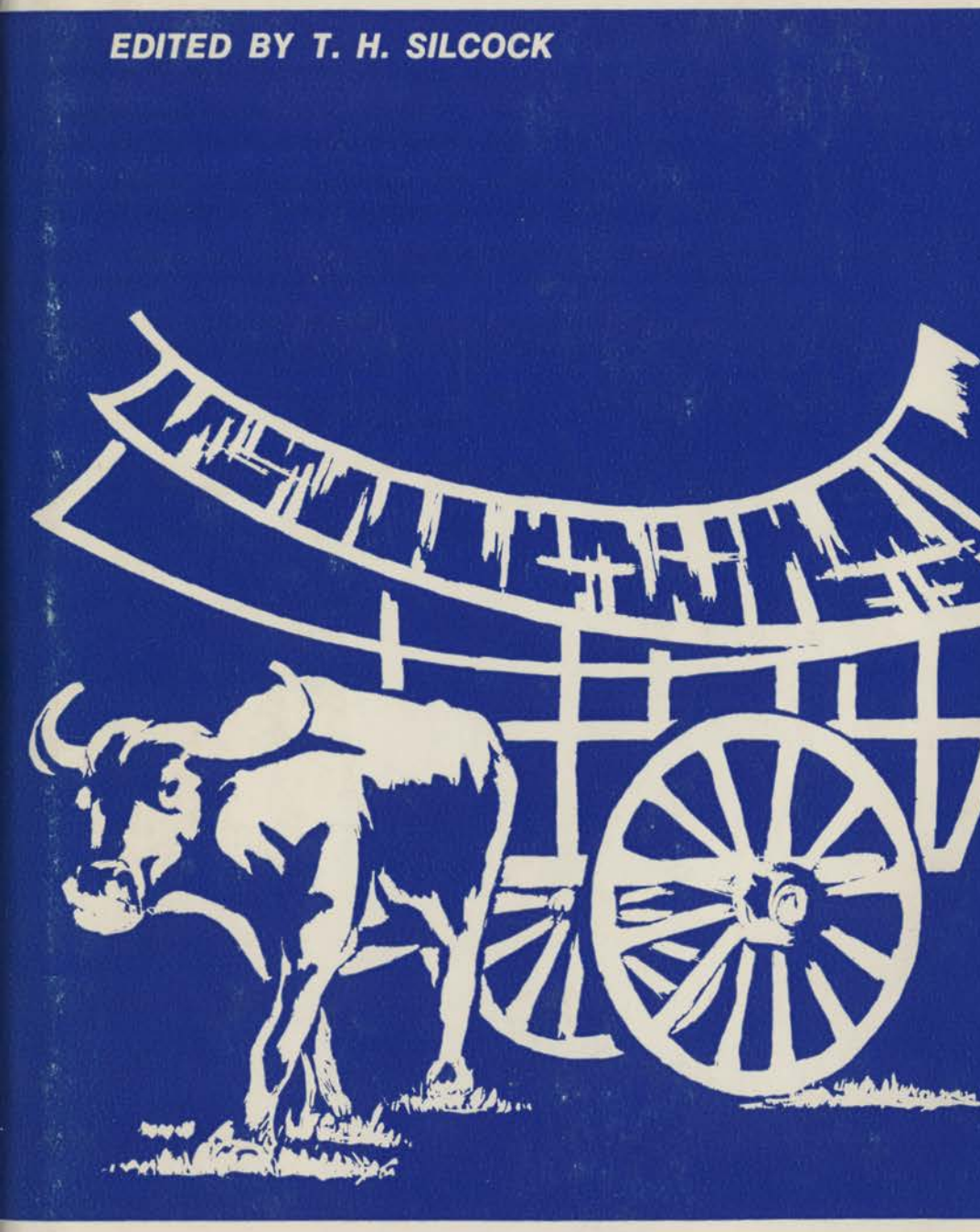
THAILAND
Social and Economic Studies in Development

EDITED BY T. H. SILCOCK



AUSTRALIAN NATIONAL UNIVERSITY PRESS

Thailand suffered invasion, inflation, and defeat in World War II. From its badly disorganized economy it was obliged by the peace treaty to deliver rice for several years to the United Nations at prices well below the prevailing free market price. In spite of this its international reserves have made a spectacular recovery and its present growth rate puts it in the front rank among the less developed countries.

This is not to say that an account of Thailand's development since World War II is simply a success story. There have been corruption and industrial mismanagement, features of the social structure that hamper development, challenges both internal and external that have not yet been adequately met; from all these there are lessons to be learnt. Yet on the whole its progress appears to have been due to a capacity to learn by experience, and to use the aid of foreigners, both Western and Chinese, without allowing them to dominate the economy.

Thailand, which has never undergone a period of Western colonial rule, has a social structure which admirably illustrates the diffusion of the Western economic system. Its agricultural taxation, its trade pattern, its banking system, and its methods of industrialization all have unique features. This series of studies, containing both survey material and new work, combines discussion of these and other aspects of Thailand's social and economic structure with a general account of its economic development.

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All but two of the contributors to these studies are, or have been, engaged in research in the School of Pacific Studies of the Australian National University. All except one have done field studies in Thailand during the last few years.

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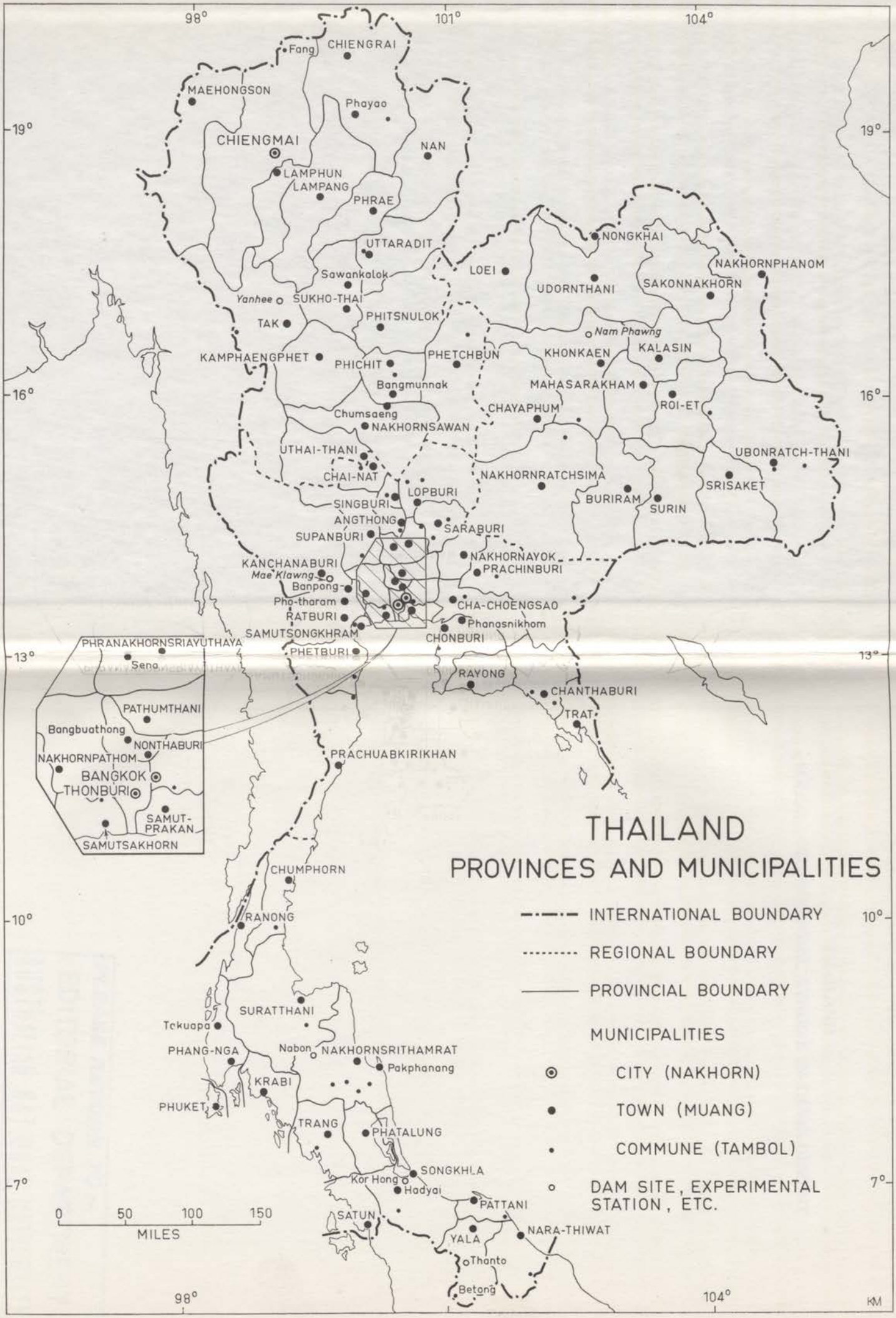
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THAILAND

SOCIAL AND ECONOMIC STUDIES IN DEVELOPMENT

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Thailand

Social and Economic Studies in Development

Edited by

T. H. SILCOCK

Australian National University

AUSTRALIAN NATIONAL UNIVERSITY PRESS
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Preface

This series of studies is intended to perform for students of Thailand a roughly similar role to that performed for students of Malaya by *The Political Economy of Independent Malaya* (Silcock and Fisk 1963). It is not meant to be completely comprehensive or to avoid all overlaps of information. Each author has included both original work and background material from secondary sources. The selection and arrangement is designed to give a balanced account both of different sectors and of different approaches and it is introduced by an outline chapter arranged chronologically and concluded by a chapter of interpretation and analysis, so that the reader can obtain a reasonable familiarity with the Thai economy and its present development problems as a whole. Essentially, however, it is a series of separate studies related to the general theme of development. For Malaya we included some discussion of the political background; for Thailand it seemed more relevant to include certain aspects of the social structure.

This is partly because Thailand is something of a special case among less developed countries,[1] being one of the very few that has not been modified by a period of colonial rule. Its social structure therefore has some rather unusual and interesting effects on its economy.

A critical factor determining the possibilities of development in any less developed country is the way in which decision-takers are selected. Though the impact of a more highly specialized economy on one less specialized appears always to modify the original pattern of selection, in ways sometimes favourable to development and sometimes unfavourable, colonial rule introduces political complexities into the process, and these are less important in Thailand.

Western techniques and institutions, from a social system based on functional specialization and on practices rationally derived from the function to be performed, have been introduced to Thailand by Thais, to fulfil Thai purposes within a different social system. In some measure these Western techniques and institutions have gradually become instruments of status and exclusiveness in an authoritarian society. There may be a contrast between the pattern of a factory, a university, or a bank imitated from the West, and the pattern which would most efficiently carry out the (approximately) corresponding function in Thailand. Economic development requires a shift from detailed cultural imitation to acceptance

[1] Different authors in this volume use different terms in their other writings to describe these countries, and the official United Nations term is here used as a compromise, though the dangling comparative is often awkward. The editor unrepentantly prefers 'development countries', translated from the beautifully precise German term 'Entwicklungsländer'; this is a normative term for all of us, implying that their development is a matter of common concern. 'Development' used adjectivally has, admittedly been unusual in English, but 'development theory' and 'development aid' are now accepted.

of the more fundamental change to rational specialization of function. This change is taking place in Thailand and it is interesting to see it working in the different departments of economic policy.

It was originally intended to organize this series of studies, like the Malayan one, in the form of a continuing seminar, with prolonged interaction of the ideas of the different contributors providing most of the unity which the book possessed. This proved impossible, and the responsibility for co-ordinating the material by selection, suggestion, and arrangement has therefore been that of the editor alone.

Dr Caldwell, Dr Corden, Mrs Richter, and Dr Wijeyewardene are colleagues in the School of Pacific Studies of the Australian National University, and fairly frequent contacts with them were maintained. Dr Prot Panitpakdi, a Thai civil servant, was working for his doctorate during part of the period in which the book was being prepared, and was asked to contribute a chapter. Dr Evers, who was at the time a Lecturer in the Department of Anthropology and Sociology at Monash University, Melbourne, visited the Australian National University briefly to collaborate in one chapter. Dr Usher was the only contributor who did not visit the Australian National University while preparing his contribution. Because of the way the book was prepared, however, none of the contributors except the editor had any significant opportunity to influence the work of any other. In particular—in fairness to Dr Prot and Dr Usher—it must be emphasized that the former would almost certainly dissent from some the editor's views about Thai administrators, and Dr Usher has publicly expressed a different view from the editor's on the wisdom of retaining the rice premium (Usher 1965).

Dr R. J. Muscat's important book, *Development Strategy in Thailand* (New York, 1966), reached Australia just after this book had gone to press and too late to affect the material presented. Though its method of treatment is very different, some of the facts and analyses have a bearing on this work, especially on Chapters 6, 10, and 11.

T.H.S.

Canberra, 1966

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Part of the material in Chapters 1, 4, 8, and 11 of this book was collected in the course of research for a broader study of Thai economic policy since World War II on which the editor is at present working under a grant to the Australian National University from the Ford Foundation.

The editor wishes to thank the Ford Foundation and the Department of Economics in the Research School of Pacific Studies of the Australian National University for making this work possible, the Graduate School of Chulalongkorn University for facilities and assistance during a period of field work in Bangkok, and many Thai civil servants at all levels, Thai-Chinese businessmen and bankers, and Thais in other occupations, as well as Americans and Europeans working in Bangkok, who were generous with their time and with published and mimeographed materials. Most of these he is not free to quote directly, and it would be invidious and misleading to refer here only to those who have not imposed this restriction.

On behalf of other contributors, the editor expresses thanks to the Cultural Relations Program of the South-East Asia Treaty Organization for assistance to Dr Corden in his research, to the Volkswagen Foundation for financial assistance to Dr Evers, to the Rockefeller Foundation for financial assistance to Dr Usher, and to the Bank of Thailand for facilities given to Dr Usher during his field work.

On behalf of the whole group, thanks are due to the staff of the A.N.U. Press for expert editorial assistance with the manuscript, to the Cartographic Section of the Department of Geography, Research School of Pacific Studies, Australian National University, for preparing the maps, and to Mrs Heather Harding for meeting many crises in the typing of the chapters.

T.H.S.

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Transliteration of Thai Words, Weights, Measures, etc.

It is virtually impossible to find any two Western writers in English who will transliterate Thai in the same way. Everyone has to compromise among a number of different desirable aims, and this book, even though it uses very few Thai words, must make its own compromise, in which typographical convenience must necessarily carry much weight. The following principles have been adopted:

1. Names of living or recently dead Thais (except Dr Prot) who are listed in the USOM *Organizational Directory of the Government of Thailand* for 1964 are spelt as they are listed in that directory, even though these spellings are often wildly inconsistent with any known system. Most of these spellings have been adopted personally by those listed or by their departmental secretaries.

2. Other Thai names which are widely known in history or literature in a particular form, e.g. Mongkut or Chulalongkorn, are given in that form.

3. A few widely known Thai names and words which are frequently transliterated in a standard form, e.g. *baht, changwat, amphur,* are transliterated in that form here even though it does not conform to any official system. Names of individual *changwats* follow the usage of the Thai *Statistical Yearbook.*

4. All other Thai names and words are transliterated in a version of the official system laid down in March 1941, simplified so as not to distinguish long vowels from short or indicate different tones. This simplified version is adapted from D. A. Wilson, *Politics in Thailand* (Ithaca, 1962), p. xii, except that for typographical reasons I have chosen *j* for the voiced *ch* sound and *aw* (or *or* before final *n*) for the most open of the three back rounded vowels, instead of the special symbols that Wilson uses.

The system can be summarized as follows:
unaspirated stops, voiced, *b, d,* voiceless, *p, t, j, k;*
aspirated stops, voiceless, *ph, th, ch, kh;*
glottal stop, not usually transcribed, but shown as a hyphen between vowels when needed for clarity;
voiceless spirants, *f, s, h;*
voiced nasals, *m, n, ng;*
vowels, front unrounded, *i, e, ae,* central unrounded, *ii, oe, a,* back rounded, *u, o, aw;*
semi-vowels, in initial position, *y, w,* in final position, *i, o,* except that after the vowel *i* the second semi-vowel is written *w.*

5. Though Thai has no plural, the practice in giving the plural of Thai words in English varies. The word *Thai,* meaning a native inhabitant of

Thailand, is here written *Thais* in the plural. The word *rai* (·4 of an acre) and *baht* (the unit of currency) are spelt the same whether singular or plural, following the usual convention.

Weights and Measures

Thai traditional weights and measures have been standardized in terms of the metric system:

1 *pikul* (or *hap*)	=	60 kilograms (132·3 pounds)
1 *kwian*	=	2000 litres (440 gallons)
1 *thang*	=	20 litres (4·4 gallons)
1 *rai*	=	0·16 hectares (0·4 acres)

The International Monetary Fund par value of the currency was fixed in October 1963: $1 (U.S.) = 20·80 *baht*.

1

Outline of Economic Development 1945-65

T. H. SILCOCK

Geographical situation of Thailand

Thailand may perhaps best be described as the territory over which the Bangkok monarchy has been able to maintain its authority. It consists of the Central Plain watered by the Chao Phya River, one of the major rice exporting areas of the world, and areas to the north, northeast, southeast, and south that for various reasons are politically dependent on it. It is, of course, also possible to describe Thailand racially and culturally: among the countries of South-East Asia Thailand has an unusual degree of ethnic and cultural homogeneity, but because large blocks of population in Laos and the Shan states of Burma differ little from the Thais, while (particularly in the south) large blocks of non-Thai peoples are included, a political description in terms of Bangkok and the Central Plain seems more accurate.

The power of the Bangkok monarchy was in part what we may call a typical Asian power, based on revenue from contiguous rice lands, and pushed as far as was strategically practicable into surrounding mountainous areas, for the protection of the rice lands; in part it was a typical monarchy of the South-East-Asian archipelago, based on the use of force and of diplomatic relations with stronger distant powers, to focus the trade of a whole region on a single port. This made Thailand partly the heartland of the South-East-Asian peninsula and partly the hinterland of the port dominating the trade of the Gulf of Thailand, though it was also typically South-East-Asian, in that its power and the extent of its territory varied greatly from period to period.

The Central Plain is flooded every year by the monsoon rains, and this constantly renews the soil, making the use of fertilizer both unnecessary for conservation and risky financially. Irrigation to control the degree of flooding is, however, beneficial almost everywhere. The land is not densely crowded like most good rice areas, parasitic diseases and wars having kept the population fairly low.

Because the heart of the country is shielded from the southwest monsoon by the mountain chain of the isthmus, and from the northeast monsoon by Laos and Vietnam, the rainfall is not heavy for the latitude—between 5° and 21° N. An exception to this is the far south, where

Thailand reaches the west coast of the isthmus, and where the mountains are not so high.

For economic development statistics the country is divided into four regions, the North, the Northeast, the Centre, and the South. The boundaries between these are not drawn according to economic criteria, but broadly the natural features are distinct. The North, which has mainly a high mountain border with Burma to the north and west, is partly jungle country where the Forestry Industry Organization's teak concession is worked, partly opium growing country and shifting cultivation where the police are paid to stave off interference with illegal activities, and partly fertile crowded valleys where the majority of the population plant rice on small, well irrigated holdings. The Northeast is a dry, often rather salty country, with population rather dense for the character of the country in the river valleys, but spreading out, as the population has grown, into more arid areas. Until recent times it cultivated mainly glutinous rice, but other crops have lately increased, notably kenaf and tapioca. This area is bounded by the Mekong River in the north and east, separating Thailand from Laos. The Mekong may have seemed a natural boundary to the French, with their preoccupation with European military tactics; in South-East Asia a river is hardly a more natural boundary than the middle of a highway would be. Movement across and along the river is frequent, and the population on both banks is well mixed. The South, with its equatorial climate, cultivates mainly rubber, coconuts, and fruit trees, though most farmers appear to have a small quantity of rice. The isthmus area, before the country widens out again to the Far South and Malaya, is an ancient trade route, where tin has been worked for centuries, and there are still extensive tin mines and some mining of wolfram and iron. The boundary with Malaya is mainly jungle, but some of it is not mountainous; smuggling here is easy by land, and the mangrove swamps make it easy also by sea. Moreover, the population in all the four border provinces and some others in the South is predominantly Malay-speaking in the rural areas.

Administratively Thailand is divided into seventy-one *changwats* or provinces. Each *changwat* has the same name as its capital town, which is also a municipality. Each *changwat* is divided into a number of *amphurs* or districts (some of them sub-districts with more limited powers) and in each of these, with a few trivial exceptions, the principal town is either a municipality or 'sanitary area' with the same name as the district. The district in which the *changwat*'s capital is situated is locally called *amphur müang,* or town district, but in speaking of it nationally the district too would have the *changwat* name. This naming system sometimes makes descriptions and identifications by foreigners confusing. Unless care is taken one is apt to confuse statements about a province with statements about its leading district or municipality.

The international position of Thailand is important chiefly because of its central position in the Indo-China peninsula and its possession of the narrow Isthmus of Kra, the land-bridge to Malaya and the Indonesian world. Bangkok has also acquired an important position in international air transport, partly for geographical reasons (though its early provision of up-to-date facilities after World War II also contributed). Its favoured

geographical position is probably almost wholly a result of China's restrictive attitude to international travel, but so long as this attitude continues, air travel may be expected to bring tourists and revenue to Bangkok. The comparative isolation of Bangkok from the world's main sea lanes which helped to preserve its independence in the eighteenth and nineteenth centuries still continues, and it has now been decided that a canal cutting the isthmus would not change this situation sufficiently to justify the expense of cutting it.

Historical background

The monarchy of Ayudhya, which was succeeded and consciously imitated by the Bangkok monarchy, had lasted from the fourteenth century to the sack of Ayudhya by the Burmese in 1767. It was an absolute monarchy headed by a ruler revered as divine and upheld by many ancient Brahmanic ceremonies derived from India by way of Cambodia, to which the Thais had originally been subject.

The absoluteness of the monarchy was strengthened by three devices (Wales 1965): first, the reigning king was recognized as an incarnation of the Buddha on the way to beatification, and he was the patron of the Buddhist order of monks, the *Sangkha;* next, there was some specialization of function among the civil officers of state—for example finance and trade, and the land system, were divisions of the service—instead of the usual subordinate tenure of defined territory; finally, there was a system intermediate between feudal tenure and official salary, by which a person's rank was determined by a number indicating the area of land from which he could derive revenue and services, the rank being conferred, along with a title, by the king, for carrying out a specific function. The actual stretch of land from which revenues, and the services of cultivators, were derived, was not fixed, and patrons could change their clients (and in some measure clients their patrons) by arrangement within the limits of rank laid down.

The Ayudhya monarchy was willing to encourage Western traders from the time of the first arrival of the Portuguese at the beginning of the sixteenth century to the death of King Narai in 1688 (Skinner 1957). By this time British, French, Portuguese, and Dutch were all engaged in trade with Ayudhya, but in that year a revolution against French intervention in Thai affairs led to a virtual severance of contact with the West until after the fall of the Ayudhya monarchy.

Thai fortunes were restored by King Taksin, who drove the Burmese out and established a new capital at Thonburi. His successor, the founder of the present dynasty, Yawtfa (or Rama I) established the capital just across the river from Thonburi at Bangkok in 1782, just before the foundation of Penang by Francis Light and the beginning of British influence in Malaya. Contacts with the West were, however, hostile and suspicious until the accession of Mongkut (or Rama IV) in 1851. During the period of isolation a large part of Thai trade was with China and Japan, and was mainly carried by Chinese resident in Thailand, who acted as agents of the royal trading monopoly. Chinese officials were found at the court of Ayudhya, and King Taksin himself, though brought up as a Thai, was a pure Chinese.

King Mongkut was a scholar who had spent many years in a monastery and who had studied Western languages and science. He was convinced that Thailand would have to learn from the West and to make concessions if it was to survive. The Bowring Treaty of 1855 limited Thai power to impose import duties and gave extraterritorial rights to British subjects, rights which were soon extended to other Western nations and then exploited by Asian adventurers who openly bought consular certificates of nationality from Western officials.

King Mongkut employed a number of Western technicians and sent a few Thais abroad for training, but it was his son, Chulalongkorn, who had been taught Western languages from boyhood, who realized that the Thai government could retain control of the drastic changes introduced by the Bowring Treaty only if it was itself radically transformed (Vella 1955). He began with the administration, introducing salaries, regular hours, audit, financial control, and a pension system. He worked out a system for the gradual abolition of slavery and forced labour. He employed many Europeans as advisers, taking care to draw them from several different countries, using them in some measure as a check on one another, and appointing able and trusted Thais (usually of high or royal rank) through whom he could control them. With their aid he built up professional legal and medical services, a system of courts, and a few hospitals. He built a railway system and initiated some modern irrigation. When he died in 1910 the country had a political and social structure not very different from that of a well-run European colony, with the Western-trained members of the royal family and nobility playing the role of the colonial power, modernizing the country and educating the people gradually in scientific techniques.

Most of the labour for the railways and public works, the sawmills and rice mills, and the expanding commercial activity was Chinese. At the level of enterprise the Europeans had come to command strategic positions during the period when European civil servants were advising the departments (Ingram 1955). They controlled most of the teak concessions, tobacco manufacturing, and the export trade in rice. In tin mining the coming of the dredges had enabled the Europeans to outstrip the Chinese as they had done in Malaya. Chinese, however, still controlled most wholesale trades and had used this control to spread a network of produce collection and retail distribution of goods throughout the expanding economy. The Thais remained rice growers and administrators, and some were coming to occupy professional positions.

Chulalongkorn's two sons who succeeded him in turn, Vajiravudh and Prajadipok (or Rama VI and VII), continued the process of change. Vajiravudh was mainly concerned with nationalism, with modernization and diffusion of Thai culture, with military strength, and with education. He was also the first to try to rally the Thais against the increasing economic penetration of the Chinese, whom he called the Jews of the East. Prajadipok was a more conventional man, with some sympathy for liberal and constitutional ideas. His chief interest was efficiency and economy in the public service. Circumstances, however, were against him. He was not a strong enough figure to dominate the princes and nobles in the various departments, who were often short-sighted and conservative towards

the new Western-trained civil servants. A conspiracy of these civil servants and soldiers easily overthrew the absolute monarchy in 1932, nominally in favour of democracy and constitutional monarchy. Actually the conspirators merely wanted themselves to take charge of the process of change and development. There have been genuine elections from time to time since this revolution, but different constitutional devices have always prevented the elected representatives from having more than a minor influence over the executive.

Once the revolutionary group had broken the King's power, dissension broke out among them, many of the civil servants in the group favouring Pridi Phanomyong's radical scheme for modernization by a vast increase in the economic role of the state. A counter-revolution by royalists under Prince Bawawradet was defeated by Phibun Songkhram, one of the military members of the group, and this greatly increased his power. He quickly won control of the government, making himself Prime Minister in 1938, and from then until 1957—except for a period of three years at the end of the war—remained the dominant figure in Thailand.

Phibun was an admirer of the fascist and national socialist ideology of Germany and Italy that was also being imitated by Japan, but he remained a Thai, much more flexible and less ruthless than the European dictators, and the Thais certainly took him much less seriously than the Germans and Italians took their dictators. There was a period in which he had himself called the Leader (*Tan Phunam*) and he established a Thai Rice Company to take the rice trade out of Chinese hands and break their boycott of the Japanese, but Thailand was not terrorized by secret police.

After the fall of France Thailand accepted Japanese help in recovering some territory from Indo-China. The pretext for effectively occupying Indo-China without military involvement in the European war helped Japan with her surprise assault on Singapore a few months later, and the Thai posture of neutrality was also one that precluded consultations with the British about the joint defence of the isthmus if Japan attacked. Hence the British were inclined to treat the fighting in Indo-China as effective collusion with Japan, and the resistance to the Japanese invasion of Thailand in December 1941 as merely a token resistance. Thailand's subsequent treaty of friendship with Japan and declaration of war on the United Kingdom were thus taken much more seriously by the British than the Americans. This was to have important political consequences and a considerable impact on the Thai economy in the post-war period.

Negotiation and reconstruction, 1945-6

Thailand ended the war in 1945 with its economy in a very poor condition.[1] The power station in Bangkok, the Ministry of Industry, several important bridges, and much of the port of Bangkok had been destroyed by British and American bombing. Its trade had been cut off for over three years, except for trade with Japan, which was mainly exports of Thai

[1] Much of the information in this and the next section is summarized from material collected from interviews with surviving participants, research in the *Economic Bulletins* issued by the British Commissioner-General's Office in Singapore, the *Thai Government Gazette* and elsewhere.

produce with very little in return. There was thus an acute shortage of manufactured goods of all kinds, both capital goods and consumers' goods. Virtually all that was available was a limited quantity of durable goods from Malaya that had come from looting or distress sales and been smuggled in exchange for rice.

Rice was almost the only product that was not in short supply. The destruction of Japanese shipping in the latter part of World War II in the Far East meant that much of the shipment even to Japan had ceased and stocks had accumulated. The combined economic pressures of lack of export demand for rice and Japanese wartime demands for labour had drawn a considerable number of Thais away from their paddy fields, but even so the rice had accumulated. Because of smuggling and the disorganization of the economy no one knew how much there was, but there was believed to be a stock of 1·5 million tons. There was an acute world shortage of rice and this was Thailand's only considerable asset. Yet it had to be bartered away to secure Thailand's standing as a neutral invaded nation, rather than an enemy of the United Nations, in the peace negotiations that followed the war.

It was the United Kingdom that Thailand chiefly feared in the peace negotiations. The new Prime Minister, Momrachawong Seni Pramoj, had been the Thai Ambassador to the United States when Thailand made its alliance with Japan and declared war on the United Nations in January 1942. He had persuaded the Americans to treat this declaration as invalid, but the United Kingdom had other views. The Thais had accepted British territory from the Japanese in both Malaya and Burma. Hence the United Kingdom wanted some concessions before ending the state of war. As a bargaining counter against British pressure, Seni Pramoj needed the support of the strong anti-colonial element in American foreign policy. Hence he offered Thailand's surplus rice, to a maximum of 1·5 million tons, free of charge, to the United Nations, as an earnest of Thailand's desire to co-operate in repairing the damage caused by the war. The alternative would probably have been a British rice unit established in Thailand, buying rice from the farmers in exchange for imports charged to Thailand's blocked reserve funds held in London. No doubt the Thais also feared territorial demands in the south, with its Malay-speaking population and extensive British and Malayan-Chinese interests, if they could not count on American support.

The tactics adopted won a good deal of American support and gave Thailand some initiative in dealing with its own economy. This initiative hardly amounted to freedom. The United Nations exercised some pressure against the various government trading agencies, so that a private-enterprise economy was virtually imposed. Moreover, Thailand had always been a very open economy, importing capital and consumer goods from the West, and its supplies of these were low. It was forced to use some of its foreign exchange reserves to rehabilitate the country (Bank of Thailand 1961: Pt 1; 1962). Yet the position of most of its foreign exchange reserves was doubtful. The greater part of the total—over £16 million—was held in sterling in London, and was blocked. A further £10 million worth of gold was held in Japan, which was under occupation, and the status of this gold was uncertain. Only the gold held in Thailand and the gold and

dollar securities held in the United States were available. It is indicative of the pressures on the Thai economy at this time that some $9 million worth of gold—nearly all the gold available in the reserve in the United States—was sold to buy necessary capital and consumer goods. In addition Thailand borrowed 50 million *rupees* from India to buy Indian goods, mainly textiles, and $10 million from the United States to buy war surplus supplies. The Thai government was even willing to part with some of the gold reserve held in Bangkok. Legislation was passed to allow the sale of just under 3 million grammes in the local market, but owing to a dispute between the government and the Bank of Thailand about methods of sale very little of this was actually sold.

Probably very little of the original surplus rice in Thailand reached the official channels of distribution. Black market prices made rice smuggling an immensely profitable business and wartime channels were already available; Thai government officials had experienced over three years of inflation; the military governments on the United Nations side were largely made up of temporary officials who had undergone six years of war; many Chinese entrepreneurs had large funds at their disposal, excellent international contacts in the region, and long experience in dealing with underpaid civil servants. A fairly high proportion of the rice probably reached Penang and Singapore illegally and was distributed from there to the black markets of Malaya and neighbouring countries. It was realized as early as May 1946 that the rice surplus was no longer there, and that attempts must be made to secure as much as possible of the rice crops to be produced in future.

The British and Americans tried to secure rice from the producing areas and distribute it to the individual consumers through a complex bureaucratic organization with its local headquarters in Singapore. At the top was the local committee of the International Emergency Food Control in Washington. Washington made the allocations of rice to the various countries on the basis of reports received, but the local committee was responsible for adjusting allocations on the basis of actual shipments and availabilities. A branch of the International Emergency Food Control local committee was the Combined Siam Rice Commission, which was responsible for getting the rice from the Thai government. The Commission was a political agency. It operated commercially through a group of long-established European (mainly British) merchants in Bangkok, organized in a consortium called the Siam Rice Agency, which bought and shipped the rice in accordance with allocations made in Singapore. On the Thai side a Rice Bureau was responsible for seeing that the rice reached the Agency. This Bureau was headed by a much respected Thai aristocrat, Mom Luang Dej Snidwongse, and at first had no monopoly powers but tried to limit the trade to approved channels; most of the actual buying from rice farmers was done through the former compradors—local Chinese merchants—of the individual European firms. Later, in 1947, the government enacted legislation to give the Rice Bureau a monopoly of the sale of rice for export. It may easily be seen that if a British organization analogous to the Combined Siam Rice Commission had been using the machinery of European firms and the blocked Thai currency to collect an indemnity in rice, the British merchants would have rapidly re-established

a firm hold over the economy. Seni Pramoj's negotiating skill enabled the Thais to avoid any such situation.

Seni gave up the position of Prime Minister with the signing of the peace treaty with the United Kingdom and India in January 1946. His chief tasks had been to use his goodwill in America to gain some bargaining power for Thailand, to achieve the removal of foreign troops from Thai soil without any interference with the Thai army, and to secure a resumption of trade without loss of Thai territory or of any essential sovereign rights. These tasks he had accomplished. He was succeeded after the first post-war election by Khuang Aphaiwong, a former Prime Minister and leader of the relatively conservative Democrat Party to which Seni himself belonged. The real power in Thailand, however, was the Regent, Pridi Phanomyong. Pridi had followers in almost every section of Thai society except the regular army. As leader in Thailand of the Free Thai Movement he had great goodwill abroad. He had also strongly opposed the wartime Prime Minister, Phibun Songkhram. Having invited the young King, Ananda Mahidol, to return to Thailand, he was free to leave the regency, and in March 1946 secured the overthrow of the Khuang government in Parliament. He thereupon succeeded as Prime Minister.

In June, however, the mysterious death of the King in the palace by shooting (which the government was unable to explain) led to widespread rumours that Pridi was a regicide. Even his resignation and the appointment of his more conservative friend and follower, Admiral Thamrong, did not allay the popular clamour. The Thamrong government tried for over a year to control smuggling and corruption, to fulfil Thailand's obligations, and to regain popularity, without much success. In November 1947 a *coup d' état* threw it out of power, and restored Khuang Aphaiwong as Prime Minister.

Recovery of economic sovereignty, 1947-9

Khuang did not, however, return to power in his own right. The army group which had staged the *coup* was in control, and Khuang was no more than a figurehead, used to allay foreign fears and give the army a breathing space to consolidate its power (Wilson 1962). The new government lasted only until April 1948 when the wartime dictator, Phibun Songkhram, returned to full power as Prime Minister.

The new government began almost at once to try to regain Thai control of the economy. This involved trying to recover the initiative both from the United Nations forces and from the Chinese. In part the process was assisted by the mere lapse of time. The partial recovery of rice exports in Burma and consequent easing of the international rice position had led to the departure of the Combined Siam Rice Commission at the end of August, just before the *coup d'état*. It is, indeed, possible that the group which staged the *coup* waited for the departure of the Commission, hoping that foreign intervention would be less likely if no foreign political commission was actually present in Thailand.

As soon as the Combined Siam Rice Commission had left and the new government had assumed control, new steps were taken to consolidate Thai control over the rice trade, which was regarded as the key to the

whole economy. On the initiative of the Thai Rice Company—the organization through which the pre-war government had frustrated the Chinese boycott of Japan—the government prepared to monopolize the milling of rice for export. The pretext for this was the poor quality of the rice that was being delivered through official channels. Newcomers to the rice trade had been smuggling their best rice out to the black market. The established Chinese rice mills, which had been a virtually closed group before the war, were no doubt also engaged in smuggling, but were prepared to co-operate with a Thai monopoly for the sake of recovering their former dominant position.

The plan behind this move was not merely to gain increased Thai control over the rice industry but to use it to control imports as well. Once the new rice organization controlled the milling it was to appoint its own provincial agents, some of whom would be the surviving provincial trading companies established by the pre-war régime. These would be given a monopoly of buying rice for export and would be paid for the rice partly in import goods, so providing a Thai-controlled network to beat the independent Chinese traders.

It is not clear how far the government would have been able to exercise control over this network; the plan never became effective because the excluded Chinese were able to mobilize enough diplomatic support abroad to prevent its being carried out. Monopoly control over the export of rice continued, but milling remained competitive. The Siam Rice Agency continued to handle the transport of rice to the markets to which it was allocated by the International Emergency Food Control.

In 1949 it was announced that international allocation of rice would end at the end of the year. The price had risen from £12.10s. per ton in early 1946 to about £40 by the time of the devaluation of sterling. Thailand was not immediately able to negotiate better prices, but the outbreak of the Korean War in the following year enabled it to do so.

In spheres other than rice the government of Thailand also began to regain control.[2] The first governor of the Bank of Thailand, Prince Wiwatanachai (henceforth called Prince Viwat), who had resigned in the dispute with the previous government over gold sales, was given the post of Minister of Finance by the new government, and held it for two years from November 1947 to October 1949, with a short break during 1948. It was under his leadership that Thailand, for the first and only time in the immediate post-war years, succeeded in balancing its budget in 1948. Early in 1949 it took the final step in a process which he himself had initiated in his visit to Washington in 1946, by becoming a member of both the International Monetary Fund and the International Bank for Reconstruction and Development. This was important not only because it brought Thailand into an international currency system without any special link to sterling; it also brought important pressures from these two institutions, in the directions of monetary stability and development respectively, to bear on the Thai government.

[2] Apart from special material cited in the different specialized chapters of this book, the main sources for this and succeeding sections have been the *Annual Economic Reports* of the Bank of Thailand, and the 1965-6 Supplement to the International Monetary Fund's *International Financial Statistics*.

The transfer of the offices of the United Nations Economic Commission for Asia and the Far East to Bangkok in 1949, as a result of communist successes in the Chinese civil war, gave Thailand additional international prestige, and brought some help to the economy by promoting international interest in the development of power and other facilities for Bangkok.

During 1947 and 1948 the Bank of Thailand increasingly brought order into the foreign exchange system by selective liberalization. Recognition of the free foreign exchange market greatly simplified business and reduced the opportunities for corruption, while exports were encouraged by eliminating the obligation to hand over the foreign exchange earned, except by the sale of rice, rubber, tin, and teak. This created a comparatively successful multiple exchange rate system.

The Bank of Thailand also began building up the depleted foreign exchange reserves again, and tried to restore the strength of Thailand's international credit, for example by resuming payments which the war had interrupted on overseas loans. The use of large amounts of foreign exchange as early as 1948 in building up the reserves may seem in retrospect to show an excessive concern with credit, and not enough with development, but it strengthened the power of the Bank of Thailand, which was concerned with national interests, against the personal interests of politicians.

The economy was recovering rapidly as war damage was repaired and the people were able to return to normal productive employment. According to official figures the value of exports increased by about 140 per cent between 1946 and 1947, and by a further 120 per cent between 1947 and 1948. All Thai statistics at this time must, however, be interpreted with great caution. All figures concerning the increase in the production of rice, for example, almost certainly include both genuine increases in output and improvements in statistics, as producers, exporters, and junior government officials had less interest in concealing illegitimate exports. Greatly improved export of teak was caused by heavy overcutting, for which Thailand paid later in a contraction of the industry. Rubber exports in 1948 were more than double the boom exports of 1941, partly because of some carry-over from the previous year, but it seems probable that more than one-sixth of the 1948 exports represented rubber smuggled from Malaya to Thailand, to enable Malayan businessmen to make large profits by evading sterling exchange control.[3] On the other hand Thailand was known to be making large gains from operations in both opium and gold which do not appear in the trade figures.

In 1948, with the return of the army to power, the War Veterans' Organization was established with the intention of creating business opportunities for returned soldiers. This organization, which was empowered

[3] The rubber was consigned from South Thailand to Penang or Singapore, to be paid for in sterling, but was trans-shipped, without landing, to the U.S.A. where it was sold for dollars that were then used to buy sterling at the much lower free market rate for delivery to the Thai exchange control, so making a large profit in dollars. This was particularly valuable to Malayan Chinese, who could either hold the dollars as a speculation against the anticipated devaluation of sterling and the Malayan dollar, or buy dollar goods in Hong Kong to sell (quite legally, and with a further profit) in Malaya. Some individual Chinese engaged in this trade in Singapore made profits reckoned in tens of millions of U.S. dollars in the year 1949.

both to collect money from private donors and to use public funds, and which invested in a large number of business undertakings, was at that time one of the chief instruments for army intervention in the economy. Its activities were a mixture of nationalism (the setting up of Thais in opposition to established Chinese business), patronage, and the enrichment of army politicians.

Nationalism and anti-communism, 1949-50

The British and the Americans had accepted the *coup d'état,* and even the return to power of the wartime military dictator, without active opposition. They apparently were satisfied that the nationalism of Phibun Songkhram, which had assumed an aggressive, Pan-Thai form in association with the Japanese, would now realize its limitations and be confined to internal politics. This assumption proved correct in the years that followed.

Thai nationalism is on the whole cool, pragmatic, and self-confident. It is directed mainly against those Chinese who remain culturally distinct from the Thais and maintain a well-knit system of business relations within their country. At times the feeling against local Chinese has contained an element of fear of the possible extension of the power of China, but there is usually no feeling that the Chinese are radically different and unassimilable. Even at times when Thai policy has been most hostile to the Chinese minority it has never tried to resist assimilation of those who wish to adopt Thai ways. By contrast the attitude to Europeans is one of acceptance of their role as bringers of new techniques and products, realization that assimilation is unlikely, and suspicion that individual Europeans or local groups of them may try to further their personal or group interest at Thailand's expense by mobilizing the power of their countries.

In the immediate post-war period Thai nationalist feelings were mainly directed against the Chinese. One reason for this was the use made by Chinese businesses—immediately after the war—of their contacts with the European business houses that were carrying out United Nations rice policy. A much more important reason was the incursion into Thai affairs of the rivalry between Chinese nationalist and communist factions as the communists drove the nationalists out to Formosa in the concluding stages of the Chinese civil war. Chinese domination of trade unions and upheavals in the Chinese guilds and chambers of commerce created a sense of vulnerability to possible Chinese communist pressures.

In their relations with Europeans the Thais were no longer concerned for their own territorial integrity, and some of the bureaucrats began to realize that the United Nations gave them the opportunity to obtain technical assistance with little risk of becoming dependent. The presence of many foreign experts in Bangkok for meetings of the United Nations Economic Commission for Asia and the Far East and of visiting advisers from the International Monetary Fund and the International Bank made them aware that technical help could be obtained without the pre-war condition of having foreigners virtually controlling their main departments and blocking promotions for local civil servants.

The measures taken against the Chinese included a drastic raising of the poll tax on aliens to 400 *baht,* restrictions on the teaching of Chinese in

private schools, and the round-up and detention without trial of a number of prominent Chinese in November 1952. The total number of permanent immigrants was limited to 200 of each nationality in 1949—a restriction which hit chiefly the Chinese, since most Europeans could work under temporary permits—and in 1950 large numbers of Chinese journals were banned from importation into Thailand. There was also a campaign to drive out Chinese who had planted rubber in the jungle area of Nabon in Suratthani province in the south. A large part of the rubber planted in the south was illegal, because the planting restrictions of the pre-war International Rubber Regulation Scheme had been continued after the war—long after the scheme had ended—probably for the benefit of officials. These Chinese refused to be evicted and troops had to be brought in to drive them out. The area was taken over by the government in 1949 and converted into a state enterprise.

It is possible that there was some communist influence among these rural Chinese in south Thailand, as this was a time when the communist insurrection in Malaya was enjoying some success; but it is unlikely that it was very strong. The prosperity of the south was increasing rapidly with a recovery in both tin and rubber as mining equipment and coagulants became available. By 1949 the pre-war volume of exports had almost been reached in tin, and far surpassed—almost doubled—in rubber. In 1950 and 1951 both quantities produced and prices increased still further, with the abnormal stockpiling demand of the Korean War.

Fear of external communist pressure also led to efforts being made to improve conditions in Thailand's Northeast Region, where the standard of living was low because of poor soil, and the mixture of Lao and Thai peoples favoured the penetration of communist propaganda. At this time irrigation tanks to conserve the heavy but short and irregular rains were thought to be the main need, and much of the effort of the Irrigation Department was focused on emergency tank-building in this region.

Thailand had already obtained much diplomatic support from America against British pressures. American opinion, however, was at first lukewarm toward the return of Phibun Songkhram, because of his war record. The strong anti-communist policy may have been partly designed to secure more American support; at least it had this result. At the end of 1950 an agreement on technical assistance was signed with the United States, and from this time American assistance has not merely provided capital and technique but also influenced the character of Thai development. American influence played a considerable part in checking the trend towards state enterprise, in transferring interest from rail and river transport to highways, and in delaying the adoption of a national economic plan (at least of the indicative type favoured during the 1950s by Malaya and other countries in the Colombo Plan).

A year earlier Thailand had signed a bilateral trade agreement with Japan, resuming a trade relationship that had been broken at the end of the war. It was ironic that the authority negotiating on behalf of Japan should be the predominantly American occupation authorities, while the Thai Prime Minister was the same man who had been ruling Thailand when the Thai-Japanese treaty of alliance was signed. This first trade treaty was mainly concerned with the exchange of rice for railway engines

and equipment, and was to be the first of a long series of moves that ultimately made Japan a key market and dominant source of capital and technique for Thailand.

Another early exercise of economic sovereignty (though probably a bad decision) was the breaking in September 1949 of the link with sterling by changing the rate established in 1946. The *baht* had been linked to sterling for almost forty years, up to World War II. Yet with the devaluation of sterling the Thai government decided to adopt its own midway position in relation to the new dollar-sterling exchange. This was a step weakening Thailand's economic relations with the British Commonwealth.

The combination of the independent adjustment of the value of the *baht*, the trade treaty with Japan, the technical assistance agreement with the United States, and the establishment of regional United Nations agencies in Bangkok set the stage for a new and independent foreign economic policy in keeping with the changes in the post-war world. This was a policy of much less dependence on the United Kingdom, much more dependence on the United States, but with a steady trend towards substitution of Japan for the United States, and also a policy of active co-operation with the United Nations and its agencies. On the whole Thailand has found it difficult to secure an adequate counterweight to the United States, to give it the freedom of manoeuvre that it likes to have, especially as the United Kingdom has taken little interest in Thailand outside the southern mining areas since the system of rice allocation ended at the end of 1949. In the 1960s the Japanese and West Germans played this role, but in the 1950s the only protection against particular American interests (apart from some limited French influence) was the possibility of using the assistance supplied by the International Bank and other international agencies. At the beginning of the decade, while general government policy was strongly anti-communist, Phibun Songkhram tried to establish a left-wing party through which he could, if necessary, co-operate with the communists, but the aggressive domestic policy of the communists and the vulnerability of the large and influential Chinese minority made it impossible to use Chinese communist pressures. Hence in the 1950s Thailand was much involved with United Nations affairs and with the International Bank and International Monetary Fund.

This gave increased influence to the Bank of Thailand and the economists and other Western-trained technicians, who had good access to international agencies. They also gained in influence through the establishment early in 1950 of the National Economic Council as a formal government agency, since a number of Western-trained men were employed in its different boards.

During the Korean War, in 1951, the Phibun government was to carry army control and anti-communism a stage further by suspending the constitution on the grounds of the danger of communism and driving the Democrat Party out of the government. The Democrats had had no real power since Phibun assumed the post of Prime Minister, but their ability to muster, at times, a majority in the Thai Parliament was an embarrassment.

The Korean War boom, 1951-3

The first part of the Korean War brought considerable prosperity to Thailand, enabling it to secure large positive balances for two years running in its balance of payments, and to restore the currency reserve to its pre-war level. This was partly because the increased demand for rubber and tin—both for the war and for strategic stockpiling—pushed the price of both rubber and tin up. Rubber was at more than double the pre-war price level in 1950, and tin nearly double in 1951. These high prices were partly responsible for increased output in 1950, though in 1951 the output of rubber fell slightly (possibly a result of over-tapping in 1950) and the output of tin more sharply, because stockpiling ceased in the middle of the year.

Another cause of improved exports was the rising price of rice, and also the increased quantity exported as a result of a record area planted in 1950. The war itself created some military demand for rice, but more important was the increased demand in areas such as Malaya, where the war demand for rubber and tin was generating even greater prosperity than in Thailand.

Thailand's imports did not at first rise to match its exports. The Korean War generated a greatly increased demand for manufactured goods all over the world, while capacity had still not recovered from World War II. Deliveries were very slow, and it was not until 1952 that the increased incomes of 1950 generated any appreciable increase in imports. This might have been expected to cause a sharp rise in prices, but in fact the rise in the cost of living was kept to 6 per cent. The explanation was partly the exchange profits of the Bank of Thailand, exceeding 500 million *baht* in one year, and far more than offsetting a budget deficit of about 300 million. In addition the government rice monopoly almost certainly made much larger profits than were handed over to the government. The distribution of these to individual officials would generate income, but almost certainly a much higher proportion would be saved than if the money had been distributed to rice growers.

The initial effects of the Korean War boom were thus almost wholly favourable to the Thai economy. In early 1951, after American and Chinese forces reached a standstill, the situation became in some respects less favourable, but was still highly advantageous to Thailand. There was a slight setback in tin and rubber but rice exports increased again in both quantity and price. Since rice was the only product on which 100 per cent of export proceeds was surrendered at the official rate, this led to further enormous exchange profits on the exchange that was sold, and a further large increase in the reserves. The exchange profits were again more than sufficient to offset the budget deficit, and the cost of living index was only 1 per cent higher at the end of the year than at the beginning.

Even in 1952, with the war dragging on at reduced intensity, stockpiling no longer adding to demand, and capacity catching up with requirements in the industrial countries, there was only a slight setback to Thai prosperity. There was again a surplus of nearly one billion *baht* on current account in the balance of payments. The exchange profit of the Bank of Thailand approximately offset the budget deficit. At last, however, the

cost of living began to rise fairly steeply, and there was some popular discontent about inflation. An unwise policy of trying to force up the free market value of the *baht* led to some loss of foreign exchange and consequent need to curtail imports. The rise in the free *baht* value also reacted on the sales of exports such as rubber, which had to sell in competitive foreign markets. The overcutting of teak during the immediate post-war years also now led to a shortage of supply for export. There were signs that when the armistice was finally signed the Thai economy would encounter difficulties.

The Korean War boom had not only brought prosperity to some of Thailand's industries and a great strengthening of its reserve position; foreign aid also began to flow into the country, both from the International Bank and from the United States. The first loan agreement with the International Bank was signed toward the end of 1950. This was a loan of U.S.$25·4 million, more than three-quarters of which was for the Chai-nat dam for irrigation of the Central Plain, and the rest for railway renewal and re-equipment and the improvement of the port of Bangkok. This loan was administered through the Bank of Thailand, which verified actual expenditure on projects agreed. During the year 1951 funds began to flow in under the Economic and Technical Aid Agreement with the United States also. More than $4·6 million flowed in within the year, about half of it for industrial equipment (mainly electrical) for services in Bangkok. The largest other single item was for agricultural assistance.

At the end of 1951 the trade agreement which had been concluded with the United Nations Command in Japan was renewed with the independent Japanese government.

Aftermath of the Korean War, 1953-4

The armistice at the end of July 1953 ended the war in Korea, but it had been preceded by many months of negotiation during which it was obvious that the war was coming to an end. Prices fell during 1953 and it became more and more difficult to sell rice. Thai production of all the main export goods remained high, but export sales fell heavily. Instead of large favourable balances there was an unfavourable balance of 800 million *baht* on the balance of payments. Even more important than the adverse balance was the loss of the profits on the rice monopoly, both to the government and to the politicians who had been extracting funds from it.

The budget deficit exceeded two billion *baht*, a figure higher than the total revenue in the year before the Korean War. Only about one-quarter of this was offset by exchange profits, and substantial inflationary pressure developed. This was made more serious by the government's continuing efforts to raise the free market value of the *baht:* an overvalued currency with heavy inflationary pressure was unhelpful to Thai exports at a time when a buyers' market was developing.

The years immediately after the Korean War might, however, have seemed favourable to a spurt of industrial development of the import-replacing kind. The cost of living, though it was rising, was still low, and the militantly anti-communist attitude of the government discouraged the emergence of any trade union pressure for higher wages. Moreover, import

policy was becoming more restrictive, in line with the government's effort to raise the value of the currency.

In fact there was a good deal of activity in the field of industrial promotion, but it achieved only very poor results. At this stage factory industry was organized mainly within the different ministries. An Act was passed setting out the procedure for establishing affiliated organizations, but in 1953 this Act was used chiefly for large-scale trading monopolies; the factories were still run by the Factory Department within the Ministry of Industry, the Department of Military Industry within the Ministry of Defence, and the Ministry of Economic Affairs.

The reason for the lack of success was the one that was to continue to interfere with Thai industrial progress right up to the present day: the association of the control of industry with political power and the consequent use of industrial undertakings as opportunities for patronage. There was also a market reason: although imports were being drastically restricted there had been heavy overstocking during the Korean War boom, partly as a result of delayed fulfilment of orders from industrial countries.

The government was, however, preoccupied—in a rather unsophisticated way—with industrialization, partly as the next stage in the modernization of the country, partly as an immediate offset to the loss of some of Thailand's profitable rice market. Two developments in 1954 illustrate the government's attitude, the passing of the Act for the Promotion of Industry and the establishment of the National Economic Development Corporation. The former was an attempt to attract foreign capitalists by tax concessions and privileges, a scheme which failed to promote much investment because it was poorly presented and also required them to furnish detailed information that would be useful to potential competitors but not very relevant to a decision on the merits of the investment. The latter was a corporation floated by a Thai-Chinese banker and backed by the Prime Minister and the Director-General of Police; it operated mainly on money borrowed from an American bank, which was used to buy machinery from Europe, and its aim was to produce, by modern factory methods, a number of products from marble to gunny bags. In both cases failure was due to a combination of limited industrial knowledge and personal involvement of government servants in business undertakings.

There were, however, those within the government, and particularly those within the Bank of Thailand, who considered that Thailand should go further in building up the infrastructure for development—roads, power supply, irrigation—and improving the productivity of its existing economic activities—rice, rubber, tin, and other primary products—before it could profitably launch into industrial development. The Bank of Thailand was also very critical of the waste and lack of return in existing government industries.

At the end of 1954 teams of officials from both the International Monetary Fund and the International Bank visited Thailand. The International Monetary Fund representatives came to advise on the exchange control system—a result of the problems which arose from the attempt to appreciate the free market value of the *baht*, and also the serious balance of payments deficit of 1953. The International Bank representatives were to inspect the railway and harbour projects for which International Bank

loans had been given and make representations for long-run development projects that might be financed by further loans.

In spite of the less favourable situation in the years 1953 and 1954 Thailand's trade with Japan continued to improve. In 1953 Japan became Thailand's best export market, and the bilateral trade agreement was renewed to cover a larger volume of trade and allow larger credit or debit balances than had been covered by the previous agreement. Renewed prosperity in Japan and improved business relations between Japan and Thailand seemed to the Thais to offer a favourable opportunity to negotiate for the repayment of the 'special *yen* account' which had been built up by exports of Thai products to Japan during World War II. Japan had begun a policy of negotiating reparations agreements and credit agreements simultaneously with the countries it had invaded, so building up goodwill and trade at once. Thailand, as will appear, expected better terms.

New economic policy, 1955-6

The result of the visit of the International Bank and International Monetary Fund officials soon became apparent. There was a clear change of policy which, without abandoning all interest in industrialization, shifted towards improving trade conditions, making more use of the market mechanism, improving the accuracy of recording and budgeting, and creating new public works. The new policy was not immediately very successful, but it prepared the way for further changes initiated by the more thorough-going International Bank Mission of 1957-9.

The first sign of the new policy was the radical reform of exchange control policy and the taxation of trade at the beginning of 1955. The serious falling off in demand for rice in 1954 had made the government more willing to allow private trade, subject to the payment of a premium to the Rice Division of the Department of External Trade. It was apparent that the Chinese merchants were more effective than Thai civil servants in finding markets for the rice now that a buyers' market had developed. Moreover, some of the financial specialists had wanted since about 1952 to give up exchange control for current transactions.

The combination of these influences under the guidance of the international experts led to the abandonment of the rice monopoly and most of the exchange controls. Superficially it seems as if Thailand was converted to a liberal exchange policy. Yet in two respects this is an inaccurate account. The policy of insulating the internal price from the world price by an administratively variable rice premium was retained and expanded, and in internal trade no attempt was made to change the profitable monopolies that had been built up by various state enterprises.

The importance of the retention of the rice premium is that in Thailand liberal policy does not mean simply leaving market forces to transfer resources freely, subject to a few special industries receiving protection. It contains a built-in inducement to move out of the principal traditional industry of Thailand, namely rice growing, and so is a liberal policy with a tendency to promote market development. The continuation of the government monopolies, however, operates in the opposite direction, inhibiting movement in large sections of the economy.

Most of the new changes were made simultaneously in January 1955. Import control was, however, retained until September for fear of pressure on the balance of payments. The result was a great improvement, with an adverse balance of only a little over 200 million *baht*, easily offset by capital inflows from the United States and the International Bank. The substitution of increased export duties on rubber and tin and an increased rice premium for the obligation to deliver part of the foreign exchange to the Bank of Thailand at official rates led to a great increase in the government's revenue and hence a fall in the budget deficit to 647 million *baht* in 1955 and 672 million *baht* in 1956, compared to 1,600 million *baht* in 1954; but these figures are, from some points of view, deceptive, since exchange profits of about half a billion *baht* per year which had accrued to the Bank of Thailand before the change were now given up. When allowance is made for these the recovery seems much more modest.

Another result of the visits by the international officials was a pressure for improved budgeting. The national accounts had become unsatisfactory partly because inflation had given rise to new types of expenditure—such as massive cost-of-living allowances to civil servants—which had been treated as special while they were small but had grown to distort the whole system. Another reason was the growth of irregularities in the Rice Bureau, in the government industries, and even in some of the revenue departments.

The Bank of Thailand pressed for reform in its 1954 *Report*, and in 1956 a new Budget Act was passed improving the form in which accounts were presented. The trade statistics were overhauled with expert American assistance; at the same time a public administration service established within the United States Operations Mission began pressing steadily for improved standards, training, and remuneration in the public service. Results were not yet apparent, except that the idea of specific training for special posts in the public service began to gain ground. A contract was, however, let to Indiana University by the United States government to establish a postgraduate school of public administration in Thammasat University in 1955. This devoted a great deal of attention to in-service training with a view to raising the standard of existing departments.

Partly as a result of the improvements in administration and liberalization of the economy, more foreign aid and loans began to pour into Thailand, especially in 1956. Total foreign aid in that year of 641 million *baht* was equal to more than 10 per cent of the Thai government's budget. This aid, together with 366 million *baht* of loans and long-term credit, gave strong support to the balance of payments. Among these loans was a further International Bank loan for railway development. Thailand also joined the International Finance Corporation, but was unable for some years to make appreciable use of its facilities.

A futher flow of overseas funds was secured by the success of the negotiations conducted by an American on behalf of Thailand for the payment of part of the special *yen* fund already mentioned. Japan agreed to pay a part of the 1·5 billion *yen* in five annual instalments in cash, and the remainder in credits and services of Japanese people. Apparently the Japanese intended the latter part to be a repayable advance, used to build up business, as in other South-East-Asian countries, but the Thais later

successfully resisted this interpretation and eventually secured the treatment of the whole amount as a debt.

In 1956 the 1953 International Tin Agreement came into force with Thailand as a member. Thailand had benefited considerably from the pre-war agreements, which it was persuaded to join by a quota out of all proportion to its real capacity. It was to benefit from the post-war one by less straightforward methods.

The period of the new economic policy was also a period of new political policy. After his overseas tour in 1955 when he visited the United Kingdom, the United States, and other democracies, Phibun Songkhram decided that he could strengthen his régime by winning popular support in free and open debate. He was anxious over the increasing influence of one of his lieutenants, Police General Phao Sriyanon, and over the rivalry between him and the Commander-in-Chief, Field Marshal Sarit Thanarat. He had himself lost touch with the army, and hence instituted 'Hyde Park' opportunities for political oratory in Bangkok's Royal Park, hoping for a popular base for his own power. This led to a marked growth in political consciousness, leading up to the elections in 1957.

The International Bank Mission, 1957-9

The visit of a mission from the International Bank followed naturally from the Bank's earlier loans for transport development and from the new economic policy of Thailand. The Thai government—no doubt after some prompting from the Bank of Thailand—invited the International Bank to send a general survey mission. Its purpose was 'to help the Government plan its contribution to the economic and social development of the country during the next several years, and to advise on the forms of organisation which are likely to be most effective in fostering these developments' (I.B.R.D. 1959: vii). One of the most important features of the mission was that, unlike most such missions, which work for about two or three months in the field, this one spent a whole year in Thailand from July 1957 to June 1958 and had a group of fairly senior Thai officials attached to work with it. This meant, on the one hand, that the mission had far more of a training role than most such missions. On the other hand it made the Report rather more a government document than a fully independent inquiry. The recommendations were made in part from the inside, with a view to assisting the subsequent influence and work within the government of those who would be doing the planning.

While the mission was at work several important political events took place. The 1957 election had surprised the government and the public by producing only a narrow government majority, in spite of much use of army votes, faked voting papers, and the like. There had been student demonstrations against General Phao who had conducted the government campaign, and Field Marshal Sarit had handled these with great skill, increasing his personal prospects in the struggle to succeed Phibun Songkhram. Thus by July when the mission arrived the rivalry between the two men was intense. In September Sarit struck first, Phao and Phibun were driven into exile, and Pote Sarasin, a former Secretary-General of the South-East Asia Treaty Organization, was made Prime Minister. Before the mission left, a futher election had taken place and Pote was succeeded

by one of Sarit's army supporters, General Thanom Kittikachorn. Yet, like Pote, Thanom ruled by the power of Sarit.

The mission thus made its recommendations knowing that Sarit was the real power. Some of the emphasis of the Report may be influenced by this. Sarit was well disposed towards the condemnation of government enterprises. Unlike Phibun he did not base his power on patronage within the system of government enterprise, but had extensive private interests in which he used his political power to help his friends, mainly outside the system of formal government control. When the National Economic Development Corporation proved unable to meet its financial obligations in 1957 Sarit used this as one of the justifications for his *coup d'état.* Hence the report refers at some length to the evils of state enterprises, but hardly mentions the involvement of government servants in the private sector, and the difficulties of building up genuinely independent enterprise.

On the other hand, there are many recommendations for improving the efficiency of the detailed administration of undertakings for which the government must take responsibility, such as budgeting, public works, maintenance, and research and advisory services. The mission clearly hoped to increase the relative influence of some of the younger civil servants with expertise and technical interests. Hence in spite of a considerable bias towards private enterprise, and particularly the attracting of foreign capital, it recommended a good deal more overall planning of the economy, within a limited sphere, than was previously considered acceptable by the government.

Several independent events largely favourable to the Thai economy occurred during the period between the arrival of the mission and the publication of its Report in 1959. First, there was the beginning of effective preparatory work on the international Lower Mekong development scheme. In March 1957 the thirteenth session of the Economic Commission for Asia and the Far East had adopted a project to be undertaken jointly by the four riparian states, Cambodia, Laos, Thailand, and South Vietnam, with assistance from other countries in the region. In September a Statute establishing the Committee for the Co-ordination of Investigations of the Lower Mekong Basin was adopted by the four states, and early in 1958 the first detailed engineering report was submitted; during 1958 further substantial support was given for the project, an advisory committee was appointed, and at the end of the year an executive agent was recruited who began work on the project at the time the International Bank Mission Report was published. This project, which has not yet proceeded to dam the Mekong itself, has had some importance in the development of Thailand's Northeast Region, not only through the Nam Phawng project now (1966) nearing completion—but through promoting widespread international interest in the irrigation, agriculture, and power supply problems of the whole area.

A new currency reserve policy adopted in 1958 opened the way to an initiative by the Bank of Thailand in providing short-term finance through the rediscount of promissory notes for both exports and industrialization. This has greatly increased the Bank of Thailand's knowledge of the private sector and may be a first stage in the growth of a money market.

Finally, in 1958, with the collapse of the tin market, the first restriction of tin exports under the 1953 International Tin Agreement was imposed. On this occasion the restriction was evaded not by smuggling but by the open shipment of about 2,000 tons of tin in excess of the quota by a subsidiary company in which Field Marshal Sarit had a major interest. This represented about one-fifth of Thailand's official quota. The sale was never admitted internationally, but has been locally admitted, since Sarit's death, by the imposition of fines of over 80 million *baht* on the companies chiefly concerned.

At the end of 1958 Sarit staged another *coup d'état,* with the connivance of the Prime Minister, Thanom, suspending the constitution, establishing a wholly appointed constitutional commission to draft (without undue haste) a new constitution, and in the meantime to function as a legislature. It was still drafting the constitution when Sarit died five years later, and is still (in 1966) doing so.

After the Sarit revolution, 1959-60

Sarit dominated the Thai economy for five years. His character was a combination of the ruthless gangster, the traditional lavish oriental despot, and the shrewd judge of expertise. He built up immense private interests for himself in banking, real estate, construction contracting, and other sectors. He placed his trusted friends in key positions to make money for him and held people's loyalty by both gratitude and fear. He liked to listen to men—even quite junior officials—whose ideas seemed beneficial to Thailand. If they created a good impression he would give them vigorous support.

He announced in one of the first policy statements after the revolution that no more state enterprises would be established, but his policy was not one of *laissez-faire.* He set about making a number of structural changes in the bureaucracy, more or less along the lines laid down in the International Bank Mission Report, and he announced that one of the main purposes of his revolution was to enable him to implement a national economic development plan. His vigour, his use of the King's influence to persuade people to change, and his capacity to cut through delays arising from seniority, incompetence, and bureaucratic inertia enabled him to generate a sense of movement and an expectation of change.

Most of the achievements during his tenure of power, at least until the adoption of the national economic development plan, may be attributed to other causes than Sarit; it is probably mainly the pace of change that was accelerated. The establishment of the Budget Bureau and the National Economic Development Board, for example, merely implemented with slight modifications changes recommended in the International Bank Mission report, but these changes were carried through within a year of the revolution. The change in the attitude to private industry, the setting up of the Investment Board, and also the foundation of the Industrial Finance Corporation of Thailand, were all simply modifications of existing policy or imitation of foreign institutions along lines already suggested by the International Bank Mission or the Bank of Thailand. What was striking was the carrying through of all these developments within two years.

The considerable increases in agricultural productivity mostly had special causes unrelated to the government, but in some cases the psychological impact of increased construction activity and institutional change may have quickened the pace. Rubber, for example, increased spectacularly in 1959, but this was almost wholly due to planting during the Korean War boom seven years earlier. In 1960 rubber exports, for the one year only, slightly exceeded rice exports in value—the only year on record in which rice was not Thailand's leading export. This increase owed nothing to the government, but the prosperity doubtless contributed to its popularity.

The increase of maize exports by over 50 per cent in a single year (1959) was mainly caused by the growth of livestock demand in Japan, but it may have owed something to the increased acceptance of change generated by the Sarit government.

The spectacular increase in kenaf production from under 30,000 tons in 1958 to over 300,000 in 1961 was also in part the result of high prices due to crop failures in Pakistan, but the main cause was perhaps deliberate promotion of the crop by the government, with American help, especially in the Northeast Region. Indeed the expansion was so great that it caused some embarrassment, for it is a crop that involves marketing risks (if unsatisfactory retting leads to a poor quality product) and also production risks (due to possible soil exhaustion) if expansion is too rapid.

All this suggests that miscellaneous promotional efforts, often sustained over some time, had had little obvious effect until about 1959-60, and then quite suddenly began to become much more effective. The Sarit government naturally took, and was allowed, credit for these improvements. Yet it is not easy to isolate the overall causes of the change in pace of development, or to determine just how far the government was responsible.

In the first place it is clear that the new government inherited the results of a number of improvements that had taken place earlier, but could not have been expected to produce results at once. The major irrigation schemes and the improvements in rail transport financed by the International Bank, the Friendship Highway and other road development financed by American aid, the research (greatly expanded by American finance and technical help) of the Ministry of Agriculture into rice seeds, pests, and the like, the efforts of the Bank of Thailand to improve the currency and banking system, and the massive increase in the training of Thais abroad would all have produced an improved rate of growth some time in the sixties, even if Sarit had never dramatized the change.

There were, however, overall changes initiated by the Sarit government which promoted development directly, and others which accentuated the effects of changes already taking place. First, although developments since Sarit's death have made it quite clear that corruption, patronage, and other irregularities were by no means eliminated from the government service, civil servants were certainly under greater pressure to produce results in return for their regular and irregular incomes. Next, although few government enterprises were actually abandoned, and the changes in the inducements offered for promoting industry were by no means radical, Sarit did manage to convince many foreign firms that promotion of new government concerns would not take place, and also to create institutions that foreign capitalists trusted. Finally, the royal tours which Sarit promoted and the

interest that the King himself took in rural development almost certainly helped to stimulate among Thai farmers a greater willingness to change their methods. These were acts and policies which directly stimulated change.

There were also, however, pressures making for change which the Sarit government did not create, but rather released to greater effectiveness. The increased mobility generated by improved transport and by the effect of the rice premium in keeping costs low and stimulating movement out of rice growing was strongly accentuated in Thailand's relatively flexible rural economy by the creation of an atmosphere in which change was expected; this mobility was further increased by improving the relations between the Chinese businessmen and government officials. Similarly, the beneficial effects of the training of Thais abroad and of the new institutions suggested by the International Bank Mission were increased by Sarit's willingness to rearrange his ministries, and to listen to, and promote, young men.

In 1959, soon after the revolution, the Sarit government banned all imports from China (mainland). Later in the same year, after receiving the last payment in cash on the special *yen* account from Japan, it began negotiations over the credits and technical services which Japan had agreed in 1955 to supply in respect of the 9,600 million *yen* still outstanding. It refused to accept the argument that these credits and services were repayable; the only distinction it would accept between the second and the first parts of the special *yen* account was that the first was a cash settlement, the second a settlement that had to be used to buy Japanese goods and services. In the end the Japanese accepted these terms, which gave them—at a fairly heavy cost to their government—access for Japanese manufacturers and technicians to the rapidly growing Thai market. This foreshadowed a great increase in Japanese participation in the Thai economy.

Adoption of national planning, 1961-3

The national economic development plan which Sarit had foreshadowed immediately after his assumption of power was promulgated just two years later, in October 1960, to take effect from the beginning of 1961. Since one of the main functions of the plan was to focus the attention of the people and of the government departments on development, it is natural that from 1961 on the progress achieved should be attributed to the plan. Yet the real effects of the plan itself were probably rather unimportant until after Sarit's death, and are not yet fully apparent.

If we can judge from the statistics of national income by industrial origin, there is virtually only one sector of the national economy the growth of which in the early plan period markedly exceeded its growth in the two previous years of the Sarit government. This was the construction sector. In most other sectors the growth in 1960 and 1961 was actually less than in 1959 and 1960. This is, indeed, only what one might reasonably expect. Thailand is not a centrally planned economy, and the chief merit of establishing a national plan is to enable co-ordinated forecasts to be made of results in the various sectors of the economy, to make those parts of the economy which are necessarily part of the public sector, such as roads and education, appropriate to the highest rate of growth that seems feasible,

to anticipate sectors where the price system is likely to operate ineffectively or to give incorrect guidance, and to stimulate the growth and inflow of capital.

Thai statistics are still inadequate for much of this detail. The population growth was wrongly estimated. Construction, the one sphere in which the more positive approach of the plan led to real improvement in the rate of growth, began to fall behind schedule because of lack of trained manpower. Inadequate knowledge of the areas of monopoly or rigidity was combined with insufficient power to overcome some of the political supports of monopoly.

Without such knowledge an indicative plan cannot do much to promote rapid growth. The psychological effect of a strong intention to develop the country had been achieved by some of the measures taken in preparation for the plan, and by the announcement that a plan was being prepared. The plan itself probably added little immediately. Its main effect was to stimulate both thought about development and the collection of better statistical data. Until this began to be available, the first three years of the plan were little more than an opportunity for the technicians in the departments and ministries to press more successfully for their individual projects. Even by 1963 when the second half of the plan (1964-6) was drafted there was little that could make a significant impact.

The need for figures for attempting forecasting did, however, lead to a great expansion of statistical activity: an agricultural census and a labour force survey in 1963, a series of household budget surveys in 1962 and 1963, a census of manufactures in 1964. The Department of Statistics began to undertake sample surveys, using trained supervisors and selected schoolteachers as enumerators. At present these surveys have shown up some discrepancies in the statistics, and they may lead to improved administrative procedures to derive regularly more reliable figures. The Regional Planning Committees for the Northeast, North, and South, initiated in 1961, have also caused departments to do more in relating their work in the different regions to available local statistics and have stimulated more interest in producing regional figures, the most important innovation being the regional gross national product figures issued in 1965.

As reliable figures become available, it will become possible to coordinate more effectively with the private sector. In the meantime one of the chief effects of the plan is to continue, after Sarit's death, the effect of his willingness to listen to the advice of young and well-trained professionals. The Ministry of National Development, the National Economic Development Board, and to some extent the Budget Bureau have become pressure groups in favour of policies based on the best statistical forecasting that can be obtained, and this has done something to alter the balance of power and influence in the different departments.

Less publicized than the plan but probably quite as important to the economy was the Commercial Banking Act of 1962. In an economy controlled by decentralized techniques the control of money and credit assumes great importance. The Act represented a courageous attempt by the Bank of Thailand to control some of the unsound and dangerous characteristics of the banking system, many of them defended by powerful politicians who have interests in the different banks.

In 1961 the Japanese began supplying goods and services under the second part of the agreement for settling the special *yen* account. Since the end of the first payments Japan had become a large-scale purchaser of Thai maize, in addition to its normal position as one of Thailand's main customers for rice. Japanese industrial capital, both in Japanese-Thai ventures and in all-Japanese ones, began flowing in strongly under the new legislation for the promotion of industry introduced in 1959 and 1962. Within a few years Japan was to become the predominant investor in private industry in Thailand, though still far behind the United States in financial and technical aid.

Censuses and manpower, 1963-5

From the beginning it was intended that the plan adopted in October 1960 should be in two parts, and that the period from 1964 to 1966 should be revised in the light of fuller information and experience. By 1963 when the second part was being revised it was already becoming apparent that manpower was going to become a crucial question. Not only had the first results of the 1960 population census shown a rate of population growth much greater than had been expected, it was also increasingly obvious that the International Bank Mission Report, while it had frequently drawn attention to shortages of skilled manpower, was extremely modest in its recommended provision for education. Thailand began to realize in about 1963 that its population growth was becoming more rapid and that shortage of skilled manpower was a serious bottle-neck in planning.

Nor was this a situation to be simply met by increasing the aggregate funds devoted to education; more detail was required on both the supply and the demand sides. Projections were attempted and revealed that Thailand, like many less developed countries, needed increased supplies of intermediate technicians and other qualitative and quantitative adjustments elsewhere in the education system. A manpower planning unit was also set up to help to assess projects in terms of their demand on limited manpower supplies at different levels.

More adequate statistics elsewhere in the economy and the greater availability of professional economists began to lead to more detailed discussion about planning techniques. How far could decentralized, overall techniques suffice to stimulate and control economic growth? There were discussions of fiscal measures, particularly possible modifications of the rice premium, of financial measures, particularly agricultural credit techniques, and of the desirability or otherwise of using foreign credits while investing Thailand's own reserves abroad. Was it possible to obtain guidance for trade or investment policy by macroeconomic models? Experiments were being made with these.

Twenty years after the end of World War II Thailand was enjoying a rapid rate of economic growth, with real national income increasing well over twice as fast as population. The popular mood, however, was far from complacent. At the end of 1963 Sarit had died and been succeeded by Thanom. Within a few months Sarit's vast evasions of taxation and misuse of public funds had been made a public scandal. A white book was prepared, which was to give full details. Questions began to be asked

about who had helped amass this wealth and who had benefited. The book was never published.

There was anxious awareness of problems to be solved, and doubts concerning the selection of leaders and the new constitution. Thailand might be progressing rather more rapidly than its neighbours, while enjoying remarkable political stability, but interest in further national development was still active. Considerable efforts were being made to reconcile and to improve statistical data, to remedy abuses in the administrative structure in the interest of greater progress, and to improve planning techniques.

In its external economic relations Thailand is slowly regaining some freedom of manoeuvre. After a decade in which it was heavily dependent on the United States, there are signs that it is having more success in attracting aid, technique, and investment from elsewhere. Financial and technical aid is coming in increasingly from Australia, New Zealand, and West Germany, and private investment and skills from Japan.

2

The Demographic Structure

J. C. CALDWELL

The making of the population

Thailand lies athwart the main peninsular and insular routes down which peoples have moved for tens of thousands of years from the heartlands of Asia to the warm lands of the western and southwestern Pacific. In the forests of southern Thailand, as in those of Malaysia and parts of Indonesia, the remnants of such early migrant peoples as the Negritos are still to be found. South of about 8° latitude the Malays continue to predominate. The Thais themselves are first identifiable about 4,500 years ago in northwestern Szechuan, whence they were gradually forced southward by Chinese pressure. Those who were not absorbed moved south to become the Shans to the northwest of present-day Thailand and the Lao to the northeast. The central movement ultimately came into what is now the Central Plain of the country where the first Thai kingdom was established over six centuries ago.

Estimates of Thailand's population prior to the last half-century vary, partly because the size of the country did likewise. Under French and British pressure from the late eighteenth century the area of Thai suzerainty was halved, as all of what is now Laos and Cambodia and considerable areas of contemporary Burma, Vietnam, and Malaya were ceded. Only in 1909 was the process completed.

Many attempts were made to estimate the population of nineteenth-century Thailand and there is general agreement that numbers inside the present borders probably rose from about 4 million inhabitants to somewhere in the vicinity of 6 million during the two centuries preceding 1900. There is some dispute over the chronology of this expansion. Skinner (1957) believes that there was a slow but accelerating pattern of population growth at least throughout the whole of the nineteenth century, and this is in agreement with what we know of population trends in China during the period when the use of irrigation for the cultivation of paddy rice was extending. This has been contested by Sternstein (1965: 16-18) who argues that there is no evidence to suggest that birth levels had more than the slightest margin over those of deaths until about 1880, when dramatic changes in South-East Asia induced a 'population explosion'

such as to yield a rate of population growth by the beginning of the present century of the order, if not quite the magnitude, of that which persists at the present time. The series of censuses which began in 1911 does not completely resolve the problem but it does seem to come down more on Skinner's side. In any case the kind of population strain to which Thailand has been subjected has been of a similar order to that experienced by the Philippines and Burma, and not the startling demographic change which took Java's number of inhabitants from 4 million in 1800 to 28 million in 1900, and to almost 70 million at the present time, nor that which may have multiplied Malaya's population by over forty times in a century and a half.

The last thirty years of the nineteenth century were of decisive importance in the history of South-East Asia. Colonial rule spread on the mainland during a time when trade was becoming global in a way that had never been the case before. Cheap shipping rates, the guarantee of personal safety which could be given by the European powers, and the new commercial markets attracted Chinese from the coast of southern China to the countries bordering the South China Sea. There were to be found frontier lands with valuable unexploited natural resources which did not suffer the crushing poverty and population density of China. Perhaps to Thailand the most important aspect of this movement was the fact that peasants from south China went to these new lands to become in an overwhelming number of cases not farmers but businessmen, tin miners, rubber planters, and so on. They usually needed to buy food, which meant that a large commercial rice market developed in the region. The Malayan Chinese and Indians were of particular importance. In the last decades of the century, Singapore alone took almost half Thailand's rice exports (Ingram 1955: 42).[1]

Rural Thailand proved remarkably responsive to the new demand and subsistence farmers began to produce, with little hesitation, surpluses for cash sale. This was facilitated by an influx of Chinese who provided all entrepreneurial services needed, from the original removal of the rice from the grower until its final sale to distant markets. For half a century this extra production was realized by an extension of paddy land and an intensification of labour in the Central Plain above Bangkok, but these supplies have since been augmented from more distant regions with the extension this century of the railways and feeder roads.

It is doubtful whether the Thai population has ever known real hunger or has been limited by Malthusian pressures. They apparently always had the capacity to produce more rice if they wished to do so. It was undoubtedly disease, acting upon reasonably well fed and not debilitated bodies, which played the major role in limiting population growth. Nevertheless, it is likely that Thailand's entrance into world commerce in the second half of the nineteenth century did something to accelerate the rate of population growth. Cash incomes can be used flexibly on occasion to improve nutrition, or, in times of need, to do something to save an endangered life. Extra labour could produce valuable increments of cash

[1] In the periods 1870-4, 1880-4, and 1900-4 the proportion of all rice exports shipped to Singapore was 20%, 50%, and 36% respectively.

income and it may well be that some indigenous means of reducing the level of fertility were relaxed. Certainly the economic changes encouraged substantial Chinese immigration, although the immigrants have been responsible for only a modest fraction of this century's total population growth.

For the last half-century we are on less conjectural ground, for a series of six censuses from 1911 to 1960 has endeavoured to record population change. Such a series provides in a developing, tropical country a very valuable demographic history. The validity of this history will be discussed later.

In Table 2.1 the census record is reproduced together with Ingram's assessment of the most reliable mid-nineteenth-century estimate and the figure produced by the *1954 Demographic and Economic Survey* (National Statistical Office 1957a), which is bracketed because it claimed a total population figure well below that indicated by the census series.

TABLE 2.1 Thailand, Total Population, 1850-1960

Date	Estimate	Population ('000)	Average annual rate of population growth since previous estimate (%)
1850	Ingram*	5,500	—
1911	census	8,266	0·7
1919	census	9,207	1·4
1929	census	11,506	2·2
1937	census	14,464	3·0
1947	census	17,443	1·9
(1956)	survey†	(20,095)	—
1960	census	26,258	3·2‡

* Ingram (1955: 7-8).
† National Statistical Office (1957b: 1). Note that the estimate is not for 1954 but for 23 February 1956.
‡ Calculated for the period 1947-60.

Some of the censuses may well be inaccurate; the irregular rate of growth seems to imply as much. However, there is firm evidence of a very great population increase, so that the country's inhabitants have more than trebled in the half-century that has followed the final stabilizing of the borders. A subsidiary though important factor in this increase has been, until the last intercensal period, immigration, but the main cause has been the excess of births over deaths, and this excess has become ever more significant. Indeed, it is noteworthy that the rate of population growth was greatest between 1947 and 1960, the only period when it must be explained almost wholly in terms of natural increase.

The movement of borders and the influx of immigrants have meant that Thailand contains certain minority ethnic groups. Their existence has been the cause of many political decisions and actions over the last forty years.

In the far northwest are to be found the Shans, while the Karens occupy a broad arc stretching around the northern and western borders for six or seven hundred miles. Near the border of Cambodia live considerable numbers of Khmer, Chaung, Sui, and Annamese or Vietnamese. In the far south there are still pockets of Semang and Sam-Sam, while off the western coast the boat-dwelling Chao Nam stretch from the Burmese to the Malayan borders. In addition about seven thousand Indians,

Pakistanis, and Ceylonese and a similar number of Europeans, Americans, and Australians were to be found in the country in 1960. A large proportion of these persons lived in Bangkok (National Statistical Office n.d.b: Table 8).[2]

When minority problems are discussed, however, reference is usually not to any of these groups. Most of the people discussed above are akin to the Thais both ethnically and in terms of the shared Buddhist religion, while the Indians and Europeans are small and transient groups. The exceptions are the ethnic Malays in the extreme south of Thailand and the Chinese of Bangkok and other towns.

The Malays are found from coast to coast along the Malaysian border in a swathe which is always at least 50 miles deep and extends to over 150 miles on the west coast, where it stretches northward to Krabi and beyond. Their feeling of identity has been based on the Malay language and perhaps more importantly on the Moslem religion. An estimate of their numbers is provided by the 1960 census enumeration of just over a million Moslems, making up 3·9 per cent of the country's population.

When the Siamese revolution took a more nationalistic turn at the end of 1938, the Malays, in common with the Chinese, were subject to the attempt to educate their children in Thai language and ways and to restrict their opportunities for improving their knowledge of Malay language and custom. This included the resented act of obeisance to the Buddha in the schools. There was certainly some local bitterness, especially after the discontinuance of certain special Malay cultural privileges in 1940. These were granted again at the end of 1946, but this did not prevent the growth of Malay bitterness in 1947 and 1948 and the spread of separatist feelings (Landon 1949). Emotions seem to have waned in recent years, perhaps partly because of the success of the education program. The 1960 census showed that most of the younger people can now speak Thai and that language is in common use right up to the Malaysian border.

However, the chief issue faced by Thai nationalism, and to a considerable extent the cause of it, has been the presence of large numbers of Chinese. Since the thirteenth century Chinese merchants have been spreading over the *Nan Yang* and indeed they established Bangkok as a trading post before the Thai seat of government was moved there from Ayudhya (Unger 1944: 200). But the large-scale movement began only with the last quarter of the nineteenth century, when the Western administrative presence in much of the region and its resulting inclusion within the world economy vastly increased the economic opportunities for Chinese migrants. Both trade and migration were decisively assisted by the advent of cheaper shipping.

There had long been some Chinese in Thailand both as merchants and, from the mid-nineteenth century, as tin miners in the peninsula. As external markets for rice expanded after about 1870 they poured in to become businessmen, craftsmen, and labourers. They played a vital role

[2] Of 6,694 Indians, Pakistanis, and Ceylonese, 3,452 were in the *changwats* of Phranakhorn and Thonburi, which include Greater Bangkok, while of 5,043 Europeans and Americans and 2,830 others (which includes Australians) 3,644 and 1,838 respectively were enumerated in these two *changwats*. These figures exclude diplomatic and military personnel and their families, thus undoubtedly understating the number of Americans.

in the economic modernization of the country, for, as Ingram has pointed out, the Thais were well satisfied with rural life and left most entrepreneurial activity, except rice cultivation, to foreigners. Until World War II high wages were needed to attract Thais to the towns, and from the mid-nineteenth century onwards the literature is full of complaints of urban labour shortage (Ingram 1955: 56, 57).

Thus Chinese immigration was encouraged, and until 1910 the immigrants paid less than one-third the capitation tax paid by the Thais (Ingram 1955: 211). They

> held an unchallenged position as an economic class. They owned most of the rice mills and controlled the rice market. They planted and marketed rubber. They were the moneylenders as well as the tin-miners and market-gardeners (Harrison 1954: 225-6).

But in South-East Asia times were changing. A forecast of things to come was provided in 1898 by the American decision to ban further Chinese immigration into the Philippines. Events in China itself had implications for the countries to its south. Subsequent to the Chinese revolution of 1911 Chinese women as well as men began to migrate. Hitherto, single Chinese male migrants were likely to marry Thai women so that the eventual assimilation of their descendants into the local society was ensured. But by the 1920s purely Chinese families were being formed and reared in large numbers in both Thailand and Malaya, and the parents were seeking schools which would saturate their children in Chinese language and culture. Indeed, between the 1929 and 1937 censuses the increase in the number of Chinese females accounted for almost three-quarters of the total Chinese increase.

The new Asian nationalism has proved this century to be sensitive to such changes, especially when they have implications for external relations. By 1927-8 the Kuomintang finally seized undisputed power in China and did not forget the strong support it had received from the South-East-Asian Chinese. 'Only Thailand refused to have diplomatic relations with China, fearing the influence of the new régime on her Chinese population' (Fitz-Gerald 1965: 25). By 1932 it was Thailand's turn, and the nationalist revolution of that year ensured that the times of unrestricted immigration had passed for ever.

The Chinese schools first felt the effect of the revolution and within a few weeks many were closed. The education of the young Chinese was affected by the promulgation in 1933 of the National Education Policy, by the severe restrictions in 1939 on the teaching of Chinese, and by the somewhat less vigorous pressures of the last fifteen years. Pressure on the economic front also increased. The mild Business Registration Act of 1936 was followed in 1939 by intervention in a wide range of economic activities in an effort to break the Chinese control and encourage Thai participation. In the absence of any strong Thai inclination to participate in urban and other entrepreneurial activity, the government itself was encouraged from late 1938 to do so, and this has had a continuing effect on the nature of the country's economy.

These actions have probably had two opposite results. In the short run they have undoubtedly made those of undeniably Chinese identity feel

more like a beseiged minority and such isolation has almost certainly reduced the tendency towards cultural assimilation. In the long run, the government's belief that children of Chinese extraction will probably become absorbed into the society if only they are fluent in Thai and conscious of the country's culture is almost certainly correct. The Chinese are closer in physical appearance to the Thais than they are, for instance, to the Malays, and there is no equivalent in Thailand to the bar to intermarriage which Islam has presented in Malaya. The 1960 census certainly bore impressive witness to the success of the educational system in teaching the children to speak Thai, at least to the standard demanded by the enumerators. Even in Bangkok, where Chinese influence is far greater than elsewhere, there are fewer than eight thousand persons between ten and thirty years of age who cannot speak Thai (National Statistical Office n.d.b: Table 7).[3] This is no more than one person in eighty and includes non-Asians.

But the ultimate determinant that there will in the long run be no Chinese minority problem is provided by the immigration restrictions. The Immigration Acts of 1927-8, 1932, and 1937-8, the various changes of ministerial regulations, and the Alien Registration Acts of 1936-7 and 1939 did little to stem the immigration flow although they did raise a substantial amount of revenue. But the quotas introduced and subsequently lowered by both revision and reinterpretation in the period from 1947 to 1950 brought the era of mass immigration to an end, and indeed Chinese immigration, now below the quota of 200 per year, may be regarded as virtually non-existent.

Now that this phenomenon can be regarded as having run its full course, it is well to inquire into its magnitude. The inquiry is rendered impossibly complex by the confusion between the use of the term 'Chinese' in the popular Thai sense to mean anyone who habitually dresses like a Chinese, speaks Chinese, and regards his culture as Chinese, and the much more restricted official definition of those of Chinese citizenship, which excludes almost all except the China-born. Employing the broader definition, contemporary estimates put the Chinese in Thailand during the first half of the nineteenth century at as many as half a million (Purcell 1951: 106) or one-eighth of the population. But, unless complete assimilation has been much more rapid than has been believed, such high figures cannot be easily made to agree with the subsequent volume of immigration and the present total of Chinese. By 1850 the gross intake of Chinese was around 15,000 per year and during the first decades of this century the net intake averaged at least 40,000 per year. Between 1900 and 1930 this immigration probably accounted directly for at least one-third of all population growth, and, if we include locally born children, perhaps two-fifths. Its effect on urban growth was certainly very much greater. Tax figures show that in 1828 three-quarters of Bangkok's population was Chinese and that half the balance was at least partially of Chinese descent (Purcell 1951: 106). As late as the 1950s it was claimed that ethnic Chinese made up nearly half the population of the city (Skinner 1958: 17-18).

[3] These figures are actually for *Changwat* Phranakhorn.

It is almost as difficult to gauge the present position. Those regarded officially as Chinese reached their maximum proportion of the whole population in 1929 when they almost touched 4 per cent, and their maximum number in 1937 when they exceeded half a million. The 1960 census enumerated 409,508 persons of Chinese citizenship, of whom 384,408 were China-born. These figures represent 1·6 per cent and 1·5 per cent of the whole population. But by the definitions used in everyday life both Thais and Chinese regard the numbers of the latter as being well above this level. In 1939 the Thai Premier was echoing the local belief when he spoke of 2 million Chinese in the country. The 1960 census recorded 461,317 believers in Confucianism (National Statistical Office n.d.b: Table 9), a group which must have consisted almost solely of ethnic Chinese, but which excluded the large number of Buddhist Chinese.

The *1938-39 Chinese Year Book* claimed there were 3 million Chinese in Thailand and a recent authority (FitzGerald 1965: back inside cover map) has raised this to more than 3½ million. This would make the Chinese community in Thailand rival that of Malaya as the largest in the world outside China. Its present and long-term significance is, however, very much less, for, even using this perhaps inflated figure, its members would form only one-eighth of Thailand's population compared with almost half of that of Malaya. Furthermore, in the generation to come the Sino-Thai will undoubtedly become increasingly absorbed by the larger population, while this is not nearly as probable in Malaya.

Contemporary population structure and growth

However, in the last half-century the chief determinant of population change has been neither moving borders nor Chinese immigration. It has been the natural growth of the Thai people, and accordingly this phenomenon and its implications will be the theme of the rest of this chapter.

In order to assess present demographic change and likely future developments, it is necessary to examine what has been the course of population events in the recent past. But this is not easy, for, although Thailand has by the standards of many less developed countries an impressive range of census and registration information, it is still in a condition that has been described as statistically 'semi-developed'. Much of the data collected are defective and cannot be accepted without analysis and interpretation. Between the 1947 and 1960 censuses, the systems responsible for recording and registering vital events and migration detected only two-thirds of the intercensal population change evidenced by the censuses (U.N. 1963: Pt 2).

Undoubtedly the weakest link in the apparatus for recording demographic phenomena has been the vital registration system. Birth and death registrations have been compulsory for half a century, but were estimated in 1960 to be only 75 per cent and 60 per cent complete respectively (Das Gupta *et al.* 1965: 23). Bourgeois-Pichat (1959: 19-21) showed that registration improved markedly during the 1930s but relapsed so badly as a result of the war that by 1955 it had only just recovered to the position of a quarter of a century earlier. Birth registration is now improving fairly rapidly because of pressures exerted by the school admissions system and the population registration system which is being introduced; however,

not only is it still defective, it is about 6 per cent more so for females than for males (Das Gupta *et al.* 1965: 24).

As in many less developed countries, the position appears to be much better with regard to census statistics. On the whole age enumeration has been surprisingly good. This is an important point because a relationship has often been demonstrated between the accuracy of the age data and that of other data, and indeed of the completeness of coverage. *Whipple's Index,*[4] which tests one type of digital preference, was computed to be 109 and 114 for males and females respectively in 1947 and 105 and 107 in 1960. Thus by the latter date the index recorded not only better figures than all groups except the Chinese in the 1957 censuses of Malaya and Singapore, but better ones than the United States up to and including the 1940 census. By 1960 the *United Nations Secretariat Index,*[5] which is said to be sensitive to the underenumeration of age groups but which is also in fact affected by genuine irregularities in age structure, stood at 16·9;[6] a figure which was far below that of any Malayan group in 1957 and below that of Australia in 1954.

There is certainly some age misstatement amongst the old, who were brought up in times when the Western concept of age had penetrated the culture to a lesser extent, and many of whom received no schooling. It is not probable, for instance, that there are twice as many 80-year-olds as either 81-year-olds or 79-year-olds, as would appear from the 1960 enumeration. But the only really serious deficiencies, which imply the possibility of the omission of considerable numbers of people from the count, are those found amongst young children. Thus, although one would expect to find more children in each age group than in the next oldest age group, there were fewer children enumerated in 1960 in each age group under 4 years of age than there were 4-year-olds. In fact there were less than two-thirds as many children enumerated as under one year of age as there were 4-year-olds. With more births each year in an expanding population, and with the erosive effect of mortality, this is plainly impossible and is evidence of either age misstatement or omission from the enumeration. The latter is common in many parts of the world amongst young children. Das Gupta and colleagues assumed that the omission was real and represented the major source of error in the 1960 population count. They computed that almost three-quarters of a million children under 5 years of age or almost 15 per cent of that group had been omitted, and, on this basis, estimated the true population at the time of the 1960 census to have been 26,990,000 instead of the 26,257,916 recorded. This writer has certain doubts as to whether all or perhaps even most of these children were omitted. It is possible that the phenomenon is more a product of advancement in age statement, as is common in many

[4] A test of preference for ages ending with '0' or '5'. Where no bias exists the index should be '100'; where the bias is complete and no other ages are recorded it would be '500'. For further explanation see Population Study No. 23 (U.N. 1955: 40-1).

[5] A test of irregularities in the recording of age groups and of the sex balance within age groups. Where no biases exist the index should record zero, and with increasing bias numbers increasingly higher. For further explanation see Population Study No. 23 (U.N. 1955: 42-3).

[6] In the *Country Statement for Thailand* (U.N. 1963: Pt 2) the index for 1947 is given as 15·7 and for 1960 as 12·8. The latter figure is certainly incorrect.

societies, especially those which contain Chinese, for even many educated Chinese may for cultural reasons insist on giving children's ages according to Chinese custom irrespective of census instructions (Caldwell 1962: 475-91). It is instructive to note, for instance, that the Central Region, with its large Chinese population, returned a smaller proportional margin of 0-4-year-olds over 5-9-year-olds than did the less educated North and Northeast Regions.

Detailed analyses by Bourgeois-Pichat and by Das Gupta and his colleagues of the deficiencies in the censuses allow us to reconstruct the probable path of population growth to date and to estimate the strength of the various demographic components of that growth.

TABLE 2.2 Thailand, Adjusted Census Counts and Population Growth Rates, 1919-60

	Adjustments by Bourgeois-Pichat*		Adjustments by Das Gupta and colleagues	
Census date	Population ('000)	Average annual rate of population growth since previous estimate	Population ('000)	Average annual rate of population growth since previous estimate
1919	9,966	—	—	—
1929	12,433	2·2	—	—
1937	14,549	2·0	—	—
1947	17,657	2·0	17,890†	2·1‡
1960	—	—	27,170†	3·2

* The only adjustments made were to population under 10 years of age.

† In a subsequent more refined adjustment the 1960 figure was scaled down to 26,990,000. It is left here as 27,170,000 so as not to affect the computation of the 1947-57 rate. However, if the intention of Das Gupta and colleagues was that both populations should be scaled down by the same amount, the 1947 population would become 17,772,000, but neither of the two intercensal growth rates would be affected.

‡ Using Bourgeois-Pichat's 1937 estimate.

Source: Bourgeois-Pichat (1959: 9-10); Das Gupta *et al.* (1965).

A comparison of Table 2.2 with Table 2.1 shows that, while the censuses have always conveyed a reasonable impression of the general magnitude of the country's population in that even the worst have apparently recorded well over nine-tenths of the population, the variation in the degree of error has produced a completely erroneous impression of the rate of population growth. The truth seems to be that the population grew at a fairly constant and high rate averaging about 2 per cent per year for at least a generation prior to the post-World War II period, but that since then the rate of increase has climbed and has averaged over 3 per cent per year for the post-war years. Thus Thailand's population has not changed suddenly from a nearly stationary position.

The increase between 1919 and 1947 bears impressive witness to the food-producing capacity of the country. It is well above that experienced by most Asian countries during the same period, although it does compare with three countries in the same region, Malaya, the Philippines, and China (Taiwan) (U.N. 1948-(1960: Table 6)). But equally clear is the fact that, just as the late nineteenth century demand for rice exports provided one nodal point where population growth suddenly quickened, the invasion of new medical technology after World War II provided a second, leading to much steeper rates of increase.

The 1960 census provided the most recent check on the people of the country and there is value in using it to give a quick sketch of the inhabitants before analysing in detail the demographic forces which are acting upon them.[7]

There were in 1960 about 27 million people,[8] of whom three-quarters lived in households devoted to agriculture. The sexes were almost evenly balanced, males exceeding females by only one-third of 1 per cent. The high growth rate had produced a community with a large proportion of children. Even the uncorrected census figures showed that more than 45 per cent of the population was under 15 years of age, and that half was either under 15 or over 60 years. The proportion of children will undoubtedly be a source of increasing economic strain, especially as schooling programs develop. In this regard Thailand, Malaya, the Philippines, and China (Taiwan) are similar, with relatively more children in the total population than is the case in most Asian countries and twice as many as in such economically developed countries as Sweden and the United Kingdom (U.N. 1948-(1963: Table 5); ECAFE 1955: 13 (population pyramids)).

Over 98 per cent of the population had been born in Thailand and about four-fifths of the remainder in China (mainland). Similarly, over 98 per cent were Thai citizens. Of the balance, nine-tenths were Chinese citizens, and most of the rest citizens of some other South-East-Asian country. Only 3 per cent could not speak Thai, and only 6·4 per cent were not Buddhists. The minority religious groups of any appreciable size were over a million Moslems, nearly half a million persons described as 'Confucianists' and 150,000 Christians.

Of persons over 10 years of age, 81 per cent of males and 61 per cent of females were literate, the rate of literacy reaching 91 per cent amongst 15-19-year-old males. Of the population over 6 years of age, 69 per cent of males and 56 per cent of females had experienced some schooling, the proportions rising to 92 per cent and 88 per cent in the 14-17 age range for males and females respectively.

In the population over 10 years of age, 83 per cent of males and 77 per cent of females were economically active, the male rate exceeding 90 per cent amongst 25-29-year-olds. Over four-fifths of the economically active worked on farms.

Having examined the course of population growth and the resultant population, it is now pertinent to inquire what influences shaped that growth and have determined the present-day population structure.

The most impressive of these forces is undoubtedly the very high level of fertility. The 1960 census sought information on the number of children ever borne by women who had been married. Table 2.3 presents a summary of the findings together with some other relevant data.

The data in the table should be treated with some caution. Firstly, they do not include any births recorded to women who returned themselves as 'Never Married' or of unknown marital status, even though the births were averaged by dividing by all females in the country. However, it is quite likely that there were few births in this category. Secondly, it does not

[7] The following description is from the 1960 census (National Statistical Office n.d.b).

[8] Employing the correction suggested by Das Gupta *et al.* (1965).

include the births from the 6 per cent of ever-married women who did not state a number of births, which should not be confused with the births from the 5½ per cent who stated that they had borne no children. However, it is likely that a large majority had in fact borne no children, for the margin as shown in Table 2.3 between those who had ever married and those stating they had borne children is for the 25-55 age range about what one would expect to arise from natural infertility.

TABLE 2.3 Thailand, Average Number of Live Births per Female by Age

Age	Number of live births (av.)	% of all females from whom births were recorded	% of all females ever married
15–19	0·1	11	14
20–24	0·9	55	61
25–29	2·3	82	86
30–34	3·8	90	93
35–39	5·0	93	96
40–44	5·7	94	97
45–49	5·9	94	97
50–54	5·7	94	98
55–59	5·6	93	98
60–64	5·4	92	98
65–69	5·3	91	98
70+	5·2	89	98

Source: National Statistical Office (n.d.b: Tables 3, 4, 14).

More serious is the fact that there is definite evidence of a recall lapse which is very likely associated with the failure to tell the enumerator of some children who had died. This is suggested by the progressive fall in average number of births from the age of completed fertility to old age. It is extremely improbable that this can be explained by a rapid rise in fertility over the last thirty or forty years. Furthermore, such a recall lapse suggests that the averages for younger women are also affected, and that the average size of the completed family is considerably above the figure of 5·9 recorded for women reaching the end of their reproductive span at 45-49 years of age. In fact, an examination of the number of 5-9-year-olds, neglecting 0-4-year-olds because of enumeration problems, compared with the number of women who must have borne them, and taking into account the distribution of fertility according to birth registration and the probable mortality of both groups during the 1950s, suggests that the average woman records over 6·5 live births during her lifetime and that birth rates are in the mid-forties per thousand population.

Bourgeois-Pichat (1959: 10n.), working on census material up to 1947, estimated the crude birth rate to be a little below 50 per thousand. With the greater information available from the 1960 census, the *Country Statement* given by Thailand to the 1963 Asian Population Conference (U.N. 1963: Pt 2) and the work of Das Gupta and his colleagues (1965: 20) both suggest a birth rate of about 45 per thousand. The latter also compute completed family size at an average of 6·6 live births per female (Das Gutpa *et al.* 1965: 17). These rates are very high by the standards of the world's economically developed countries, being twice

or more their level, but they are fairly typical of developing Asia. Bourgeois-Pichat's (1959: 5-9) careful reconstruction of past birth rates suggests that the fertility level has been fairly constant for at least the last half-century, with the exception of a dip caused by the dislocation of World War II, and that there is as yet no sign of any decline.

One sign of incipient fertility decline can be the development of a fertility differential by residence or social class, although the existence of such a differential, without evidence that it is widening or that the balance of residence or social class is changing, is of itself no evidence that a fertility transition is under way. A differential certainly exists in Thailand. In the whole country, females of 45-49 years reported in 1960 an average of 5·9 live births, while the figures for Bangkok and Thonburi,[9] were 4·4 and 4·7 respectively, indicating a level of fertility which was 25 per cent and 20 per cent lower respectively. This may be partly explained by a tendency for the sterile and less fertile to migrate to the city, in that such migration is more easily undertaken, but the margin is so substantial as to suggest that the Bangkok-born are less fertile than the population of the rest of the country. One should, therefore, seek for social differentials. Skinner (1957: 57-8) certainly reported lower fertility amongst the highly educated in a study confined to the Chinese *élite* of Bangkok, and a small-scale study in the Bangkok area indicated that educated civil servants tended to have smaller families than those with little education, but that there was no fertility differential between literate and illiterate farmers (Gille 1964: 3).

The explanation for differences in fertility can sometimes be found in the marriage patterns. In the country as a whole, marriage is not entered into at a particularly early age, and the pattern compares more with that of the United States than of India. Half of all males have been married at least once by the time they are a little over 24 years of age, and half of all females at a little over 21 years. However, in Bangkok these ages rise a further 2½ years for males and 2 years for females.[10] The *1954 Demographic and Economic Survey* demonstrated that in urban areas there was a markedly larger proportion of single females up to 35 years of age and of single males at all ages than was the case in rural areas. It also showed that amongst older women, widows and divorcees are more frequently found in the towns (National Statistical Office 1957a: Pt 2, 50-1). Thus a differential in age at marriage probably provides some of the explanation for the urban-rural fertility differential, but by no means all.

Between the 1947 and 1960 censuses average age at marriage for females rose, in that there was a reduction in the proportion of ever-married females of almost one-third in the 15-19 age group and one-eighth amongst 20-24-year-olds. Had marital fertility remained constant such a reduction should have resulted in a 5·3 per cent decline in fertility. During the same period there has been no substantial change in male proportions married

[9] Actually the *changwats* of Phranakhorn and Thonburi.

[10] Assuming constant increases in married proportions within the census age groups, 50% of males and females in the country were married at the time of the 1960 census by 24·2 and 21·3 years respectively. In *Changwat* Phranakhorn (Bangkok) the equivalent ages were 26·7 and 23·3 years. Because of serious defects in the marriage registration system, census data alone have been used to compute ages at, and levels of, marriage.

by age, and it seems probable that, in a rapidly growing society which amongst the Thai at least no longer knows any appreciable amount of polygamy, there has been a reduction in the age difference between spouses, which has helped to maintain near universal marriage (Caldwell 1963: 21-4).

Practically all women can marry at some time, but not all remain married or retain a living partner. At the time of the 1960 census, well over a million women were either widowed or divorced, making up one-fifth of all ever-married women, compared with just over one-third of a million males. There is the potential here for a substantial rise in fertility. Falling mortality and a reduction in the age gap between spouses will reduce widowhood, while social change may well reduce divorce.

However, the most important determinant of change in the rate of natural increase has not been the level of fertility but that of mortality. In the late nineteenth century there may well have been some fall in mortality as external influences, and especially the cash economy, penetrated ever more deeply into the country. But the evidence suggests that the death rate remained fairly constant at about 30 per thousand for most of the first half of this century (Bourgeois-Pichat 1959: 22-6). A gentle downward trend may have begun to develop from the mid-thirties, but this was counterbalanced by rising rates during the war. However, within a year or two of its end, major change was under way. The death rate began the persistent downward movement that took it below 20 per thousand by the mid-fifties and to about 13 per thousand at the time of the 1960 census (U.N. 1963: Pt 2; Das Gutpa *et al.* 1965: 28). The process is continuing, bringing in its wake soaring levels of natural increase. Nevertheless, the drop in mortality is in Thailand, as in much of the developing world, the most outstanding example of social and economic advance of the last generation. In 1937 the expectation of life at birth was probably about 35 years (Das Gupta *et al.* 1965: 12; Bourgeois-Pichat 1959: 22-7), in contrast to 54 years in 1960 and a projected 67 years in 1980 (Das Gupta *et al.* 1965: 39). At the present time the expectation of life at birth is probably that of the United States in 1920 or Portugal in the late 1940s, countries which at those dates had birth rates which were not only much lower than that of contemporary Thailand but which were falling. There is little evidence of a marked sex differential in mortality, although male deaths are somewhat higher than those of females during infancy and old age, while the reverse is the case during the major child-bearing years (Das Gupta *et al.* 1965: 26).

This remarkable achievement has largely been brought about, not as the inevitable result of steady economic advance as in nineteenth-century Europe, but by the importation of the new medical technology and by an expansion of governmental responsibilities in the field of health. By 1949 malarial control had begun with WHO and UNICEF assistance.[11] Between 1952 and 1958 residual D.D.T. spraying carried out with USAID assistance spread to cover the whole country, reducing cases of malaria by four-fifths and leading in 1959 to the decision to attempt the eradication of the disease. Between 1943 and 1961 the annual death rate per hundred

[11] Much that follows is from the 1964 *Official Yearbook* (Govt of Thailand 1965: 225-34).

thousand people for malaria fell from 328·9 to 24·5 and the government estimated that 'for every baht spent for this programme, the value of 30 baht could be saved for economic gains, and that for 250 baht expenditure one human life could be spared' (Govt of Thailand 1965: 225-6). Between 1950 and 1961 the incidence of yaws had been reduced from 8 per cent to less than 0·5 per cent of the population. Smallpox has been brought under complete control with 22 million vaccinations, and cholera has lost much of its severity and importance, for, although the 1958-9 outbreak resulted in the greatest number of cases ever, the mortality rate was only 12 per cent, compared with 60 per cent in earlier epidemics. Plague has been kept out, one-third of all leprosy cases are being treated, and mass tuberculosis tests and vaccinations are under way amongst school children. Even by 1961, only one-fifth of the causes of reported deaths were specifically diagnosed, and of these diarrhoea and enteritis were the most common, followed by tuberculosis, pneumonia, and malaria in that order (National Statistical Office 1956-(1963: 75)).

The provision of such medical services has meant the expansion of health facilities throughout the country.[12] There are now 71 Provincial Health Offices, 1,700 Provincial Health Officers, and 92 Government Hospitals of which 86 are in the provinces. In addition to the Special Divisions of the Department of Medical Services for maternal and child health and the health of school children, there are others set up to combat malaria, venereal disease, yaws, tuberculosis, and leprosy. The Rural Health Centres are spreading and various schemes have been begun to improve nutritional levels. For an underdeveloped country, the supply of doctors is reasonable,[13] but they are very badly distributed. A total of 2,500 doctors in 1961 meant approximately one to every 10,000 persons, but in practice the number of persons per doctor fell to 1,100 in Bangkok, an impressive figure by Western standards, and climbed to 50,000 in the Northeast Region. Between 1960 and 1965 the annual output of doctors climbed from 200 to 250, but there is grave doubt whether training can outstrip population growth at least this side of 1975.

The other determinant of population growth is immigration, and in Thai history this has been important. In the second half of the nineteenth century it probably explained about half of all population growth, being directly responsible for an annual population increment of about 0·25 per cent up to 1880 and about 0·4 per cent between then and the end of the century. Higher levels of natural increase and greater regulation and restriction of immigration have changed that position, with the result that since the late 1940s migration has ceased to be a significant demographic force. The censuses indicate that net immigration explained one-sixth of population increase during the 1920s, less than one-twentieth during the economic depression of the 1930s, and about one-sixteenth between the 1947 and 1960 censuses.

For over fifteen years now, however, a new pattern has emerged, largely as a product of the Immigration Act of 1949. In the year of the 1960 census official statistics showed a migrational net loss, and even

[12] Much that follows is from the 1964 *Official Yearbook* (Govt of Thailand 1965: 214, 232-4).

[13] The following information is from Hunter (*c.* 1963: 14-15).

for the three-year period centring on the census the excess of arrivals over departures was only 18,700 per year, amounting to about one-fiftieth of natural increase and raising the rate of natural growth, expressed as a percentage of the total population, by one-fifteenth of 1 per cent. However, these immigrants were neither the traditional type nor on the whole permanent settlers; nearly half were described as 'Malayan' and one-third as 'American'. So-called 'permanent immigrants' averaged little over one thousand per year, as had been the case right through the 1950s (National Statistical Office 1956-(1963: 89-91)). These figures might be somewhat low because they are probably complete only for the ports, airports, and main rail and road crossings, but this warning is modified by the fact that the great majority of Chinese have always entered by ship through Bangkok. Movement across the rivers and hills of the northeast, north, and northwest has in the past always been slight. However, with continued civil unrest and military activity in the countries to the east which once formed French Indo-China and the absence of a clear ethnic break on the Mekong frontier, there is evidence of the movement of refugees and others into Thailand. The scale of the movement to date is negligible in demographic terms, whatever its political implications. There has been some movement of Chinese from Malaya into peninsular Thailand, especially during the 1920s and 1930s, in search of land for growing rubber which was forbidden in Malaya.

With net migration practically zero, Thailand's population growth rate was by 1960 determined solely by the levels of fertility and mortality. The high growth rate revealed by the 1960 census shocked many government officials who had been lulled into some complacency by the 1956 population estimates.[14] The census clearly indicated that the crude birth rate was certainly as high as 45 per thousand, that the crude death rate was already down to 13 per thousand, and that the rate of natural increase had reached 3·2 per cent per year and was rising. Thus, after a thirty-year period following the end of World War I with a rate of population increase never varying very far from 2 per cent per year, a new era had been entered. The thirty years from 1918 to 1948 probably just failed to double the population and witnessed an increase of about 8½ million persons. By 1960 an extra million persons per year was being added. Furthermore, if birth rates remained high while death rates continued to fall, as seemed only too possible, the thirty years following 1960 might treble the population, adding an extra 50 million inhabitants.

Population distribution

In 1960 most Thais lived in one of two areas, either on a long stretch of alluvial plain running almost three hundred miles northward from Bangkok narrowing from about one hundred miles in width in the south to no more than fifty miles in the north and becoming at the same time less densely settled, or in a circular area in the northeast basin centred approximately on Roi-et and averaging about 125 miles in radius. Secondary concentrations occurred on the eastern coast of the far southern peninsular area and in the Chiengmai area of the far north (National Statistical Office

[14] As set out in the *1954 Survey* (National Statistical Office 1957a).

n.d.b: Fig. 2). Dense population settlement can be equated roughly with the lowland areas; only around Chiengmai are any areas above the 650-foot contour closely settled.

In Table 2.4 the population distribution pattern is shown in terms of the National Economic Development Board's planning regions, although from the analytical viewpoint these are not completely satisfactory. The major problem is that the border between the Central and North Regions cuts across the Central Plain, and relatively short population movements northward to the less densely settled part of the plain appear as movements from central to northern Thailand. Thus Chai-nat is in the Central Region but Uthai-thani is in the North.

One-third of the population lives in each of the Central and Northeast Regions, while the remaining one-third is shared between the more peripheral North and South Regions. Regional population density varies from over 200 persons per square mile in the Centre to 88 in the South. This is not, of course, the whole story. Half the area of the country has fewer than 65 persons per square mile, while parts of the Central Plain exceed 650.

TABLE 2.4 Thailand, Population Density by Region, 1960

Area	Pop. ('000)	% of total population	Area (sq. miles)	Area (% of total)	Pop. density per sq. mile
Central Region	8,271	32	39,992	20	207
Northeast Region	8,992	34	65,724	33	137
North Region	5,723	22	65,639	33	88
South Region	3,272	12	27,100	14	122
Thailand	26,258	100	198,455	100	132

Source: National Statistical Office (n.d.b: Table 1).

The country as a whole averaged 132 persons per square mile. This is not dense by the standards of East and South Asia. Within South-East Asia it is similar to the Federation of Malaya and one and a half times as dense as Burma, but only half as dense as the Philippines or Vietnam. Nor is it thickly settled by the standards of some temperate, industrialized, and urbanized countries. For instance, Thailand's area is about the same as that of France, but its population is little more than half as great. Nevertheless the country's density of settlement is already great in comparison either with that of many western-European countries at the same stage of economic development or with the great majority of the tropical world outside monsoon Asia.

Two efforts to divide the country into more meaningful demographic units should be mentioned. Ingram pointed out that up to 1905, when the railway network began to tap the hinterland, nearly all the great increase in rice production which fed the export stream came from the Central Plain. Presumably most of the natural increase that did take place in the late nineteenth century occurred there, and certainly the great majority of the immigrational increase did so. But this was no longer the case by the time the first censuses were taken, for between 1903-7 and 1948-50 rice cultivation increased in the 'Centre', by which Ingram means almost the whole Central Plain, by 151 per cent and in the rest of the country by 678 per cent (Ingram 1955: 45). Nevertheless, for the whole period from 1911 to 1947 the Centre maintained its share of the population at

about 40 per cent (Ingram 1955: 8). The most significant change has occurred since Ingram's analysis, for between 1947 and 1960 the Centre's share rose from 40 per cent to 42 per cent, partly because of increased metropolitanization around Bangkok and partly because of increased settlement in the northern part of the Plain.

A more painstaking effort has been made by Sternstein (1965: 22-7), who divided the country into eight reasonably homogeneous regions, the *Eastern Plateau* corresponding approximately to the Northeast Region, the *Northern Ranges* and the *Outer Central Plain* corresponding more roughly to the North Region, the *Inner Central Plain* and the *Southeastern Upland* and *Coastal Plain* corresponding perhaps even more roughly to the Central Region, and the *Southern Ranges* and *Southern Coastal Plain* corresponding to the South Region. He is able to demonstrate thereby just how stable the population distribution pattern has been over the last forty years. During that period the Outer Central Plain has increased its share of the population from 12 to 14 per cent and the Inner Central Plain from 15 to 16 per cent. In contrast the Northern Ranges' share has fallen from 19 to 17 per cent and the Southern Coastal Plain's from 9 to 8 per cent. Up to 1940 the Eastern Plateau actually increased its share slightly from 33 per cent to 34 per cent but more recently this trend has been reversed.

Land has never been in particularly short supply in Thailand. Chapman and Allen (1965: 2) have pointed out that for the lower Central Plain as a whole settlement density is probably still below 400 persons per square mile, compared with 800 on the Central Plain of Luzon and 1,200 in Java. Both the latter areas have government-sponsored internal migration programs. The fact that Thailand has not suggests that settlement densities on the Central Plain have not yet become critical. Ingram suggests that when extra rice production has been profitable it has often been possible to increase yields even on the Central Plain merely by intensifying labour, without in many cases the need to extend the area of cultivation or to alter the method of cultivation (Ingram 1955: 54-5).

Nevertheless, the rapid growth of rural population may do something to change this situation. Increased numbers of surviving children can upset inheritance provisions even in countries without overall land shortages. Already Wijeyewardene seems to have discovered landlessness and a shortage of agricultural opportunities in the location which he examined in the northern part of the Central Plain (see Chapter 3) and certainly tenancy exists to a very considerable extent on the Plain. Furthermore, rapid population growth can upset the mechanism whereby villages prepare new land for the settlement of their surplus inhabitants or old land for more intensive cultivation. That there is already an awareness of the possibility that such problems will increase was shown by the discussion at the 1963 National Seminar on Population Problems of Thailand, from the report on which the following statement is drawn:

> It was recognized that unused arable land was available for cultivation but only to a limited extent in view of the Government's policy not to allow the proportion of land area under forest, which was now 55 per cent, to become less than 50 per cent of the total land area. Furthermore, pilot projects with land settlement indicated that unused land could only be made available for cultivation at considerable cost. (Gille 1964: 3).

It might be noted that the land which is to remain forested is rugged hill and mountain country, naturally most suited to tree growth.

Urbanization and internal migration

Now that the approximate levels of most demographic phenomena are known, the two most significant areas for speculation are the likely trends of urbanization and fertility. The courses taken by these two characteristics of the population will have marked economic effects, and different courses will result in very different demands for employment, both in volume and type, and consumption goods.

Accordingly, some space must be devoted to an examination of urbanization and internal migration. Two aspects of Thailand's urban pattern should be noted: its relatively low level of urbanization and the great extent of metropolitanization.

Statistics of urban population are notoriously hard to compare, because towns in many countries are merely equated with local government areas of which the real towns may form only a part. To some extent this is true in Thailand, for the municipal areas shown in Table 2.5 'have some characteristics generally recognized as urban, but some such areas are geographically extensive, with a population more rural than urban' (National Statistical Office n.d.b: Definitions). Even so, the proportion of the population living in urban areas is low compared with much of the developing world. For instance, by the late 1950s almost one-third of the people of China (Taiwan) and one-quarter of those in the Federation of Malaya lived in centres with more than 50,000 inhabitants, compared with one in fifteen in Thailand.[15]

TABLE 2.5 Thailand, Population Living in Urban Centres by Size, 1960*

Size of centres (number of inhabitants)	Total inhabitants ('000)	Percentage of total population	Number of centres
Over 1,000,000	1,703	6·5	1†
50–75 thousands	66	0·3	1
20–50 thousands	553	2·1	19
5–20 thousands	906	3·4	86
Under 5 thousand	46	0·2	12

* Urban centres have been equated with muncipal areas.
† Bangkok and Thonburi are treated together as Greater Bangkok.
Source: National Statistical Office (n.d.b: Table 1a).

A basic question in the consideration of population change is the stability of the present situation. Can future urban trends be projected on the basis of past experience in the country, or is it safer to assume from experience elsewhere an urban 'explosion'? Thailand's recent pattern of urban population change has been radically different from that of Malaya. Between 1947 and 1960 Thailand's towns absorbed little more than one-sixth of the total intercensal population increase, while those of Malaya absorbed the entire increase (Caldwell 1962: 83-4).

There are at least four major forces helping to produce rapid urbanization in various less developed countries. They are, or have been, foreign

[15] Comparative statistics are drawn from the 1962 *Demographic Yearbook* (U.N. 1948-(1963: Table 11)).

immigration, rapid population growth raising problems of absorption in rural areas, military action and civil unrest in the countryside, and various aspects of social modernization, of which the extension of schooling is particularly important, tending to make urban living more attractive. As yet rural Thailand has shown itself remarkably capable of providing for increases in the farming population, but, as has been suggested above, this condition may not persist. Nor are there signs of the type of guerilla activity which has been an important factor in swelling rural-urban migration in Malaya, Java, Burma, Vietnam, and the Philippines, although that situation is at least conceivable in northeast Thailand. Finally, Thai society has been so stable that the vast extension of schooling this century has not produced a revulsion from rural life.

> The Thai has preferred the communal life of the village, and it is not easy to break the ties of culture and tradition which have induced him to become a rice farmer (or to remain one, since by the time he is old enough to strike out on his own he is already experienced in the art of rice cultivation) (Ingram 1955: 56).

This reluctance to migrate to the town has meant that economic advance has necessitated the importation of a foreign urban class. This in its turn meant that the rural Thai youth was unlikely to have any friends in the city and so felt no strong temptation to move there. But these circumstances are passing. For sixteen years there has been little recruitment of Chinese to the towns, while at the same time the Thai movement into them has been on the increase. Not only does Bangkok possess a Thai bureaucratic class, but it is now also the home of a rapidly increasing Thai proletariat, which outnumbers the Chinese, and which is found particularly in the peripheral parts of the city (Skinner 1957: 17-19). It is said that large-scale Thai migration from the rice fields began during World War II (Thompson 1947: 242). Chain migration to Bangkok from the rural areas may well increase dramatically as an increasing proportion of the peasantry comes to have relatives there.

But to talk of towns in the sense, for instance, of the Philippines or Malaya is a misnomer in Thailand. The country has one large metropolitan area, Bangkok-Thonburi or Greater Bangkok, and no other major centres. It is over a quarter of a century since Mark Jefferson (1939: 226) coined the term 'Primate City', and wrote, it

> stands out alone in a different order of magnitude and significance from those of all other cities in its country . . . The finest wares are always to be found there, the rarest articles, the greatest talents, the most skilled workers in every science and art. Thither flows an unending stream of the young and ambitious in search of fame and fortune, and there fame and fortune are found. [It] is the kingdom's market for all that is superlative in intellectual and material productions. Its supereminence as a market runs parallel to its supereminence in size. It is the primate city . . . .

Jefferson (1939: 229) stated that 'Primacy of a leading city is . . . an earmark of intense nationalism', and singled out Austria as his most extreme example with a population ratio between the first, second, and third towns of 100 : 8 : 6. But if ever a country had a primate city it is Thailand, for in 1960 the relationship in size between the populations of

Bangkok, Chiengmai, and Nakhorn-Ratchsima (Khorat) was 100 : 4 : 2, and every word of Jefferson's description can be truthfully echoed. Between 1947 and 1960 Thailand's ten leading towns more than doubled their aggregate population, from under one million to just over two million persons, but 87 per cent of the increase occurred in Greater Bangkok, which enlarged its proportion of the total population of the ten towns from 82 per cent to 85 per cent. Thus, although urban population as a whole is so small that one might suppose that industrialization would prove difficult, this is probably more than compensated for by the existence of such a metropolis. For Greater Bangkok now has a population approaching two million and is second in size only to Djakarta in South-East Asia (National Statistical Office 1960-(1962: Table 10)).

Bangkok's primacy is partly historical. The capital could retreat no further southward in its search for safety from the invader without leaving the Central Plain for the peripheral hills of the peninsula or the southeast. However, in its final position it was admirably placed to take advantage of the external commercial developments of the late nineteenth century. It was on the largest river of the Central Plain and as far up it as big ships could conveniently go. In fact the Gulf of Siam and the estuary of the Chao Phya tapered to the site of Bangkok and increasingly led the maritime trade there in search of rice. On the other three sides of the city the natural and man-made waterways of the Central Plain have for almost two centuries carried boats and their cargoes into the city. This century it has been well sited as the rail and road nexus of the country.

It is possible that Bangkok's predominance carries dangers. Certainly the warnings have increased. Its position in the heartland of the Tai people may make it difficult for the ruling bureaucracy to appreciate the attitudes of distant ethnic minorities. Politically, the centralization of government might encourage or facilitate *coups,* although it may also ensure that they are bloodless. In terms of economic development, there is probably something to be said for locating as much as possible of the modern sector of the industrial economy in one place, and that place a port, until it is very much larger than at present.

One might well ask if the surmise that social and economic change are likely to occur more easily in the metropolis can be supported by evidence of qualitative differences between the population of the city and that of the country as a whole. Certainly, marked contrasts can be detected when comparing *Changwat* Phranakhorn[16] with the whole kingdom and some of these are summarized in Table 2.6.

The Bangkok population is more cosmopolitan, containing more foreigners, fewer Buddhists, and more Thais who have migrated within the country. As a reflection of this, the city contains a preponderance of males, the more mobile and economically activated sex, and this is especially the case amongst young adults. Marriage in the city is later, and fertility is lower apparently by as much as 30 per cent if the criterion used is that of completed family size. Thus Bangkok has somewhat lower dependency ratios. But a larger proportion of persons of working age does not mean more economically active persons, largely because of more education for the young, more complete retirement for the old, and more concentration

[16] Five-sixths of the population live in Bangkok Municipality. Thonburi is excluded.

amongst females on the household. In the metropolis, too, there is more unemployment. Education, especially extended schooling, is more common in the city.

TABLE 2.6 Comparison of Certain Data for the Kingdom of Thailand and *Changwat* Phranakhorn, 1960

	Thailand	Phranakhorn
Thai citizens (%)	98	89
Foreign-born (%)	2	12
Buddhists (%)	94	77
Locally born*	87	66
Sex ratio (males per 100 females)	100	105
Sex ratio, 15–44 years	101	108
Age at which 50% have been married:†		
males (in years)	24·2	26·7
females (in years)	21·3	23·3
Child-woman ratio‡	757	704
Median number of children per female:		
45–49	5·8	4·1
Percentage of population:		
under 15	43	41
15–64	54	56
65+	3	3
Percentage economically active:		
males, all ages	83	71
males, 11–19	59	28
males, 60+	64	48
females, all ages	77	41
Percentage of economically active unemployed	1	3
Percentage of persons over 6 years:		
with no schooling	38	32
finished secondary schooling	2	8
Percentage of employed males:		
farming, fishing, etc.	78	11
professional, administrative, clerical	4	17
sales and services	7	28
craftsmen, transport, mining	10	38
Percentage of employed females:		
farming	86	21
professional, administrative, clerical	1	12
sales and services	8	44
craftsmen, transport, mining	4	21
Percentage of economically active persons:		
employers	0§	2§
own account workers	30	22
employees—government	4	20
—other	8	36
unpaid family workers	58	19

* In the same *changwat* (Phranakhorn and Thonburi counted as one).
† Assuming constant increases in married proportions within age groups.
‡ Children, 0-4 years, per 1,000 females, 15-44 years.
§ Thailand = 0·3%, Phranakhorn = 1·5%.

Source: National Statistical Office (n.d.b); National Statistical Office (1961-2: *Changwat* Phranakhorn).

The occupational pattern shows many differences. In the city there are, of course, fewer farmers and fewer unpaid family workers. The frequency of both employer and governmental employee status is about five times what it is in the country as a whole, while craftsmen are about four times as common. The importance of the city as a centre for sales and services

is also apparent, although such activities do not dominate craftsmanship and transport as much as in many cities in less developed countries.

Urbanization and other social and economic change within the country will be affected substantially by the volume of internal migration. In fact the analysis of such movement can provide an indicator of the types of development under way. For the first time the 1960 census provided data upon which accurate analyses can be based. Information had been collected on the location of persons five years before the census and also at birth, and both were related to residence at the time of enumeration. The major problem of analyses based upon such census statistics is that they do not distinguish between seasonal and permanent migration. The former is certainly important in Thailand, but as yet we do not possess adequate statistics to gauge it properly.

Employing the planning regions, Table 2.7 illustrates the movements of those aged 5 years or more in 1960 since a date five years earlier than the census. Intraregional movement is as yet more important than interregional movement, and is at its greatest in the Central Region where there is considerable movement to Bangkok. The Northeast and Central Regions have been the greatest exporters of population to other regions and the Central and North Regions have been the largest importers. Only the Northeast has shown a net loss. Much of the movement from the Central Region and the movement into the North must be explained not in terms of migration to the distant northern hills but merely as movement to the less densely settled areas in the northern part of the Central Plain, where much of the recent extension of irrigation works has been concentrated. The seven largest interregional migration flows have been, in order of volume, that from the Northeast to Central, Central to North, North to Central, Northeast to North, Central to Northeast, Central to South, and South to Central. The only net movements of any real magnitude have been the transfer of 35,000 people from the Northeast to the Central Region and that of 21,000 from the Northeast to the North Region.

TABLE 2.7 Thailand, Population Movements Between 1955 and 1960*

Region	Intraregional movement† % regional population	Interregional movement			
		Migration‡ index	Net migration§ ('000)	Immigration % regional population	Emigration % regional population
Central	3·4	+1·27	+21	1·2	0·9
Northeast	2·0	−3·32	−60	0·3	1·0
North	1·6	+1·84	+30	1·2	0·6
South	1·8	+1·56	+9	0·8	0·5

* Difference of residence between 1955 and 1960 for persons over 5 years in 1960.
† From one *changwat* to another.
‡ Larger stream divided by smaller stream; net immigration shown positive and net emigration negative.
§ Immigration positive, emigration negative.
Source: National Statistical Office (n.d.b: Table 6).

A detailed analysis of migrational movements has been begun by Chapman and Allen (1965: 9), who have employed data on both migration since birth and during the five years preceding 1960. These two sets of data have shown movement in the same direction in the great majority of cases. They have shown that there is both an urban frontier and a

rural one in Thailand. The two great focuses for migration have been Greater Bangkok at the southern end of the Central Plain and the agricultural areas at the northern end of the Plain. An important subsidiary focus has been the northernmost part of the Northeast Region centring on Udornthani.

Chapman and Allen (1965: 7) nail what they term two myths. Firstly, they point out that there has never been a strong movement of people from the Northeast to peninsular Thailand. Secondly, and more importantly, they discuss the growth mechanics of the metropolis.

> The 'shift to the capital' is predominantly an intraregional movement, supplemented to only a minor degree by the movement of people from the Northeast, North and South to Bangkok. The capital, in fact, gained only one-fifth of its net in-migrants from the 45 changwads and two-thirds of the kingdom's population which are found outside the Central Region.

Nevertheless the analysis does show that, outside the southern part of the Central Plain, the chief contributors to Bangkok have been *changwats* in the Northeast, especially in the far east of that region.

Chapman and Allen (1965: 10, 11) do underline the important part that rural-rural migration has played in the country. The two great streams are that which has moved from the central to north parts of the Northeast Region and that which has moved into the northern part of the Central Plain from the southern part of the Plain and from the Northeast. But this may all be changing. A comparison of the short-term 5-year movements with the longer-term ones since birth showed that Bangkok is exerting an increasing pull.

> There is a strong suggestion, then, that the Northeast in particular has recently experienced a substitution of Bangkok for intraregional destinations which previously absorbed so much of the out-migrant flow.

Internal migration has as yet been on rather a small scale in Thailand. Rapid population growth in rural areas may lead to a sudden quickening in the flow. The fact that this quickening has been delayed until most of the country has been reached by modern transportation may mean that provincial towns will increase in size only slowly while Bangkok gains an ever greater ascendancy. This can hardly but affect the process of economic development. The experience of the Australian states, where usually a single metropolis houses half the population, suggests that this may be by no means a bad thing for the rapid construction of secondary industry using imported technology.

Social and economic aspects

As shown in Table 2.8, 79 per cent of economically active males and 86 per cent of economically active females are employed in farming, fishing, or logging, nearly all in the first. Of those in the agricultural sector of employment, 30 per cent are farmers or farm managers and the balance are farm workers. In fact the overwhelming proportion of this balance consists of each farmer's wife and one or two of the elder of his unmarried children, working as unpaid members of the family. This is the typical farming unit now that communal farming methods have largely given way to family farms. Married sons soon acquire their own farms, as is shown by the fact that half of all male farm workers are under 20 years of age,

and married daughters join their husbands as sources of farm labour. Women take over farms largely as a result of widowhood, as is shown by the fact that whilst only one farmer or farm manager in each thirteen in the 25-29-year-old group is a female, one in four of those over 50 years of age is.

TABLE 2.8 Thailand, Employed Population* by Industry, 1960

Industry	Males Number ('000)	%	Females Number ('000)	%
Agriculture, fishing, etc.	5,575	79	5,757	86
Manufacturing	293	4	177	3
Commerce	363	5	416	6
Construction, mining, quarrying, electricity, water, etc.	99	1	15	0
Transport and communications	156	2	9	0
Services†	458	6	197	3
All industries‡	7,092	100	6,657	100

* Over 10 years of age.
† Includes public service.
‡ Includes 148,000 males and 86,000 females of unknown occupation.
Source: National Statistical Office (n.d.b: Table 19).

Thailand's percentage of farmers certainly places it amongst the agrarian, less developed nations, but the signs of change can be read in the occupational statistics, for, while 82 per cent of employed males over 60 years of age are farmers, only 72 per cent of those in the 20-24 age range are engaged in this activity.

One aspect of the occupational structure of the Thai town is illustrated by the statistics that in 1960 30 per cent of males and 45 per cent of females working outside the farming, fishing, and logging sector were employed in sales and half of this group were hawkers (National Statistical Office n.d.b: Table 16).

However, there are signs of economic change. By 1960, 12 per cent of the male labour force were employed in non-agricultural and non-labouring occupations. Transport was expanding particularly rapidly and employed 165,000 persons, land transport predominating over water transport in terms of employees by the unprecedented ratio of four to one. Manufacturing employed 470,000 persons, making up 4·1 per cent and 2·7 per cent of the male and female work forces respectively. Of those employed in manufacturing only just over one-third worked in the Greater Bangkok complex, but this understates the fraction found there of what may be termed modern manufacturing. For instance, the production of wearing apparel, which, with 80,000 employees, is the largest single sub-division of the manufacturing sector, ranges all the way from dressmakers to factories. Other major employers are the wood and cork industry with 60,000 persons, miscellaneous food preparation and rice mills with 33,000 each, the making of textiles, cordage, and rope, and also sawmills with 27,000 in each of the two groups, and the spinning and weaving of cotton textiles with 20,000.

Some other aspects of the labour force might be briefly summarized.

The towns have created a work environment more suited to the employment of males than females, partly because the caring for children proves

more difficult in urban conditions. Outside farming and commerce, there are over two and a half times as many employed males as females.

The towns, as well as being commercial and growing manufacturing centres, are important places of governmental employment. There are almost half a million government employees in Thailand, 30 per cent of all employees other than unpaid family workers.

They are also the centres to which the internal migrant goes in search of work. In 1960 there were 88,000 unemployed in Thailand, thus giving it one of the lowest unemployment rates in Asia (Aromin 1965: 4). But over one-quarter of the unemployed were to be found in Greater Bangkok, and, as might be expected, they were young. Almost three-fifths were under 25 years of age and a similar fraction were males (National Statistical Office n.d.b: Table 14). However, it should be noted that such figures are far from satisfactory, as they do not measure the extent or degree of underemployment, which is certainly a feature of urban life and perhaps rural life as well.

Thus by 1960 Thailand possessed an economically active population of 13,837,000 of whom 13,749,000 were in employment. Of the employed, almost 2½ million were working outside farming and over 800,000 were working in Greater Bangkok.[17] The whole work force was probably increasing by almost half a million persons per year, and the non-agricultural work force by over 100,000 each year. Indeed, over 40,000 persons were probably being added each year to the number of economically active in Greater Bangkok.

At the same time the educational system had been preparing, and was still preparing, the work force for structural change. Thailand is in fact a less developed country which has achieved, at least at primary school level, mass education without giving rise to either explosive urbanization or political instability. The introduction of a modern education system dates from the 1890s (Harrison 1954: 229) and compulsory schooling legislation from the early 1920s (Govt of Thailand 1965: 429). Four years of primary schooling is now compulsory and it is hoped that this will soon be extended to seven years by introducing an extra three years of upper primary before the commencement of secondary education. The effectiveness of the provision for compulsory schooling can be judged from Table 2.9, where it can be seen that 90 per cent of 14-17-year-olds are either in school or have at some stage been there. However, statistics from the Ministry of Education suggest that the number of students who routinely attend is only about five-sixths of the number claiming attendance in the census (USOM/Thailand 1963: 220). The age grouping used in the table is unusual, but it does seem to group persons of similar education experience by age. Thus it can be seen that most Thais under 45 years of age and the great majority under 30 years have been to school.

The table brings out certain other points, such as the persistence of a sex differential in education. It also demonstrates the chief feature of Thai education, the sudden breaks at certain levels. A study of educational retention carried out in 1960 (USOM/Thailand 1963: 245) employing life-table methods to show loss rates for the year on a synthetic cohort, and thus picturing a situation which would not in fact exist at any one

[17] *Changwats* Phranakhorn and Thonburi.

time unless the present position persisted unchanged, demonstrated that, of 1,000 students commencing first grade, 696 would reach fourth grade, but only 149 would then proceed to secondary school, of whom 118 would reach sixth grade secondary. Then the second major break would occur. Of these 118, only 35 would proceed to the pre-university seventh grade and only 31 to eighth grade.

TABLE 2.9 Thailand, Education by Age and Sex, 1960

(percentages of each age group reaching certain education levels but no higher)*

Age	No ed.	Some primary but not 4th grade	4th grade primary	Some secondary but not 6th grade	6th grade secondary	Pre-university	College university
Males							
6–9	69	29	(0·4)	(0·1)	0	0	0
10–13	11	53	28	8	0	0	0
14–17	8	13	58	19	1	(0·3)	0
18–21	11	13	59	7	6	2	1
22–29	15	15	59	4	4	1	2
30–44	25	16	47	6	3	1	1
45+	60	13	20	3	1	1	1
Females							
6–9	69	30	(0·4)	0	0	0	0
10–13	13	49	31	7	0	0	0
14–17	13	12	63	11	1	(0·2)	0
18–21	18	12	62	3	3	1	1
22–29	24	15	56	2	1	(0·4)	1
30–44	48	14	34	2	1	(0·2)	(0·3)
45+	91	3	5	1	(0·2)	(0·1)	(0·1)

* Percentages do not add to 100 because of the omission of 'other education', which includes kindergarten. Percentages between 0·1 and 0·4 have been shown in parentheses.

Source: National Statistical Office (n.d.b: Table 11).

Thailand's education system has its difficulties. In the early 1960s only half the primary school teachers were qualified according to the minimum standards laid down by the government (USOM/Thailand 1963: 28). This does present a problem, especially in view of the government's aim to extend compulsory primary schooling from four to seven years and to enforce completely the compulsory provisions by the early 1970s (Gille 1964: 2). This means that during the next decade and a half, the number of persons receiving full-time education is likely to be increasing at an annual rate of 5·2 per cent,[18] compared with population and labour force rates of increase of only about two-thirds as much. Whether an expansion to such a degree is warranted in terms of economic development has been the subject of debate. The Joint Thai-USOM Task Force certainly believed so, and may have been right to the extent that education adds generally to the economic efficiency of a society. They argued, 'Investment in primary education for the educational development of Thai youth is an investment that has no rival in terms of return' (USOM/Thailand 1963: 211, 18-70). But Hunter (*c.* 1963: 8-10) pointed out that it was very difficult to sustain the argument in terms of specific manpower requirements except in some technical areas as well as in the field of teacher-training. But the ambitious Thai has often been more interested in general

[18] See Table 2.12, Section (a)(ii), Projection I.

education, for his hope has been to join the governmental bureaucracy, which still has tremendous status and importance (see Chapter 3).

> Thailand in 1960, a country with 82 per cent of population in agricultural pursuits, had accumulated a considerable educated class—nearly 30,000 men and women with four years of college education; nearly 100,000 who had had a touch of college work. Many of these had gained education for education's sake. The economy was not much industrialized or 'modernized' and education was not naturally regarded as a prelude to intensive training for some technical pursuit; if anything, it led to Government service for men, private business and social service for women (Hunter *c.* 1963: 18).

Sundrum and Daroesman have been able to show that, while education by no means determines occupational level in Thailand's occupational stratification, it is the most important key to entrance to the professional, administrative and clerical occupations from which the bureaucracy is largely drawn.[19]

Education has certainly helped to produce a more literate citizenry. Amongst the population over ten years of age, the literate proportion climbed from 31 per cent in 1937 to 54 per cent in 1947, and then to 67 per cent in 1956 and 71 per cent in 1960. This has assisted the spread of the mass media (Govt of Thailand 1965: 411-16). There are now nineteen daily newspapers of which eighteen emanate from Bangkok. Between them they had recently a Thai circulation of 207,000, a Chinese circulation of 45,000, and an English one of 14,000. There are thirty-seven provincial papers, which usually appear every five days to coincide with the announcement of the lottery results. Since 1931 government and commercial radio has spread until there are now sixty-nine broadcasting stations. In 1955 the first television service on the Asian mainland commenced in Bangkok. There are now two services, and by the end of 1963 more than 200,000 receivers were in use. Although half the population of the country is within reach of the Bangkok transmitters, these are now supplemented by three regional transmitters.

The future

The heroic period of Thailand's demographic analysis is now over. Reasonably accurate and consistent estimates exist of the levels and trends of population phenomena. Population projections can be constructed. Mortality trends can be predicted fairly confidently and some variation will have little effect on overall population size. The greatest unknown is the future course of fertility. This may seem a surprising statement in a country where the birth rate may well not have changed appreciably for centuries. But the fact of the matter is that the recent upturn in growth rates has put strains both on individual families and on the government which may evoke response. An increasing willingness on the part of Asian governments to intervene in the family planning field and a decided improvement in contraceptive technology has led to some observers sensing the possibility of considerably faster declines in birth rates than anyone has hitherto liked to predict. This has been reinforced by quite dramatic falls in birth levels in Singapore and Hong Kong, where family planning clinics are plentiful,

[19] See Sundrum and Daroesman (1960), especially figures between pp. 134 and 135.

and by unexpectedly large demands for contraceptive services in China (Taiwan) and South Korea.[20] Accordingly, it would now be unwise to discuss population projections for Thailand without first considering likely governmental population policy.

Thai society may avail itself quite readily of simple, cheap contraceptive devices. It is a highly literate Asian society with levels of education above those in much of the West when birth rates began to decline in the late nineteenth century. Apparently there already is some degree of family limitation amongst the small Thai and Chinese *élite*, as discussed previously. The Family Planning Association of Thailand had reported as early as 1963:

> Advice on family planning was given in response to a number of requests from various parts of the country. A large number of requests for advice originated from civil servants (Gille 1964: 3).

Indeed by that date the Ministry of Health reported that more than 10,000 women were being sterilized each year in the hospitals, together with a number of males in private surgeries, and that the numbers were growing. 'Indications were that the desire for sterilization was increasing, not only in cities and towns, but also in rural areas'. It has been pointed out that Thai Buddhism is not inimical to rational economic activity (see Chapter 3), and that social change has been achieved with surprising ease, especially when it has been decreed from above (see Chapter 3).

The government has been made increasingly aware that rapid population growth has maintained an economically inefficient age structure with half the population either young children or old people, and that in addition it is necessitating the investment of savings in duplicating facilities for the large population increments rather than permitting as fast an increase in the amount of capital stock per worker as is desired. There has been some suggestion that a continuation of such growth would imperil the country's position as a rice exporter. As early as 1959 the International Bank Mission, believing the annual population growth rate to be no higher than 2 per cent (I.B.R.D. 1959: 3), had advised, on the basis of its 1957-8 investigations, that,

> In view of the rapid rate of increase in the population, a responsible attitude toward the size of families should be encouraged by making birth control information available at public health centres (I.B.R.D. 1959: 160).

But the 1960 census revealed to both United Nations demographers and to the Thai public servants a higher rate of population growth than they had anticipated (Gille and Thip 1953: 7). The first outcome of this realization was the National Population Seminar, held in Bangkok in March 1963, which has been described as having begun serious thought about population control in Thailand (Winich *et al.* 1965: 1). The Seminar was organized under the auspices of the National Research Council, and amongst the leading citizens participating was the Prime Minister. It was explained to the Seminar that population growth was more rapid than had been

[20] Many of these facts are from reports to the International Conference on Family Planning held in Geneva in August 1965. The reports have been printed in Berelson *et al.* (1966).

expected and the censuses had shown that the proportion of population in the dependent age groups was rising (Gille 1964: 1). In addition it was stated that the development plan's target of a doubling of national income per head had been set at a time when it was thought that the rate of population growth was only 2 per cent per year. In his Preface to the Final Report, Lieutenant-General Netr Khemayodhin, the Secretary-General of the National Research Council, stated that the Seminar

> brought to the attention of our people the urgency of the need for us to prepare a corps of specialists to deal with this question. It aroused within our country an increased desire to know and to understand such things as family planning, mortality, fecundity and fertility trends, methods of population control, and so on. It unearthed facts that bear upon the present population. It enabled us to obtain a more accurate perspective of our position on this issue of international significance. And, finally, it provided a useful framework and guide for us to follow as we work to achieve a useful role for our people within the contemporary demographic revolution as we continue to strive to improve their general health and welfare (Gille 1964: 1).

Perhaps the most important outcome of the Seminar was the decision that a pilot project should be carried out in one *amphur* to measure the effects of various approaches to family planning.

By December 1963, the *Country Statement for Thailand* presented to the United Nations Asian Population Conference in Delhi said:

> Considering that the Government may have to introduce measures to reduce the rate of population growth, it is expected that the birth rate is likely to remain fairly constant or even decline in the future as well as the death rate (U.N. 1963: Pt 2).

Subsequent to the National Population Seminar, and consequent upon its decision, a family planning project was established in a rural *amphur* in the southern part of the Central Plain about fifty miles west of Bangkok. It was jointly sponsored by the National Research Council and the Ministry of Public Health, and it was hoped that it could eventually be integrated with the Health Services. The Population Council supplied two technical advisers and funds for a year. The area chosen does not appear to be one which in any way disposes the project to a successful outcome. It is relatively inaccessible and has been penetrated to only a very slight extent by either newspapers or radio.

Those in charge of the project reported that 'Local health personnel, village headmen and others in authority were enthusiastic about the prospect of a family planning service in their respective areas' (Winich *et al.* 1965: 1). A general survey of married females between 20 and 45 years of age in the district indicated a desired family size averaging 3·8 children, which was well below the average size of completed families, and perhaps of greater interest, the fact that 72 per cent of the women wanted no more children. Although less than 1 per cent had even the vaguest idea of contraception, 70 per cent wished either to practise contraception or to learn all about it. These were much higher rates than anyone had expected and gave some indication of what might occur when family planning services were subsequently provided.

Initially, six clinics were attached to health installations.

> The rush to the clinics in the first few weeks was so great that service amounted to little more than a brief talk about four contraceptive methods—the I.U.C.D. [intra-uterine contraceptive device, usually in the form of a plastic loop or coil], oral pill, condom and foam tablet—followed by a free distribution of the method selected (Winich *et al.* 1965: 2).

Within six months, 20 per cent of the eligible women in the area were using family planning. Three-fifths had come because they had heard about the clinics from neighbours or friends. In addition, women from other *amphurs* had arrived for treatment.

Initially, 77 per cent of the women chose the I.U.C.Ds, 13 per cent the pills, and 9 per cent condoms. But later 29 per cent, 21 per cent, and 7 per cent of those starting with orals, foam tablets and condoms respectively switched to I.U.C.Ds, although during the same period 13 per cent of the I.U.C.Ds inserted were removed either on request or for medical reasons. The largest proportion of women practising contraception was in the 25-34-years age range. By 1965 it was reported that 'We think we have demonstrated the existence of a high degree of readiness to engage in family planning in Thailand'.

Nevertheless, by the second half of 1965 it still remained a moot point whether such services would spread over Thailand. Those working on the project wrote:

> Thailand is a highly centralized society. Everyone looks to the central government for guidance, especially when change is imminent. Hence the opinion of the government is of vital importance for the acceptance of a national programme. We are not informed about how much that opinion has shifted from its somewhat neutral stance of several months ago, though we are counting on the reports of our project to convince the government of the advisability of such a programme. Whether government approval of a national programme, should it be given, will emerge as an explicit policy or simply as an acquiescence to an extension of the present mandate of the Ministry of Public Health is impossible to forecast. From our standpoint a formal policy is unnecessary, as experience in Taiwan has indicated (Winich *et al.* 1965: 3).

Thus it is obvious now, as it was not when even the most recent population projections were constructed, that the possibility must be allowed that widespread governmental provision of family planning facilities could become a fact and that such provision might be more successful in lowering the levels of fertility and natural increase than earlier seemed likely. These views are necessarily influenced by events in the same general region as Thailand.[21] In the admittedly urbanized areas of Singapore and Hong Kong large numbers of family planning clinics have been established. They are probably at least partly responsible for the facts that the birth rate in the former has fallen by almost one-third in a decade while births in the latter were one-third lower in 1964 than earlier projections had forecast. In South Korea and China (Taiwan) so many I.U.C.Ds had been supplied that forecasts were now being made that the rate of population increase might be reduced from 3 per cent to 2 per cent per year by 1971 and 1968

[21] All the matter following was reported to either the International Conference on Family Planning held in Geneva in August 1965, or to the United Nations World Population Conference held in Belgrade in August-September 1965.

respectively. Such aims might not be achieved, but by late 1965 they seemed for the first time to be within the range of possibilities. In Thailand, too, the levels of education and literacy, together with the findings of the National Research Council-Ministry of Public Health project, suggested that a marked fall in birth rates was no longer highly improbable.

Thailand does not suffer from lack of population projections. Hence it would be pointless to construct yet another series for this chapter; it will be time enough for that after the next census. Instead, the discussion here will be limited to an examination of some of the implications of existing projections.

On the basis of the 1947 census and what were believed to be subsequent demographic trends, the last volume of the *Final Report of the Demographic and Economic Survey, 1954,* (National Statistical Office 1957b: Vol. 2) produced a projection suggesting a 1977 population of around 37½ million. In 1958 the United Nations published projections on four different sets of assumptions (U.N. 1958), one of which may yet be right because the projected populations for 1980 ranged all the way from 36½ million to one-third higher again at 48½ million. However, what disturbed some Thais about the 1960 census was that the enumerated population was almost 8 per cent above the highest of the United Nations projections for that date, and by implication the 1947-60 intercensal population increase was 27 per cent greater than that suggested by the highest projection. The chief error in the United Nations projection seems to have been an overestimate of mortality, for while their Conservative and Low Mortality projections assumed expectations of life at birth of 39 and 42 years in 1950 and 1955 respectively and 52 and 66 years in 1975 and 1980 (U.N. 1958: 101), analyses of the 1947 and 1960 censuses suggest figures of 50 (*Population Index* 1964) and 54 years (Das Gupta and Sen Gupta 1965: 2) for those two dates.

After the 1960 census data began to become available in 1962 Das Gupta and colleagues prepared a projection (Das Gupta *et al.* 1965) based on the assumption of a continuation of the mortality decline in accordance with Thailand's recent experience and, making what was then a much more radical assumption, a fall in fertility by well over one-quarter between 1965 and 1980 from a crude birth rate of 45 to one of 32 per thousand. Gille and Thip (1963) presented a series of four projections, one of which was the one just described, to the National Seminar on the Population of Thailand in Bangkok in March 1963. These projections were subsequently presented in the *Country Statement for Thailand* to the United Nations Asian Population Conference in Delhi in December 1963.

These four projections appear in Table 2.10. The 1980 projected populations range from a low of 48½ million to a high only one-ninth above at 54⅓ million. All projections commence with Das Gupta's corrected figure for the 1960 census. Projection I assumes constant fertility with a crude birth rate around 45 per thousand and mortality declining in accordance with 1947-60 trends from an expectation of life at birth of about 54 years in 1960 to one of 67 years in 1980 (Das Gupta and Sen Gupta 1965: 2). Projection II, constructed by Das Gupta and colleagues, makes the same assumption about mortality but assumes a fall in fertility of almost 29 per cent between 1965 and 1980. Projection III once again

assumes constant fertility but posits the more rapid type of mortality decline that some Asian countries such as Ceylon have experienced. Finally, Projection IV incorporates both the fertility and rapid mortality declines.

TABLE 2.10 Thailand, Population Projections, 1960-80

Projection*	(a) Total population size at certain dates (thousands)				
	1960	1965	1970	1975	1980
I. C.F., M.M.D.	26,990	31,777	37,537	44,579	53,291
II. F.D., M.M.D.	26,990	31,777	37,069	42,602	48,508
III. C.F., R.M.D.	26,990	31,801	37,861	45,242	54,335
IV. F.D., R.M.D.	26,990	31,801	37,381	43,212	49,449
	(b) Index of total population size at certain dates (1960 = 100)				
	1960	1965	1970	1975	1980
I. C.F., M.M.D.	100	118	139	165	197
II. F.D., M.M.D.	100	118	137	158	180
III. C.F., R.M.D.	100	118	140	168	201
IV. F.D., R.M.D.	100	118	138	160	183
	(c) Quinquennial population increase (percentage)				
		1960-65	1965-70	1970-75	1975-80
I. C.F., M.M.D.		18	18	19	20
II. F.D., M.M.D.		18	17	15	14
III. C.F., R.M.D.		18	19	19	20
IV. F.D., R.M.D.		18	18	16	15

* C.F. = constant fertility; F.D. = fertility declining; M.M.D. = moderate mortality decline; R.M.D. = rapid mortality decline.

Source: Das Gupta *et al.* (1965); Gille and Thip (1963); U.N. (1963).

Four points might be made at this stage. First, the projections present rather similar findings up to 1980. There will probably be about 50 million people in Thailand at that date, or approximately double the number in 1960. Second, the important determinant of future population size is the level of births. The higher mortality projections give 1980 populations less than 2 per cent below the lower mortality ones of the same fertility levels, but the lower fertility projections fall 9 per cent below the higher fertility ones of the same mortality level. Third, the 1964-5 experience of fertility control methods in parts of eastern Asia suggests that there is a real possibility that fertility might fall by one-third well before 1980. Fourth, the fertility and mortality changes may be linked. If fertility remains constant, family size will remain large with consequent greater difficulty in protecting infants from illness and indeed a lesser incentive to do so. Almost certainly it is declining fertility which would be linked with a steepening rate of mortality decline. For this reason, the subsequent analysis will usually be confined to Projections I and IV.

Although the total populations are not very different in 1980, their capacity for growth and hence their implications for the future have diverged much more strikingly. Between 1975 and 1980, Projection III adds over 9 million people at an average annual rate of increase of 3·7 per cent, while Projection II adds less than 6 million at an average annual rate of 2·7 per cent. Thus even the lowest projection suggests, in terms of

numbers of persons, larger population increments in the late 1970s than have occurred in the last five years.

These projections have many implications. Four aspects will be examined here. They are the implications in the fields of investment and economic growth, labour force, education, and urbanization.

In all growing populations there is a certain amount of what has been described as *demographic investment*. This means the duplication of existing facilities, such as housing, roads, schools, and the like, which is necessary merely to provide the same facilities for the population increment as are already possessed by the base population. Inevitably, the faster growing population must make a greater investment, and must spend more of its savings on such investment and less on increasing the amount of capital per worker in an effort to raise productivity. If 3·5 : 1 capital-output ratio is posited, then by the 1975-80 quinquennium the constant fertility projections imply a demographic investment of 12 to 13 per cent each year while the reducing fertility projections imply ones of only 9 to 10 per cent, a discrepancy of about 3 per cent or sufficient to increase productivity by around an extra 1 per cent per year.

The reducing fertility projections also imply economic gains through changes in the age structure. This is most easily seen by examining the relative changes expected in the 1965-80 period and by making the assumption, which is on average at the present time approximately true, that persons under 15 years of age are dependent children while those over that age are economically productive. Then, no children born during the 15-year period would enter the labour force and so the economically active population would be identical in size in projections with similar mortality. The difference in total population size would merely reflect differences in the numbers of children. Making the conservative assumption that children consume only two-thirds as much as do adults, a fraction which has some validity from experience elsewhere, then the relative production and consumption of pairs of projections can be compared. Such comparisons show that the declining fertility projections allow 2·6 per cent more of national income to be saved over the whole 1965-80 period than do the constant fertility projections, while permitting the same level of consumption. As the divergence between projections increases with time, the possible savings become greater, reaching 4·6 per cent of the national income for the 1975-80 quinquennium. By this time the additional investment could mean a difference in the rate at which productivity was increasing of almost 1½ per cent per year. These would be gains made during a transitional period when fertility decline was reducing the dependent population without affecting the size of the labour force, but similar gains would subsequently persist because of the transformation of the population's age structure into one with a higher proportion of persons in the potentially economically active age range.

This discussion is meant largely to describe economic contrasts and not to quantify them accurately. Obviously, capital-output ratios may be different and may vary. There may be difficulties in collecting the additional potential savings, though in this case there would be the immediate benefit to the population of a rise in the levels of consumption. Differences in investment would in one way tend to be greater than has been suggested,

because they would not be collected in one lump but continuously, and hence from the outset productivity should tend to increase more rapidly in the population with declining fertility, leading to the possibility of greater reinvestment, greater productivity, and therefore greater subsequent reinvestment in a compounding cycle. On the other hand, if the fertility decline was achieved by state and private investment in family planning facilities and supplies, such expenditure would have to be debited against the other gains. Experience to date suggests that the expenditure would normally amount to only a very small part of the likely gains. Quite apart from any personal gains from the rearing of small families, there are almost certainly less tangible but very real social and economic gains from declining fertility. Parents of small families probably do train their children more intensively, especially in such matters as adapting to more modernized economic conditions and gaining most from schooling. In terms of education and other training, it is more efficient to produce a few children with a maximum chance of survival to old age than to give birth to more and have many die prematurely.

If labour force change is to be analysed in the crude terms of age structure, this can be done as in Table 2.11. Taking the 15-59 age group to be potentially active, it can be seen that in Projection I this group slowly declines in size until it is less than half the total population, while in Projection IV it recovers from an initial decline, caused by demographic change which is already unalterably part of history, to increase steadily. By 1980, in Projection I there are 103 persons either under 15 years of age or over 60 for every 100 persons in the 15-59 age group, contrasted with only 87 persons under 15 or over 60 in Projection IV. In terms of dependency, Projection I could be said to be almost one-fifth less economically efficient than Projection IV.

TABLE 2.11 Thailand, Projected Age Structure, 1960-80
(percentage of persons of all ages)

	Projection I (C.F., M.M.D.)			Projection IV (F.D., R.M.D.)		
Age	1960	1970	1980	1960	1970	1980
0–14	44·9	45·7	45·9	44·9	45·2	41·0
15–59	50·6	49·5	49·3	50·6	49·9	53·6
60+	4·5	4·8	4·8	4·5	4·9	5·4

Source: Gille and Thip (1963).

A closer scrutiny of the exact relation between what we might call the 'active' group, aged 15-59, and the dependent group, aged 0-14 and 60+, reveals relationships which may prove significant in terms of economic change. Between the 1947 and 1960 censuses the active group increased slightly more than the dependent group, by 52 per cent compared with 49 per cent. But Thailand has begun to experience a phenomenon felt in many less developed countries. The decline in mortality during the 1950s was above all a drop in infant and child death rates. Thus, there have since been far more surviving children, who have increased the numbers of dependants without as yet having much effect on the active group. Nor has this position yet passed. Until recently it has been intensifying. Between 1960 and 1965 the active group will have increased in size by less than 16 per cent at an average annual rate of 2·9 per cent, while the dependent

group will have swollen by almost 23 per cent at an average annual rate of 4·2 per cent. Between 1965 and 1970 there will be some easing of the position. According to both Projections I and IV, the rate of growth of the active group will climb to an average rate of 3·4 per cent, while that of the dependent group will average 3·5 and 3·4 per cent respectively. Thereafter the projections diverge. Up to 1980 the active group in Projection I never quite catches up on the rate of growth of the dependent group, while in Projection IV it increasingly outdistances it.

What this all means is that the sort of population growth experienced by Thailand in recent years has meant that consumers have been increasing faster than producers. This has made it relatively easier than it may be in the future to provide employment, but, because of the increasingly unfavourable age structure of the population, relatively harder to raise production per head. Between 1960 and 1965 the active group grew by a little over two million, while the dependent group increased by almost three million.

In terms of more refined analyses of manpower needs, Thailand has now what has been described as a 'plethora' of manpower projections (Hunter *c.* 1963: 1). The explanation is that

> After the 1960 population survey [i.e. 1960 census] was conducted, and its result was made known late in 1962, the importance of fast growing population and trained manpower need was startlingly realized. Feverish effort has been made in 1963 to study and analyse the past and present manpower situation of the country . . . (U.N. 1963: Pt 2).

Work has been done by the National Economic Development Board and the National Statistical Office, by a Thai-USOM task force, by UNESCO and UNESCO/IAU teams. The Thai-USOM group, which admittedly saw the examination of the educational system as its main task, seemed less worried about the volume of persons to be employed in the future than about the proportion who would be sufficiently trained to man a developing economy (USOM/Thailand 1963). A study of projected labour forces in various Asian countries pointed out that only the Philippines exceeds Thailand in the expected rate of labour force growth. It also claimed that the employment targets in the countries examined were sufficient only to meet expected population growth and not to reduce underemployment (Aromin 1965: 4).

Unrestricted fertility and a governmental determination to extend the coverage of education produces projections for numbers of school children far more spectacular than is the case for the growth of the total population or the labour force. Even if the government were forced to abandon any attempts to improve school attendance or to extend the years of compulsory schooling, the number of needed school places would more than double between 1960 and 1980 according to Projection I. If the government's aims can be realized, school places would have to multiply by more than two and a half, and expenditure in real terms would more than treble because of disproportionate increases in more expensive forms of education. Thus expenditure per head of population would multiply over one and a half times.

However, educational expenditure would be markedly affected, even by 1980, by a fall in fertility. In fact it is the possibility of this saving which

may weigh heavily in attracting the government into the family planning field. As can be seen in Table 2.12, declining fertility could reduce the 1960-80 increase in needed places by over a million. Furthermore, by 1970-80 the rate of new school construction and the provision of teachers could be reduced to only about two-fifths.

TABLE 2.12 Thailand, Projected School Population, 1960-80*

(a) School population (millions)

	1960	1980	1960-80 increase
(i) *No extension of education:* (all school population)			
Projection I (C.F., M.M.D.)	4·2	8·6	4·4
Projection II (F.D., M.M.D.)	4·2	7·4	3·2
(ii) *Planned extension of education:* (primary school only)			
Projection I (C.F., M.M.D.)	3·9	10·7	6·8
Projection II (F.D., M.M.D.)	3·9	9·7	5·8

(b) Percentage average annual rates of increase of school population with no extension of education

	1960-65	1965-70	1970-75	1975-80
Projection I (C.F., M.M.D.)	4·1	3·4	3·4	4·4
Projection II (F.D., M.M.D.)	4·1	3·4	2·5	1·5

* Following Gille and Thip, Projections I and II are used. The use of Projection II instead of IV does not produce markedly different findings.

Source: Gille and Thip (1963: 18, 32-3); U.N. (1963: Pt 2).

Perhaps the most difficult type of population projection in the Thai situation is that of urban and rural population. As shown in Table 2.13, Das Gupta and colleagues projected urban population to 9 million in 1980, while Gille and Thip, employing different definitions, produced projections of just under 7½ million and just over 6½ million for constant and declining fertility projections respectively. If Gille and Thip had used the urban definition employed by the other projections, their lower projection for 1980 would probably have been about 9 million and the higher almost 10½ million. These projections are based soundly on past trends, for, between 1947 and 1960, rural Thailand succeeded in absorbing extra population at the rather astonishing rate of 3 per cent per year.

Yet the writer has considerable doubts whether this situation can persist from 1960 to 1980, a period during which the total population will double. The ability of the rural areas to continue to absorb population at quite such a high rate may be sorely taxed. The growing number of Thais in the large towns may encourage chain migration to them. The expansion of schooling may well stimulate rural-urban movement. In Table 2.13 the level of urbanization has been shown on the assumption that rural Thailand may be able to absorb population at only 2½ per cent per year, still a very high figure by most precedent elsewhere. In this case unrestricted fertility would produce an urban population of 27 per cent or almost 14½ million people by 1980. Population Projection IV would reduce this to 11½ millions, but, as declining fertility might well be associated with more rapidly rising living standards, it might be wise to assume in that case an urban proportion of 25 per cent and hence an urban population of 12½ million. In view of levels of urbanization existing today in many parts of

Asia, Latin America, and even Africa, often associated with high rates of natural increase, it seems more than likely that a quarter of Thailand's people will live in towns by 1980, especially if municipal borders are drawn as generously as they are today.

TABLE 2.13 Thailand, Projected Urban and Rural Population, 1960-80*

		Projections					
			Gille and Thip		With 2½% annual rural growth		
		Das Gupta *et al.*	Projection I	Projection II	Projection I	Projection IV	Projection IV adjusted
Urban population (thousands)	1960	3,256	2,321	2,321	3,256	3,256	3,256
	1970	5,600	4,167	4,077	7,157	7,001	—
	1980	9,000	7,421	6,573	14,411	10,569	12,362
Rural population (thousands)	1960	23,934	24,669	24,669	23,734	23,734	23,734
	1970	31,490	33,370	32,992	30,380	30,380	—
	1980	39,510	45,870	41,935	38,880	38,880	37,087
Urban proportion (percentage)	1960	12·4	8·6	8·6	12·4	12·4	12·4
	1970	15·1	11·1	11·0	19·1	18·7	—
	1980	18·5	13·9	13·6	27·1	21·4	25·0

* All projections except those of Gille and Thip are based upon an urban population equal to the total population within all municipal boundaries at the time of the 1960 census. Gille and Thip have defined as urban areas only those municipalities with more than 20,000 inhabitants.

Source: Das Gupta *et al.* (1965: 42-3); Gille and Thip (1963: 11-13); National Statistical Office (1956-(1956-8)); National Statistical Office (n.d.b).

In economic planning, it might be wise to envisage the possibility of at least 12 million people within municipal boundaries by 1980, or four times the number found there in 1960. If Greater Bangkok retains its 1960 proportion of the urban population, as seems likely from the analysis of 1947-60 trends, it would, on the writer's assumptions as to maximum rural population growth, exhibit a population of 6½ to 7½ million by 1980. It is to be hoped that the inhabitants of such a metropolis can be employed in greater proportion in secondary industry by that time, because Bangkok's commercial functions can certainly be undertaken without such a massive population.

If Bangkok does grow in this manner, it will almost certainly do so partly by attracting a larger proportion of migrants from more distant parts of rural Thailand than has hitherto been the case. Almost certainly, the proportion of the country's population living in the Central Region will slowly climb.

Summary and conclusions

There have been two nodal points in Thailand's population history. The first occurred in the late nineteenth century when external markets for rice sales brought the country into the world economy and caused a rise in the rate of population growth which finally stabilized at about 2 per cent per year in the early years of this century. Perhaps two-fifths of the early growth can be explained by Chinese immigration. The rest is natural increase, doubtless arising largely from a fall in mortality which may have been assisted by some rise in the birth rate. The second turning point followed World War II, when immigration virtually ceased, and, more

significantly, when mortality rates began to move downwards so decisively that natural increase may by the mid-1960s have reached 3½ per cent per year.

The government of Thailand became aware of this greatly heightened rate of increase from about 1962 when the results of the 1960 census began to become known. No one feared actual food shortage but the view was more frequently expressed that eventually rice exports might suffer. In addition it was argued that neither the high rate of population growth nor the age structure produced by such growth were conducive to the maximum improvement of individual economic welfare. By the mid-1960s government thought was increasingly directed to such matters, for the times when policy was activated to a large degree by the aim of preserving Thailand for the Thais had passed with the increasing certainty that eventual total victory had been won at least internally.

Naturally enough some concern centred on the high level of fertility, as, apart from mortality, which no one wished raised, it was now the sole determinant of population growth. Furthermore, with completed family size probably exceeding 6·5 and the crude birth rate standing at least at 45 per thousand, the level of fertility was amongst Asia's highest. Following the accumulation of evidence from a family planning project in a rural area, it seems quite possible that the government will at some stage decide to meet any existing demand for family planning by establishing clinics and perhaps subsidizing contraceptive sales. If this is done, evidence from some other parts of East and South-East Asia now suggests that it is quite possible that a fertility decline could set in which would be considerably steeper than a 29 per cent fall in the fifteen years between 1965 and 1980, the most extreme case which has been considered here. If this were to happen, some of the possibilities of saving on schooling and other expenditures would be proportionately greater than those described in this chapter.

Nevertheless, the population, which by 1960 had reached 27 million and was growing by about one million per year, had probably touched 32 million by mid-1965 and would almost certainly approach 50 million by 1980. Even a precipitous fertility decline could not affect the size of either the labour force or the potential military force during the years between 1965 and 1980, years which could prove decisive in improving both individual welfare and national strength if an optimum path towards economic modernization could be chosen.

The years immediately ahead will probably witness a marked increase in urban population and may well see a quadrupling of Bangkok's population in twenty years. Such an occurrence, whatever its social disadvantages, might assist in efforts towards industrialization. It would certainly increase the Thai characteristics of the capital at the expense of Chinese characteristics. It would reduce the proportion of farmers below the 82 per cent level in the labour force found in 1960, but within 20 years it would hardly reduce either the number of farmers or the predominantly agrarian nature of the country.

3

Some Aspects of Rural Life in Thailand

G. WIJEYEWARDENE

Economic activity in rural Thailand is predominantly the business of domestic units. Even the rice farms of the commercial rice growing area —the Central Plain—are domestic farms; the business firm is almost invariably a single household. This does not mean that the single household provides all the labour necessary for cultivation. It does mean that to understand the organization of agriculture we must look first at those factors which go to determine the composition of the household: kinship and kinship units, marriage, and inheritance.

It is, however, an over-simplification to think of either kinship or locality as clear-cut principles of organization in rural Thai society. This society is perhaps most satisfactorily characterized as pragmatic, with organization directed to specific and limited ends.

Most published material on rural Thais refers to communities in the Central Plain or the Chiengmai river system. The village I have been working in and which I shall call 'South Village' is in the North Region of Thailand in the Mae Ping river system, but is not completely typical of the people in the system, mainly because its inhabitants are less prosperous.

Kinship, marriage, and divorce

Though there are excellent descriptions of domestic life, general accounts of kinship, marriage, and inheritance—with some case material, and figures for land ownership and cultivation, and household composition—relatively little is known on how inheritance rules actually work, or on marital choice and divorce. In situations such as one finds in Thailand where there is an absence of clear-cut rules defining kinship ties and obligations, domestic structure can adequately be treated only through the use of statistical data. In the absence of such data what follows must be a fragmentary and impressionistic account.

The norm for the Thai peasant household in all parts of the country is that the elementary family is the residential unit. The unit formed by a husband and wife and their children is not only the expected composition of the household, it is in fact the type which is most frequently found. This is confirmed by all village studies so far available, and indirectly by census and survey material. Average household size in all parts of Thailand is

between five and six persons. But household composition and size in themselves give no indication of kinship structure. One of the crucial questions to be asked about Thai rural economy and society is the nature of kinship obligation and kinship structure outside the household and elementary family, and it is here that the difficulty of giving systematic answers is greatest.

Kaufman is one of the few writers who have attempted any kind of systematic description. He identifies three categories of kin outside the domestic group (for the Central Plain). They are, in his terminology, the *spatially extended family,* the *remotely extended family,* and the *fictional family.* We may add a fourth category by distinguishing between the household and the compound group. Kaufman (1960: 21) uses the term 'household' to refer to a group which may occupy a number of houses on a single compound, and does not treat the single house as a significant group except when it is the only house in a compound. The spatially extended family refers

> to those members of a family who shared a common household during their youth and who have now moved away because of marriage or employment and are living in widely separated households, perhaps in different communities (Kaufman 1960: 23).

The compound group and the spatially extended family are both essentially groups of brothers and sisters, their spouses and children, the spatially extended family being distinguished by the fact that its members do not share a single locality. The compound group, however, is clearly made up of people with very close ties who frequently cultivate a single farm, and may even work from a common domestic budget. Despite this, I would prefer to treat the compound group as a transitional group separate from the household, with a wide variety of arrangements being possible between the separate households in the compound.

There is another difficulty when we move outside the compound. Marriage creates links with non-kin, which are not shared with other households in the compound group. It is highly probable, therefore, that even in the situation which Kaufman is describing, links between brothers and sisters who are spatially separate are not in practice equal. Certainly, in my experience in the North, ties between brothers are unequally utilized —and often ties between male affines could equal or exceed in importance ties between brothers.

The remotely extended family involves links among cousins, which may be occasionally utilized, particularly when individuals move from one community to another. The fictional family merely refers to the vague feeling of kinship individuals may have with others in the community (Kaufman 1960: 21-6).

As a general rule for most of Thailand—apart from individual ties maintained between brothers and sisters, children and parents, who are spatially separated—kinship obligation falls off sharply outside the compound group. The term *compound group* should, however, be interpreted rather loosely. In South Village there are some very definite compounds: blocks of land sometimes undivided, sometimes legally divided between a group of heirs. In addition there are close kinsmen living not in the same compound, but in the same village or general locality who co-operate as

closely as kin living together; overcrowding in many villages simply prevents such closely knit groups living together.

Marriage itself, in rural Thailand, conforms to the pragmatic character of Thai rural social structure as a whole. The literature suggests that it is nearly always based on personal choice, with few marriages arranged to cement political alliances or consolidate property holdings, relatively little ceremony, easy divorce, and flexibility in the residence pattern. There are no rules of endogamy or exogamy sufficiently rigid to act as important checks or stimuli to mobility.

It is striking—in view of the prevalence in Asia of marriage alliances of families for political or economic ends—that in Thailand individual choice in marriage is everywhere reported as widespread. A couple who wish to be married and meet opposition from their parents have almost institutionalized means of forcing their parents to give recognition to a *fait accompli*. In South Village marriage is almost totally a matter of individual choice.

Kaufman (1960: 151) says that in the past in Bangkhuad marriages were mostly arranged by parents, but he does not go into this in any detail. In the immediate past, however, he says there have been only two such cases, both in wealthy families. Whether his assertion with regard to the past is generally true for the rural Thais is something on which we must reserve judgment.

Since 1935 marriages are expected to be registered, and polygamy has been forbidden. There is at present no information on the extent to which the law is followed, and it is very likely that the actual incidence of registration varies considerably from area to area. In South Village only two marriages, past or current, were said to have been registered. People do say, however, that where considerable property is involved marriages are almost certain to be registered.

Kaufman reports a fairly elaborate Buddhist marriage ritual and says that cohabitation without ritual as a form of marriage is no longer practised. In South Village and throughout the North Region such rituals appear to be extremely rare among peasants. The sanction in the North on marriage is the spirit cult, and not Buddhism. There is a belief that only kinsmen may enter the sleeping area of a house with impunity. Thus when a new cohabitation takes place the spirits of the house have to be placated. This is the only necessary ritual at marriage. John de Young (1955: 63), presumably referring to Thailand as a whole, says:

> There is no religious ceremony of marriage in Thai village culture, the fact of a young couple's living together being the seal of marriage in the eyes of the community.

If de Young is right, Kaufman's village is exceptional in Thailand. On the other hand, Dr Clark Cunningham (personal communication), who worked in a village in the north of the Central Plain, reports an extensive use of Buddhist ritual in marriage. Perhaps, as Kaufman suggests, in the rural Central Plain marriages are increasingly marked by public ritual, while they remain mostly informal in the rural North Region. The placation of the spirits is a private, not a public ceremony.[1]

[1] Buddhist ideology makes it unlikely that marriage is anywhere actually solemnized by monks. Buddhist ritual, where it is used, is a blessing of the union little different from the blessing invoked at a housewarming or the opening of a new shop. Monks may invoke blessing on any secular activity, but it is not their business to solemnize such activity.

Data on divorce are extremely sparse. Official figures would not be very helpful because only if the marriage was registered would the divorce be registered. De Young (1955: 66) has a brief, not very informative paragraph which says nothing of the incidence of divorce except that among couples who have children it is rare. Kaufman and Kingshill do not discuss divorce in any detail. As a general statement one may say that divorce is easy, and if the marriage has not been registered, even mutual consent may not be necessary. The children of a broken marriage usually but not always live with their mother. In peasant as opposed to urban society, women seem to be just as likely as men to initiate divorce.

The South Village divorce figures are presented in Table 3.1. There is no way of assessing the representativeness of these figures, nor do they give a complete picture of marriage stability within the village, but in the absence of any other data they may be an indication of the possible extent of divorce in rural society. Marriages terminated by death have been ignored, except that a widow or widower who has not remarried is included in the 'Married—never divorced' category.

TABLE 3.1 South Village, Incidence of Divorce

	Males	Females
Married—never divorced	46	42
Once divorced	11	30
Twice divorced	4	4
3 times divorced	3	–
4 times divorced	1	–
5 times divorced	–	–
6 times divorced	1	–
Number of divorces unknown	3	1

These figures, for what they are worth, indicate a high incidence of divorce, much of it accounted for by a few divorce-prone men; men in South Village, however, assert that it is almost always the woman who leaves her husband for a younger man.

De Young suggests that marriages to which children have been born are more stable, and that childlessness is a major factor in divorce. Table 3.2 gives the data for South Village.

TABLE 3.2 South Village, Presence of Children in Broken Marriages

	Number of Divorces
No children	36
Children alive	29
Children dead*	5

* Not known whether before or after divorce

As the childless married population is small in proportion to the total married population, the presence of children appears to be negatively correlated with divorce, but it is more difficult to say to what extent childlessness is a factor in causing divorce.

Forty-two of the divorces occurred in the first two years of marriage, though not all of these marriages were childless.

Most observers report some tendency towards uxorilocal residence in rural Thailand. In those areas of the Northeast Region in which matrilateral inheritance is reported, residence is probably largely uxorilocal. In

other areas a couple is generally expected to live in the girl's parents' house until the birth of the first child, after which residence will be determined by convenience. A provisional breakdown of birthplace and residence figures for South Village is given in Table 3.3. Of course, persons born outside South Village need not have moved in at the time of marriage.

TABLE 3.3 South Village, Birth Place and Residence

Both partners born in South Village	22
Wife only born in South Village	16
Husband only born in South Village	16
Both born out of village (uxorilocal)	11
Both born out of village (other)	4
Not currently married	7
Total	76

Forty-two of the sixty-nine marriages are currently uxorilocal—implying by this term movement by the husband to the home, parents' home, or village of his wife. This is consonant with information from elsewhere in Thailand; perhaps we may generalize for most of Thailand that marital residence is bilateral with a tendency towards uxorilocality.

This tendency is probably determined by ideology, not economics; however, the flexibility and vagueness of the rules allows couples to move to those compounds that have property, and ease the burden on those compounds that are short.

The fluidity of residence patterns, the relative informality of marriage and the frequency of divorce pose a number of questions about the working of the rural economy, especially in relation to the holding and transmission of land. There is no evidence that land litigation is high in rural Thailand. It seems, therefore, that where a man or a woman is a significant property holder, care is taken to ensure orderly transmission through the registering of marriage, the use of wills, and so on. Where property holdings are small the fluidity of domestic arrangements appears to be conducive to the frequent sale of land.

Form and structure of villages

Settlement patterns. It is often assumed that peasant societies are organized on the basis of either strong, extended kinship groups or well defined local communities. Large cohesive kinship groups, as we have seen, are not typical of rural Thailand, nor it seems are integrated, particularistic local communities, hence the ease with which Embree's phrase 'a loosely structured social system' has come to be accepted as descriptive of most aspects of Thai society. One of the striking things about the North Region of Thailand is the facility with which individuals move from one village to another. Admittedly a great deal of this movement is within the district, but movements involving large distances are far from uncommon, and a small but significant proportion involves movement between regions. That these migrants are assimilated with a minimum of difficulty is noteworthy, and because this mobility does not appear to be an exclusive feature of the North, we must examine the nature of the Thai village generally.

Here, we immediately encounter the problem of defining what we mean by a village. A brief review of the literature shows that there is no general correspondence of local residential and social units with administrative

ones—except perhaps in parts of the Northeast. What de Young calls a village is essentially the smallest more or less natural collection of houses, one or more of which make up an administrative hamlet (*muban*) under a headman (de Young 1955: 17-21). The commune (*tambon*) of San Pong in Chiengmai province, he says, was (in 1952-3) made up of eleven villages under five headmen. The population of the villages ranged between 755 and 350 inhabitants. In fact many of these villages are contiguous.

Bang Chan, the village studied by the Cornell research team, is demarcated by the use of a school and temple (*wat*) (see Sharp 1953; Janlekha 1955). The homesteads in this part of the Central Plain are isolated from one another, and are set among the fields. Janlekha (1955: 52) writes:

> . . . we are not interested in an administrative unit which is often an artificial division, but rather in a 'natural' or 'functional' village which may be operationally defined as a geographical area inhabited by a conglomeration of people having one or more convenient centres.

In 1949 Bang Chan was made up of 298 households with an average household size of 5·5 persons. Four of its component hamlets were in one administrative district (*amphur*) and three in another.

Bangkhuad, described by Kaufman (1960: 17), is about 14 kilometres from Bang Chan, and is a 'linear village, with houses and compounds constructed along the canal'. It consists of three undemarcated hamlets with a population in 1954 of 744 persons or 147 households. The village is clearly separated from adjacent villages; it has a school and a *wat,* but it is not clear whether the community which these serve is identical with the village.

Ku Daeng, described by Kingshill (1960: 13-19), is in the North Region, in Chiengmai province, and is a clearly demarcated unit served by a school and *wat.* It consists of two hamlets and had in 1953 a population of 842 persons. Ku Daeng is unusual in taking the form of a circle around a central rice field.

South Village, which I have been studying, is also in Chiengmai province. It is a single administrative unit, has 75 households with a population of 376 persons (1964), and its residential area is clearly demarcated from surrounding villages. It is served by a single *wat* and a single school.

De Young distinguishes three types of village in Thailand, two of which are 'traditional', the third relatively modern, in the area around Bangkok. In the first or linear type the houses are stretched out along the sides of a canal, river, or road. In the second or island type, the village is nucleated. In the third type—partly based on the rapid expansion of commercial agriculture—villages consist of isolated homesteads.

Of the villages referred to above, Bang Chan is apparently at least partly of the third type (Sharp 1953: 30). The commune of San Pong has both linear and island villages (de Young 1955: map 15). Ku Daeng is more or less nucleated (Kingshill 1960: map 14), and Bangkhuad is linear (Kaufman 1960: 17). South Village is nucleated, but the general pattern for the commune is linear. Other examples of village types are to be found in Pendleton (1962: 208).

Settlement types and the definition of a village may not of themselves be important in a discussion of rural social structure. The implications of

the term 'village' tend, however, to be carried over from one context to another. Village studies from other parts of Asia tend to associate with this term a particularistic local community with a well developed internal political life.

Political status. Vella (1955: 331) says of Thai villages in the latter half of the nineteenth century:

> At that time villagers, male and female, chose one of their numbers as village chief. This chief, who was not paid for his labours and was not part of the official bureaucracy, was usually a respected, relatively wealthy elder of the village. Through him the village handled many of its community efforts, such as the pooling of labour for constructing and repairing local water-ways, roads and temples. The chief also settled minor disputes in the village. Villagers also co-operated among themselves in planting and harvesting operations.

Apart from the fact that village headmen today are paid a small stipend, this is not very different from contemporary Thailand.

Can the level of internal political activity and village particularism in Thailand be compared with that found in villages, say in India and pre-communist China? The evidence seems to suggest that villages in many parts of Thailand are different, certainly in degree, perhaps even in kind. The following argument will attempt to justify this view, and examine some of the consequences of the situation.

There is little or no evidence that villages exercise corporate control over all or part of their territories. Village territory may generally be divided into fields, house sites, and forest (or scrub). Of these the first two are owned by individuals, the third is crown land. Corporate entities such as temples may own land, but, except administratively, villages do not have such characteristics.

There has in all parts of Thailand been an expansion of occupancy during the last century or so. The way in which new villages have been formed is an indication of the 'ideological' and legal basis of village communities. Except in the rare co-operative villages set up under state sponsorship, all new settlement appears to be individual. Individuals move into unoccupied land, acquire squatter's rights (*jap jawng*) and in due course become a village community. South Village developed in this way from a tiny hamlet about forty years ago. The incentive for expansion was the building of a new road by the Department of Irrigation. The process becomes complete with the recognition of its headman by the administration. A village is made up of individual land-owning households; it is not a case of the community allocating its corporate resources among its members.

The definition of a village, by most writers, as the community using a particular *wat* and/or school may tend to create a wrong impression. Temples are either state or 'church' owned (Kaufman 1960: 97); in no jural sense are they owned corporately by a village or any other local community. Many village schools are built through local subscription, the government then supplying a minimum of equipment and teachers. The land used is probably in most cases either crown land (de Young 1955: 166-7) or temple land. Legally the school apparently becomes the property of the Ministry of Education.

Villagers have obligations for the upkeep of temples, schools, roads, and irrigation works—where they do not fall within the responsibility of some central or local authority. The village headman is responsible for this work, and he has the authority to call on any labour he thinks is required. The literature is silent on the sanctions at his disposal—but it appears that the district courts enforce his authority. Thus it seems that the obligation is to (and the authority derives from) the state, and not the village community.

The maintenance of irrigation works is, in my experience, slightly different from this general pattern. The irrigation canal in South Village serves the fields in the territory of two villages. The only people who have responsibility for the maintenance of the dam and the canal are the actual cultivators of the fields watered by the system (including cultivators whose homes are not in these villages). These farmers elect an irrigation headman who has authority to call on labour and materials as required. The irrigation headman and the headman of one of the villages happen to be the same, but the two offices are thought of as being separate.

In 1964 the farmers cultivating in this particular system had their homes in five different villages; some of them cultivated in two different systems, and therefore had obligations which sometimes clashed. In such cases a substitute labourer, paid for by the farmer concerned, had to replace him for work on one of the canals.

Other irrigation systems in the North are much more extensive and water the fields of a number of villages. It would appear, however, that their organization is essentially similar. Two other irrigation systems in the district water the fields of five villages each. The irrigation headman of one is also the commune head (*kamnan*), the other is a prosperous farmer with no other official post. Village headmen and commune heads who are also cultivators are co-opted as assistants to the irrigation headman, and are not called on to provide labour for the maintenance of the canal. The lay committees of temples are similarly exempt, though for some reason this is not so in South Village.

De Young (1955: 79-80) gives a brief account of the organization of one of these larger systems, though he does not specify who exactly has obligations to give labour. It seems unlikely that villages as communities are responsible, though of course the farmers in a particular village or group of villages would be organized under a 'section' head.[2]

Graham (1924: Vol. 2, 34) supports the view that responsibility for irrigation works lies with individual cultivators rather than with villages. Writing about irrigation in the North, he says:

> . . . smaller weirs are usually made by communal effort of those who benefit thereby, but a larger sort, rather more permanent in structure and sometimes irrigating as much as a couple of thousand acres, are often recognised as in some sort the property of one or other of the many chieftains who still form the local aristocracy, though they no longer rule and who, in return for moderate assistance given in building and repairing the works, such as the provision of food for the labourers, receive a portion of the harvest of all the lands irrigated by them.

[2] This refers to 'people's irrigation systems', not those of the Royal Irrigation Department.

Social structure. The villages can be compared with villages elsewhere in Asia in terms of three features of internal social structure; solidarity, stratification, and factionalism.

By internal solidarity we mean the extent to which the village operates as a cohesive unit. We have already looked briefly at the position of the temple in the local community, and it seems undeniable that in some areas at least people do think of these institutions as defining the community. But does the temple congregation operate as a cohesive group in other institutional spheres? Does the temple ritually symbolize the solidarity of a social group, or alternatively does common participation in ritual lead to solidarity and cohesiveness of action? There is little evidence that it does. Thai Buddhism is indeed a powerful and highly cohesive force in Thai society, but at a national rather than at a local level. Local communities will see that their *wat* is maintained through labour, alms (including the daily feeding of monks), and attendance, but there is no evidence in the literature that this community operates in any other field. It would be wrong to think even of village communities each independently supporting and administering its own temple. The Buddhist clergy and temples are administered by a hierarchical system with the Supreme Patriarch at its head, with centralized legislative, administrative, and judicial bodies, and with a local administrative structure parallel to the secular administration. We do not yet know how far—in Thailand as a whole—the building and support of temples is the responsibility of local communities (Wells 1960: 7-11).

The main assembly hall of the Ku Daeng temple was built in 1951. Kingshill (1960: 93) writes:

> The total cost . . . was over sixty thousand *baht,* raised mostly by subscriptions from the villagers and through huge temple fiestas to which members from sixty-two different temples as far as seventy-five miles away were invited.

Obviously the villagers could not raise all the necessary money. It is likely that the major building of temples depends on large-scale donors. The South Village *wat* was almost wholly financed by persons with little or no connection with that particular district. The Bangkhuad *wat* was endowed with land and most of the money for its construction by one family, whether resident or not is not specified (Kaufman 1960: 96).

Even the major portion of the annual income of the *wat* need not come from the local community. Of the thirty thousand *baht* cash income of the Bangkhuad *wat* in 1953-4 two-thirds was a donation from a British firm (Kaufman 1960: 106). The major alms-giving after the Buddhist Lent in 1964 in South Village raised only about fifty *baht.*[3] The *wat* has only one monk and one novice in residence, yet even so could not possibly survive on the donations of its local congregation.

The spirit cult (or cults) which with varying intensity is widespread throughout Thailand may serve as a focus of village solidarity. The published material is inadequate for any definite judgment for the country as a whole. Keyes (1964: 9-10) reports a village cult for the Northeast, which in any case appears to have more solidary village communities. One

[3] Too much importance should not be paid to this low figure. In 1966 at 'thanksgiving' after the harvest, rice worth well over 500 *baht* was donated by households in the village.

important aspect of spirit worship in Chiengmai is quite definitely territorial. Each local area, sometimes an administrative village, sometimes part of one, sometimes two or more villages, has its protective deity (or deities). Each individual also has his own personal and domestic protective spirits. The latter are inherited in the female line. The power of these spirits is not limited by locality. The former are essentially local and should be worshipped by everyone living within their territory. In practice, in many villages the custodian performs sacrifices alone, on certain set dates. In other villages there are communal rituals. Both types of spirit must be informed when a man or a family changes its place of residence, but they do not act as a hindrance on movement, nor as a bar to the assimilation of newcomers. The ceremonies connected with the local deity would certainly foster communal solidarity, but the group involved is not necessarily a group using one *wat* or one school, nor having a single headman. Dr Cunningham's material from the north of the Central Plain (personal communication) suggests that the worship of local deities is widespread throughout the country.

We are on surer ground in discussing internal stratification. Clearly this is universally low in Thai villages. Respect and status accrue to individuals on the basis of wealth, age, education, piety, and occupation, but there is no report of anything like the stratification of Indian villages, nor even China's former differentiation between land-owning gentry and peasantry. The traditional ranking system does not appear to have created status differences *within* villages, and though there are now signs of the emergence of a wealth-based *élite,* particularly on the Central Plain, Thai villages must be characterized as egalitarian. Though Thais look for status indicators in their personal relations—so that every relationship has a dominant and subordinate component—this does not lead to the formation of classes (Keyes 1964).

This has important consequences for the structure of Thai villages. There is within a village no self-acknowledged, relatively permanent group who can exert their influence to create a clearly demarcated local community over which they may wield authority, and from which they may derive benefit in competition with similar groups in other local communities.

Internal factionalism is a feature one would expect to find in any well defined local community, where individuals and groups compete internally for influence and power. It is surprising at first sight that the literature on village life in Thailand is so devoid of references to factionalism. Bang Chan is the only village for which factionalism is clearly reported. Even here it is mentioned only, and not presented in any detail. Obviously the authors did not think it to be of any great significance (Sharp 1953: 75). Unless there has been widespread sociological myopia, the only conclusion one can draw is that Thai villages do not present the conditions for factions to form.

The discussion so far has attempted to show that villages in Thailand are not rigidly defined social units, and that the term 'village' should be used with caution—it does not imply a Thai version of local units similarly named in other parts of Asia. The Thai pattern of rural communities may, however, be a variation of a general South-East-Asian type. Other aspects of this theme will be considered in the next section.

Attitudes to land and land ownership

Reference may be found in the literature to the rapid commercialization of wet rice agriculture in the Central Region of Thailand, the uniformly commercial and rational attitude to land throughout the country, and the remarkable expansion of the area cultivated (Ingram 1955). One aspect has escaped comment: that we see here a peasantry treating land as a commodity, not as a traditional heritage nor as a symbol of membership and status in a local community. The phenomenon compels us to reconsider what we mean by a 'peasantry' and to question the validity of certain assumptions about the nature of peasant societies. Probably this relatively commercial attitude is due partly to the traditional Thai administrative system, which prevented the development of typical peasant attitudes to land, and partly to demography—the fact that Thailand has always had more agricultural land than peasants to cultivate it.

By and large land is individually owned throughout Thailand, and for all practical purposes there are no customary restrictions on sale; the central government exercises a few controls, for example it prohibits sale of agricultural land to foreigners. Extent of ownership shows wide variation, not only among individuals, but among regions. Zimmerman (1931: 25-8) gives the following averages for the pre-war period: Central Thailand, 28·35 *rai;* North Thailand, 9·56 *rai;* South Thailand, 7·55 *rai;* Northeast Thailand, 5·83 *rai.*

For post-war Bang Chan the distribution of farms by size in a sample of 104 farms was as shown in Table 3.4.

TABLE 3.4 Bang Chan, Distribution of 104 Farms by Size, 1949

	Number of farms
Under 15 *rai*	17
15–29 *rai*	34
30–44 *rai*	27
45–59 *rai*	11
60–74 *rai*	8
75–89 *rai*	5
90–104 *rai*	1
105 *rai*	1
Total	104

Source: Sharp (1953: Table 10).

In Bangkhuad the average amount of land owned per family was 23·6 *rai.* Considering not ownership but area ploughed, Kaufman gives percentage figures as shown in Table 3.5.

TABLE 3.5 Bangkhuad, Distribution of 106 Households by Area of Land Ploughed

Rai in land ploughed	Households (%) (Number = 106)
5–25	42
26–50	35
51 and over	22

There were no farms under 5 *rai* in area.

Source: Kaufman (1960: 225).

For the North, the average amount of land owned in Ku Daeng was 6·4 *rai* (Kingshill 1960: 25), and the average amount of land worked per

TABLE 3.6 Thailand, Average Size of Land Holdings by Province

Province	Number of holdings	Area	Average	% in rice
South Region				
Krabi	17,298	506,388	29·3	80·3
Chumphorn	27,548	602,749	21·9	76·2
Trang	35,174	984,572	28·0	67·6
Nakhornsrithamrat	110,459	2,520,696	22·8	85·5
Nara-thiwat	37,853	764,537	20·2	70·1
Pattani	41,307	572,990	13·9	79·2
Phang-nga	12,420	366,020	29·5	62·3
Phatalung	40,868	857,522	21·0	94·6
Phuket	5,940	148,778	25·0	42·3
Yala	23,191	651,778	28·1	58·2
Ranong	4,033	69,903	17·3	68·4
Songkhla	73,710	1,677,485	22·8	84·3
Satun	11,490	240,475	20·9	79·8
Suratthani	51,715	1,360,624	26·3	78·3
Whole region	493,006	11,324,517	23·0	79·0
Northeast Region				
Kalasin	60,685	1,239,884	20·4	96·6
Khonkaen	109,082	2,346,392	21·5	94·8
Chayaphum	67,529	1,328,596	19·7	94·2
Nakhornphanom	58,994	752,784	12·8	96·8
Nakhornratchsima	136,077	3,216,992	23·6	85·6
Buriram	76,474	2,029,201	26·5	92·5
Mahasarakham	70,090	1,716,126	24·5	96·6
Roi-et	95,488	2,203,406	23·1	97·5
Loei	30,633	247,059	8·1	95·7
Srisaket	84,852	1,681,083	19·8	96·4
Sakonnakhorn	62,307	1,210,516	19·4	97·9
Surin	78,207	1,825,723	23·3	96·4
Nongkhai*	32,693	567,121	17·3	95·6
Udornthani	99,111	2,306,880	23·3	96·2
Ubonratch-thani	158,564	3,747,336	23·6	96·2
Whole region	1,220,786	26,419,099	21·6	94·8
North Region				
Kamphaengphet	28,733	812,163	28·3	80·8
Chiengrai	112,725	1,246,595	11·1	96·2
Chiengmai	106,795	807,389	7·6	98·8
Tak	19,734	189,720	9·6	86·8
Nakhornsawan	83,148	2,505,370	30·1	69·8
Nan	31,598	195,844	6·2	94·6
Phichit	50,135	1,608,380	32·1	82·9
Phitsanulok	49,015	1,138,049	23·2	84·9
Phetchbun	48,290	884,619	18·3	82·4
Phrae	37,491	311,363	8·3	89·4
Maehongson	11,227	82,579	7·4	96·5
Lampang	61,693	457,428	7·4	94·4
Lamphun	35,584	283,933	8·0	89·7
Sukho-thai	46,840	978,717	20·9	76·9
Uttaradit	34,843	503,422	14·4	84·1
Uthai-thani	19,791	552,383	27·9	91·9
Whole region	777,642	12,557,954	16·1	86·5

* Figures for this province were not available, and have been calculated from the regional figures for the same year.

TABLE 3.6 Thailand, Average Size of Land Holdings by Province (continued)

Province	Number of holdings	Area	Average	% in rice
Central Region				
Kanchanaburi	30,024	660,969	22·0	65·0
Chanthaburi	22,674	580,376	25·6	54·1
Cha-Choengsao	34,683	1,155,374	33·3	85·2
Chonburi	38,866	1,031,783	26·5	57·3
Chai-nat	32,469	871,881	26·9	92·2
Trat	9,469	305,316	32·2	55·4
Thonburi	14,970	195,009	13·0	32·2
Nakhornayok	17,219	689,378	40·0	91·4
Nakhornpathom	44,078	1,035,579	23·5	78·6
Nonthaburi	17,399	329,039	18·9	58·3
Pathumthani	19,695	830,040	22·8	85·5
Prachuabkirikhan	20,642	520,925	25·2	39·7
Prachinburi	40,237	1,322,980	32·9	90·2
Phranakhorn	20,385	524,260	25·7	84·9
Phranakhornsri-ayuthaya	43,771	1,381,902	31·6	95·2
Phetburi	25,191	557,659	22·1	85·9
Rayong	23,516	689,300	29·3	47·7
Ratburi	43,442	861,806	19·8	75·4
Lopburi	44,177	1,237,079	28·0	95·7
Samutprakan	15,930	402,152	25·2	70·0
Samutsongkhram	12,865	134,296	10·4	13·7
Samutsakhorn	13,013	331,309	26·7	60·5
Saraburi	30,481	945,338	31·0	74·2
Singburi	18,841	440,187	23·4	94·1
Supanburi	63,895	1,852,298	29·0	91·0
Angthong	25,039	494,632	19·8	94·2
Whole region	722,971	19,380,867	26·8	74·8
Whole kingdom	3,214,405	69,682,437	21·7	85·9

family was 6·6 *rai*. The average for Sarapi district in which Ku Daeng lies was 8·1 *rai*.

For South Village the average area cultivated by wet rice cultivating farmers in 1964 was about 5 *rai*, the average for all households in the village was 2·5 *rai* (that is half the households had no land to cultivate in 1964). This is, I believe, an unusual state of affairs for the country as a whole. Nine households admitted to illegal cultivation of swiddens.[4] The actual figure is probably much higher.

A survey of Khonkaen province (Northeast) gives an average area held of 27·3 *rai* and an average area harvested of 16·3 *rai* (Long 1963: 18).

The *Census of Agriculture 1963* (National Statistical Office 1965) allows us to look at these figures in perspective. Tables 3.6 and 3.7 summarize most of the relevant data. The percentages in rice are of holdings of 2 *rai* and over, not of area. The difficulty still remains of explaining the discrepancy between Zimmerman's averages for the South and the Northeast, and the other data. The greatest expansion of cultivated land in this century was in the Northeast (Ingram 1955: 45), but even here this does not seem to be sufficient explanation for the discrepancy.

[4] Detailed investigation showed 15 households cultivating swiddens (i.e. engaging in shifting cultivation of forest land) illegally in 1965. In 1966 the re-registering of land enabled most of these cultivators to acquire squatters' certificates. These certificates have not yet been validated by the Lands Department, but it does indicate that there are mechanisms by which illegal cultivation can be made legal.

TABLE 3.7 Distribution of Average (Provincial) Land Holdings by Region

Area (in *rai*)	Central	South	Northeast	North	Total
5–9·9	–	–	1	7	8
10–14·9	2	1	1	2	6
15–19·9	3	1	4	1	9
20–24·9	5	6	8	2	21
25–29·9	10	6	1	2	19
30 and over	6	–	–	2	8
Total	26	14	15	16	71

The demarcation of the North and Central Regions tends to obscure an important aspect of these data. The Ministry of Agriculture classification of geographical zones (Agriculture 1955-(1964)) leaves the South and Northeast Regions the same, but classifies only seven provinces as Northern, and thirty-five as Central. The seven Northern provinces are Chiengrai, Chiengmai, Nan, Phrae, Maehongson, Lampang, and Lamphun. This not only makes sense in terms of geography, but these are also the provinces in which Northern Thai is the predominant local dialect. If the census data are rearranged according to the Ministry of Agriculture classification, average holdings for the regions are as follows: Central, 25·9 *rai;* South, 23·0 *rai;* Northeast, 21·6 *rai;* and North, 8·6 *rai.* The Zimmerman figures put the Central Plain on its own with an average of over 20, and the others with an average under 10 *rai.* The rearranged census figures put the North under 10 and the others over 20 *rai.* This latter divergence appears to be consistent with a marked ecological difference between the North and the rest of the country. It is quite true that the other regions are ecologically differentiated among themselves—a differentiation obscured by the figures with which we are dealing. However that may be, the North Region, with more intensive rice cultivation and more effective water control, operates with much smaller holdings than the rest of the country. In fact few farm families in the North operate, or are physically capable of operating, a rice holding of more than 15 *rai.* This is substantiated by looking at the Chiengmai census figures as an example. Of all rice holdings of 2 *rai* and over, 88·5 per cent are within the range 2-14·9 *rai.* This compares with 25·7 per cent for the Central Plain (before rearrangement), 44·1 per cent for the South, 40·9 per cent for the Northeast, and 60·4 per cent for the North (before rearrangement).

The ecological difference is also borne out by the figures for average yield per *rai* as between regions. Table 3.8 gives average yields for 1963 according to the census classification of regions as well as yields for the three years 1963-5 (inclusive) according to the Ministry of Agriculture (1955-(1964)) classification. It is assumed that the census figures are for paddy yields, though this is not stated. Table 3.8 not only helps characterize the North as an ecological area with small farms and high yields, but also

TABLE 3.8 Average Rice (Paddy) Yield (kilograms) per *Rai* by Region

Year	Central	South	Northeast	North
	(from agricultural census)			
1963	216·1	210·6	169·2	302·5
	(from agricultural statistics)			
1962/3	254·4	235·9	173·0	332·8
1963/4	289·8	269·6	178·8	347·5
1964/5	264·7	224·3	178·7	369·2

differentiates the Northeast as an area of large farms and low yields as opposed to the South and Central Plain which have large farms and moderate yields. Unfortunately the census data do not allow us to differentiate Centre from South. The ecological differences between these two regions are not characterized by differences of farm size or average yield.

The incidence of landlessness and tenancy is uneven throughout Thailand, but I would suspect that it is greater than reported for areas outside the Central Plain. This last area is recognized as the area with the greatest incidence of tenancy. South Village may be exceptional in the North. In this village nearly 43 per cent of households do not own wet rice land, do not sharecrop, and do not belong to a compound which owns or sharecrops.[5] The Khonkaen survey (Northeast) reported only 3 out of 520 farmers who claimed to have no land (Long 1963: 16). However, sharecropping cannot be unknown in the area. A Thai artist returning to his home village in or near Khonkaen province, writing about his visit says:

> Not all the people of the village own land to work, and they have to hire out and work on other's fields. In such cases, once the harvesting is done, the yield is divided equally between the owner of the fields and those who have worked it. Some families derive their living by lending the use of their oxen to short-handed farmers in exchange for a share of their harvest (Tongkum 1964).

One probable reason for the small figure is the inclusion of house sites with agricultural land, as the report says that 'A number of farmers owned less than one rai . . .' (Long 1963: 18).

For Bang Chan Janlekha (1955: 132) gives the following figures for tenancy:

Land cultivated fully owned	48 families
Land cultivated part-owned	88 families
Land cultivated all rented	80 families
Total	216 families

The inheritance of land in most of Thailand is bilateral—sons and daughters inherit from both father and mother. The qualifications and difficulties mentioned earlier should, however, be borne in mind. The only exception to this is for the people whom Keyes calls the 'Thai-Lao' in the Northeast Region. Here only daughters inherit and sons have either to acquire new land or manage their wives' properties (Keyes, personal communication). Despite bilateral partible inheritance excessive fragmentation of land is rare—sale of land being the chief mechanism by which this is avoided. The following figures give some indication of the extent to which land is bought and sold.

In a sample of 104 farm operators in Bang Chan between the years 1948-52, 2 operators sold 2 pieces of land each, and 10 operators bought 2 pieces of land each (Janlekha 1955: 157). In Khonkaen province, of 20 commune heads interviewed, 8 reported that some land had been sold in their communes in the month immediately preceding the survey (Long 1963: 17). In South Village of 70 parcels of land 34 of the present owners acquired the land through inheritance, 30 through purchase, and the

[5] 43% was the 1964 figure; in 1966 it was over 50%.

remaining 6 had undergone no change of ownership since being cleared. Sale of land is associated with change of residence, but the extent to which this is so is difficult to specify. Kingshill (1960: 22) reports that many villagers in Ku Daeng sold their land and moved to areas in which the price of land was lower.

Land in the state system

As suggested earlier, part of the explanation for Thai attitudes to land could lie in the traditional administrative system. Wales presents a detailed account of Thai administration in the historical period, but it is not possible to say either to what extent the system in practice corresponded to the system in theory, or to what extent the theory applies to the border states. The comments that follow are a hypothetical projection of Wales's data. The crux of the argument lies in the following paragraph:

> Indian and Khmer ideas of kingship and government had no doubt been gradually absorbed during the latter part of the Sukhodaya period and the first hundred years after the foundation of Ayudhya, but it was not until the reign of King Paramtrailokanatha that a definite reorganization of the administration was carried out. This was necessitated by the expansion of the king's direct authority over the province adjoining the small area of land surrounding the capital which alone had previously been directly responsible to the king; and it was made possible by the influx of captured Khmer officials and literati after the sack of Ankor Thom by King Paramaraja II in A.D. 1431. These skilled statesmen were able to assist the latter king's successor, King Paramatrailokanatha, in strengthening his power by changing the basis of the feudal system from a territorial to a personal one, which had long before been done by the Khmers in their own country; and also by evolving a centralized and functionally differentiated system of administration for the large area now placed under the direct control of the capital (Wales 1965: 70).

In theory territorial lords were replaced by administrators operating through a departmental system, with rank governed by the older numerical *sakdi na* or land rank system. All peasants were allocated to one department or another, and became the clients of a patron-official in the system. The right to cultivate land did not derive from living in the territory of a feudal lord, but from the services given to the state. Any particular patron-official would have clients in different villages, and each village would have the clients of a number of patrons. Change of residence would not change a man's patron, his obligations, or his status and right to cultivate. Conversely, in theory a man could, with consent, change his patron, and this did not necessitate a change in either residence or place of cultivation. It is very possible, therefore, that since the fifteenth century, land and locality have not carried with them any connotations of status, rights, and obligations. The centralization of power has probably avoided some major problems in modernizing a peasant economy.

Another historical factor that could be important is the fact that Thailand was able to avoid Western colonialism and the institution of plantations. Thai agriculturalists did not have to compete with large plantations for land when the population began to rise.

It is not easy to determine how widespread are the kind of landlessness and the lack of agricultural opportunities found in South Village.

The building of large-scale irrigation works should raise the productivity of old land, and, perhaps more important for the rural population, bring new land into production. Even so it is reasonable to expect landlessness to increase. The Mae Faek irrigation project in northern Thailand, which was completed in 1933, is claimed by the Irrigation Department to have brought into cultivation 30,000 *rai* of new land. This is out of a total area irrigated by the project of 70,000 *rai* (Irrigation n.d.).

An interesting question is how this land was allocated to farmers. South Village inhabitants say they are at a disadvantage in acquiring new land. They claim that government servants, who have access to information and to the officials responsible for allocation, are much more likely to be given such land. If this is generally true one would expect the growth of tenancy and a land-owning bureaucracy. An additional factor is that the clearing of new land requires capital usually unavailable to the ordinary farmer.

The bureaucracy has a tremendous importance and status in Thailand. This importance may be expected to grow. There are signs that the Thai bureaucracy is challenging the Sino-Thai in entrepreneurship. This is not only true of the upper echelons in Bangkok, but also of the lesser bureaucrats in the provinces. In the district in which South Village is situated, of the two big land owners one is of Chinese ancestry and the other is a retired school teacher and government servant. Of the two petrol sheds in the district centre one is owned by another Chinese, the other by a Thai government official. Other government officials or their wives own shops and run a variety of other businesses.

Religion and political authority

The role of religion and other non-economic factors in the working of the rural economy is a highly complex subject which cannot be entered into fully here. What follow are brief and highly generalized comments.

With some minor exceptions Eastern religious ideologies are believed to be inimical to rational economic activity. Thai Buddhism appears to be neutral in this respect. Economic activity is prohibited for the monastic orders, but for the lay population no specific prohibitions are involved, except perhaps that of taking life. Buddhist doctrines as interpreted by ordinary rural folk, however, lead to attitudes which have a bearing on economic activity. Success is interpreted as the consequence of merit, failure of demerit. Thus winning a lottery and concluding a successful business deal are at least partially thought of as being the product of the same forces. Yet it is difficult to say how far this inhibits enterprise among peasants. The highly rational approach to farm management—for example to the decision whether or not to keep livestock—suggests that the merit concept does not prevent rational decisions and activity.

Though doctrine and ideology may be economically neutral, religious activity is not. De Young (1955: 130) points out that Zimmerman estimated the contribution made to temples and other merit-making at 27 per cent of a farm household's cash, and that Andrews considered this an underestimate. There is little doubt that the amount of money that goes towards the maintenance of religious institutions for the country as a whole is enormous. De Young gives the range of 1,000 *baht* to 15 *baht* per year for households in San Pong. In exceptional circumstances, such as

the ordination of a son, the contributions and religious expenditure could be a severe drain on the resources of a farming family. However, it is unlikely that most of these assets would be productively used if the merit-making demands were not made. Perhaps a significant proportion of all merit-making comes from windfalls—particularly the state lottery. Kaufman (1960: 110) says that farmers in Bangkhuad answered the question, 'What would you do if you won 50,000 *baht* in the lottery?', by saying they would donate some to the *wat*. As a lottery is held once a week, it is very probable that a good portion of temples' incomes is derived from this source.

A related question of economic consequence is the loss of manpower through men becoming monks. Here it is significant that the period during which short-term entry is made—the Buddhist Lent—is the rainy season, the time when the rice is growing and labour is least in demand. Again, if South Village is any indication, entry into the monastic orders appears to be much more frequent among the more prosperous. Such families are better able to bear both the direct cost involved and the loss of a worker or wage-earner.

One aspect of the social structure where debate is minimal is the position of the King, and, since the revolution, the government. The centralization and authoritarian nature of the Thai state and the position of the King in the value system of the people have had some very remarkable consequences. Innovation in widely different social practices has been achieved with surprising rapidity; the abolition of slavery, changes in dress and eating habits, and the use of surnames all had widespread acceptance merely in response to decrees of the King and government.

The Thai peasant in particular looks on such initiatives as being the exclusive prerogative of the state and of authority. Such an attitude could be extremely useful for innovation of various kinds; whether it is also stultifying is another matter. But in comparison with many Asian peasantries the Thais tend to be less traditionalist in matters that do not touch on religious beliefs.

Kin structure and economic organization: Chinese and Thais

It has sometimes been said that one of the reasons for the greater success of the overseas Chinese as entrepreneurs is their traditional lineage organization. The argument is that this tradition of organization was well suited to mutual protection and aid in the alien environment, and was easily adapted to the organization of the individual firm, while the wide network created by the dispersal of kin was conducive to the development of international business ties. It is quite true that the Chinese did organize themselves very efficiently throughout South-East Asia. Whether, however, it was largely the consequence of *unilineal* kin organization is more debatable. Though individual Chinese firms were often family firms, there is less evidence that they were lineage firms. The larger organizations were not always unilineal, and the clan and surname organizations were an overseas rather than a homeland phenomenon. In such organizations, the big man or patron seems to have been as important a constituent as lineage or even kinship ideology.

As opposed to the Chinese most South-East-Asian peoples have some kind of cognatic organization, and Thailand is well known for its absence

of formal kin groups, or traditional formal groups of any kind. Does this mean that organization is alien to Thai culture, and that therefore the Thais start with a handicap in modern economic activity?

Kaufman (1960: 30) discusses two methods prevalent in Bangkhuad of raising labour: reciprocal labour, and what may be termed obligated labour. The latter seems to imply a status difference, and Kaufman uses the word 'patron' to describe the man requiring the labour. Patron-client relationships we saw were part of the traditional Thai system, and there is evidence to show that these are still widespread in a different form. In rural areas the clustering of clients around a patron does not perhaps create a large or formally organized association, but it has to be considered an organization of a type, and is, moreover, essential to the social system as a whole. In the South Village area important contacts with the administration appear to be largely channelled through 'patrons' of one sort or another. These patrons could be government servants, landowners, traders, or merely wealthy kinsmen. Such relationships seem to be particularly important when illicit activities are involved. Whether ties of this kind are less viable for business purposes than those arising out of a unilineal kinship ideology is a matter for investigation. Probably, however, one should look for the cause of the greater success of Chinese entrepreneurs elsewhere than in their unilineal kinship system.

At the village level, too, the Thai peasantry is not as devoid of organization as is sometimes alleged. The organizations which maintain the irrigation systems are well developed and efficiently run. But they exist only for the one purpose; they do not carry over into other fields of social life. Similarly, funeral organizations exist in many parts of the North. The one that exists in South Village—and presumably the others—are based on strict accounting and reciprocity, with records being kept by the societies' officials as well as by individual members. It is with respect to this kind of phenomenon that I used the word pragmatic at the beginning of the chapter. Organizations arise to fill specific tasks, but there is no tradition of on-going associations which may be called on to fill any task that may arise.

4

Elites and Selection

H. D. EVERS and T. H. SILCOCK

In studying economic growth in Thailand it is more than usually important to study the character of the *élite* groups which take the economic decisions. In all societies decisions about the use of large blocks of assets are taken by certain members of the society, selected by a process openly or tacitly accepted. In any rapidly progressing society the selection of these decision-takers must enable their decisions to be conducive to progress. Understanding how they are chosen and how this choice in any society is influenced by contact with an organized market economy is thus an important part of understanding economic growth. In Thailand several different but overlapping *élites* are accepted as leaders, and in general adopt a modernizing role. They can thus influence their society to adopt changes which they consider desirable. Yet the circumstances that lead to their holding an *élite* position often strongly influence the changes that they promote.

Thai society is highly centralized, and most important policy decisions are taken in Bangkok, the only considerable city in the kingdom (see Chapter 2).

Concentrated in Bangkok are the military and civilian leaders who head the various ministries, the leading civil servants, most of the leading Chinese merchants, the leading members of the Buddhist clergy, the Privy Council, and the King. These men's decisions sometimes affect large blocks of resources directly; sometimes they influence the framework of rules, regulations, and laws which condition the behaviour of rural and urban Thais in using their own assets. The distinction between these two types of influence over economic life is, however, rather less clear-cut in Thailand than in most Western countries. Partly this arises from the way the *élites* came to be where they are. Partly it results from the fundamental structure of Thai government and authority.

The lack of any sharp break in continuity from the days—still only a century away—of one of the most absolute monarchies in the world at that time, still deeply influences the relation between the *élites* and the ordinary people. Bureaucrats, for example, have been trained to carry out without question the orders of their superiors, up to the King. They receive reverence from the people and from their own juniors because in carrying

out these orders they have some limited discretion, and are therefore holders of subsidiary authority. As the orders have become more generalized and abstract, with certain formal functions to be carried out for the welfare of the people, the nature of their obedience and their discretion has changed, but on the whole, at the lower levels, they are still revered as royal agents to be served and placated by ordinary people, because they have some choice in being strict or lenient.

There is thus an attitude to authority based on traditional respect, fear, and desire for patronage, which underlies the whole power of the Thai government, and there is also a set of regulations the intentions of which are often at variance with these attitudes. The extent to which the bureaucrats themselves are influenced by the expectation of the public probably depends mainly on whether there has been detailed training in other attitudes based on rational public functions: in health and some parts of education other values derived from the training are probably stronger than in the lower levels of the administration itself.

The higher levels of the bureaucracy tend, because of their Western training, to think of formal authority in terms of laws and regulations and the use of generalized sanctions, and this tends to influence the form in which power is exercised. Even these men, however, are by no means insulated from the forces which determine how power is achieved and held, and hence how it is exercised, in Thai conditions. The rules that they make and the way in which they and their subordinates apply these rules are inevitably affected by the selection system and the attitudes that underlie it.

Chapter 3 has shown that in rural Thailand the social structure is pragmatic and flexible, and that the relation of the people to authority is—while submissive and accepting—remarkably free of any element of local loyalty. Superficially this would appear to be a favourable social structure for generating rapid economic growth. There appear to be few obstacles to the pursuit of economic advantage by the people themselves, and a respected government with increasing numbers of Western-trained civil servants is in a position to establish a framework of order, and suitable training and inducements, to generate rapid change.

The kings, under the absolute monarchy, had introduced great changes,[1] but had not made economic development a high priority. The changes in the structure of government that would preserve the nation's independence by removing occasions for intervention had to come first. Those who staged the *coup d'état* in 1932 were, however, much more deeply interested in economic development.[2] Yet they were unable to change sufficiently radically the system by which their subordinates and successors were selected, to ensure the emergence of growth-promoting institutions. Developments in the bureaucracy, the political system, and the structure of business were inherent in the attitudes that the monarchy had created among the people and in the relations between the different *élites* themselves once the royal power was removed.

At the time of the 1932 *coup d'état* the bureaucracy was formally recruited by a system based on academic merit. Increasing professionalism

[1] E.g. railways for detailed control of outlying provinces, law courts to eliminate extraterritorial rights, and an improved revenue system to pay for these.

[2] For the background of the 1932 revolution see Thawat (1962).

and emphasis on training by Europeans acting as advisers in the different specialized departments had slowly modified the system of recruitment in the civil service at all but the highest levels, until the old *sakdi na* system of patronage according to function and rank had virtually disappeared. In its place a Civil Service Commission was set up in 1928, largely based on British models and administering a system of recruitment and promotion by competitive examination throughout the civil service (Kasem 1962: 3; Collins 1951: 127).[3] At no time, however, was a complete academic merit system in operation; the higher civil service positions were still filled by royal patronage from princely families until 1932, and thereafter, while the academic merit system still prevailed in theory, and in fact promoted a higher level of education in the service, a more or less closed administrative class began to develop in the upper levels.

The causes of this subsequent change were complex and can be only briefly discussed here. One factor was the increasing importance of the different ministries as a result of the abolition of the royal power. Politicians in charge of ministries used them to build up their own power. As a result the Civil Service Commission developed ministerial sub-commissions, consisting of the different departmental heads, and even departmental sub-commissions, consisting of divisional heads (Kasem 1962: 3). In effect the central commission became merely a regulatory agency controlling the exercise of patronage by the different ministries and departments.

A second factor was the increasing importance of overseas education. During the reign of Chulalongkorn royal princes had been sent overseas for further education, mainly in the European monarchies (Chinnawoot 1961). As the importance of education increased in the civil service, and the service itself expanded, successful civil servants, lawyers, university lecturers, and other prominent Thais began to send their sons abroad. These were accommodated in the civil service outside the ordinary system of selection and promotion, which was designed for Thai conditions. Only just before World War II were holders of foreign degrees given specific recognition as technical experts within the Thai civil service structure, but from the beginning these degrees gave access to opportunity and rapid promotion.

The combined effect of these two influences was to undermine the system of selection by academic merit. In the lower ranks of the service the work of the Civil Service Commission became mainly the defence of selection within formally defined rules, and subject to proper qualifications. In the upper ranks foreign-degree-holders entered almost automatically, and as the number of holders of such degrees increased, the way was virtually blocked for anyone in the lower ranks who could not go for study overseas. After World War II, as shown in Table 4.1, the number of Thai students studying overseas—mainly in Europe, the U.S.A. and Australia—increased rapidly.

The academic merit system was further undermined by the increasing impact of American education after World War II. American advisers had little sympathy for the former British system. This system had temporarily

[3] Kasem and other writers, mainly American, ignore the British background of the Thai system. The composition of the Commission was similar to that which was simultaneously being recommended by the Donoughmore Commission in Ceylon, and the examinations used—though obviously modified for Thai conditions—were based on the methods used in the United Kingdom in the 1920s for recruiting the Home and Indian Civil Service and Eastern cadets.

TABLE 4.1 Number of Thai Students Studying Abroad under the Supervision of the Thai Civil Service Commission in Various Countries, 1951-63

Year	U.S.	Other America	U.K.	Europe	Aust. & N.Z.	Japan	Philippines	India	Other Asia	Total
1951	310	–	379	38	3	–	5	13	–	748
1952	330	–	580	58	184	–	3	22	–	1,177
1953	400	–	808	102	215	1	6	26	–	1,558
1954	555	–	867	158	206	17	17	39	–	1,859
1955	607	–	871	188	179	48	20	54	2	1,969
1956	667	1	809	206	167	47	23	66	4	1,990
1957	721	1	803	193	140	42	27	51	2	1,980
1958	765	1	740	202	116	54	28	49	6	1,961
1959	790	3	740	174	104	67	28	37	5	1,948
1960	850	7	710	209	138	74	32	35	22	2,077
1961	961	8	667	221	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1962	1,073	5	698	265	184	167	102	89	57	2,640
1963*	1,096	5	739	292	203	192	117	88	64	2,796

* June 1963.

Source: Unpublished records of the Thai Civil Service Commission.

accepted aristocracy and patronage, and had tried gradually first to supplement it by assimilating those selected on merit to the existing aristocracy, and then to make academic merit the criterion for selection.[4] The new aim was to train such of the existing personnel as could profit by it, together with new applicants mainly jointly nominated by Thai officials and American advisers. Many training courses, of different standards and specializations, were available, adapted to various tasks that needed to be performed. Paradoxically the new system made it much easier for those who enjoyed the proper patronage to secure an overseas degree. The emphasis shifted to training rather than selection. In the long run the effects of this change may be beneficial to growth. In the short run it seems to have produced an administrative *élite* with a relatively rigid class structure and with characteristics only moderately favourable to economic development.

A new class can be consolidated only if entrance into it is partly restricted; the high mobility needed for forming the class must subsequently decline. Most authorities assure us that social mobility is and always has been very high in Thai society (Blanchard 1958: 50, 411; Embree 1950: 185; Hamburger 1965: 49-72; Hanks 1962: 1257; Hanks and Hanks 1964: 203; Mosel 1957: 48, 52), though field studies do not at present indicate any exceptionally high rate of status mobility (Boesch 1962; Kingshill 1960; Kaufman 1960; Skinner 1958; Textor 1961; Sharp 1953). The argument usually runs as follows: Thai society is loosely structured, which means that 'considerable variation of individual behaviour is sanctioned' (Embree 1950: 182). There is nevertheless a very elaborate system of fixed ranks which has its roots in the traditional *sakdi na* system, whereby Thais were

[4] The relevant parallel is British relations with the Malay aristocracy; for although Chulalongkorn refused (for obvious reasons) to have advisers sent from Malaya, advisers recruited from London must have informed themselves about the highly successful policies adopted in Malaya, especially the northern states formerly under Thai rule. For a critical account of Malayan practice see Tilman (1964). A scarce but much more useful source on this topic is J. M. Gullick (1957-8).

assigned a numerical status index according to their position or occupation.[5] But movement from occupation to occupation up and down the hierarchy was not and is not restricted by birth or other factors (Hanks 1962: 1252). Mobility is sanctioned in the Thai Buddhist value system, by which a person's status derives from religious merit, acquired in previous lives (Boesch 1962: 34; Hanks 1962; Textor 1961: 44).[6] As everybody may do good and acquire merit and thus rise to a higher social position, social status is not fixed by birth, and social mobility is thought to be quite natural.

Hanks, for example, speaks of the 'built-in social mobility of Siamese society' (Hanks and Hanks 1964: 203). Developing his argument from the Thai value system, he emphatically denies the existence of a class system in Thai society, without, however, differentiating between rural and urban society: 'Efforts to depict social classes in Thai society founder because of misconstruing the nature of this social order, which resembles a military organization more than an occidental class-type society' (Hanks 1962: 1252). This is contradicted by Skinner, whose description of the Bangkok class system is based on observation and data derived from an extensive field study of the Chinese community in Thailand. But he also emphasizes that the stratification system is not very rigid (Skinner 1958: 18-19).

It is not hard to reconcile Hanks with Skinner. Efforts to depict social classes in Thai urban society have failed, not because of misconstruing the nature of the Thai social order, but because a class system is now in the process of evolving, and rapid social change makes it difficult to construct a static model of Thai society.

Though the highest and politically most important positions were held by royal nobility before 1932, recruitment for the lower ranks of the civil service provided opportunities for many ambitious young men from Bangkok and from the provinces to move up the social ladder. Interviews with higher Thai civil servants and the examination of their life histories showed, however, that after the revolution competition for civil service positions became more intense and people from rural areas and low family background found it extremely difficult to get a civil service appointment.

Some corroboration for this interpretation (which was based on intensive but unstructured interviews with a great number of civil servants) can be given from a series of more formal interviews, designed to elicit facts about the social background of Thai civil servants. These were undertaken (originally as a pilot study) in 1963.[7] All senior civil servants in one ministry, and all those in a single division of another, were asked—among other questions—whether their fathers were civil servants, what their

[5] For a description of the *sakdi na* system see Wales (1965: 49-51).

[6] The idea that the social status of a person is connected with religious merit was frequently expressed by Thai civil servants and miltary leaders during interviews in Bangkok in 1963. See Evers (1964).

[7] This study was carried out in 1963 as part of a comparative study of *élites* in Thailand, China (Taiwan), and Indonesia under the auspices of the Arnold Bergstraesser Institute for Socio-political Research, Freiburg, Germany, by D. Bernstorff, Z. A. Hanfi, G. K. Kindermann, and H. D. Evers. In working out this paper, use has been made of the field notes and suggestions of these co-workers. The assistance of

fathers' professions were, and the date at which they themselves entered the civil service.

TABLE 4.2 Inter-Generational Mobility of a Group of Senior Thai Civil Servants in two Ministries, 1963

	Entry into civil service			
	1932 and earlier		after 1932	
Father's occupation	Number	%	Number	%
Government service	4	17	20	49
Professional	1	4	3	7
Business	7	30	12	29
Farmer	9	40	4	10
Other	2	9	2	5
Total	23	100	41	100

Table 4.2 compares the intergenerational mobility for those civil servants entering government service before 1932 and for those entering since that date. Inevitably such a table compounds the influence of two sources of difference between the pre-1932-entry group and the post-1932 one: one is the difference in promotion rates between civil servants' sons and others; the other is the change, through time, of recruitment policies. If, for example, in both 1932 and 1963 sons of civil servants reached these senior ranks in an average period of ten years from recruitment, while sons of others, on average, took thirty years to rise so far, a comparison made in 1932 would have shown, even then, many sons of civil servants and few of others among those recruited in the last thirty-one years. Yet there would have been other civil servants—recruited, but not yet senior enough to be counted in 1932—rising slowly through the ranks. By 1963 these would be seniors, and would make the proportions among the pre-1932-entry group surviving in the senior ranks in 1963 quite different from the proportions that would have been found at this level in 1932 itself. Thus a part of the difference in 1963 between the pre-1932-entry group and the post-1932 one may well be due to more rapid promotion, at both dates, of civil servants' sons. A comparison in 1963 of social origins between the pre-1932-entry group and the post-1932 one is not the same thing as a comparison of social origins of civil servants in 1932 with those of a similar group in 1963. Only the latter could have shown unambiguously the change in class structure. Nevertheless the differences are probably large enough to warrant the conclusion that social mobility *has declined* after 1932 despite continuing urbanization and bureaucratization. In fact the bureaucratic *élite* has become more self-sufficient as new members have tended to be recruited from its own ranks. The figures in Table 4.2 are of even greater significance if we consider the occupational structure of Thai society as a whole. The civil servants certainly account for less than 0·5 per cent of the total population, whereas the farming population constitutes

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over 80 per cent. For Greater Bangkok itself an estimate based on the 1960 census gives the following percentages (National Statistical Office 1961):[8]

Government officials (administration)	0·5
Professions (incl. teachers)	3·5
Traders and businessmen	17·5
Clerical occupations	9·2
Others	69·3
	100·0

These figures show that about 60 per cent of the higher civil servants have been recruited from occupational groups which constitute less than 4 per cent even of the total Bangkok population.

Another recruiting field for higher civil service positions, though far less important than the bureaucratic *élite* itself, is families with a business background. As most businessmen are Chinese or part-Chinese, the vast majority of Thai people, except those few whose family heads are already in government employment, have practically no chance of moving into a higher social position. The situation today apparently differs greatly from the time before 1932, when a considerable proportion of government officials was still recruited from rural areas.

How has the consolidation of the administrative *élite* come about? There has been no lack of migration into the capital, yet it seems probable that the administrative class has had a rate of natural increase sufficient to match the expansion of the bureaucracy.[9] There is as yet little evidence of the 'differential fertility' of Lipset and Bendix (1959: 280) compelling outside recruitment. Further, the administrative class has been able largely to close its ranks to outside entry, by differential acculturation to Western values and behaviour patterns. One of the chief means of acculturation has been the acquisition of foreign degrees.

The number of Thais studying abroad, especially in the U.S.A., has increased in recent years (see Table 4.1). In the questionnaire on the social background of civil servants a question was asked about education abroad, the results of which are tabulated in Table 4.3.

TABLE 4.3 Foreign Education of a Group of 64 Senior Thai Civil Servants in two Ministries, 1963, by Date of Entry to the Civil Service

Entry into civil service	Studied abroad		Not studied abroad	
	Number	%	Number	%
1920–32	6	26	17	74
1933–45	17	63	10	37
1946–63	13	93	1	7

The percentage of those who have studied abroad is much higher among those who entered the civil service after the revolution of 1932 and still higher after World War II. Since overseas graduates are extremely likely to have been promoted relatively rapidly at all times, we must be even more careful with Table 4.3 than with Table 4.2 not to take the results at

[8] This estimate is condensed from the re-grouped Table 16. It is, however, very doubtful whether the statistical data in Table 16, 'Economically Active Population 11 Years of Age and Over, by Work Status, by Occupation, and by Sex' are reliable.

[9] There has been some decline, but it has been very recent and not yet precipitate (see Chapter 2).

face value. The difference in the percentages studying abroad would almost certainly have been much less if there had been three inquiries, in 1932, 1945, and 1963; the present system includes in the 1946-63 group—but not in the others—only men who had reached Grade I within (at most) seventeen years of entering the service. Nevertheless, adjusting for this would almost certainly not have eliminated the whole trend towards a higher proportion of overseas graduates in the service, and it seems unlikely that in future many places will be left in the higher grades for those without overseas degrees.

A foreign education, however, is very expensive. The costs incurred for two years study in the United States to receive a master's degree will be close to U.S. $10,000, a sum even the upper class Thai finds extremely high. Scholarships, the main avenue to foreign degrees, are, however, mostly controlled by the Civil Service Commission. Those best placed to receive a scholarship are either government employees themselves—one-third of Thai students studying abroad in 1963 were in fact government officials taking leave of absence (Evers 1964: Table 10)[10]—or sons or daughters of civil servants. This is not necessarily connected with nepotism or any kind of irregular administrative procedure, but the importance in the competitive examination of knowing a Western language (usually English) gives a far better chance to members of the Westernized bureaucratic *élite,* socialized into families where a knowledge of English and Western behaviour patterns is common. It appears, therefore, that the growing importance of foreign academic degrees on the one hand, and the tendency towards monopolization of the ways to obtain them on the other, are converting the bureaucratic *élite* into a relatively closed group with class characteristics.

The bureaucratic *élite,* however, is not the only *élite* which is developing the attributes of a social class. As has already been indicated, Skinner's investigations (1958: 245-6) have shown some tendency toward the development of a similar class structure within the Chinese community. Moreover, within the bureaucratic structure there is a growing distinction between the outward-looking, modernizing administrative *élite* and a power *élite,* mainly based on army cliques (Wilson 1962: 6). These features of Thai social structure also have a bearing on economic development; in particular, the relations between the different emerging classes, and also between them and the peasants in the countryside, impose constraints on the types of development that are possible. We must therefore consider the character of these *élites* and their relations with one another.

From the time of Ayudhya, at least, the Thai kings derived both wealth and recognition from relations with China (Skinner 1957: 2-3). At times Chinese traders were relatively free, paying only taxes to the King, at other times—particularly in the later Ayudhya period—Chinese traders participated in the royal trade monopolies. There were also 'tribute missions' to the Chinese court, which were a form of royal trade through exchange of gifts (Skinner 1957: 5-10).

It was in the early Bangkok period, however, that the Chinese, particularly the Teochius, attained their position of maximum influence.

[10] Only students supervised by the Thai Civil Service Commission have been included.

King Taksin, the first king who restored Thai fortunes after the fall of Ayudhya in 1767, was himself a Chinese, and, though his successor was a Thai, Skinner (1957: 26-7) has shown that throughout the whole Chakkri dynasty there have been frequent infusions of Chinese blood through the female line. Chinese traders came to dominate most of the principal exports and imports, either alone, or as local agents of a few European firms which supplied the capital and overseas contacts but used almost wholly Chinese labour and Chinese local channels of collection and distribution. Almost all the free and indentured labour that built the ports and railways and public buildings and operated the tin mines and rice and timber mills was Chinese.

Chinese society, however, during the Bangkok period of the absolute monarchy, was characterized by considerable social mobility. There was a great deal of harsh oppression of labour through the indenture system and secret societies (Skinner 1957: 140),[11] but the rapid opening up of the country made it possible for those individuals who could work and save assiduously, and who had good social contacts and good luck, to rise from the bottom of the economic scale to positions of great wealth. The structure of leadership was such that it allowed for such movement, and accorded respect to those who rose by their own efforts (Skinner 1958: Ch. 2).

This structure was, on the whole, very favourable to economic development. It enabled wealth to be concentrated reasonably rapidly in the hands of those who could use it effectively, while a framework of order was provided from outside the Chinese community. It did not, however, lead to industrialization or the type of economic progress which could outstrip the rapid expansion of the population by natural growth and immigration. For this, as Ingram (1955) has shown, more active intervention would have been necessary, and this neither the Thai kings nor the Chinese business community were in a position to initiate.

The emergence of a class structure within the Chinese community was an indirect result of the emergence of Thai nationalism. The *coup* group of 1932 had acquired nationalist sentiments from a combination of the nationalist propaganda of King Vajiravudh during their childhood and the experience of education abroad (Wilson 1962: 109-12; Vella 1955: 362-3). They resented both the Europeans in the higher ranks of the civil service and the control by the Chinese over so large a part of the economy (Skinner 1957: 220).

We have seen how the removal both of the royal power and of the Europeans from the ministries led to the development of the ministries themselves as sources of power and influence, and to the consequent transformation of the civil service. The removal of Chinese control over the economy was a much more difficult matter.

The main instrument envisaged by Pridi Phanomyong, the intellectual leader of the *coup* group, was an economic plan for the whole country in which the state would take over the entire structure of production (Pridi 1947). It was a simple-minded system of state socialism, absurdly underestimating the degree of organization and training that would be needed for

[11] The role of secret societies in controlling labour is better documented for Malaya and Indonesia at this time, but no doubt similar methods were used. For a brief sketch see Wong (1965: 42); a fuller account is in Wynne (1940) and Comber (1959).

central control of a whole economy, and almost wholly free of the notions of class war or dictatorship of the proletariat; indeed its chief characteristic was that, in spite of a good deal of apparent detail, it was almost completely devoid of concern with the realities of either economics or politics. The plan as a whole never had much chance of being adopted, but a number of individual measures were introduced which were designed to transfer more of the economy to Thai hands: the establishment of a national banking commission, the setting up of the Thai Rice Company to remove the rice trade from Chinese control, and the founding of provincial trading companies—mainly run by Chinese, but under government control —with the object of gaining control of retail trade in every province (Bank of Thailand 1962: 1-3; Skinner 1957: 262; Budget Bureau 1956-(1966)).[12]

In the years immediately before and during World War II Thai measures against the Chinese achieved some success. The Thai Rice Company gained control of the export of rice to Japan as a result of the Chinese anti-Japanese boycott; the provincial trading companies, armed with supplies of rationed goods, expanded their hold over retail trade; the Ministry of Industry was able, in the early years of the war, to set up several small-scale industries replacing imports cut off by the war (Industry 1949: 5-17).

In the immediate post-war period Thai diplomacy successfully resisted any interference with the Thai army.[13] Although the group in power was not an army group the strength of the Bangkok *élite* was unexpectedly great, both because of dissensions within the Free Thai Movement that had been operating from abroad against the Japanese, and because of sharp differences between British and American policy. Much of the effort of Thai diplomacy was directed to preserving what were felt to be the essentials of Thai sovereignty—removing foreign troops from Thai territory and preserving the framework of government from foreign interference. The result of this, however—certainly not intended by those who carried on the negotiations—was the return to power of an army group by a *coup d'état* in late 1947. Five months later the wartime dictator Phibun Songkhram was back in power as Prime Minister, and the policy of trying to replace Chinese by Thais in the control of the economy was resumed (Skinner 1957: Ch. 9).

The situation, however, was no longer the same as it had been in the pre-war and early war years. At that time there were virtually no Thais with any wealth or business experience, while the Chinese had no understanding of the Thai political process. The structure of Chinese society had favoured leadership by those whose outlook was characteristically Chinese (Skinner 1957: 7-9). The Chinese were an immigrant community, mainly organized on commercial lines. Their political structure had to provide certain social welfare facilities, and also protection against the alien government. This gave advantages to the first generation Chinese, the self-made

[12] The *Budget Documents* give the dates at which the majority of the surviving Provincial Trading Companies were founded as 1940 or 1941. More than half of them were wound up in the immediate post-war period.

[13] The Thais' preoccupation with preserving their sovereignty at this time appears in 'Sarakhadi' (Pla Thawng 1964). The fact that the United Nations wished to reorganize and retrain the Thai army and that this was successfully resisted by the Thai negotiators has been mentioned, in interviews, by two Thais actually involved in the negotiations.

man, and helped to preserve the considerable mobility that had characterized Thai Chinese society.

In 1952, at the time of Skinner's first studies of social structure among the Thai Chinese, mobility was still high, but there was an increasing tendency to accept as leaders those who most identified themselves with Thailand and co-operated with the new Thai *élite*. Since 1947 there had been great pressure by the Thais and disunity in the Chinese leadership. Left-wing leaders had gained control in certain speech-groups, largely as a result of communist anti-Japanese activities in connection with the Free Thai Movement. In other groups nationalist leaders were still in control, as a result of pre-war nationalist pressures through such media as chambers of commerce and schools. Civil war in China made the conflict more bitter.

On the other hand, there were now far more Thais in the new *élite* group who had acquired wealth either from government sources or as a result of the Japanese occupation and inflation. More important, there were members of the *élite* group anxious to expand their wealth. It was possible for Chinese to make themselves useful to such Thais, and in doing so to gain protection for themselves against the prevailing anti-Chinese pressures. Moreover, it became important to the Chinese in general to give prestige and leadership to those Chinese who had powerful Thai friends; only so could their protection in turn be secured, against the more extreme forms of Thai pressure.

By giving leadership to those Chinese who were most closely associated with the Thai *élite,* the Chinese in some degree diminished the mobility of their own social system. Close assimilation to the Thai *élite* takes many years, if not generations. Though the lower levels of Chinese society remain very competitive, the main concentrations of wealth are increasingly related to political and social contacts.

Within the Thai *élite* it is necessary to draw a contrast between the bureaucracy itself and the political-military groups that have, from time to time, controlled it. In the main these have been groups of army officers, though their power has not always depended wholly on their military position and command of armed force (Wilson 1962: esp. 149-59).

The original constitution in 1932 provided for political appointments in the ministries, separate from the bureaucracy (Chinnawoot 1961). These posts were at first held by those who had carried through the revolution. Some of these, of course, were former members of the bureaucracy, and the subsequent governments have always included as ministers some men who have risen through the civil service. Increasingly, however, at least until 1963, the key posts have been given to army generals in return for military support in capturing power. Nevertheless it would be a mistake to suppose that influence in the army is the only key to power. Wealth and influence in the bureaucracy are also important. Prominent Thai politicians have sought wealth not only for the personal advantages it yields, but also as a source of political power. The details of the money disbursed by Field Marshal Sarit during his premiership are included in the secret white book, which at one time his successor, Field Marshal Thanom, intended to publish (Puey 1965: 2). He was dissuaded on the grounds that publication would undermine discipline throughout the army. There can be little doubt from the way Sarit exercised power that several of those who assisted him

then were previously in his pay. His rival for the succession to Phibun Songkhram, Police General Phao Sriyanon, also had considerable sources of wealth from opium, gold, and a number of industrial companies, and his power in the police and in his relation to members of Parliament was partly due to the money that he was able to disburse.[14] A bank or other source of large-scale finance seems to be a necessary resource for any *coup d'état* in Thailand (see Chapter 8).

The making up of a Cabinet in Thailand thus involves three kinds of consideration. First, there is the capacity of each minister to give leadership in a particular branch of government; next, there is the opportunity that he is given to acquire wealth from government industries affiliated to the ministry, or contracts for equipment; finally, there is the political influence which the ministry brings, and which may be used on behalf of the Prime Minister or in other circumstances against him.

The members of the power *élite* exercise political influence through their departments partly because of the services these departments give and the consequent opportunities for publicity and popular support, but this is of relatively minor importance, since popular support is normally hardly significant. Their main influence is through patronage, and the consequent desire of large sections of the bureaucracy to win their approval (Wilson 1962: 157-60). Although the *sakdi na* system no longer operates, the god-king no longer crowns the edifice of authority, each civil servant tends still to be his minister's man. In most cases the chief feeling of obligation is toward the permanent head, and other superiors within the civil hierarchy up to the King. This, however, is sufficient, for the minister has enough inducements in his control to command the support of the important civil servants by patronage. It is the rivalry between ministries for the extension of influence that underlies the frequent struggles for the affiliation of important blocks of civil servants, for example the recent struggle between the Ministries of the Interior and Education for affiliation of the primary school teachers.

The Prime Minister in controlling the country and the individual ministers in controlling their different departments have to use both a formal and an informal structure of authority. It is because both structures are independently important that certain types of economic development are successful and others severely handicapped. The formal structure is clearly defined and well known, and possesses considerable sanctions. The Prime Minister is not only chairman of the Council of Ministers, with the power to appoint and dismiss ministers in the King's name; he also has within the Prime Minister's Office a number of commissions, councils, and boards which influence the decision-making process in specific ways, such as the Budget Bureau, the National Economic Development Board, the Tax Supervision Board, the National Audit Council and the National Security Council (Wilson 1962: 141).[15] These enable and virtually compel the Prime Minister to operate the formal structure in such a way that it largely conforms to

[14] See Pla Thawng (1964: 3 Sept.) for the influence of General Phao over the members of Parliament, though the unofficial payments are merely hinted at, not specifically mentioned.

[15] See also the organization charts of the Thai government prepared by the Public Administration Division of the United States Operations Mission, Bangkok, 1964.

standard overseas systems of public responsibility and financial control. In the same way each ministry has its own under-secretary's office and formal methods of discipline and financial control.

This formal system has, as we have seen, been imported from abroad, and in some degree under pressure. It has probably been incorporated as a part of the value system of most educated Thais, in the sense that its sanctions will be used to further their own interest if preference, for example, is given to another. Possibly the power *élite* is less strongly affected than most of the bureaucracy by Western bureaucratic values, since most of its members have been chiefly trained in Thai military training establishments, even if they have spent short periods of study abroad.

Western bureaucratic values and organizations have been grafted on to a Thai system of patronage and mutual obligation which still survives as the informal underlying basis of power. This informal power is necessarily secret, difficult to detect, and still more difficult to document. Its basis is a clique of men, held to the Prime Minister by ties of obligation, which may rest on kinship, on a pupil-teacher relation, on patronage or favours bestowed in the past, or simply on respect and expectation (Wilson 1962: 141; see also Chapter 8). This clique is obliged to secure the Prime Minister's power and maintain him in it. In turn he is obliged to put members of the clique in a position to fulfil the obligations which any Thai in a position of power is expected to fulfil to his family and to many clients dependent on him.

This structure of obligation is part of the explanation for the failure to adjust civil service salaries to modern price levels, in spite of nearly a decade in which price levels have changed very little. Civil service salaries under the absolute monarchy were always low, because status and patronage, with the voluntary services that these brought, were a part of the reward for serving the King. During the period in which an academic-merit system was being introduced salaries became more adequate. The wartime inflation coincided with a growth in the power of patronage by the emerging *élite*. Supplements came to be provided for co-operative and successful civil servants; such supplements were increasingly dependent on the support or acquiescence of those in authority. They lessened the pressure for adjusting salaries, so that civil servants are now virtually dependent on supplements to achieve a reasonable standard of living.

These supplements are by no means all a result of malpractices, even by normal Western standards. A common one is the generous meeting allowance given for serving on the numerous committees in which the Thai civil service abounds. Another (not dishonest, but strange to Western ideas) is the bonus paid to directors of government enterprises, including those serving *ex officio,* to represent the departments to which they are responsible. The more irregular sources of income usually involve at least passive connivance of superiors, partly because of the formally strict controls that have to be circumvented (Riggs 1964: 116-19).

It is, however, an exaggeration to suggest that most of these sources of income involve corruption in the sense in which this word is often used in less developed countries. Certainly corruption is fairly widespread, but it is far more important that the Thai system allows and expects the bureaucratic *élite* to engage—directly or indirectly—in private business. A Thai civil

servant's official position can help in such business in many ways, ranging from mere prestige, through general knowledge of government policies, inside knowledge of particular decisions, to diversion of contracts and monopolies.

The position of patronage exercised by the newer power *élite*—a separate group based on military training and solidarity—towards the general bureaucratic *élite,* is not, however, the only significant relationship between them. The bureaucratic *élite* also tends to be more Western in its outlook, and better educated, than its military superiors. This has a number of interesting consequences.

The first is a tendency for the bureaucrats to mobilize foreign pressures to frustrate the private interests of the power *élite.* Many of the aspects of Thailand's economy which can be described as liberal are the result of such mobilization. The most important influences are those of the International Bank and the International Monetary Fund, which are discussed in Chapter 8. In addition several of the advisory missions sent to Thailand by the United States Operations Mission have been at least partly initiated by foreign-trained Thai civil servants wishing to initiate reforms.[16] Thailand is an unusually favourable environment for foreign advice, since the bureaucracy is often willing to use it in asserting what it believes to be the national interest against particular interests of those in power. The relatively liberal exchange and trade policy is also partly the result of opposition to the opportunities for private gain which a protective system would bring, and the consequent encouragement of liberalizing pressures not only from the International Bank and International Monetary Fund but also from the Economic Commission for Asia and the Far East.

In addition there have been attempts to strengthen the formal machinery of government, for example the Budget Bureau and the Tax Supervision Board, initiated by Western-trained bureaucrats nominally with a view to increasing efficiency, but probably also with a view to strengthening the position of the bureaucracy itself.

There have also been direct attempts by Western-trained bureaucrats to influence the thinking of the army power *élite,* notably through the system of mutual education evolved in the National Defence College.

The relations of the power *élite* to the Chinese business *élite* are also, of course, of critical importance for economic development. G. W. Skinner has shown how the Chinese business *élite* and the Thai military and bureaucratic *élites* embarked on a long and enduring co-operation, the Thai political leaders and officials providing protection and favours while the Chinese back the political and administrative power of the Thais with their own acquired wealth. The legal basis of this process was the 'Thai-ification' program, which debarred Chinese from certain sections of the economy and required Thai participation in others. The program was started by Phibun Songkhram in 1948-9 and accelerated in 1951.

> By the end of 1952 tens of Chinese leaders were managing Thai or genuinely Sino-Thai enterprises, and hundreds of government officials and other members of the Thai elite were either fully 'cut in' on Chinese business or serving on the boards of Chinese firms in a 'protective' capacity (Skinner 1958: 187).

[16] Information based on interviews at USOM, Bangkok.

In 1955 most of the influential Chinese business leaders had formed business alliances with members of the Thai *élite* and the co-operation has rather increased than declined up to now.

As the power *élite* learned the techniques of deriving wealth from participation in private businesses and banks largely run by Chinese, the establishment of additional government enterprises became unnecessary to the structure of political power. It is probably this, rather than the advice of the International Bank Mission and the Bank of Thailand, that persuaded Field Marshal Sarit to adopt the policy of founding no more state enterprises and encouraging development by private firms.

Before considering the economic significance of the consolidation of the three modern *élite* groups and their tendency to form a rudimentary upper class structure, we must briefly discuss their relations with two other *élites* in Thailand. One is the King and the royal princes, the other the *Sangkha,* the Theravada Buddhist order of monks.

The position of the King in Thailand is one of great potential strength. He is much loved and respected by people of all classes. During the prime ministership of Phibun Songkhram he was kept very much in the background, but Sarit used the royal influence in support of policies needing popular approval. It is noteworthy that, while the King has always maintained a strictly constitutional role, some members of the power *élite* have recently shown some anxiety about his obvious power to intervene decisively in a time of crisis. The revised constitution published in 1965 has been amended, in comparison with that of 1952, to cut down several of the formal powers previously held by the King in abnormal situations ('Winyachon' 1965). There is, however, no indication that the King has any intention of using his power for any political or economic purpose. The significance of the throne is to be found elsewhere.

There seems little doubt that the person of the King does provide for the individual Thai bureaucrat a continuing focus of loyalty which limits the extent to which he feels his duty is to serve the interest of a particular minister. Though respect for authority is strong in the Thai *élite,* this underlying loyalty in the bureaucracy as a whole probably strengthens the hands of those—particularly princes like Prince Viwat and Mom Luang Dej Snidwongse—who are able, in institutions like the Bank of Thailand or the Industrial Finance Corporation of Thailand, to serve a more long-run interest.

In a society in which authority is as much respected as it is in Thailand, and in which, to a very large section of the population, the King is still the embodiment of authority, the role of the throne is obviously important to all *élite* groups. The royal power is clearly increasing, partly as a result of disillusionment with corruption in the power *élite* and the bureaucracy, though there is no indication of any intention to use that power. It seems unlikely, indeed, that the present King would accept any political role, in view of his own democratic background. One interesting possibility, however, is that professional associations, as they begin to emerge, may seek royal patronage as a means of raising their status and their power to enforce standards.

Except in medicine and auditing Thailand has no professional associations with any effective influence;[17] but the expansion of overseas training is

[17] For a fuller discussion of associations in Thailand see Riggs (1962: 153-89).

almost certain to lead to their emergence in the near future. At present professional standards, for example in accountancy, are protected—so far as they are protected at all—by official regulation. The growth of private industry is certain to lead to a need for professional bodies to control standards in such fields as engineering, accountancy, architecture, and management. Such bodies might well seek royal patronage, and it would be an interesting constitutional question whether this could properly be given directly and not on the advice of the executive.

It would plainly be contrary to Thai ideas for the King himself to exercise any selection. If, however, an important professional body was accepted by the profession, and was itself selecting on professional grounds, it might be felt that this was analogous to the position of the legal profession—established as a virtually autonomous system under the absolute monarchy, and still continuing as such. Royal patronage exercised in this way might strengthen the element of professionalism in the Thai *élite,* as well as strengthening the influence of the Crown in a non-political field.

In the long run professional control over professional standards and selection could have far-reaching effects on the professions, the universities, and the bureaucracy itself. It might well help to mitigate the exclusiveness of the *élite.*

Theravada Buddhism is an extremely important part of Thai culture and the *Sangkha,* or the Buddhist order of monks, is most influential in Thai social life. It is not, however, of very great significance for decision-making in the field of economics. All Thai governments have always reacted very strongly against the slightest indication of any political activity by members of the *Sangkha,* and in the few cases where some political involvement could be established the monks have invariably been disrobed and punished. A situation like that in South Vietnam, Burma, or Ceylon where Buddhist monks have more or less successfully claimed a share in national politics could not develop in Thailand without major social changes. The *Sangkha* has, however, been used to popularize development programs in rural areas.

The economic importance of the *Sangkha* lies in the fact that a great number of male workers are permanently or periodically removed from the production process. As it is still a widely accepted practice for Thai men to become ordained for several weeks or months at least once in their life, more than 250,000 monks will usually be in residence in the *wats,* or monasteries, during the time of retreat, the rainy season. Furthermore, the *Sangkha* attracts substantial sums in the forms of religious donations in cash or kind, given by laymen in quest of making merit and to better their chances of rebirth in a higher social position. Larger *wats,* especially the royal monasteries, can accumulate capital which sometimes is invested by temple societies in shares or land or directly in business enterprises.

The administration of the *Sangkha* is patterned on the same line as the Thai government, and constitutional changes have usually also resulted in a reform of the *Sangkha* administration. The head of both chapters, the *Mahanikaya* and the *Thammayut Nikaya,* is the Supreme Patriarch. Though his position commands great prestige his actual power is limited, firstly because appointments to *Sangkha* offices are made on an ordination seniority principle and the Supreme Patriarch is therefore usually very old, and secondly because the *Sangkha* cabinet is tightly controlled by

the Department of Religious Affairs, which forms part of the Ministry of Education.

To a certain extent the position of the religious *élite,* the *Sangkha,* is similar to that of the King and the princes. Both could be called symbolic *élites* as they both symbolize the unity of Thai culture and express the self-identity of the Thai nation. As such they are both somewhat removed from day-to-day politics and their latent influence might be turned into actual political power only if the very values for which they stand were challenged.

In considering the effects of the *élite* structure of Thailand on its economic development we may begin by considering the effect of the Thai acceptance of authority as such, and in particular the acceptance of what is felt to be a modernizing authority. In one respect this acceptance is most favourable to economic development: not only does it make it relatively easy to introduce even quite radical changes in social life, such as the acceptance of inoculation or other health practices, because they are recommended by the King; it probably also makes for a relatively suggestible attitude to advertising coming through apparently authoritative channels, such as radio or television. Though not all such suggested changes would be conducive to welfare, the resulting increased demand for income helps to generate economic development.[18]

There are, however, other effects that are less favourable. The exaggerated respect for government leads to an expectation that government will take all the necessary action in fields which can be represented as government responsibilities. Though Thai farmers are normally trained to be self-reliant (Benedict 1952: 26-8), they readily assume that irrigation water or loans through co-operative societies will be provided with no co-operation on their own part.

Related to this attitude is the belief (often well founded) that government officials are too exalted to understand the conditions of rural life, and that therefore a particular piece of hygienic or economic advice—though no doubt excellent for city dwellers—is not appropriate to a farmer (Hanks 1963: 102-4).

There are similar effects on the attitude of the *élite* group itself. Thai officials are apt to assert, defensively, that they know better than the peasants what is needed for the development of Thailand, and that it is their responsibility to give the instructions rather than to carry out the peasants' wishes. There is much truth in this, particularly as a retort to those overemphasizing felt needs or democratic values inappropriate to present attitudes. Yet the situation of the Thai farmer is not normally one in which any foreign technique that can be taught ready-made will solve the problems. A great deal of detailed investigation about conditions and

[18] There are, of course, two views among economists concerning the impact of a range of new consumption goods on the economies of less developed countries; Nurkse emphasized the Duesenberry effect, the adverse influence on the propensity to save, while both Bauer and Hirschmann have stressed the inducement effect. Thailand illustrates both influences at once; it seems clear that transistor radios, buses, and advertising have stimulated rural change and the monetization of the economy, but a Nurkse effect is apparent among the Thai bureaucrats (imitated, in some measure, by the Chinese) which limits Thailand's capacity for non-inflationary capital formation, and wastes such capital as there is.

attitudes is necessary before effective leadership can be given, and the increasingly rigid class structure and conviction of access to superior techniques do not encourage this.

It is an unfortunate fact about the structure of recruitment to official positions in modern Thai society that it does not help the local research which might create a basis for local training. The main reason for this is precisely the emphasis on overseas degrees, for the level of technique and background knowledge required for beginning research in Europe and America is very different from that which is appropriate in Thai conditions. The boundary of ignorance is nearer in Thailand and there are fewer resources to devote to research. The sophisticated equipment and trained research assistants which foreign M.As. and Ph.Ds. are trained to use are not available.

The administrative and academic *élite* is Western-oriented and Western techniques enjoy high prestige. It is unfortunately also true that a relatively rigid class structure does not promote the selection for overseas study of students with outstanding ability who could be relied on to adapt their foreign ideas creatively.[19] The result is a great deal of frustration at the impossibility of carrying out in Thailand ideas developed for very different conditions. The lack of funds and equipment is put down to government corruption and inefficiency, whereas in fact it would be uneconomic for any government, however efficient, to try to imitate most of the foreign research techniques. Adequate investigation, for which relatively unsophisticated techniques would suffice, is needed as the basis for most kinds of training in the Thai economy. A commitment to scientific attitudes and a belief that information can be obtained by them is what urgently needs training, at whatever level students are available (see Appendix B).

An example may be taken from Kasetsart, the Agricultural University. This began very soundly during the Japanese occupation as an attempt to raise the standard of training for field workers in different branches; outside help was then difficult to obtain. Field investigations of Thai rural conditions were emphasized, and the first American aid expanded this factual and relatively elementary research. Kasetsart graduates were people with no great knowledge of recent development in their subjects, but generally with some experience in simple field investigation. More recently the attempt to raise the standard of work has taken the form not of keener selection and more exacting research demands but of expanding the content of course work. This may well have the effect of raising to an overseas graduate level the standard of entry to research, which will cause the bulk of graduates to enter agricultural offices with no commitment to research, or prior experience of research problems.[20] Their needs may be sacrificed to the relatively

[19] There is still some highly competitive selection for entry to universities and the lower levels of the civil service—the chief means of achieving foreign degrees—so that the general level of competence and capacity for hard work there is high (even if cultural and climatic conditions often lead to fairly early relaxation of effort). The problem is rather that, within this group, the actual selection for overseas study, even when free from patronage influence, tends to be based on 'capacity to profit from a university education abroad'—in practice, Western acculturation—rather than distinction or originality.

[20] This is not, of course, the intention, but pressure of demand is likely to make it impossible to insist on a higher degree for all those who should have an orientation to research.

few trained research workers, and these may well come to feel frustrated unless they can have trained technicians, expensive equipment, and a task near the frontier of world knowledge.

Research is not, of course, the only field in which a Western orientation in the *élite* induces technologies inappropriate to Thai conditions. The effective rate of interest for industrial capital in Thailand is at least double what it is in most industrial countries. The level of unskilled wages, even making generous allowance for inferior efficiency, is certainly not more than half as great. The economic pressure to use labour-intensive methods must be enormous; yet the training school for technicians provided for Thailand by the West German government trains students not to adapt shop-house buildings, cannibalize second-hand industrial machinery, and adapt old motor engines, but to service more up-to-date machinery than would be found in an average West German firm. The number of such technicians who can be trained is of course small, because of the cost of the teachers and equipment, and the industries in which they work will provide relatively little work for unskilled or semi-skilled Thais. The pride taken in the new machinery is a part of the prevailing attitude of the *élite,* and relatively little commission could be made on used or adapted machinery.

Yet probably the most serious defect of the *élite* structure in promoting economic development is its tendency to weaken competition. In many parts of the Thai economy competition is very keen—retail trade, repair shops, and small manufactures, and most buying from farmers. This leads to a good deal of innovation and economizing. The point at which monopoly arises is in the larger manufacturing in Bangkok, the contracting work, and from time to time in the export markets. Monopoly arises not only from the government enterprises, to which reference is frequently made in reports on Thailand, but also from the active participation of the ruling *élite* in large-scale Chinese business.

From a political point of view the closer integration of the leading Chinese merchants into the Thai *élite* has certainly helped the assimilation of the very large number of Chinese who flowed into Thailand during the first half of the twentieth century. The emergence as a result of this integration of many who consider themselves Thais and have both capital and business skill also helps to remedy a situation in which closed Chinese family businesses were the only significant businesses in the country and Thais had virtually no chance of breaking in. In the lower levels of the economy it is becoming more difficult to distinguish the assimilated Chinese or part-Chinese from the pure ethnic Thais; the situation is far more flexible and gives far more access to business opportunities than one in which the Chinese felt themselves a closed and mutually co-operating group in an alien society. From the point of view of a pure Thai, with enough resources to start his own business, the situation is certainly better than it was when the Chinese dominated the economy in the first quarter of the twentieth century and earned themselves the title of the 'Jews of the East'.[21] There are Thai and Sino-Thai firms in key positions the services of which a new Thai firm can use; partnership with a Chinese or Sino-Thai is not

[21] The phrase is probably due to King Vajiravudh (see Skinner 1957: 164).

out of the question; agencies of the major importers can be obtained by Thais as well as Chinese.

Yet the protection of the Thai power *élite* has consolidated the position of many Chinese in existing key positions. Monopoly, based on links with government, is increasingly important; it is probably difficult for new Thai firms, as for new Chinese firms, to break into the groups which command great wealth. The skill of the most assimilated Chinese in making themselves useful to the Thai power *élite* has prevented the emergence of an exclusive Thai business *élite,* such as Pridi Phanomyong, and Phibun Songkhram in his early days, probably had in mind. This is largely a result of a simultaneous reduction of social mobility and softening of racial antagonism. The advantage to the economy as a whole of increasing mobility at the lower levels is partly offset by increasing stratification and rigidity at the top.

The rigidity and lack of competition is becoming a high price for Thailand to pay for integration. It almost certainly aggravates the shortage of industrial capital, and also adds to the cost of public works which are an important feature of modern development. It has probably not, as yet, seriously interfered with the growth of Thailand's export trade, but the farmer might have gained more from it if a more flexible situation had prevailed.

Some of the detailed effects of the *élite* structure on policy-making are discussed in other chapters, but some general comments are in place here. Policy is made by a Cabinet consisting of a majority of generals with a few bureaucrats in some of the more economic ministries—usually Finance, sometimes one or more of Economic Affairs, Industry, Agriculture, and Foreign Affairs. The political pressures which are brought to bear on the Cabinet are, however, different from those in a democratic country.

Public opinion has some influence, though it is mainly the public opinion of the Bangkok *élite.* There is no sanction of electoral defeat, but the press has a good deal of freedom and there is public criticism of failures to achieve official national objectives, and also of the more flagrant misuses of public funds. Probably most of such criticisms represent infighting between different groups within the government, though some journalists enjoy sufficient backing to criticize independently. The chief sanction behind such criticism is that, if a *coup* is to be successful, it is apparently necessary to generate widespread and sustained criticism of the government (Wilson 1962: 71, 255).

Public opinion in turn is influenced partly by official and private media of communication, partly by the reported (or privately expressed) views of influential people. Recently there has also been some sensitiveness to the propaganda which is brought to bear, from neighbouring countries, on minority groups in the Northeast, North, or South.

The different ministries have their professional interests, fed by the keener bureaucrats, and also their subsidiary industries. In addition there are pressures from the banks and other economic interests in which the individual ministers and senior bureaucrats are involved (see Chapter 8).

All these are forces influencing Cabinet decisions; yet the machinery of economic policy-making is becoming increasingly influenced by professional

considerations. Long-range planning is undertaken by the National Economic Development Board, budgeting by the Budget Bureau, and financial controls by the Bank of Thailand, all of which are mainly staffed by bureaucrats with a professional orientation. Their policies may sometimes be unduly influenced by Western models insufficiently adapted to Thai economic and political conditions, but relatively little by special private interests.

5

National Accounts Estimates of Thailand

PROT PANITPAKDI

The structures of national production, consumption, and capital formation

The following is a brief analysis of official national accounts estimates of Thailand to indicate the structures of national production, consumption, and capital formation, and changes in these structures during the period of five years from 1958 to 1963, the last year for which firm estimates are available.

Table 5.1 shows that the average annual rate of expansion of gross national product in real terms between 1958 and 1963 was about 9 per cent. Assuming a rate of population growth of 3·2 per cent per year,[1] an annual increase of approximately 5 per cent in real gross national product per head is indicated. However, it should be noted that the actual rate of growth of the gross national product from year to year fluctuated considerably, ranging from a high of 11 per cent to a low of only 4 per cent.[2]

Table 5.1 also draws attention to the dominant but declining position of the agriculture sector and the increasing importance of the secondary and tertiary sectors.[3] The relatively rapid growth of the construction, electricity and water, and transportation and communication industries to a large extent reflects the heavy emphasis in the first national economic development plan (1961-6) on building up the infrastructure of the economy (N.E.D.B. 1964a: 9).

As can be seen from Table 5.2, between 1958 and 1963 there was a steep rise in the production of maize, tapioca, and kenaf, relative to that of other crops. This has sometimes been referred to as a process of

[1] This is the rate used by Das Gupta and colleagues, after correction of the official 1960 population census data (see Chapter 2).

[2] Discussions in the following sections will show that official national accounts estimates are suspected of undervaluing gross domestic product and private consumption expenditure and overvaluing gross domestic capital formation. However, assuming consistency in the biases, an intertemporal comparison of the same series may be relied upon to give an acceptable indication of trends.

[3] It can be argued (see Chapters 6 and 8) that the value added of the agriculture sector is underestimated relative to that of other sectors. But here again a trend may be seen from changes in the composition of gross domestic product over time.

TABLE 5.1 Thailand, Gross Domestic and National Product by Industrial Origin in 1958 and 1963 (at constant 1962 prices)

Industrial origin (1)	1958 *baht* m. (2)	1958 % (3)	1963 *baht* m. (4)	1963 % (5)	Av. annual growth rate 1958-63 (4)/(2) %
Agriculture:	19,895·4	40·67	26,545·1	36·99	6·68
crops	*13,562·6*	*27·73*	*19,009·8*	*26·49*	*8·03*
livestock	*3,713·7*	*7·59*	*3,898·2*	*5·43*	*0·99*
fisheries	*759·7*	*1·55*	*1,545·4*	*2·15*	*18·84*
forestry	*1,859·4*	*3·80*	*2,091·7*	*2·92*	*2·49*
Mining and quarrying	608·7	1·24	1,053·8	1·47	14·62
Manufacturing	5,472·9	11·19	8,617·4	12·01	11·49
Construction	1,608·7	3·29	3,410·3	4·75	22·39
Electricity and water supply	159·7	0·33	381·0	0·53	27·71
Transportation and communication	2,536·2	5·18	4,567·3	6·37	16·01
Wholesale and retail trade	8,502·2	17·38	12,822·4	17·87	10·16
Banking, insurance, and real estate	864·0	1·77	2,069·0	2·88	27·89
Ownership of dwellings	2,499·3	5·11	2,953·7	4·12	3·63
Public administration and defence	2,489·1	5·09	3,273·4	4·56	6·30
Services	4,283·2	8·75	6,065·6	8·45	8·32
Gross domestic product	48,919·4	100·00	71,759·0	100·00	9·33
Net income from abroad	−151·5		−43·5		
Gross national product	48,767·9		71,715·5		9·41
Total population ('000)	25,343		29,662		3·2
GNP per head (*baht*)	1,924·31		2,417·75		5·12

Source: N.E.D.B. (1966c: Tables 3, 5).

TABLE 5.2 Thailand, Output of Major Crops in 1958 and 1963 (at constant 1958 prices)

Crops	Average 1957-9 Volume (tons)	Value (*baht* m.)	Value (% of total)	Average 1962-4 Volume (tons)	Value (*baht* m.)	Value (% of total)	Total increase 1958-63 (%)
Paddy	6,973,330	7,123·9	51·38	9,163,330	9,361·2	49·12	31·40
Rubber	150,300	1,427·8	10·30	201,530	1,914·5	10·05	34·08
Coconut	1,121,670	700·3	5·05	1,133,330	707·6	3·71	1·04
Sugar-cane	4,481,330	495·4	3·57	4,320,600	477·7	2·51	−3·47
Maize	213,330	221·8	1·60	819,400	852·2	4·47	284·10
Groundnut	120,900	257·5	1·86	115,030	245·0	1·29	−4·86
Tapioca	487,000	183·4	1·32	2,077,000	782·2	4·10	326·48
Kenaf	33,530	77·1	0·56	219,570	505·0	2·65	554·84
Mung beans	42,800	122·4	0·88	93,300	266·8	1·40	118·00
Castor beans	31,730	76·1	0·55	45,170	108·4	0·57	42·36
Soy beans	23,900	59·7	0·43	31,430	78·6	0·41	31·51
Sesame	17,200	81·5	0·59	15,000	71·1	0·37	−12·80
Cotton	36,200	136·5	0·98	44,950	169·4	0·89	24·17
Tobacco	66,230	538·3	3·88	55,330	454·0	2·38	−16·46
Fruits and vegetables	—	2,364·1	17·05	—	3,063·2	16·08	29·57
Total	—	13,865·8	100·00	—	19,056·9	100·00	37·44

Source: Bank of Thailand (1958-(Jan. 1966)), Agriculture (1955-(1961)), N.E.D.B. (1966a).

agricultural diversification (Brown 1963). It should be noted, however, that during the same period there was only a slight decline in the importance of rice and rubber, the two principal crops of the country. In particular, the supermacy of rice remains unchallenged. Table 5.3 shows that the new cash crops have a greater impact on foreign trade where they become major exports and foreign exchange earners, in addition to the usual trio of rice, rubber, and tin.

TABLE 5.3 Thailand, Distribution of Exports in 1958 and 1963

	Average 1957-9			Average 1962-4			Total increase 1958-63	
Exports	Volume (tons)	Value (*baht* m.)	Value (% of total)	Volume (tons)	Value (*baht* m.)	Value (% of total)	Volume (%)	Value (%)
Rice	1,264,946	3,055	42·54	1,528,318	3,684	35·04	20·82	20·59
Rubber	148,248	1,689	23·52	199,353	2,025	19·26	34·47	19·89
Tin	13,743	407	5·67	21,394	796	7·57	55·67	95·58
Maize	154,677	169	2·35	777,164	892	8·48	402·44	427·81
Tapioca products	148,349	185	2·57	522,363	505	4·80	252·12	172·97
Kenaf and jute	26,495	68	0·95	175,249	477	4·54	561·44	601·47
Other products	—	1,609	22·40	—	2,135	20·31	—	22·68
Total	—	7,182	100·00	—	10,514	100·00	—	46·39

Source: Bank of Thailand (1958-(Jan. 1966)).

TABLE 5.4 Thailand, Composition of Private Consumption Expenditure in 1958 and 1963 (at constant 1962 prices)

Commodity groups (1)	1958 *baht* m. (2)	% (3)	1963 *baht* m. (4)	% (5)	Av. annual growth rate 1958-63 (4)/(2) %
Food	17,654·8	49·34	23,716·8	47·47	6·86
Beverages	832·4	2·33	1,730·3	3·46	21·57
Tobacco	1,137·0	3·18	1,621·2	3·25	8·52
Clothing	2,832·1	7·91	3,992·2	7·99	8·19
Rent and water charges	2,618·0	7·31	3,112·9	6·23	3·78
Fuel and light	1,465·8	4·10	1,796·2	3·59	4·50
Furniture, furnishings, and household equipment	939·1	2·62	984·4	1·97	0·96
Household operation	873·8	2·44	969·2	1·94	2·18
Personal care and health	2,473·9	6·91	2,923·7	5·85	3·63
Transportation and communication	1,726·0	4·82	3,778·4	7·56	23·78
Recreation and entertainment	1,959·7	5·48	3,566·9	7·14	16·40
Miscellaneous services	1,151·1	3·22	1,627·6	3·26	8·27
Net expenditure of residents abroad	122·2	0·34	147·2	0·29	4·09
Total private consumption expenditure	35,785·9	100·00	49,967·0	100·00	7·92
Total population ('000)	25,343		29,662		3·2
Expenditure per head (*baht*)	1,412		1,684		3·85

Source: N.E.D.B. (1966a: Table 22).

The composition of private consumption expenditure is presented in Table 5.4. It will be seen that total private consumption expenditure in real terms increased by almost 8 per cent per year between 1958 and 1963, and that expenditure per head expanded annually by more than 3 per cent. The pattern of consumption expenditure seems to be changing slightly in the direction of greater spending on beverages, transportation and communication, and recreation and entertainment, at the expense of outlays on furniture and furnishing, household operation, and personal care and health.

TABLE 5.5 Thailand, Composition of Gross Domestic Capital Formation in 1958 and 1963 (at constant 1962 prices)

Capital goods (1)	1958 *baht* m. (2)	1958 % (3)	1963 *baht* m. (4)	1963 % (5)	Av. annual growth rate (4)/(2) % (6)
Net import of capital goods:	1,909·2	26·32	4,013·1	26·08	22·04
transport equipment	*602·7*	*8·31*	*1,022·7*	*6·65*	*13·93*
machinery and other equipment	*768·2*	*10·59*	*1,882·3*	*12·23*	*29·00*
industrial raw materials (embodied in domestic capital goods production)	*538·3*	*7·42*	*1,108·1*	*7·20*	*21·17*
Building and construction:	3,524·7	48·60	7,783·2	50·59	24·16
private construction	*2,428·7*	*33·49*	*5,118·5*	*33·27*	*22·15*
public construction	*1,096·0*	*15·11*	*2,664·7*	*17·32*	*28·62*
Other domestic capital formation:	1,350·5	18·62	3,281·2	21·33	28·59
additional local costs (import duties, insurance, transportation, markup, etc.)	*949·7*	*13·09*	*2,555·9*	*16·61*	*33·82*
value added in other domestic capital goods production	*400·8*	*5·53*	*725·3*	*4·72*	*16·19*
Total gross domestic fixed capital formation (GDFCF)	6,784·4	93.54	15,077·5	98·00	24·44
Changes in inventories	468·7	6·46	308·0	2·00	—6·86
Total gross domestic capital formation:	**7,253·1**	100·00	**15,385·5**	100·00	22·40
public sector	*1,579·6*	*21·78*	*3,770·8*	*24·51*	*27·74*
private sector	*5,673·5*	*78·22*	*11,614·7*	*75·49*	*20·94*
% of GDFCF to GNP	13·91		21·02		

Source: N.E.D.B. (1966a: Tables 26, 32).

Table 5.5 shows the composition of gross domestic capital formation which remained essentially the same in 1963 as in 1958. The rather high proportion of gross domestic fixed capital formation to gross national product, especially in 1963, is due to the probable overvaluation of the former and undervaluation of the latter (see pp. 119-21). No importance can be attached to the estimates of changes in inventories (see p. 118).

National accounting work in Thailand will now be examined from the following aspects: the organization of national accounts work; methods of estimation and sources of data; the structure of the present national accounts system; and existing and possible uses of national accounts estimates.

The organization of national accounts work

National income estimation in Thailand began shortly after 1950 with the calculation of national income and product by the National Income Office, then under the National Economic Council, the predecessor to the National Economic Development Board. In 1957 the Thai government invited the International Bank for Reconstruction and Development to send a mission to conduct a survey of the Thai economy and to recommend appropriate action for economic development to the government. The International Bank Mission spent a full year in Thailand and submitted its final Report in 1959, which, among other things, recommended the setting up of the National Economic Development Board (I.B.R.D. 1959: 208-9). As background materials for their analysis of the Thai economy, the International Bank Mission compiled, with the co-operation of the Ministry of Finance and the National Economic Council, the first estimates of national expenditure and capital formation for the years 1952-6. The Thai government thereupon set up the National Expenditure and Capital Formation Divisions within the National Income Office to carry on the work begun by the International Bank Mission. For some years the three National Income Office divisions published results of their work separately, though all three sets of figures are needed to form a complete picture of the economy. In 1964 national accounts estimates were for the first time published together in a single volume entitled *National Income Statistics of Thailand* (N.E.D.B. 1964b).

As presently organized, national accounts work is carried on in Thailand by the National Income Office, which is a unit of the National Economic Development Board. The National Income Office is divided into the National Income Division, the National Expenditure Division, and the Capital Formation Division, co-ordinated, for the present, by a part-time director only.

The allocation of work within the National Income Office can be readily inferred from the names of the divisions; thus the National Income Division is responsible for estimating national income and product by industrial origin and other allied estimates; the National Expenditure Division is responsible for the major components of national expenditure except capital formation (especially private and government current expenditures); the Capital Formation Division is responsible for gross fixed capital formation and changes in inventories.

The place of the National Income Office within the organization structure of the Thai government makes it dependent on a close working relationship with other government agencies which produce basic economic data in the course of their routine administration, such as the Ministries of Finance, Agriculture, Industry, and Economic Affairs, the Bank of Thailand, the

National Statistical Office, and the various government enterprises. Relations with the National Statistical Office are particularly crucial inasmuch as the National Income Office has no legal authority to make any direct statistical inquiry, whether by census, survey, or questionnaire, all power to acquire information directly from the public having been vested solely in the National Statistical Office by the Statistics Act of 1952.

The appointment of a full-time director should lead to a co-ordinated program of action within the National Income Office itself, but it remains a problem to secure the active co-operation of other government agencies in supplying requisite statistics. Though a national accounts unit must, by its very nature, use materials produced by other agencies, its work is lightened where these materials are regularly produced in a usable or readily adaptable form. Much of the energy of the National Income Office is in practice diverted from improving the quality and increasing the quantity of its work, to requesting, persuading, or cajoling various government agencies to compile statistics regularly, and reasonably promptly, in a suitable form. Despite close contact between the National Income Office and the National Statistical Office, it has sometimes been found difficult to arrange for a statistical inquiry, conducted primarily for other purposes, to elicit information required for national accounting. Closer interdepartmental co-operation is more easily recommended than achieved. Although, through the National Economic Development Board, the National Statistical Office already invites the National Income Office to send a representative to any meeting bearing upon the collection of national accounts statistics, the National Statistical Office may not always recognize which statistics will be useful for national accounting purposes, nor always give enough weight to the National Income Office representative's views.

This situation will no doubt gradually improve in the long run as government agencies become more accustomed to providing basic national accounts statistics and more proficient in processing them. Meanwhile, the National Income Office might well be empowered to conduct certain statistical inquiries itself, particularly those which cannot conveniently be fitted into the current work program of the National Statistical Office. At present the National Income Office is completely dependent upon the National Statistical Office for all information other than data produced as by-products by government agencies. For example, even a request to another government department, let alone to a private firm, to disclose its actual capital expenditure within a certain period has to be put through the National Statistical Office's Current Statistics Division. Dependence on the National Statistical Office is liable to cause frustration in the National Income Office and delay in obtaining basic statistics and in compiling corresponding national accounts estimates. A suitable amendment of the 1952 Statistics Act, and the setting up of a Field Work Division in the National Income Office, with limited power to conduct statistical inquiries, would free the National Income Office from its total dependence on outside materials and speed up its work. This would also be in line with the recommendation in 1963 by the National Income Adviser that the National Income Office be allowed to play a much more active role in forcing the pace of development of statistics, especially of national accounts statistics (Abraham 1963: 4).

Methods of estimation and sources of data

This section will examine in slightly more detail than is given in official publications the methods of national accounts estimation and sources of data at present used in Thailand, with a view to assessing their adequacy for existing or other potential uses and suggesting some possible improvements. The detailed information is based on personal inquiries in the agencies concerned.

Gross domestic product by industrial origin

Thailand, in common with many other less developed countries, relies mainly on the production or value-added approach in estimating gross domestic product, especially in agriculture (U.N. 1962).

Agricultural crops. For each crop the total value of production is obtained by multiplying estimated output in the calendar year by the so-called average ex-farm or local price, which is in reality an adjusted Bangkok wholesale price. From the total value of production of all agricultural crops the estimated costs of seeds and fertilizers are deducted to give the total value added. For vegetables and fruit estimated consumption per head is used to obtain total output, which is again valued at adjusted Bangkok wholesale prices.

The two main sources of production and price statistics used in the calculation are the Ministries of Agriculture and Economic Affairs. Annual crop outputs are estimated through a system of crop reporting: the headman of each village reports acreages planted and yields of all crops in his village to the District Agricultural Officer who compiles, checks, and transmits the revised report to Bangkok. For vegetables and fruit, dietary experts have estimated the average amounts consumed per head of population per year at 26 and 100 kilograms respectively. Price statistics are obtained from published circulars of the Department of Commercial Intelligence of the Ministry of Economic Affairs. These are wholesale prices ruling in the Bangkok market; they are then reduced by a certain percentage (generally 15 per cent) to approximate, as it is believed, to local farm prices.

As a supplementary source of data, the crop-cutting technique is being tried. A sample of villages and fields is selected at random and the crop, grown in a measured plot randomly situated, is harvested and weighed, giving the actual yield per *rai* (0·4 acre). In 1965 with a budget of 2 million *baht* the National Statistical Office conducted this experiment in 550 villages on crops of rice, maize, kenaf, sugar-cane, and cassava. Ultimately a permanent sampling unit is envisaged, with an annual budget of about 6 million *baht* and employing village school teachers as enumerators, to sample the yields of seven to eight major crops.

If representative samples of villages and fields can be obtained, this unit should be very useful; the cost is small in relation to the importance of agriculture in the economy. Yet even accurate yield figures would solve only half the problem of output estimation; reliable acreage data for the various crops are also needed.

Another source of data is the *Census of Agriculture 1963* conducted by the National Statistical Office. There are wide discrepancies between the census data and the Ministry of Agriculture's statistics of production,

acreage, and yield of most crops. Generally speaking, the census production data are much lower than the Ministry's estimates. The National Income Office is understandably reluctant to make use of census data, except in the few cases where these are clearly superior to the Ministry data. Census data are available for one year only, whereas Ministry data are collected annually through the crop-reporting system, and form a continuous series dating back in many cases as far as forty years (Gajewski 1965a).

This seems to point to the desirability of having an agricultural sample survey at suitable intervals between the censuses, at least until the Agricultural Productivity Survey which incorporates the crop-cutting technique is well established.

Local farm prices are only very crudely estimated by the present practice of deducting generally 15 per cent (for cost of transportation) from Bangkok wholesale prices, but steps are already being taken to obtain, with the co-operation of *changwat* Economic Affairs officers, genuine provincial prices of farm products. A comparison of these prices with Bangkok prices reveals margins varying from 3 per cent for soya beans to 31 per cent for kenaf. For rice the margin seems to be fairly close to the 15 per cent commonly used. These margins also tend to fluctuate from year to year, but any data based on actual regional prices are probably better than arbitrarily adjusted Bangkok prices.

Livestock. Livestock estimates at present cover only buffaloes, cattle, elephants, pigs, chickens, and ducks; the first three must, by law, be registered for a small fee at the district office on the occasions of birth, death, or sale. Production estimates of livestock (except poultry) are based on exports and the Livestock Department's figures of changes in stock and number slaughtered or died during the year. For poultry, changes in stock, exports, and estimated consumption per head of population are used to obtain estimates of output. For eggs only exports and estimated consumption are used.

The Livestock Department's main source is the district office livestock registries. Bangkok and Thonburi slaughterhouse figures are also used.

For valuation, Bangkok wholesale prices are used except for exports where export prices are substituted. From the total value of output thus obtained an arbitrary 6·5 per cent is deducted to give value added.

As in the case of agricultural crops, there is a discrepancy, sometimes surprisingly wide, between the province by province livestock figures of the *Census of Agriculture 1963* and those of the Livestock Department for the same year.

Fishery. To obtain value added of seafish and fresh-water fish production, the estimated annual catch of each type is valued at the average Bangkok wholesale price less 15 per cent deduction. Both production and price statistics are obtained from the Fishery Department, Ministry of Agriculture.

The estimated fish catch refers to commercial fishing only, and does not include fish caught for family consumption. In Thailand this may be a serious omission, since it is known that country people depend on fish, mostly caught by themselves, as an important source of protein. It seems desirable, therefore, to attempt some estimate of the volume of non-marketed fish output, some data on which are obtainable from the *Household Expenditure Surveys, 1962-63.*

Forestry. Estimates of production of various kinds of timber are based on the royalty earnings of the Forestry Department, Ministry of Agriculture. After valuation at Bangkok prices, various percentages are deducted to obtain value added, ranging from 30 per cent for teak wood to 55 per cent for yang wood and 65 per cent for takien wood.

Estimates of output of other forest products have a rather shaky basis, depending partly on statistics of the Forestry Department and partly on imputation of non-marketed production. The latter is particularly unsatisfactory; for example, the amount of firewood collected by country people for their own use has been estimated at 13,686,915 cubic metres for a number of years.

Mining and quarrying. The most important product in this group is tin, which accounts for 60 per cent of total value added in 1963. Production and price statistics of most mining products are obtained from the Department of Mineral Resources, Ministry of National Development. Salt production is estimated from the area of salt fields and the average yield per *rai*. Stone, gravel, and sand are estimated by applying a fixed proportion to the total amount of cement sold.

Ten per cent is deducted from total output of tin to obtain value added. Since all tin produced in Thailand is exported under the quota system supervised by the International Tin Council, the export figure plus known change in stock is useful in checking the estimate of output.

Manufacturing. This sector has been shown in official statistics as contributing about 11 per cent to gross domestic product in recent years. However, as most production data are based on income tax returns, its total output has almost certainly been underestimated.

Calculations are made for the value added of about forty industries classified under twenty major industrial groups according to the International Standard Industrial Classification.

Briefly, data for the calculations are obtained from manufacturing and profit and loss accounts of incorporated enterprises submitted to the Revenue Department for income tax purposes. The value-added ratio of incorporated enterprises in each industry is obtained and then applied either to the industry's total raw materials used or to its total output, as the case may be, to obtain total value added.

These data, dictated by the absence of data on unincorporated enterprises, are admittedly very crude. They presuppose a very doubtful similarity between the cost structures of corporate and unincorporated enterprises in the same industry. Moreover, even the data on corporate enterprises, except perhaps government corporations, cannot be taken at their face value. It is common knowledge that financial accounts submitted for income tax purposes have a tendency to overstate expenses or understate income or both.

Much hope is now pinned upon the results of the 1964 industrial census, which covers mining and quarrying as well as manufacturing proper. This census, the first of its kind in Thailand, sought information on a host of details such as labour force, payroll, fuel and electrical expenses, expenses on raw materials, repairs, rent, fixed assets, depreciation, capital expenditure, sales of output, output for own use, and inventory

changes. It could, therefore, throw much light on the operation of industrial enterprises, particularly the unincorporated businesses. Much of its usefulness would be lost, however, if firms merely replied with the same sets of figures that they had used for income tax returns. In a developed economy the census or income tax data can usually be checked against other independent sources such as social security and employment statistics. In most less developed countries, however, the opportunity for such cross-checking is naturally limited. The reliability of census data may improve when businessmen become more confident that the government will make fair use of information thus obtained, but this is, of course, a long-term prospect.

Construction. The importance of the construction industry cannot be measured only by its contribution to gross domestic product (that is 5·7 per cent in 1963). One must also consider its share in gross domestic fixed capital formation, which in recent years has amounted to almost 45 per cent.

Public building activity is estimated from questionnaires sent to the various government enterprises and agencies, private building from building permits which contain information on types of buildings (dwellings, commercial buildings, industrial buildings, schools and hospitals, and others) and floor space, but which are issued only in municipal areas. The total value of buildings is obtained by applying cost per square metre (given by the Department of Public and Municipal Works) to floor space. Value added is then obtained by deducting an average of 31 per cent from the total value. Private construction outside municipal areas is estimated very roughly from the population increase and the average size of rural households.

The use of building permits, although unavoidable in the absence of other data, involves many inaccuracies. For example, actual construction does not always correspond with permits issued, owing to time lags and illegal construction. Further, since permits give no information on value, the cost structure of private builders is assumed to be the same as that of the Department of Public and Municipal Works. Additional estimates have also to be made for builders' profits and for the costs of permanent fixtures and fittings.

Electricity and water supply. In Thailand these two industries are almost wholly operated by the public sector—electricity authorities, municipalities, and the Department of Public and Municipal Works. The basic data for calculating total output and value added are therefore fairly complete and reliable. Steps are now being taken to impute the value of free services so far not accounted for, electricity for street-lighting and water for public hydrants for example; this will increase total output in each case by approximately 10 per cent (Gajewski 1965c: 5).

Transportation and communication. For transportation the income approach is extensively used in calculating value added.

All air transportation, railways, tram lines, and a significant share of bus and haulage services are operated by the public sector. Reasonably accurate and complete basic data for these are taken from financial statements of respective government enterprises.

For the larger share of road transport and practically all water transport, which are in the private sector, value added is derived partly from financial statements of incorporated enterprises but mainly from the number of buses, trucks, taxis, barges, motor-boats, and so on licensed by the Police Department and the average earned income per vehicle estimated from government transport enterprises. Suitable allowance should, however, be made for the well known overstaffing of these enterprises.

As transport costs form part of inputs of most industries it is probably worth while to pay close attention to the inter-industry balance, that is to try to maintain consistency between the transport component of inputs of other industries and the output of the transport industry itself.

Communication is another industry wholly in the public sector, as represented by the Post and Telegraph Department, the Telephone Organization, and the Telecommunication Organization. No basic data problem therefore arises. Complete coverage, however, should include the activities of the various radio stations, operated by different government agencies.

Wholesale and retail trade. According to official estimates, this sector is second in importance only to agriculture, contributing in recent years about 18 per cent to the gross domestic product. The method of estimating value added is a version of the commodity flow approach. Briefly speaking, the value-added ratio of incorporated enterprises, taken from their income tax returns, is applied to the total estimated value of locally produced and imported commodities to obtain total value added. Separate calculations are made for a number of commodities classified into the following main groups: imports, agricultural products, livestock products, fishery products, industrial products, non-metallic mining products, and metallic mining products. In the detailed computation it is determined arbitrarily whether each group has to pass through one or two levels of middlemen before reaching the final consumers (for example one level for commercial crops and most manufactured products and two levels for rice, fruit, and vegetables). For the latter products it has also to be decided what proportion of the total output enters into trade.

The use of the commodity flow approach is necessitated mainly by the absence of income data. Some improvement in information relating to unincorporated enterprises may be expected from the census of wholesale and retail trade scheduled for 1966.

Banking, insurance, and real estate. Basic data for incorporated financial enterprises such as banks and insurance companies are obtainable from the returns which they have to submit to the Bank of Thailand or the Ministry of Economic Affairs. Data on the unincorporated financial enterprises are very weak: questionnaires are sent by the National Statistical Office to pawnshops, and data on real estate firms are taken from their income tax returns.

Ownership of dwellings. Value added in this sector includes both actual rent paid by tenants and the imputed rental value of houses to owner-occupiers.

In estimating the number of houses, the whole of Thailand is divided into four housing areas: Bangkok-Thonburi, other municipalities, non-municipal urban areas, and agricultural areas or villages. Data for the

municipal areas are drawn from municipal reports. For the others, calculations are made using population data and average sizes of households from the *Thailand Population Census, 1960*. The number of houses is then multiplied by the estimated average net rent for each area to obtain value added.

Average net rent for each housing area is at present fixed somewhat arbitrarily. For example, the annual rents of houses of the lowest quality in towns and villages are considered to be 1,200 and 600 *baht* respectively. Doubts may be expressed concerning the suitability of these figures (Usher 1965: Appendix 1). Fuller use might be made of the *Household Expenditure Surveys* which contain information for all six major regions of the country on the percentage distribution of households by type of dwelling and tenure of occupant, and the average value of rent paid and size of dwelling by tenure and income class.

Public administration and defence. Value added in this sector is calculated from expenditure records of the central government and the municipalities, obtained respectively from the Comptroller General's Department, Ministry of Finance, and the Department of Administrative Affairs, Ministry of the Interior.

The following are the major components included: all wages and salaries on the government establishment, wages paid from the organization's own fund, other compensation (temporary hire, overtime, bonus, rent, school fees for children), travel allowances (internal and abroad), and pensions. To this total are added taxes paid for public servants by the government, while salaries and wages of teachers and officials of the Departments of Health and Medical Services are excluded, these latter items being shown in the services sector.

Pensions should perhaps be treated as current transfers from government to household sector (U.N. 1964: paras. 265-6).

Services. This last sector covers a wide range of activities: education, medical and health services, recreation and entertainment, domestic services, hotels and restaurants, laundries, barber shops and other personal services, welfare institutions, legal services, trade associations, and so on.

Data concerning this sector are perhaps the weakest. Questionnaires on expenses are sent out by the Current Statistics Division, National Statistical Office, to hotels and restaurants, private hospitals and clinics, associations, clubs, and foundations. Income tax returns are used for some of the bigger enterprises.

The lack of reliable bench-mark data for this sector—now approximately 6 per cent of gross domestic product—should be a cause for concern.

National expenditure on gross domestic product

The estimates of three major components of national expenditure, private consumption expenditure, government consumption expenditure, and gross domestic capital formation will be examined next.

Private consumption expenditure. The overwhelming majority of individual commodity estimates are based on the commodity flow and family budget survey techniques. The retail sales method is used only in estimating expenditure on tobacco where sales data are obtainable from Thailand

Tobacco Monopoly, a wholly owned government corporation. A version of the retail valuation method is used for determining expenditure on personal transport equipment; the number of private licensed vehicles is multiplied by the estimated average maintenance cost per vehicle.

Expenditure on food and clothing—approximately half of total private consumption expenditure—are estimated from flow data (that is domestic production plus net imports), and from family budget surveys, particularly the *Household Expenditure Surveys, 1962-63*. Expenditures on beverages, water, electricity, and furniture and furnishings are derived from production data of the respective industries. Expenditures on fuel, rent, and household operations are estimated from the *Household Expenditure Surveys*. Personal care and health expenses and recreation and entertainment expenses are estimated from three sources: from questionnaires sent by the National Statistical Office to all private hospitals and clinics, hotels, and restaurants; from amusement taxes collected by the Ministry of Finance; and from reports of government's hospitals from the Ministry of Public Health. The basic data for estimating expenditures on miscellaneous services come from banking and financial institutions, Post and Telegraph Department, Telephone Organization, and other agencies.

The use of the commodity flow method based on data of production and imports gives rise to a number of difficulties in estimation, particularly the problems of allocating total supplies to business, government, and private consumers, and of determining the markup and sales tax at each stage of transaction. Beginning with the domestic producer or importer, the total volume of commodity produced or imported plus any decrease in producers' and importers' stock have to be allocated between direct sales to consumers (private and government) and intermediate sales to wholesalers, retailers, or exporters. The volume of goods sold to wholesalers plus any decrease in their stocks have again to be allocated between sales to final consumers and to retailers. Each time that the goods change hands, their values have to be increased by appropriate sales taxes and markups for producers, importers, wholesalers, retailers, or re-exporters. The markups, and sometimes the sales taxes, vary not only vertically with different levels of middlemen, but also horizontally with different kinds of goods traded. In the case of production and sales of services, the usual absence of middlemen simplifies the task of estimation somewhat, but the twin problems of markup and allocation still have to be faced.

In Thailand an attempt is being made to compare estimates of value added where possible with estimates of private consumption expenditures of the same item. This can only be a rough comparison to check the consistency of figures from the two series. A thorough-going comparison would mean starting with data on production or imports of each commodity and following the series of steps described above to arrive finally at estimates of expenditure on the same commodity. Nevertheless, the comparison reveals wide discrepancies in certain items that cannot be accounted for by any reasonable allowance for markups, sales tax, and allocation. In many cases the cause of inconsistency seems to lie in the treatment of non-marketed production.

The revelation of these discrepancies has led to the proposal of a closer working relationship between the National Income Division and

the National Expenditure Division of the National Income Office, particularly between persons responsible for the estimates of value added and consumption expenditures of corresponding items (Gajewski 1965b: 1). This desirable proposal should be extended to include pooling of specific data and techniques used in the estimation. Co-operation in the treatment of production for own consumption would seem to deserve a high priority.

Government consumption expenditure. Basic data for this estimate are obtained from records of actual expenditure by government agencies compiled by the Comptroller General's Department, Ministry of Finance. Where actual expenditures are not available, budget estimates from the Budget Bureau, Prime Minister's Office, are temporarily substituted.

Apart from inaccuracy arising from misappropriation of government funds, the above-mentioned sources of data are fairly complete and reliable and readily adaptable for national accounting purposes. Code numbers for different types of expenditure enable capital formation expenditures to be identified and separated from other government outlays. Further, an economic and functional classification of government expenditures along United Nations lines, compiled by the Comptroller General's Department on a quarterly basis, simplifies the presentation of government consumption expenditure by purpose.

Changes in inventories. This is one of the most difficult items to estimate, even in developed countries where data are available from annual censuses of production and agriculture and sample farm or industrial surveys.

In Thailand this estimate is officially admitted to be tentative (N.E.D.B. 1964b: 80). Calculations are made separately for the private and the public sectors. Data for the former are obtained from profit and loss accounts submitted to the Revenue Department for income tax purposes. Data for the latter are based mainly on questionnaires sent to various government enterprises, supplemented by their financial accounts.

Income tax returns have been used for want of a better source of data, at least until 1964 when the census of industry was taken. The often-stated unreliability of business accounts reappears here in the form of an understatement of inventories with the intention of hiding the true scale of operation of the business. Although undervaluation of total stock is probable, the change in stock from year to year may be adequately estimated by the regular use of income tax returns. This source of data also suffers from the incompleteness of coverage. It leaves out all unincorporated enterprises such as farmers, sole traders, and enterprises with gross receipts of less than 600 *baht* per month, all of which are not required to submit accounts. However, although the total volume of stock held by these small businesses at any one time is undoubtedly large, it may perhaps not vary much from year to year.

Gross domestic fixed capital formation. The two major components in this aggregate are net imports of capital goods, and building and construction.

Net imports of capital goods. This estimate is naturally based on the commodity flow approach, using foreign trade statistics of the Customs Department. To the c.i.f. value of imported capital goods are added estimates of local expenses such as import duties, importers' markups, local freight and insurance from the landing place to the installation site, and the

cost of installation. Additional local costs are, however, shown separately from capital imports proper.

While the Customs Department supplies data on volume and value of imported goods and import duties, data on local costs have to be obtained from private businesses through the Chambers of Commerce of various nationalities in Bangkok and from a special survey conducted by the National Statistical Office to ascertain the relationship of final cost to c.i.f. value of eight groups of imported capital goods.

Imports of machinery and other equipment by the public sector are separately estimated by means of questionnaires sent to various government agencies. The private sector imports are then derived by deducting public sector imports from the total.

Two points are worth noticing about the present estimate of capital formation through imports in Thailand. The first is that not only costs of major alteration and renewals (as recommended by the United Nations) but also all imported spare and replacement parts are included (U.N. 1964: 28). Capital formation is thus valued on the so-called gross-gross basis more or less along the lines adopted by the Scandinavian countries. The second point is that the Thai estimate also includes imported industrial raw materials which are considered to be embodied eventually in locally produced capital goods. This obviously raises the possibility of double-counting unless all imported raw materials can be accounted for and excluded from the estimate of local capital goods production.

The official estimate of capital formation through imports in 1961 was originally given as 3,136 million *baht* (N.E.D.B. 1964b: 12). A later revision brought the figure down to 2,606 million *baht,* a reduction of some 17 per cent (N.E.D.B. 1966a: 25). However, recalculated on a more generally accepted basis (that is excluding all imported spare and replacement parts and raw materials embodied in locally produced capital goods), the estimate came to only 1,907 million *baht* (Abraham 1963: 8). The overvaluation in the present official figure is therefore probably in the region of 37 per cent.

Building and construction. The method used in estimating the total value of building and other construction has already been described in the discussion of value added of the construction industry. This component of fixed capital formation also includes an estimate of the value of newly cleared land in official self-help land settlement villages, from the Department of Public Welfare's data on acreage and value.

The present official estimate of rural construction is based on out-of-date data from the 1953 *Economic Farm Survey* which gives only the cash costs of materials and hired labour, with no imputation for own labour and materials used. Comparable data are not available in the more recent *Census of Agriculture 1963.* Private land clearing, which could hardly be fully revealed even by a census or sample survey, is at present excluded from the official estimate. The estimate of rural construction is therefore likely to remain unsatisfactory for some time to come.

Other domestic fixed capital formation. In this component are included the following miscellaneous items: agricultural tools of domestic origin; value added of transport equipment; other tools and equipment domestically

produced; office equipment domestically produced in the public sector; and additional local costs. The last item has already been discussed in connection with net imports of capital goods.

The first item refers mainly to production of farm equipment for the farmers' own use and is subject to the same problem of valuation as the rest of rural own-account capital formation. The present estimate is based, for lack of more recent data, on information from the 1953 *Economic Farm Survey* and the *Thailand Population Census, 1960.* Although the value of each piece of home-produced equipment is certainly small, their total value could be quite large. Here again, comprehensive and reliable information could only come from an agricultural census or sample survey.

The remaining items represent additional costs incurred in domestic fabrication of imported transport and other equipment. Basic data are obtained from questionnaires sent to various government agencies and from miscellaneous private sources.

Concluding discussion of methods and sources

One test of the overall reliability of present Thai national accounts estimates is to consider the relationship of two key aggregates, gross domestic fixed capital formation and gross domestic product. For the period 1957-65 the ratio of the former to the latter is 17 per cent (N.E.D.B. 1966a: 29). Professor Abraham thought this ratio was too high and pointed out that in order to finance this volume of fixed capital formation a ratio of household saving, residually arrived at, of 10 per cent of disposable income would be indicated, which he again considered too high to be believed (Abraham 1963: 9).

It is interesting to know where Thailand stands in this respect relative to other less developed countries. Table 5.6 below gives the percentages of gross domestic fixed capital formation to gross domestic product of twelve countries in the ECAFE region. It will be seen that the Thai figure is one of the three highest shown.

TABLE 5.6 Various Asian Countries, Gross Domestic Fixed Capital Formation as Percentages of Gross Domestic Product (at current prices)

Countries	1952-4	1959-61
Burma	15·7	16·5
Ceylon	10·3	14·6
China (Taiwan)	12·2	17·6
Hong Kong	7·9	—
India	11·1	15·5
Indonesia	9·0	5·2
Malaya	8·0	8·8
Pakistan	7·6	9·7
Philippines	6·7	8·6
Korea	9·2	12·9
Vietnam	6·8	7·7
Thailand	13·4	16·2

Source: ECAFE (1964b: Table 14).

The above discussion of methods and sources of national accounts estimation seems to suggest that the high investment ratio is caused by both an overvaluation of fixed capital formation and an undervaluation of gross domestic product.

The probable causes of undervaluation of gross domestic product may be briefly restated as follows:

1. The use of income tax returns for estimating value added, especially in the manufacturing, mining, and services sectors.
2. The incomplete coverage of minor agricultural crops, livestock, and forestry products.
3. The inadequate coverage of rural production for own use either for consumption or capital formation purposes.

The last of these, however, affects gross domestic product and capital formation in the same direction.

The suspected undervaluation of gross domestic product and overvaluation of gross domestic fixed capital formation strongly suggests that private consumption expenditure is undervalued, especially if estimates of government consumption expenditure, exports, and imports are assumed to be fairly reliable. The probable underestimation of private consumption expenditure imputed to production for own use has already been referred to above. Since this type of production increases both the income and the consumption sides of the households current account, a more complete coverage of this item might not appreciably affect the total volume of household saving but would certainly lower the proportion of saving to disposable income.

The *Household Expenditure Surveys, 1962-63* seem to corroborate the belief that the 10 per cent fraction of household saving to disposable income is too high. It shows 5 per cent saving in the Bangkok-Thonburi municipal area and 2 per cent in the urban area of the South—the two areas with the highest income per head in the country. On the other hand, it shows dissaving of approximately 1·5, 1·8, and 8 per cent respectively by the urban population of the Northeast, North, and East. However, the use of data from the survey for this purpose is suspect for a number of reasons. Firstly, it is generally known that in a survey of this type, income is usually under-reported relative to expenditure so that the resulting saving figure is probably underestimated. Secondly, household saving in a national accounts study is frequently defined, as in Thailand, to include the saving of unincorporated enterprises, whereas a household expenditure survey covers only the income and expenditure of private households. Finally, the survey is believed to be affected by seasonal factors in the spending and earning of income that make the residual saving unreliable.

Economists writing on Thailand have several times mentioned the effects of the export duties, especially those on rice, on Thai national income figures (e.g. Usher 1965: 8). Some of these are considered in Chapter 7 and 10. Because of the importance of rice in the economy, the use of a hypothetical figure based on the elimination of these duties can have considerable effects on the size of the national income and its distribution by industrial origin.

Analysis of this kind can throw light on the economy. With data at present available, however, it would be virtually impossible to construct an interlocking double-entry system of national accounts incorporating such imaginary figures. It seems better, therefore, that analysis of the effects of export duties should be conducted outside the national accounting framework.

The structure of the present national accounts system

The range of national accounts estimates regularly compiled by the National Income Office can be seen in its publication, *National Income Statistics of Thailand.*

The primary estimate is the industrial origin of gross domestic product, now available at current prices and also at constant 1956 and 1962 prices, together with breakdown into a number of individual products and into the four major geographical regions of the country.

All the major components of gross domestic expenditure (private consumption expenditure, general government current expenditure, gross domestic fixed capital formation, changes in inventories, and exports and imports of goods and services), are estimated. Private consumption expenditures at current and at 1956 and 1962 prices are available with detailed composition of individual commodities. Estimates of general government current expenditure are shown with breakdown by types of authority by purpose, and by type of expenditure.

The capital formation component of gross domestic expenditure is estimated in some detatil. The composition of gross domestic capital formation is shown by type of purchaser, by industrial use, and by type of capital goods. The breakdown of capital formation between public and private sectors is also available. The provision for consumption of fixed capital is estimated at a flat rate of 5 per cent of gross domestic product.

Despite more than a decade of national income estimation, the work is still restricted to calculating, in some detail, the gross domestic product by industrial origin and the major components of gross domestic expenditure. No doubt these aggregates represent the three main types of economic activity generally recognized: production, consumption, and accumulation of wealth. However, they do not cover all the important flows of transactions in the economic system; for instance, private consumption expenditure is dealt with but not the income and saving of private households. Again, government current expenditure is estimated but not related to government revenue and saving. Consequently only the estimated total volume of capital formation is known, but not how it is financed (that is how much by business, households, or government saving). Finally, the relationship between this very open economy and the rest of the world is given scarcely any attention. The present official national accounts, therefore, do not form a completely interlocking framework.

The very first national income adviser to the Thai government, Dr Joseph S. Gould, recommended in 1952 that Thailand should prepare, in due course, a set of five national accounts similar to that prepared by Dr William I. Abraham for the Philippines (Gould 1952: Appendix 2). More than a decade later Dr Abraham himself visited Thailand briefly as national income adviser and found—apart from the weakness of data for estimating distributive shares—all the elements necessary for completing a set of national accounts along United Nations lines (Abraham 1963: 11).

The reluctance to compile a complete set of interlocking national accounts can perhaps be attributed primarily to the inability to obtain a reliable estimate of national income distribution from existing data.[4]. An

[4] It may be pointed out, however, that an estimate of national income distribution is not absolutely necessary for the construction of an aggregative system of national accounts.

estimate had in fact been attempted as an experiment by the National Expenditure Division for the year 1960 (N.E.D.B. 1963: 11). With the arrival of the national income adviser in 1963, it was again estimated for 1961 and this time incorporated into a system of national accounts (Abraham 1963: 13-15). The main difficulty was that data on private sector wages and salaries were largely unsatisfactory. The *Thailand Population Census, 1960* gave the number of employees in various industries but the farm wages had to be taken from the *1954 Demographic and Economic Survey,* adjusted to 1960 prices, and wages in other industries from the 1960 wages survey which was conducted in Bangkok and Thonburi only. Other components of national income were estimated mainly by the production approach, as residues of value added after deducting first wages and salaries and then corporate saving and dividends, direct and indirect taxes, and depreciation, the latter group being taken mainly from income tax returns. The regular compilation of distributive shares was rejected mainly because of the weakness of these income data, though earnings could now be derived from the *Post-Enumeration Survey, Census of Agriculture, 1963* and the *Census of Industry, 1964.* Other contributory causes of the delay in completing a national framework of accounts are probably the shortage of qualified staff in the National Income Office and the absence, at least until the first economic development plan was put into force in 1961, of a felt need for a national accounting model to help in development planning.

Existing and possible uses of the national accounts estimates

This section will discuss, in relation to Thailand, the three main fields in which national accounts estimates may be used to influence policy—the study of past performance of the economy, short-term economic forecasting, and long-term economic planning.

Study of past performance of the economy

The effectiveness of the use of estimates for this purpose, as for all other purposes, depends on the nature and adequacy of basic data available. For example, to be able to rely on the time series of gross domestic product to indicate the rate of growth of the economy, we must be reasonably confident that the estimate does represent a meaningful measurement of a collection of goods and services. However, the meaningfulness of national accounts estimates in less developed countries in general is impaired by such factors as the imperfection of the national price system, the prevalence of subsistence production, and the indistinctness of the production boundary. There are also statistical difficulties in the collection and processing of data.

In Thailand the annual publication of national accounts estimates by the National Income Office is usually accompanied by a brief analysis of the past performance of the economy as shown mainly by changes in the distribution of gross domestic product by industrial origin, in patterns of consumption expenditure, both private and public, and in the composition of gross domestic fixed capital formation.

However, the inadequacies already mentioned of the present structure of national accounts reduces the value of this analysis. Gross domestic product,

consumption expenditure, and capital formation are discussed in separate and unrelated sections. The absence of the income side of households and general government sectors and of any consideration of transactions with the rest of the world emphasizes this unrelatedness. In other words, a complete national framework of accounts is needed for an integrated analysis of the economy showing all the main features and their relationships to one another.

The relevance of other national accounts estimates, as yet not regularly compiled in Thailand, to the interpretation of past performance of the economy may be briefly indicated in the following way.

The estimates of finance and composition of gross domestic capital formation are useful in a study of saving patterns and structure of capital formation, leading in some cases to a flow of funds analysis. The estimate of national income distribution is, of course, needed in a study of inequality of income distribution. If distribution by income brackets or deciles of population is available, a measure of the degree of inequality may be attempted. This estimate may also be used as the basis for the social objectives of development plans. Details of government revenue and expenditure are useful in conjunction with other estimates in studying the probable effects of government fiscal, monetary, and other economic policies on the economy. The account of external transactions shows the balance of payments position of the nation and, together with other estimates, facilitates an analysis of the effect of changes in volume or price of key export commodities on domestic industries.

It may also be pointed out that, for purposes of studying economic development and growth and other economic analyses in real terms, constant price series of estimates are indispensable, although these are inevitably less accurate than current price series.

Short-term economic forecasting

In order to make short-term forecasts, we must have the requisite key aggregates or sectoral figures in good time. The potential uses of national accounts estimates for this purpose are various. The government may employ the national accounting framework as an aid in determining the consistency and feasibility of fiscal, monetary, and other economic measures. For example, it may derive estimates of public revenue and loan-raising capacity, analyse the economic impact of public works and other development programs, and assess the effects of changes in international trade on domestic conditions and the balance of payments.

Another important use is national budgeting (that is annual economic planning), the major aim of which is to obtain a quantitative picture of the state of the economy and thus facilitate the design of suitable measures to correct internal imbalance, deflation, or inflation. Thus the whole economic structure is projected into the forthcoming year, taking into account as far as possible all the likely changes in the economy and their repercussions on the various sectors within it. The exercise may be more realistic and useful if separate projections are made for individual industries or industrial groups instead of the overall projections of national income and expenditure aggregates. Projections by industry make it possible to compare future

supply and demand for particular products and thus provide the information needed if action to correct prospective imbalance is to be planned ahead.

It is not surprising that few less developed countries have been able to take full advantage of the potential uses of national accounts, owing chiefly to the prevailing scarcity and unreliability of data. It is interesting to note, however, that some countries, particularly the West Indian economies, have made considerable progress in disaggregating their national accounts, and now possess a system of sector accounts from which an aggregate national accounting framework can be obtained. The sector accounts also form the basis for short- or long-term projections (see Abbott 1963).

In Thailand the use of national accounts estimates for short-term economic forecasting and policy formulation seems scarcely to have been noticed. The omission of the national budgeting technique is understandable in view of the present inadequacies of the national accounts structure. There may also be something in the argument that a relatively simple economy like that of Thailand does not really need such a refined economic tool as national budgeting in fiscal policy formulation. Another reason for the failure to make use of short-term analysis is probably the usual delay of about eighteen months to two years in obtaining firm primary data. Although a number of preliminary estimates of crop output are made by the Ministry of Agriculture periodically right up to the time of harvest, they often turn out to differ substantially from the final figures obtained after the harvest.

Long-term economic planning

One may distinguish between straightforward projections and development planning projections. The former take account only of the 'natural' development trend of the economy in relation to the rest of the world. The resulting picture of the economy at some future time will help to reveal the problems that the government will probably have to face, thus giving it time to look for solutions and take appropriate actions. Development planning projections usually start from some assumption about a pre-determined rate and pattern of investment during the plan period and seek to uncover problems or bottle-necks which may hinder the fulfilment of the plan.

All the major components of national income and expenditure play their part in an economic projection. The level of personal income and its disposal among taxation, consumption expenditure, and saving have to be estimated. Breakdowns of private consumption expenditure and government revenue and expenditure are also required. Next come the estimates of business saving and investment. The whole structure of future demand is then distributed between domestic production and imports, required imports are compared with expected exports, and the resulting balance of payments position indicates further requirements of foreign grants or borrowing. The prediction, industry by industry, of the compatibility of projected production, domestic consumption, investment, and exports would require separate production accounts for the major industries or industrial groups, but in a small country the need for these detailed data depends very much on the projected balance of payments position. Provided this is sound, the more open the economy, the less grave will be the consequence of any miscalculation creating a bottle-neck.

Thailand has begun to use national accounts data for long-term economic planning. The overall objective of the second half of the national economic development plan (1961-6) is an annual increase of 6 per cent in gross national product or, assuming population growth of 3 per cent per year, an annual increase of 3 per cent in income per head. Projections for 1964-6 have been made of gross domestic product by industrial origin, of fixed capital formation by major components, of the finance of public development expenditures, and of certain balance of payments items. These projections, however, fail to present an integrated picture of the economy. For example, projections of gross domestic product and fixed capital formation are made separately, apparently with no attempt to study the underlying implication concerning the incremental capital-output ratio, either in aggregate or by sectors. Further, no corresponding projection of private consumption expenditure is made.

The first use of national accounts data to construct a long-term econometric model for Thailand occurred when the ECAFE secretariat attempted long-term macroeconomic projections for selected countries in the region (ECAFE 1964a). For Thailand they recommended that the aggregate model should be supplemented by a sectoral model disaggregated in some detail by both sectors and variables. The ECAFE group of planners also suggested that a long-term projection based on the commodity approach, similar to the one used in Malaya, might help to provide concrete guidance for the formulation and selection of development projects in Thailand. The recommended sectoral-cum-aggregate model would require more sectoral breakdown in national accounts data than are at present available. The only academic macroeconomic model for economic development of Thailand also stresses the need for more data (see Chinnawoot 1964, 1965).

Concluding discussion of the uses of national accounts estimates

The National Economic Development Board is well aware of the shortcomings in its present programming techniques and is attempting to improve them. Among future work to be done are the widening of plan coverage to include the private sector, the establishment of function relationships between projects and targets both for the individual sectors and for the economy as a whole, and the integration of manpower planning with economic planning (N.E.D.B. 1964a: 25). A national accounts consultant from the United States Operations Mission to Thailand is also helping to improve the reliability of national accounts, through better methods and sources and better organization of work.

Professor Ayal (1962: 37) has wisely observed that economic planning in Thailand is an attempt at planning with a minimum of direct controls. The importance of national accounts data for long-term planning in Thailand may therefore easily be exaggerated. In fact their chief function in the near future, apart from giving an insight into past operations, present structure, and future prospects of the economy, might well be in short-term analysis and forecasting.

In Thailand, as in most countries, the form in which national accounts estimates are compiled must be a compromise between needs and availability of data. The latter largely depends on the skilled manpower and

material resources that can be brought to bear upon the tasks of data collection, processing, and evaluation. The comprehensiveness of the national accounts system will therefore ultimately depend on the priority of national accounts work among hundreds of other development projects and on the total resources that the Thai government can mobilize for development.

6

Trade and the Balance of Payments

W. M. CORDEN and H. V. RICHTER

The principal economic development in Thailand's modern economic history has been the growth in the export trade in rice. This has been fully described by J. C. Ingram in his *Economic Change in Thailand Since 1850* (1955). While in the post-war years rice has lost some of its relative importance in the agricultural economy and in its share of exports, it continues to be the single most important export. Hence trends in rice production, consumption, and exports are of great significance to Thailand and the first part of this chapter reviews these trends. But the two most important developments affecting trade and the balance of payments since the war have been only indirectly connected with rice. The first has been a considerable diversification of the agricultural sector and of the export pattern. In the 1950s rubber became a major export earner, and in recent years a number of other agricultural products, notably maize, cassava, and kenaf, have shown large increases in output and exports. The second post-war development has been an extension of the infrastructure, mainly of roads and of dams for electricity, flood control, and irrigation, heavily supported by finance and technical assistance from abroad.

This chapter describes trends and prospects of exports, changes in the import pattern, the inflow of foreign capital and aid, and the balance of payments situation as a whole. The chapter provides an overview of various aspects of the Thai economy which are discussed in more detail in later chapters. At the end there is discussion on the question of whether Thailand has less serious trade problems than most other less developed countries—that is, whether it is a special case.

Rice exports

Thailand was opened up to international trade on a significant scale in 1855, the date of the Bowring Treaty with Great Britain. Since then the export trade in rice has grown steadily until early in the twentieth century half of Thailand's rice production was exported. Rice has been overwhelmingly Thailand's main export. In recent years it has accounted for about 35 per cent of the value of exports, and in earlier years considerably more.

Table 6.1 gives year-by-year figures of production, export, and apparent consumption trends. Rice production has increased since the pre-war years.

TABLE 6.1 Thailand, Rice: Exports, Production, Yield, Consumption, 1934-8 Average, 1938-42 Average, 1949-65

	Exports			Production†		Exports‡	Domestic retention§	
	Volume		Price	paddy	harvested	yields	as % of	total	
	metric tons milled rice	Index (1958 =100)	Index* (1958 =100)	metric tons ('000)	area *rai* ('000)	kg. per *rai*	production (milled basis)	metric tons milled rice ('000)	kg. per head ‖
1934-8 (av.)	1,388	123	24	4,357	21,063	207	49	1,488	106
1938-42 (av.)	1,245	110	n.a.	4,700	20,000	237	41	1,857	117
1949	1,215	107	128	6,835	30,812	222	27	3,296	173
1950	1,508	133	96	6,684	31,016	216	34	2,903	148
1951	1,612	142	100	6,782	33,091	205	36	2,864	142
1952	1,548	137	121	7,325	35,851	204	32	3,287	158
1953	1,359	120	127	6,602	32,064	206	31	2,998	140
1954	1,002	88	116	8,239	37,068	222	18	4,436	201
1955	1,248	110	94	5,709	28,274	202	33	2,520	111
1956	1,226	108	92	7,334	33,598	218	25	3,614	154
1957	1,570	139	96	8,297	36,013	230	29	3,906	162
1958	1,133	100	100	5,570	26,794	208	31	2,543	102
1959	1,092	96	90	7,053	32,306	218	24	3,563	139
1960	1,203	106	82	6,770	32,893	206	27	3,265	124
1961	1,576	139	87	7,834	35,270	222	30	3,594	133
1962	1,271	112	97	8,177	35,349	231	24	4,126	147
1963	1,418	125	92	9,279	38,696	240	23	4,706	163
1964	1,896	167	89	10,029	39,715	253	29	4,723	159
1965	1,905	168	88	9,558	37,316	256	30	4,403	144
1966¶				9,587	37,315	257			

* This is the I.M.F. (1948-(Supplement to 1964/5 issues)) series 76a which shows the unit value of exports in dollar (not *baht*) prices, a distinction which is significant when exchange rates are changing.

† Figures refer to the crop year ending in the year stated.

‡ Small-scale exports of rice flour and vermicelli have not been taken into account. Paddy has been converted to milled rice at the rate of 66%.

§ Production of paddy (converted into milled rice at 66%) minus exports of milled rice. Thus the resultant figure is net retention for consumption, changes in stocks, and other uses, such as for seed and animal feed.

‖ Source of population data 1949 to 1963: National Statistical Office (1956-(1963)). This adjusts the 1947 census to 17,969,000 (mid-year) for underenumeration and assumes a constant geometric growth rate of 3·0% per year in intercensal years. For the periods 1934-8 and 1938-42, the apparent growth rate of 2·2% between the 1937 census estimate of 14·46 million and the adjusted estimate for 1947 was the base for calculating the average population for each period. It should be noted that our figures are retention per head, not consumption.

¶ Provisional.

Source: National Statistical Office (1956-(1964)); I.B.R.D. (1959: 271, 272, 278); FAO (1950); FAO (1950-); Bank of Thailand (1958-); Commonwealth Economic Committee (1952-); I.M.F. (1948-).

Comparing the immediate post-war with the pre-war period we find that the rise in production was the result of increased acreage more than offsetting reduced yields. While one hesitates to draw too many conclusions from doubtful production estimates, especially pre-war ones, it seems that during this period the long-term trend of a decline in yields observed by Ingram (1955: 49) for earlier periods continued. He wrote:

> The apparent decline in yield per rai lends some support to the hypothesis that an unchanging technique was applied to a larger amount of land, and that the increments of cultivated land were of poorer quality for rice growing. The decline in yield per rai took place primarily in the outer provinces, where cultivation was rapidly extended without benefit of irrigation.

Since 1953 both acreage and yields have increased, and output has grown at an annual average of about 4 per cent though there have, of course, been considerable annual fluctuations. One may conclude that the decline in yields has been arrested, probably owing mainly to the extension of flood control and irrigation. The actual rise in yields, mainly in recent years, may be adequately explained by exceptional harvests, and does not clearly indicate an upward trend.

In most years since 1953 the volume of exports has been somewhat below the level of the late 1930s, though there have, of course, been fluctuations and years of exceptional harvests, such as 1961, 1964, and 1965. The share of production which is exported has therefore declined; while before the war it was about 50 per cent, for the whole period 1949-65 it has averaged only 28 per cent. Details are shown in Table 6.1. From figures of exports and estimates of production and of population one can obtain estimates of domestic retention of rice per head, retention being domestic consumption plus the net increase in stocks. It appears that there has been a rise in retention, and probably in consumption per head since pre-war days (see Chapter 10). This might be expected, since real incomes per head have risen and since the internal price of rice has increased less on account of the system of export taxation than prices of most other foods and indeed most other products. But it is also possible that the figures of pre-war production are substantially inaccurate, probably underestimates.

Thailand sells her rice in Asian markets, having recently outpaced Burma as the world's largest exporter. Her principal markets are Indonesia, Malaysia and Singapore, Hong Kong, Japan, Ceylon, and the Philippines. Malaysia and Singapore have over a long period been the most reliable markets, in 1957-65 taking together on the average about 30 per cent of Thailand's rice exports (though they took more than half before the war). Recently Indonesia and Japan have come to rival these two as markets. The rice market is strikingly erratic. In some years Japan and the Philippines have been big purchasers, in others they have bought very little. The most erratic element of all in the world rice market has been China. In 1958 and 1959 exports from China were actually greater than exports from Thailand and second only to those of Burma, accounting for over one-fifth of total world exports; in the following three years her exports sharply decreased, and by 1961 were less than one-third of the 1959 level. The reason for these erratic changes in trade is that rice imports and

exports (especially imports) are normally marginal to the trading countries' consumption and production. Since under 4 per cent of world rice output normally enters international trade, quite small changes in production due to variations in the harvest can have a large impact on the international rice market and on the prices realized. On the exporting side, exports are not marginal to the two principal regular exporters, Burma and Thailand, but the market must cope with the occasional eruptions on to the market of China (mainland) as well as with the repercussions of aid shipments of rice and other grains from the United States. On the importing side, imports are a substantial part of the total consumption of Malaysia, Singapore, Ceylon, and Hong Kong. But India, Pakistan, and the Philippines are all marginal importers, and Japan has at least until recently been a marginal importer. In 1959, for example, India's purchases (all from Burma) were about 1 per cent of its consumption though they represented 18 per cent of Burma's exports.[1] Indonesia was in the 1950s and early 1960s the world's largest importer, meeting about 10 per cent of its consumption from imports. But the aim of its policy is to eliminate imports, and in 1965 and 1966 it drastically cut imports; its importing policy and capacity to finance imports are in fact utterly uncertain.

The price of rice has tended to decline since 1953. This refers to the export price in terms of foreign currency and not in terms of *baht* received by millers and farmers. This latter price has over the whole post-war period been sharply divorced from the price in terms of foreign exchange owing to the multiple exchange rate and export taxation system (to be described in Chapter 7). An index of rice prices for the post-war years (the unit value of Thai rice exports in terms of U.S. dollars) is given in Table 6.1. On a base of 1958 = 100 it averaged 115 between 1949 and 1954, 94 for 1955-9 and 91 for 1961-5. Since 1953 the prices of Thailand's imports of manufactured goods have risen by perhaps 5 per cent, so that in terms of its purchasing power the price of rice has declined by a little more than indicated by its own price index.

What then, are prospects for rice exports? If production and population continue to grow at recent rates the volume of rice available for export will rise very little, and indeed might well decline. On the other hand, it is reasonable to expect a substantial rise in yields. Large-scale public investment in flood control and irrigation has been taking place, some of which will benefit rice yields. Taking a long view, substantial increases in yield per *rai* may result from the use of improved seed, fertilizer, and other improvements in method, supported by a regulated supply of water. The scope for improvements here can be suggested by a comparison of yields with other countries. A comparison is sometimes made with Japan, where the yields are nearly four times those of Thailand, but this is not really a legitimate comparison, since the 'Japonica' type of rice which Japan is able to grow is distinct from that in Thailand and lends itself to higher yields, and since social conditions are so vastly different. A much

[1] World rice trade information comes from various issues of *Grain Crops*, published by the Commonwealth Economic Committee, London. This is also the source of information on the maize trade given later in this chapter. Thai trade figures are from the Bank of Thailand (1943-) and Bank of Thailand (1958-).

more relevant comparison is with Malaysia, where average yields are two-thirds above those in Thailand. In Malaysia almost all rice land is efficiently irrigated, and this is the main reason for the higher yields. Quite good rice strains are used, and there is a good extension service, but, in contrast with Japan, Malaysia uses very little fertilizer.

Market prospects also hinge on prospects for population growth and for productivity in rice growing in other countries. Consumption can be expected to increase in line with population growth. The censuses of 1960 have revealed in Asian countries other than Japan population growth rates ranging from 2 per cent to over 3 per cent. Some increases in consumption per head are possible in India, Pakistan, and Indonesia, but in most of the other countries consumption per head is likely now to be near the maximum intake level. A shift away from rice also seems unlikely in the near future since in Asia at least rice has a firm place in the diet, though fears are frequently expressed of competition from the United States surplus disposals of wheat. Any production forecast must be even more speculative since it depends on how much reliance should be placed on official targets and plans. In 1962 the Food and Agriculture Organization Consultative Sub-Committee on the Economic Aspects of Rice produced a careful seven-year forecast which suggested that there might be an excess of supply over demand at the end of the period equal to about 2 per cent of world rice production (F.A.O. 1962).[2] This is mentioned here not because the forecast is itself of any interest now, but because the margins of error in the forecasts of demand and supply upon which this result was based were more than 2 per cent. It is in fact impossible to make a precise forecast when the trade in a product is so marginal to total world production and consumption. So much depends, for example, on political conditions in Indonesia and on how long it will take for the Indian rate of population growth to reach that of South-East Asia. There are grounds for reasonable optimism from the point of view of the exporters for the next ten years or so. But at some time in the future modern methods—seed selection, the use of fertilizers, and so on—will reach the world's rice producers, and then one might expect a quite sudden breakthrough in rice production, and so perhaps a slump in the rice market.

Other exports

Before the war tin was Thailand's second export. Table 6.2 shows that its relative importance has declined sharply from 17 per cent of exports in the late 1930s to 9 per cent in 1965. It is mined both by foreign companies and by small Thai operators, nearly all of Chinese origin. Until recently there was no smelting in Thailand and tin was all exported in the form of concentrates principally (and before the war, solely) to Malaysia, and in recent years also to the United States and to Brazil. In 1965 a tin smelter was established in Thailand with capacity to smelt most of its tin ore, and it is planned to expand capacity, so that henceforward exports will be of metal, not concentrates. In every post-war year until 1960 (except 1957), exports have been below the levels of the immediate pre-war years. But in the four years 1962 to 1965 exports rose above the

[2] The *Reports* of this Committee are a good source for discussion of the rice situation and prospects.

pre-war level. The national economic development plan envisaged further increases in production, although it also pointed out that the best deposits are nearly exhausted. Thailand is normally the world's fourth largest exporter of tin, accounting for about 10 per cent of world exports.

TABLE 6.2 Thailand, Value of Exports by Commodity, 1935-9 Average and 1952-65
(million *baht*)

	Rice	Rubber	Tin	Maize	Tapioca products	Kenaf & jute	Other exports	Total
1935-9 (av.)	86·5	18·8	29·6	n.a.	n.a.	n.a.	42·9	177·8
1952	3,870	900	410	28	28	n.a.	715	5,983
1953	3,820	675	365	47	38	n.a.	889	5,801
1954	3,086	937	373	56	60	n.a.	1,493	6,022
1955	3,133	1,802	441	80	57	n.a.	1,609	7,160
1956	3,086	1,868	507	96	98	19	1,819	7,495
1957	3,943	1,689	531	74	138	46	1,716	8,140
1958	2,968	1,326	255	183	192	69	1,453	6,413
1959	2,576	2,336	434	250	224	88	1,652	7,534
1960	2,570	2,579	537	551	288	230	1,858	8,542
1961	3,598	2,130	617	597	446	626	1,983	9,923
1962	3,240	2,111	685	502	423	579	1,989	9,435
1963	3,424	1,903	741	828	439	358	1,983	9,578
1964	4,389	2,060	962	1,346	653	495	2,434	12,165
1965*	4,376	1,999	1,166	980	686	1,121	2,721	12,664
Total value (%)								
1935-9 (av.)	48·7	10·6	16·6	n.a.	n.a.	n.a.	24·1	100
1952-7 (av.)	51·6	19·4	6·5	0·9	1·0	0·2	20·3	100
1958-60 (av.)	35·9	27·6	5·4	4·4	3·1	1·7	21·9	100
1961	36·0	21·3	6·2	6·0	4·5	6·3	19·7	100
1962	34·0	22·2	7·2	5·3	4·4	6·1	20·8	100
1963	35·4	19·7	7·7	8·6	4·5	3·7	20·5	100
1964	35·6	16·7	7·8	10·9	5·3	4·0	19·7	100
1965	33·5	15·3	8·9	7·5	5·3	8·6	20·9	100

* Provisional.

Source: 1935-57, I.B.R.D. (1959: Table 18); 1958-64, Bank of Thailand (1958-).

The figures in the first seven columns are based on or taken from customs returns. The figures up to 1957 are those given in I.B.R.D. (1959). The I.B.R.D. Mission made some adjustments to the customs returns to take into account effective rates of exchange up to 1955 and the substantial undervaluation of exports of rice and rubber in 1956 and 1957. No account was taken of possible undervaluation of exports during the years 1952-5 (see notes to I.B.R.D. (1959: Table 18)).

The figures in the last column are the totals as adjusted for the balance of payments and are on average about 1% less than the totals based on customs returns. Thus the figures in the first seven columns do not add exactly to the totals in the last column.

Percentages of total value are based on the sum of the first seven columns (i.e. on the customs returns, as adjusted 1952-7).

Thailand is a participant in the International Tin Agreement, which first came into operation in July 1956 and has been renewed twice since. This agreement brings together both producing and consuming countries and has the general object of stabilizing the world price of tin. It happens to be one of the few working international commodity schemes. It operates through two policies: a buffer stock and export quotas. The manager of the buffer stock buys or sells in the tin market according to whether the price of tin is above or below certain limits. The aim is to keep fluctuations within a price range. The result has been to modify fluctuations in the price of tin, but the buffer stock alone has not been sufficient to stabilize

prices. In 1958, a year when there was a world commodity slump, the manager eventually ran out of funds in an attempt to take sufficient tin off the market to maintain the price. In 1961, as the price of tin hit the ceiling, the manager sold from the stock until he eventually ran out of tin, so that the price jumped above the ceiling. Thus the scale of operations of the buffer stock has not been sufficient to cope with sharp fluctuations in world demand.

The second element in the stabilization policy is the imposition of export quotas. In 1958 quotas were reduced drastically; this explains the 50 per cent fall in Thailand's exports in that year (Table 6.3). In recent years the price has been high and no quota limitations have been imposed. The prospects for world demand are uncertain. On the one hand, the total world market for tin and substitute metals has been rising rapidly; on the other hand, there has been continuous substitution since 1950 in favour of aluminium. All over the world new aluminium capacity is being installed; this cannot bode well for tin. Yet there are also favourable factors. Of the five major world producers, three—Indonesia, Bolivia, and the Congo—are countries where present internal economic conditions are poor and prospects doubtful; Thailand and Malaysia should reap the benefits if the tin output of these countries fails to expand with world demand. The United States tin stockpile is being gradually reduced, so that it should be exhausted by the end of the 1960s.

TABLE 6.3 Thailand, Rubber, Tin, Teak, Maize: Volume and Price of Exports 1935-9 Average and 1948-65

	Volume of Exports				Price Index*	
	Rubber ('000 metric tons)	Tin concentrate ('000 metric tons)	Maize ('000 metric tons)	Teak ('000 cubic metres)	Rubber (1958 = 100)	Tin (1958 = 100
1935-9 (av.)	34·8	18·1	n.a.	57·1	66†	56†
1948	95·1	18·3	n.a.	55·6	77	118
1949	96·1	13·3	n.a.	57·9	55	110
1950	109·1	14·9	n.a.	92·0	129	107
1951	111·5	12·3	n.a.	100·9	195	144
1952	99·0	12·9	25·2	59·0	101	131
1953	101·4	14·2	34·7	68·0	85	107
1954	119·0	13·9	37·0	79·0	86	101
1955	132·5	15·7	68·2	88·0	139	98
1956	135·6	17·6	81·5	78·0	144	103
1957	134·8	18·4	64·3	75·7	131	103
1958	135·5	9·1	162·9	72·6	100	100
1959	174·4	13·7	236·8	73·3	141	114
1960	169·7	17·1	514·7	100·9	160	113
1961	184·6	18·1	567·2	64·5	121	122
1962	194·2	19·8	472·4	39·8	114	123
1963	186·9	22·0	744·0	32·2	108	120
1964	217·0	22·3	1115·0	40·5	100	154
1965	210·9	15·7‡	811·9	45·2	100	190

* Series 76b and 76c, indices of prices in U.S. dollars from I.M.F. (1948-).
† 1937 only.
‡ In 1965 4,779 tons of tin metal was exported, in addition to 15,722 tons of concentrate.

Source: (Columns 2-5) 1935-9 and 1952-6, I.B.R.D. (1959: 278); 1949-51, National Statistical Office (1956-(1956-8)); 1957-64, Bank of Thailand (1958-(Sept. 1966)). (Columns 6 and 7) I.M.F. (1948-(Supplement to 1964-5 issues)).

In the post-war period rubber has replaced tin as Thailand's second export (Table 6.2). The Thai rubber industry consists almost wholly of smallholders, there being no significant Western estate enterprise as in Malaysia and Indonesia. While it is probably correct to say that the rubber growing provinces are the most prosperous rural areas in Thailand, the rubber trees on the whole tend to be of low yield and poor quality, and practically all the rubber is grown from wild local seeds. A considerable proportion of the acreage is believed to be obsolete, and only 4 per cent of it has so far been replanted with high grade material under the government replanting scheme.[3] In all this Thailand's rubber growers differ very much from their neighbours to the south, for in Malaysia more than half of the acreage is planted with new seedlings or bud-grafted material. There is need for systematic replanting and new planting. This question is further discussed in Chapter 10.

It is interesting to explore the reasons for the great increase in output and exports of rubber, as shown in Table 6.3. There is considerable doubt about the accuracy of pre-war rubber statistics, and they may well understate pre-war production (Ingram 1955: 96-7). Nevertheless, even allowing for this there is little doubt that there has been a very large rise in acreage and output since the late 1930s and even more since 1929. In the late twenties and early thirties planting was encouraged by the high prices established by the restrictive Stevenson scheme of 1923-8 of which Thailand was not a member, and by the new cartel of 1933, which she was persuaded to join by a very generous quota. The figures suggest that between 1940 and 1950 the acreage had doubled. But the impetus to recent expansions was provided by the Korean boom. The first spurt in post-war rubber output was provoked by heavy tapping during the Korean boom, but this was only the first impact of the boom. Plenty of land suitable for rubber production is available in the peninsula. The boom encouraged a great expansion of acreage in the course of 1952, the results of which became apparent seven years later when the volume of production rose 24 per cent in one year. This expansion in rubber production was in no way stimulated by the government. The most that the government did was not to stand in the way of expansion and to tax rubber only lightly. The episode suggests that smallholders are responsive to high prices, both in the short run through intensive tapping and in the long run through new planting. Perhaps one may generalize that the rubber growing villagers respond to opportunities for increasing their incomes if these opportunities are clearly apparent and provided they do not involve a radical change in the nature of their activities. Taking into account the area of immature rubber yet to come into fruition there should be some further increases in export volume in the next few years. But any failure to replant adequately with good quality stock would eventually reduce output.[4]

The future of Thailand's rubber depends, of course, not only on the growth of output but also on price prospects, and prospects are clearly not good. The price has steadily declined in recent years, the result of

[3] Calculated from data running to March 1966 released by the Rubber Plantation Aid Fund, published in Bank of Thailand (1958-(Aug. 1966)).

[4] See Chapter 10 for further discussion of the rubber industry.

competition from synthetics, and a further decline can be expected. The view on which policy in Malaysia has been based is that natural rubber will be able to compete with synthetics provided the costs of natural rubber can be brought down—and the use of the new types of seedling makes possible such a reduction in costs. An analysis of the costs of synthetic production suggests that while these could certainly decrease further there is probably a lower limit, and natural rubber grown from new seedlings should be able to compete at this lower limit. The competition between synthetic and natural rubber is never static; on the one hand it takes place in the context of an expanding aggregate market; on the other hand there are continually new technical developments, the latest being the development of 'stereo-regular' synthetic rubber which is an almost perfect substitute for natural rubber.[5] One may conclude that a natural rubber industry which fails to replant with new selected seedlings—as (on the whole) the Indonesian industry is failing—has a limited future, but that an industry such as the Malaysian, which does engage in a large-scale high quality replanting program, can feel reasonably secure. At the moment the Thai industry seems to come closer to the Indonesian than the Malaysian category.

Perhaps the most significant recent development in the agricultural economy of Thailand and its export pattern has been the growth in the production and exports of three new crops—maize, cassava, and kenaf. None of these was significant in exports before 1958. By 1965, maize accounted for 8 per cent of the value of exports, cassava products for 5·3 per cent and kenaf for 9 per cent. Together with the growth of rubber output, this has thus led to a considerable diversification of Thailand's exports. The new crops are particularly important to the northeast, an area which, while at present principally a rice growing area, is more suited to these crops than to rice. In the Central Plain there may have been some shift of land from rice to these new crops; but, as already mentioned, however, total rice production has increased. In general there has been a more intensive use of labour and land and not just a reallocation (Brown 1963). As is discussed in Chapters 7 and 10, the system of taxation of rice is likely to distort the resource allocation against rice, so that in so far as there has been a shift from rice to the new crops in response to private assessments of gain, this may not wholly reflect social gain. Nevertheless, it does appear that it is mainly through the growth of these new crops that overall agricultural productivity in Thailand has risen significantly.

The Thai development plan has agricultural diversification as one of its objectives. But in fact the diversification was well under way while the plan was being drawn up. Government development of the infrastructure, notably the building of roads to the northeast, certainly helped. But it is broadly true that this change in the pattern of agriculture, like the rise in the rubber acreage, was a response of farmers to opportunities for raising their incomes, opportunities which were brought to their notice not by the government but by Chinese traders.

[5] For a general survey of the world rubber situation and prospects, and of Malayan policies, see Silcock and Fisk (1963: Ch. 4). See also various publications of FAO and U.N.

The growth in the maize industry was in response to a growth in demand from Japan to which at first about 80 per cent of Thai maize was exported. The growth in Japanese demand is a recent phenomenon, beginning in 1953 and rising rapidly from 1958. It reflects a rise in the Japanese chicken and livestock numbers explained by the rise in the Japanese standard of living which has enabled the food consumption pattern to be extended from rice to meat and poultry. So Thailand, which (for a time) lost some of its Japanese rice market, adapted its production to changing conditions. Thailand supplies between one-tenth and one-quarter of Japan's maize imports, sharing the market with the United States, South Africa, and Argentina. In recent years Thailand has diversified her market, and from 1963 onwards about one-third went to countries other than Japan. The prospects for the expansion of the market appear good. Thailand is now the world's fourth exporter of maize.

Cassava is milled and exported in the form of tapioca products. Here exports have been in response to a strong demand from the United States and Europe. Kenaf is similar to jute, and is used to make hessian, gunny bags for the rice trade, and so on. The growth in kenaf exports was stimulated by poor crops in two other jute and kenaf producing countries, Pakistan and India. Local production of gunny bags has increased, so that more kenaf is used locally; from 1961 to 1965 on average 71 per cent of production was exported.

The remaining 20 per cent of the value of Thai exports (Table 6.2) is made up of numerous minor items, the largest being teak, sugar, cattle, beans, shrimps, and kapok. During the post-war years their value in total has risen at about the same rate as total Thai exports. Before the war teak was about 4 per cent of exports but it is now below 2 per cent.

Imports

Thailand's import pattern reflects the low level of its industrialization. About 70 per cent of imports consist of finished manufactured goods of all kinds, whether for consumption or investment, and materials for manufacturing have in recent years been only 16 per cent of imports. It is interesting to compare the composition of Thailand's imports with that of the Philippines, a South-East-Asian country which has gone a little further on the road to industrialization, at least in the form of domestic processing and assembling of a variety of consumer goods. The comparison refers to 1963 (U.N. 1965). The share of imports of capital goods and of motor cars and other 'transport equipment' was much the same in Thailand as in the Philippines, but in Thailand the share of food imports was much lower (6 per cent compared with the Philippines' 17 per cent) and imports of finished consumption goods other than foods were much higher (25 per cent of imports compared with the Philippines' 9 per cent). Thailand's imports of materials for consumption goods production were only 14 per cent of total imports, while in the Philippines they were as high as 25 per cent.

The share of manufacturing in the gross domestic product in recent years has been about 12 per cent. This is surprisingly high for a country which one thinks of as essentially unindustrialized. The share of the labour

force in manufacturing was, in 1960, only 3·4 per cent, so that one may wonder about the meaning or reliability of the 12 per cent figure. The largest single manufacturing industry is rice milling, the expansion of which is obviously related to the growth of rice output. In 1965 food processing, including rice milling and the manufacture of beverages, was estimated to account for over 40 per cent of the value added by manufacturing. There is relatively little reliable information on the output of different industries; some of the more important ones are the cotton textiles industry, sugar milling, the manufacture of cigarettes, the manufacture of gunny bags (using kenaf as a raw material), and cement manufacture. The growth of the cement industry is a product of the construction boom of recent years, the result largely of public investment.

There has been limited import replacement, and this is continuing. On the basis of the information available, the main instances appear to be the following. Domestic manufacture of gunny bags, a high-cost, heavily protected industry, has increased, so that compared with only 26 per cent of the domestic market in 1961, the whole domestic market was supplied from local production by 1965. But it must be remembered that in 1961 gunny bags were less than 2 per cent of the value of total imports and while there has been import replacement to that extent, the net gain to the balance of payments is less since some local kenaf output that could have been exported has been diverted to supply the local gunny bags industry. Domestic production of cotton piece goods has increased. But at the same time imports of synthetics have risen. If we look at the combined sales (in volume terms) of cotton and synthetic piece goods, whether imported or domestically-produced, we find that over the three-year period 1961-3 they grew by 11 per cent and that the share of domestic producers in the market increased from 31 to 45 per cent. Textiles and textile materials remain an important element in imports, 12 per cent of the value of imports in 1965. In 1964 an oil refinery was established which was meant eventually to switch Thai imports almost wholly from refined to crude petroleum. While petroleum imports are certainly important (in 1963 imports of petroleum products were 9 per cent of the value of imports), the import saving was expected (Bank of Thailand 1958-(Jan. 1965: 41)) to equal only about 17 per cent of 1963 petroleum imports or 1·5 per cent of total imports. Against this, moreover, must be set the foreign exchange costs of imports of capital equipment for the initial investment. Finally, in 1965 the Firestone Company started a tyre plant to satisfy originally three-quarters of the local market, and there were eight motor car assembly plants either in production or under construction (for a country with about 200,000 motor vehicles).

It is not necessary to go into further details. The share of manufacturing in the gross domestic product appears to be slowly increasing, but Thailand is at present and will probably remain for some time an essentially non-industrialized country. The obstacles to industrialization are many, but perhaps the most important is the limited size of the local market. To get this into perspective, the value of Thailand's imports is only about one-fifth of that of Australia (even though the population is two and a half times as great) or about 70 per cent of that of New Zealand.

Foreign capital and aid

Thailand has received several important loans from the International Bank. It has been a large beneficiary of aid in the form of grants from the United States. It has also benefited from a few other official and semi-official loans and grants. In recent years there has been a significant increase in private direct investment and Thailand has also received private capital in the form of suppliers' and project contractors' credits. The details as they affect the balance of payments (that is showing not authorizations but actual drawings on loans and grants year by year) are shown in Table 6.4.

Between 1950 and June 1966 Thailand received fourteen loans from the International Bank, with a total principal of $228 million. The largest single loan was for $66 million for the Yanhee irrigation flood control and hydro-electric project; it was granted in 1957 and has been drawn gradually since. Supplementary loans totalling $29 million for Yanhee electricity generation were added in 1963 and 1964. The Yanhee dam and reservoir are now completed. The International Bank has also provided loans for other irrigation projects, for roads, ports, and for the state railways. A new departure away from infrastructure financing was a small $2·5 million loan in 1964 for the Industrial Finance Corporation, a way of channelling International Bank funds to private industry. By 30 June 1966, of the $228 million loans, $35 million had been repaid and $86 million remained undisbursed (I.M.F. 1948-). Of course, only disbursals less repayments enter the balance of payments.

The International Bank has been active in Thailand not only through its loans but also through technical assistance including economic advisory services. Thailand has been quite a large recipient of International Bank loans. The Bank prefers to lend only for soundly planned projects and perhaps it has found the political stability of Thailand as well as the readiness to seek Bank advice congenial. For the whole period 1947 to June 1966, on the basis of the total principal of the loans received, Thailand comes fourteenth in the order of countries which have received International Bank loans. It has received far more than any other South-East-Asian country, and more per head of population than other Asian countries except Japan, Malaysia, and Iran (calculated from I.M.F. 1948-).

Combining all official loans and grants, from 1958 to 1965 these have averaged (net of repayments) nearly 12 per cent of the value of imports and 2 per cent of the gross national product.[6] Their role in public development spending has been important. In the three years 1961-3 foreign loans accounted for 19 per cent and foreign grants for 16 per cent of public development spending, the balance having been domestically financed (N.E.D.B. 1964a: 17). In fact these figures understate the importance of International Bank loans and United States grants. These are fractions of total expenditures which are spent under fairly close supervision and spent probably more carefully than many other ingredients of Thailand's national expenditure. Of course this may not be saying a great deal, but at least there is an attempt to use them at key or strategic points of the economy. In fact they bring with them technical and administrative know-how with some element of compulsion in making use of this know-how.

[6] This refers to official grants, International Bank loans, and all other loans received by the Thai government and government enterprises net of repayments (see Table 6.4).

TABLE 6.4 Thailand, Balance of Payments, 1952-65
(million *baht*)

Line		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
1	Exports, f.o.b. +	5,983	5,801	6,022	7,160	7,519	8,114	6,386	7,434	8,542	9,923	9,435	9,578	12,165	12,664
2	Imports, c.i.f. –	5,651	6,021	6,681	6,928	7,457	8,418	8,018	8,828	9,438	10,062	11,242	12,547	14,015	15,814
3	Non-monetary gold imports –	476	454	362	228	94	106	23	—	61	130	156	148	111	129
4	Services, net	–205	–369	–353	–408	–287	–345	19	–62	114	320	508	686	733	1,444
5	Transfer payments, private, net	—	–90	–140	–160	–185	–193	–27	64	52	98	106	145	131	146
6	Balance of goods, services and private transfer payments	–330	–1,140	–1,440	–520	–504	–948	–1,663	–1,392	–790	149	–1,348	–2,286	–1,097	1,689
7	U.S. grants, net	80	130	160	330	484	678	426	776	666	404	557	636	395	1,373
8	Other official grants, net	—	—	—	60	64	75	96	79	52	44	248	357	249	
9	I.B.R.D. loans, net	170	160	30	30	52	141	75	202	179	202	289	158	193	
10	U.S. government loans, net	—	–26	–6	–16	144	129	10	175	308	306	220	160	112	287
11	Other borrowing by government or government bodies, net	–40	–14	–14	296	77	139	137	–8	–285	33	588	419	123	
12	Borrowing by private firms, other than direct investment, net	—	—	—	—					140	192	241	554	848	514
13	Private direct investment, net	—	—	—	50	50	50	69	71	61	121	156	354	374	591
14	Total recorded capital inflow, grants and loans, net	210	250	170	750	871	1,212	813	1,294	1,120	1,302	2,299	2,638	2,294	2,765
15	Net errors and omissions	–290	–20	830	290	–71	–104	447	227	619	196	342	596	240	629
16	Surplus or deficit	–410	–910	–440	520	297	160	–404	129	950	1,646	1,293	949	1,437	1,706
17	Level of official reserves, end year, *baht* m.	4,390	3,840	3,520	6,050	6,370	6,490	6,190	6,410	7,430	9,090	10,470	11,980	13,740	15,380
18	Level of official reserves, end year, U.S.$m.	351	307	282	304	318	324	309	319	371	454	523	576	660	739
19	Reserves as a percentage of imports	115·5	93·0	90·7	89·9	87·1	79·4	78·6	74·9	81·9	93·6	95·8	94·4	97·1	97·3

Source: (Unless otherwise stated in separate line notes) 1952-5, I.B.R.D. (1959: 230-3, 237-9, 275-81); 1956-9, I.M.F. (1952-(Vols. 6-16)); 1960-5, Bank of Thailand (1943-); Bank of Thailand (1958-), supplemented for 1960 by the Bank's working papers. Data from I.M.F. were originally in U.S. dollars and have converted to *baht* at a uniform rate of 20·8 to the dollar from 1956 on. *(Notes to Table 6.4 continued opposite.)*

Notes to Table 6.4 (cont.)

Line 1. Includes re-exports, 2-4% of the total. The slight discrepancies between this line and Table 6.2 in the period 1956-9 are accounted for by the use of uniform exchange conversion rates in the former and effective rates in the latter. They are payments returns, not customs data, and in the period 1952-5 have been adjusted to that basis by the I.B.R.D. Mission, as explained in I.B.R.D. (1959: 277) and in the notes to Table 6.2.

Line 2. Excludes gold. Balance of payments data.

Line 6. In the period 1952-5 the sum of items on current account does not add to the total. This total is line 3 of Table 22 (I.B.R.D. 1959: 232). The explanation for the discrepancies is that the I.B.R.D. used differing exchange rates for conversion of dollar data to *baht* for various transactions on current account, as listed in I.B.R.D. (1959: 275).

Line 7. *Source:* 1952-5, I.B.R.D. (1959: Table 22, line 1), (the *Report* groups U.S. loans and grants together, but actually there were no drawings on U.S. loans during this period); 1956-64, I.M.F. (1952-). Between 1956 and 1959 data include changes in *baht* liabilities to U.S. government for U.S. surplus commodities; for 1960-3 these changes have not been taken into account, since this is apparently not done by the Bank of Thailand in reporting total grants. (These changes were, in *baht*: 1956, debit of 15m.; 1957, credit of 25m.; 1958 and again 1959, debit of 4m.; 1960, debit of 38m.; 1961, debit of 6m.)

Line 8. Has been derived by deducting line 7 from total net grants reported in the source cited for each year. Data are net of Thai grants to UNICEF, etc. The main sources of aid are Japanese reparations, U.N. Specialized Agencies and Special Fund, and the Colombo Plan.

Line 9. *Source:* 1952-5, I.B.R.D. (1959: Table 23), net of repayments of I.B.R.D. loans as recorded (in U.S. $) in I.M.F. (1952-), converted to *baht* at 20 to the $, the rate generally used in the I.B.R.D. Mission's *Report*; 1956-64, I.M.F. (1952-: Vol. 16, Analytical Table 3).

Line 10. *Source:* 1952-63, I.M.F. (1952-), converted in 1952-5 at 20 *baht* to the U.S. $ and in 1956-64 at 20·8.

Lines 11 and 12. For 1952-5 line 11 has been calculated by deducting lines 7-10 from the net total of official grants and loans, as recorded in I.B.R.D. (1959: Table 23, last line). For 1956-9 the source is I.M.F. (1952-(1963: Table 3)), which classifies many quasi-governmental enterprises as belonging to the private sector. Data include drawings on an Export-Import Bank of Washington loan, suppliers' credits, etc. For 1960-5 the source is the Bank of Thailand, which records borrowings by government enterprises from both public and private sources, together with central government drawings on long-term loans. From this total, net I.B.R.D. and U.S. government loans (lines 9 and 10) have been deducted to arrive at line 11.

The main sources of such other government borrowing (line 11) and of borrowing by private firms (line 12) were suppliers' credits from France, Austria, and Japan, and latterly long-term credits extended by West Germany, both alone and jointly with the I.B.R.D. The bulk of all funds is going into the development program (see N.E.D.B. 1964a).

Line 13. Data include drawings on Export-Import Bank loans.

Line 14. Sum of items 7-13.

Line 17. Foreign assets of the Bank of Thailand and Exchange Equalization Fund, including the net I.M.F. position (the Fund gold tranche). *Source:* 1952-65, I.M.F. (1948-(Supplement to 1965-6 issues, p. 252, line 11)). Between 1952 and 1955 the reserves were valued at the official rate of 12·5 *baht* to the U.S. $ rather than at the effective rates for imports and other transactions, so that their real value is understated in *baht* terms for this period. In later years the reserves are valued at effective rates, and from October 1963 on a par value of 20·800.

Line 18. *Source:* I.M.F. (1948-(Supplement to 1965-6 issues, line 1)). These are the gold and foreign exchange assets of the Bank of Thailand and the Exchange Equalization Fund, including the I.M.F. gold tranche. (Thailand's gold reserves have been maintained at U.S.$115m. since 1949, and the share of these gold reserves which is held in the I.M.F. reserve (the gold tranche) has been raised gradually from U.S.$3·1m. in 1949 to $23·8m. in mid-1966, while gold held by the Bank of Thailand has been proportionately reduced.)

Foreign assets and liabilities of the deposit money banks have not been taken into account. They were a small net positive item from 1952 to 1955, averaging U.S.$5m. per year, and a small negative item, averaging U.S.$23m. net annually from 1956 to 1965.

Line 19. Ratio of the dollar value of official reserves (line 18) to the dollar value of imports, excluding gold, c.i.f., according to customs returns. Source of the latter data, I.M.F. (1948-(1952-65: World Trade tables)).

United States aid to Thailand consists of military and economic aid. Military aid is provided principally in kind—in the form of military 'hardware' as well as technical military assistance. Until 1964 it apparently entered the balance of payments only through expenditures by United States military personnel on locally purchased foodstuffs, housing, and services. There has recently been a large rise in military aid, some of which is reflected in the high aid figures for 1965 and 1966. In the case of economic aid we may distinguish the bulk of it, consisting of grants distributed through the International Co-operation Administration (I.C.A.) and later the Agency for International Development (A.I.D.), from loans made by the Development Loan Fund and the Export-Import Bank. Over the fourteen-year period ending June 1964 all United States economic aid authorizations to Thailand totalled $387 million (Colombo Plan 1964: 298). Grants through I.C.A./A.I.D. have been provided in a number of different ways. The greater part of the economic aid received by Vietnam and Laos has been in the form of general subsidy to the budgets of the recipient countries designed to help maintain defence expenditures. By contrast the greater part of the aid supplied to Thailand has not been of this general nature but has been tied to particular projects.

The mechanisms by which this project-type aid has worked in Thailand, and indeed in other countries receiving aid for development purposes, has been as follows. The United States engages jointly with the government of Thailand in various projects, and these have been financed from three sources. Firstly, the actual foreign exchange cost of the projects has been paid for direct in dollars, and thus has come from United States aid. This is known as 'project assistance' even though it does not represent the whole of assistance for a project, but only the direct foreign exchange cost. Secondly, the domestic cost (in terms of *baht*) of a project would be met partly from the Thai budget, and so paid by Thailand as its contribution. This is not part of United States aid. The third element requires more explanation, though it is now only of historical interest. The United States provided dollars for Thai traders to import certain specified goods which were on the 'commercial import program'; in the case of Thailand a principal item was petroleum. The Thai importers paid for these goods in *baht* which they deposited to the credit of the United States government in the counterpart fund—the *baht* counterpart of the dollar aid provided by the United States. This form of aid was known as 'non project assistance'. The *baht* costs of the aid project were then met out of this fund (as well as from the Thai budget contribution). Aid of this type to Thailand through a 'commercial import program' ceased in 1963.

United States aid has involved a large number of different projects, covering agriculture, industry, transport and communications, public health, education and public administration. The largest element has been transport, and in fact about half of all United States aid has gone to finance the building of new roads and road improvement, obviously with military purposes in mind. Up to 1962 the cost to the United States of the Friendship Highway to the northeast was $20 million, the cost of the East-West Highway was $17 million, of the Bangkok-Saraburi Highway $13 million, and of the Korat-Nongkhai Highway over $11 million (USOM/Thailand 1962).

It is interesting to compare Thailand's receipts of United States aid with those of various other Asian countries. This comparison refers to the total for the fourteen years ending June 1964, and is based on figures of aid authorizations (Colombo Plan 1964). The three formerly British countries—Malaysia, Burma, and Ceylon—received very little United States aid, far less than Thailand. Needless to say, Vietnam has been a special case: it received more than five times as much as Thailand. Laos with a population of 2 million, received almost the same as Thailand; this was United States policy's classic failure. Cambodia, with a population of 6 million, received 70 per cent of that of Thailand. India, Pakistan, Indonesia, and the Philippines all received more in total than Thailand, but clearly the interesting comparison is on a per head basis. On this basis Thailand received more than India and Indonesia, and less than the other two. Thailand appears to rank lower than one might expect because, as a major food exporter, she has not benefited from United States surplus disposals of food. It can be argued that the figures of surplus disposals (Public Law 480) tend to overstate the value of this aid. In any case, taking I.C.A./A.I.D. aid alone on a per head basis, we find that the three SEATO countries, the Philippines, Pakistan, and Thailand, have received about the same, each much more than India and Indonesia. It must be stressed that these comparisons have limited significance; the use to which the aid is put is more important than its cost, and to some extent the absorptive capacity, depending on the degree of technical skill, planning, and initiative within the aid-receiving country, governs the amount received.

Turning now to private direct investment, the greater part of tin mining is in the hands of British mining companies. Western companies largely initiated the teak industry but it is now a Thai government monopoly. Private foreign capital has been involved in various other enterprises. One notable example was the highly successful British-American Tobacco Company which was nationalized in 1941 and converted into the government Tobacco Monopoly. But apart from a limited number of industries there has not in the past been a large inflow of private foreign capital.

The problems in the way of foreign companies wishing to set up industries in Thailand were discussed in the International Bank Mission Report (1959). It observed that the readiness of the government to enter into industrial activity itself presented a threat of competition and even nationalization to potential investors.

> In general, the climate for private enterprise created by past decisions and actions has not been a favourable one. Ministers and high officials have frequently declared their recognition of the need for encouraging private industry and for attracting foreign capital. But they have not, perhaps, realized enough how other policies of the Government, adopted for seemingly sufficient reasons, have run counter to these aims (I.B.R.D. 1959: 95).

An 'Act on Promotion of Industries' was passed in 1954, but no action of practical significance resulted from it. The Act was 'confused in its wording, difficult to administer, and [gave] the impression that applicants will be penalised rather than helped' (I.B.R.D. 1959: 98). The climate changed considerably with the new government of 1959, and possibly also

as a result of recommendations made by the International Bank Mission. In 1959 the Investment Board was set up under the Prime Minister's Office. Its purpose was 'to encourage domestic and foreign investments in industry and public utilities and to negotiate conditions of investment agreements on the basis of mutual interest of both investors and the government' (Investment Board 1959c). In 1959 a report was obtained from a United States investment survey team (Investment Board 1959b) which made recommendations of a familiar nature to encourage foreign private investment. As a result of this report and other recommendations, in October 1960 the Promotion of Industrial Investment Act was enacted, setting out a number of significant privileges and rights for foreign investors. This Act was amended in February 1962 to provide more liberal conditions for foreign investors, and it appears now to incorporate a large part of the suggestions which have been made by the International Bank Mission and the survey team.

Briefly, the position is as follows. The government, through the Investment Board, issues a list, which is frequently amended, of industries 'eligible for promotion'. This, in effect, is a list of industries which the government would like to see set up. Intending investors in these industries, whether local or foreign, if they wish to obtain 'promotion privileges', must then apply to the Investment Board, and after negotiations (which have sometimes taken a long time) the applicants may be declared 'promoted' persons or companies. They then obtain a number of rights and privileges. These include the following:

1. a guarantee that the state will not carry on any industrial activity in competition and that it will not nationalize the promoted enterprise;
2. exemption from import duty or business taxes which are normally payable on imports of machinery and equipment for use in factory construction;
3. exemption from income tax during first five years of operation;
4. permission to remit abroad foreign currency for all types of transactions, including repatriation of capital and profits;
5. partial or complete exemption for five years from import duty on materials, the extent of the exemption depending on the type of industry;
6. protection may be provided by the Investment Board for the promoted industry, either by prohibition for a reasonable period of time of the import of similar products or by increasing the tariff on these products.

These are the legal provisions. What have been the results of efforts since 1959? Table 6.4 shows that direct private investment began increasing in 1961, and from 1963 onwards has been remarkably high compared with earlier years, running at about four times the annual rate of 1961. But only a small proportion of this would be 'promoted' capital. It is clear enough that foreign enterprises have not flooded into Thailand. Most potential foreign capital is for import-replacing manufacturing industry, so that the limitations to private capital inflow are the same as those to industrialization in general, notably the small size of the domestic market. In discussing the relative slowness of proposals from foreign investors, the Investment Board (writing in 1959, before the increase in investment of 1963-5) listed three possible reasons—lack of basic public utilities, fear of government competition in industry, and doubts about the government's

willingness to implement the principles of the Development Law (Investment Board 1959c). The general policy of the government is to leave it to potential investors to come and investigate what might be done rather than to conduct detailed surveys of its own. Furthermore, the government is reluctant to agree to any new enterprise being promised a monopoly, a promise without which some industries may not be attracted to a market as small as that of Thailand.

Further discussions on the promotion of industry in Thailand may be found in Chapter 11.

Reserves and the balance of payments

Thailand's foreign exchange reserves are high. Since 1954 the officially held reserves have averaged 89 per cent of the value of imports and have never fallen below 74 per cent. At the end of a year of booming exports, 1965, they were sufficient to pay for almost all of that year's imports.[7] To put these impressive figures into perspective, for the non-communist advanced countries of the world at the end of 1963 the ratio of official reserves to the value of imports was 51 per cent, and for the world's non-communist less developed countries (a group which includes Thailand) it was 38 per cent.[8]

Table 6.4 shows details of the balance of payments. Over the period from 1952 to 1965 exports have been rising. There was a fall in exports in 1954 (in dollar, though not in *baht* terms) owing to a fall in the quantity of rice exported, as well as some decline in price. The 1958 slump is explained both by a poor rice crop and by the world slump which lowered the demand for rubber and tin. There were export booms in 1961, 1964, and 1965. In all three years the rice harvest was exceptionally high. The main cause of the consistent increase in export value in recent years has been the growth of exports of maize, tapioca products, and kenaf. Of the 57 per cent rise in total exports from 1957-9 to 1962-5, no less than 45 per cent is explained by these three products. At the same time imports have been increasing quite consistently. The growth rate of imports (in money terms) averaged about 7 per cent until 1961, but in the four years 1962 to 1965, no doubt in response to the high exports of 1961 and later years, imports grew by an average of 12 per cent. The ratio of the money value of imports to gross national product at market prices has remained fairly constant over the years, ranging from 21 per cent to 17 per cent and averaging 18·5 per cent from 1953 to 1965. In real terms imports have probably grown a little faster than the national product,

[7] This definition of official reserves includes the net reserve position in the International Monetary Fund. Since Thailand has no net lendings to the Fund, this consists of automatic drawings rights against its I.M.F. gold tranche, which in 1965 would have paid for 2·5 per cent of imports. It excludes its I.M.F. credit tranche.

[8] Calculated from I.M.F. *International Financial Statistics* (1958-). The six major oil exporters among the less developed countries have been excluded from this figure. Furthermore, for quite a number of the other less developed countries (accounting for one-third of imports of this group) *International Financial Statistics* does not list reserves, so that the ratio of imports to reserves of 38 per cent cited here is based only on the remaining countries. Official reserves are here defined to include the net position in the International Monetary Fund, that is the gold tranche, and where applicable, net lending to the Fund.

since, on the available figures, prices of imports have risen less than the general price level of Thai domestically produced goods and services.

One might say that the current account deficit has been covered by foreign capital and aid, particularly by the considerable increase in private investment, suppliers' credits, and so on since 1959. But this implies that investment and aid have been 'gap-filling'. In fact, private investment and the public investment to which foreign loans and aid contributed, generate an import demand quite directly through imports of machinery and other materials; in the case of aid-financed investment this is covered by United States project aid. In addition imports are raised through the rise in Thai incomes. If an act of foreign investment stimulates some domestically financed investment which would not otherwise have taken place (and which is not offset adequately by reduced domestic consumption), the net result of foreign investment could even be to worsen the balance of payments. On the other hand, foreign investment eventually raises national output; exports are raised by public investment in transport, irrigation, and in numerous other ways; imports may eventually be reduced by import-replacing industrialization made possible both by private direct investment and by public investment to improve the electric power supply and other facilities. Against this must be set payments of interest and dividends abroad.

The short-term effects of the technique of United States aid are not always understood. We may distinguish 'project' from 'non-project' aid (the latter having now been discontinued). As was explained earlier, project assistance pays purely for the direct foreign exchange content of a project. Therefore it leaves the balance of payments and the internal situation initially undisturbed. The inflow of imports is exactly balanced by the extra supply of dollars and no payments of any kind need be made in *baht*. The matter is different in the case of the other type of assistance, which was rather misleadingly entitled 'non-project' assistance. Suppose imports of petroleum worth 210 *baht* were placed on the commercial import program instead of being imported in the normal way. The importer deposits 210 *baht* in the counterpart fund and the United States supplies $10 to pay for the imports. At this point the balance of payments has improved by the amount of the aid if we assume that the imports would have taken place in any case. The next step is for the United States to draw on the counterpart fund for its aid projects. The spending of 210 *baht* generates local demand, possibly causing inflation, and also raises demand for imports. If no extra domestic savings or investment were generated in the process all of it would eventually find its way into imports or domestic consumption of exportables, so eliminating the balance of payments improvement. Thus if the counterpart funds were being built up the net impact would be to improve the balance of payments, while in periods where they were being run down the balance of payments would tend to be worsened by this foreign aid mechanism. In fact in some years the counterpart funds increased considerably, and over the whole period 1954-65 these funds increased by 80 million *baht*, suggesting that the net result was to improve the balance of payments. But this is not the whole story: in so far as extra domestic savings result from the process of income

generation there will have been a further balance of payments improvement; on the other hand, the aid-financed projects may have stimulated domestically financed investment, and these would have an initial adverse effect on the balance of payments. Finally, the balance of payments will be affected, and almost certainly benefited, in the long term by the higher output of export industries and import-replacing industries which can be expected to result from aid-financed and aid-stimulated projects. It has certainly helped Thailand that a significant part of her development has been financed from abroad. But this does not really explain the success of Thailand in maintaining the *baht* at a stable value in the foreign exchange market while at the same time building up the foreign exchange reserves. The explanation is rather in a conservative monetary policy which has ensured that aggregate demand has grown no faster relative to aggregate supply than foreign aid and capital inflow would permit. 'Maintenance of financial stability is a cardinal point of Thailand's economic policy' (N.E.D.B. 1964a: 11). This policy is rooted in historical attitudes. Ingram (1955: 170-1) was writing of the pre-war period when he said:

> Conservative [monetary] policies were initiated by the monarchy and they have been continued by the constitutional regime in spite of many changes in the government. The chief aim of monetary policy has been to safeguard the international position of the baht, and the government seems to have put this aim above such national interests as economic development and stability of prices and incomes . . . The principal reason for the desire of the government to place the baht in a sound international position has doubtless been the very real fear of foreign intervention . . . .

These comments are clearly still relevant to an understanding of Thai policies. Monetary policies are discussed at length in Chapter 8.

Is Thailand a special case?

If one were to produce a pen picture of the typical less developed country on the basis of some prominent cases in Asia and Latin America and as it seems to emerge from the spokesmen of the countries themselves and from the literature connected with the United Nations Conference on Trade and Development, it would be something like the following.

The export industries are mainly in the hands of foreign owners, or have only recently been wrested from them. These export industries form modern enclaves in an underdeveloped country; they yield high profits and, if still foreign-owned, produce a sense of exploitation among the people of the country. Exports are highly concentrated, with one or two products dominating export income. The exports are foods or raw materials which are marketed in the industrial countries and which suffer from agricultural protectionism and from the development of synthetics in those countries. The prices of these exports have been steadily falling, so that, with the prices of industrial products rising or steady, the terms of trade are deteriorating, and will no doubt continue to do so in the future. Not only have prices been falling, but there has been a physical 'export lag', in the sense that the volume of exports has been growing very little; since world trade in manufactured products has expanded rapidly in the post-war

period, the share of these exports in world trade has been declining. These sad experiences and even sadder prospects, combined with a belief that wealth and manufacturing industry go together, have induced the country to attempt to build up import-replacing manufacturing industry behind a wall of tariffs or import restrictions. This has led to large imports of capital equipment and raw materials, so that on balance imports have probably increased as a result. The balance of payments situation is permanently critical, other than in exceptional export boom years; foreign assistance and import restrictions are just sufficient to ensure that foreign exchange reserves stay at a bare minimum. The population is growing rapidly, and the rate of growth of the gross national product is barely sufficient to maintain average income per head constant. The country could make much more use of foreign aid, immediately to maintain consumption levels and industrial production by financing extra imports of consumer goods and raw materials, and in the longer run to increase investment. If only the trade and aid problem could be solved, vigorous development to raise the standard of living would surely follow.

Perhaps this is a caricature, but it has been worth spelling it out in some detail to show in what respects Thailand, no doubt like some other countries, differs from what is widely believed to be the general case.

Tin mining is largely in the hands of Western enterprise. But all the agricultural products, rice, rubber, maize, and so on are smallholder products. Strikingly there is only one sizable Western-owned rubber estate, compared with Malaysia and Indonesia, where about half the rubber produced comes from estates either now or once predominantly Western-owned. Thus in Thailand the products of an 'enclave economy' account for only a very small part of exports. There is little doubt that the absence of Western estates is explained by the fact that Thailand has never been a colony. A sense of exploitation may sometimes be detected in Thailand; but this is alleged exploitation by Chinese, not Western traders. In terms of current South-East-Asian nationalism, practically all trade, whether domestic or foreign, is in the hands of 'foreigners'. Yet this is very much a South-East-Asian, not an international, meaning of the term. And even in this respect Thailand differs from other South-East-Asian countries. Its Chinese are more assimilated, and could perhaps be more legitimately regarded as nationals who happen to be of foreign extraction, than those in any other South-East-Asian country.

Before the war Thailand's exports were certainly concentrated, with rice accounting for about half of export value. Since the war there has been some diversification with the growth of rubber exports. By 1955 rice accounted for 44 per cent and rubber for 25 per cent of the value of exports. In a well-known study of the commodity concentration of trade, Michaely (1962: 6-12) found that, on the basis of 1954 figures and using a special coefficient of commodity concentration,[9] Thailand had the ninth most concentrated export pattern in a group of forty-four countries.

[9] The coefficient $C_x = 100\sqrt{\sum_i \left(\frac{x_i}{x}\right)^2}$ where x_i is the value of a country's exports of commodity i while x is the value of its total exports.

Its exports were found to be more concentrated than those of Malaya and Indonesia, for example. Since then there has been the change described in this chapter. For the two years 1963 and 1964 rice averaged only 36 per cent of exports, rubber 21 per cent, and many other products made up the remainder. If one recalculates Michaely's coefficient by using Thailand's 1963 export figures it is found to fall sharply;[10] if the coefficients of the other forty-three countries were the same as in 1954, Thailand would come only twentieth on the list of export concentration. More significant than the level of export diversification reached is the trend. Thailand is certainly exceptional among less developed countries in having successfully diversified its agricultural exports in recent years.

The markets for Thailand's rubber and tin are in industrial countries; these products suffer from severe competition from substitutes, and they are subject to all the problems of the export products of the typical less developed country. But rice is sold to other less developed countries (and Japan). If its price is falling it is not obviously the fault of the industrial countries, although one could argue that if the industrial countries paid higher prices for Indonesia's exports, Indonesia would be able to buy more of Thailand's rice. Furthermore, United States surplus disposals of wheat and rice to India, Pakistan, and elsewhere have clearly weakened the rice market. But the cessation of these gifts of food would be a loss, not a net gain, to less developed countries as a whole. Thailand's newer exports, maize, kenaf, and cassava, are marketed in the advanced countries (including Japan in this group). Thailand's experience with these products suggests that if the export pattern responds to changing market conditions it is indeed possible to expand exports to advanced countries or to compensate for losses of other exports.

The prices of the two principal exports, rice and rubber, have been falling, though the fall in the price of rice has been by no means consistent. But this has not led to the sad consequence with which the 'typical' country has had to cope because the Thais have moved at least marginally into other exports where the markets have been more favourable. Thailand has shown some ability to respond to the message of changing price relationships. Furthermore, Thailand has not suffered from an 'export lag'. The growth in the volume of rice exports has been slower than the growth in world trade volume in general or in the Thai gross national product, but it has been compensated for by increased output of rubber, maize, and other products.

Thailand, unlike so many other countries, has not put the emphasis of development on import-replacing industrialization. Hence she has not imposed widespread import controls or protective tariffs. Public spending has been directed to improving a very backward infrastructure, with the benefits going substantially to agriculture. Economic growth, as represented by the expansion of rubber, maize, kenaf, and cassava, has been export-led. Thailand must be one of the few less developed countries other than oil exporters of which one can say that in recent years foreign trade, through the growing markets it has provided, has been an 'engine of growth'.

As has already been mentioned, Thailand has not had balance of payments difficulties. A conservative monetary policy, foreign finance for all

[10] Michaely calculated the coefficient for 1954 at 68·3. For 1963 it becomes 44·8.

major development, the avoidance of ambitious capital-intensive projects which are domestically financed, and growth stimulated by export markets have all contributed to making Thailand a very special case in this respect. It is striking that in 1964 and 1965 Thailand's ratio of reserves to imports was much higher than that of West Germany.

According to the national income statistics, Thailand's rate of growth in recent years has been remarkably high. It has clearly been more than enough to keep up with a population growth rate of 3 per cent, and the growth rate per head places Thailand with the faster growing less developed countries. But it is difficult to assess this high growth rate. Partly it is explained by some exceptional harvests. It may also be explained by the Bangkok boom, by statistical overweighting of some Bangkok economic activities, by underweighting of the rice sector because of the rice premium, and by various deficiencies in the national income statistics. There is no evidence that a substantial transformation has filtered through to a large section of the rural population. But if there really have been such high growth rates, and if they were to continue, then a significant transformation of the economy could not be ruled out.

Thailand has plenty of problems, economic and non-economic. But at present these are not principally trade problems. With falling prices of rice and rubber, external conditions have not been wholly favourable. The prospects for these two products, which together still account for roughly half of total exports, are by no means assured. But at least the world has presented Thailand with some new export opportunities which its people—mainly, it might be added, through the initiative of its Chinese traders—have seized upon. There is also another contrast between Thailand and many other countries, such as Indonesia. In a country like Indonesia essentially internal economic problems, remedies for which involve internal policy measures—measures for increasing output and holding monetary demand in check—manifest themselves as foreign exchange problems. The internal problems of Thailand have not done so, and in the light of Thailand's history of caution and of a conservative monetary policy it seems at the moment improbable that its rulers will allow internal problems to manifest themselves as trade problems in the future.

But it would be quite wrong to end on a note of optimism. The only correct note can be one of uncertainty. Export prospects depend to a great extent on internal economic developments—particularly the rate of population growth, the continued development of the infrastructure, the extension of flood control and the adoption of improved agricultural methods. Above all, prospects depend on the preservation of internal peace. Apart from the essentially internal or political problems (perhaps brought in or assisted from outside) great uncertainties surround foreign aid and investment. While increasing unrest in South-East Asia has yielded more military or military-orientated aid, especially in Thailand, America's vast aid expenditures all around the world can never be taken for granted, and at the time of writing there are clear signs of increasing reluctance in the United States to continue with large economic aid programs. Furthermore, increasing political uncertainties as well as any actual warfare in Thailand would no doubt dry up the flow of private direct investment.

7

The Exchange Rate System and the Taxation of Trade

W. M. CORDEN

This chapter describes the various ways in which trade has been taxed or controlled in Thailand. Particular attention is paid to the taxes and controls on the principal export, rice. The taxes, controls, and exchange rate devices described here are not the only ways in which government policies have influenced trade. For example, expenditures on irrigation, transport, and communications have obvious effects in raising the capacity to export and are, indeed, probably more important than the tax system. The whole gamut of economic policies has some bearing on trade. But the devices described here have the most direct effects.

The first part of the chapter describes the multiple exchange rate system which operated up to 1955. While this has been described briefly by Ingram (1955) and at length by Yang (1957) it seems useful to expound it in some detail here since it provides the background to developments since 1955. Furthermore, neither Ingram's account nor Yang's covers the whole of the period of operation of the system, and additional statistical information has become available since they wrote. Perhaps also the method of analysis used here will help clarify the implications of a rather complex system. Included in this first part of the chapter will be an explanation of how the system affected the monetary mechanism and monetary statistics.

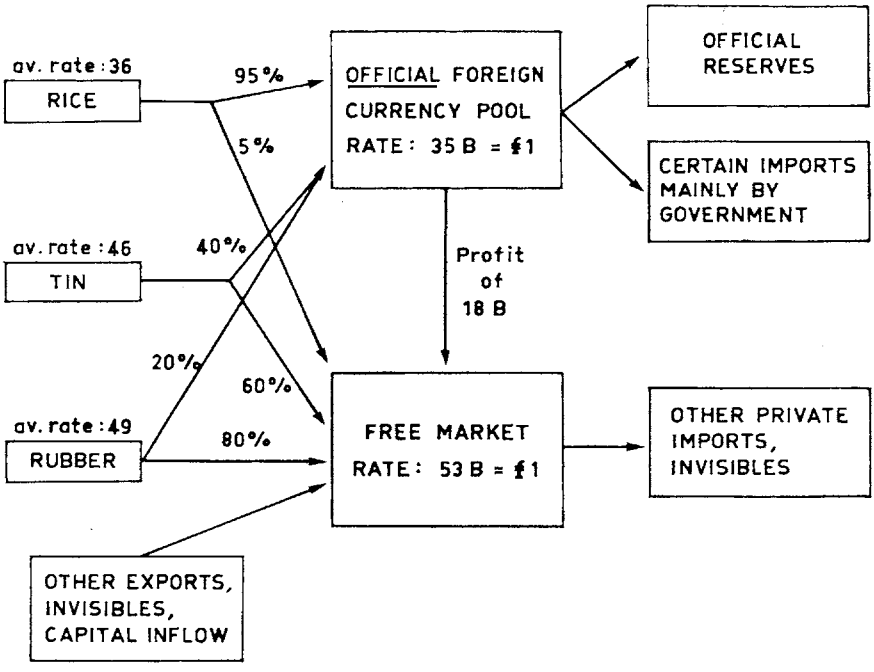
The second part of the chapter describes taxes and controls on trade since 1955, while the last part discusses briefly the far-reaching implications of the taxation of trade on government revenue and income distribution.

The multiple exchange rate system and the state trade in rice, 1947-55

The system, 1947-51. In the post-war period up to 1955 a complex exchange rate system operated. This was associated with a government near-monopoly of the foreign trade in rice, and, during some of the period, with quantitative restrictions on imports. The multiple exchange rate system developed out of the exchange control confusion of 1945 and 1946. In 1947 exchange controls were relaxed and the black market rate was officially recognized. The system which then resulted, and which remained substantially in the same form until 1951, can be described with the aid of Chart I. The rates, ratios, and regulations cited are those which ruled

in 1951 and are expressed here in relation to the pound sterling. The subsequent section will describe changes from 1952 to 1955. The system was a typical multiple exchange rate system, very similar to those which developed in a number of other neighbouring countries.

Chart 1 The Multiple Exchange Rate System, 1951



About 95 per cent of rice exports were handled by the government's Rice Bureau, and these export returns were converted at the official rate. Private rice exports (about 5 per cent of the total value of rice exports) were converted at the free rate. Exports of other commodities were all conducted privately. Twenty per cent of rubber exports and at first 50 per cent and later 40 per cent of returns from tin exports had to be converted at the official rate. Proceeds from other exports and from invisibles and capital inflow could be converted wholly on the free market. Outgoings from the official pool consisted of payments for certain imports (mainly on government account), payments into the foreign currency reserve, and sales to the free market. At the rates ruling in 1951, a profit of 18 *baht* was made on every pound sterling sold from the official pool in the free market. Private importers had to buy their foreign currency on the free market, with the exception of a few products to which the official rate applied. Similarly, payments for invisibles came out of the free market.

The net result was to establish a variety of effective exchange rates. Using the 1951 rates, at the limits there were the official rate of 35 *baht* to the pound sterling and the free rate of 53 *baht*. In between were the effective rates for rice (government and privately traded rice combined) of 36 *baht*, for tin 46 *baht* and for rubber 49 *baht* to the pound sterling. The

system was in effect a combination of trade taxes and subsidies. If one made the extreme assumption that the free rate would have been the equilibrium rate, then the system meant that any exporter who was able to convert his sterling into *baht* only at the official rate, like the state's Rice Bureau, was taxed 34 per cent (18/53), a tin exporter was taxed 15 per cent, and a rubber exporter 7·5 per cent. Those imports for which foreign currency could be obtained from the official pool had in effect a 34 per cent subsidy.

It is likely that if the official and the free markets had been merged, a new equilibrium rate would have been established. This rate would probably have been between the two rates but closer to the free rate. It is impossible to calculate what this equilibrium rate would have been, for one would need to know the relevant supply and demand elasticities. Assuming infinite foreign elasticities of demand for Thailand's exports and of supply for its imports, the equilibrium rate would be a weighted average of the actual effective rates for the different products, the weights depending both on the actual trade values and (for exports) on the domestic supply elasticities and (for imports) on the domestic demand elasticities. The higher the elasticities the greater the weights. It seems likely that the elasticity of supply of rice was less than that of 'other' exports, and that similarly the elasticity of demand for government and other special imports was considerably less than that of 'other' imports; hence the items being traded at the free rate would carry much heavier weights than the items being traded at the official rate. A reasonable guess is that in 1951 the equilibrium rate would have been 49 *baht* to the pound. Using this for an illustrative calculation, the actual rates operating in 1951 represented the taxes and subsidies shown in Table 7.1.

TABLE 7.1 Thailand, Exchange Rates in 1951 (*baht* to £ sterling)

Item	Actual effective rate in 1951	Which represented relative to the rate of 49 *baht*	
Rice	36	export tax of	27%
Tin	46	export tax of	6%
Rubber	49	no tax or subsidy	
Other exports	53	export subsidy of	8%
Government and other special imports	35	import subsidy of	29%
Other imports	53	tariff of	8%

Source: (column 1) Yang (1957), I.M.F. (1948-).

It should be noted here that in addition to the multiple exchange rate system there were also ordinary import duties. If a duty were, for example, 15 per cent, then combining it with the subsidy or tax implicit in the exchange rate system, a 'special' import would really be subsidized at the rate of 14 per cent while an ordinary import would be paying a total import tax of 23 per cent.[1]

[1] Using data from Yang (1957: Tables 22, 26) one can calculate that if all 1951 imports (with a value of $272 m. c.i.f.) were valued at the hypothetical equilibrium rate of 49 *baht* to the pound, then the value of customs revenue collected in 1951 as a percentage of imports c.i.f. would be about 15%. One may perhaps regard this as some approximation to the average level of the tariff in that year, bearing in mind that there are many difficulties in the concept of the average tariff.

Changes in the system, 1952-5. The system operated in its simplest form from 1948 to 1951. Subsequently a number of changes took place, though they did not alter the essential features. In 1952 the free rate was forced down from 51 to 45 as a result of deliberate, and probably misguided, government policy imposed upon the Bank of Thailand. This 'administrative appreciation of the free *baht*' was achieved by the diversion of foreign exchange from the official reserves on to the free market. There were two main reasons for the policy, one anti-inflationary and the other a belief that the *baht* was really worth more than it actually was.[2] This overvaluation of the currency coincided with the post-Korean downturn in commodity prices. Imports rose in 1953 and the balance of payments deficit increased. There was apparently some speculative outflow of capital, and the reserves—mainly their sterling component—fell. Nevertheless, at the end of 1953 the reserves were still over 90 per cent of the value of imports, though the trend was clearly downwards. The authorities apparently thought that they had a balance of payments crisis on their hands and imposed quantitative import restrictions as well as raising import duties.

The system of import restrictions imposed in November 1953 was comprehensive in its range and had familiar characteristics. Imports were classified into essentials, semi-essentials, and luxuries. For items in the first category licences were issued automatically, for items in the second category they were issued on the basis of each importer's highest value of imports in the preceding five years, while items in the third category were licensed either on an *ad hoc* basis (for example motor cars) or to the lowest value of imports during the preceding five years. The system did not work well and was subject to maladministration and corruption.

The new selling rate of 45 *baht* to the pound clearly overvalued the *baht* and the Bank of Thailand could not continue freely to supply funds at this rate. Therefore, from 1953 it limited this rate to certain more essential imports. The number of items to which this preferential rate applied was steadily reduced until only a few (for example milk and medicines) were left, the transfer of commodities away from the preferential rate being done slowly so as to avoid an undue rise in prices. Another minor complication was that from March 1954 the Bank of Thailand sold foreign currency to the commercial banks not only at the preferential rate (for specified imports only), but also at something just below the free rate, namely at 58 *baht* to the pound, so presumably presenting the commercial banks with a profit of 2 *baht* to the pound. This complication did not affect the rates available to traders.

At the end of 1954, shortly before the abolition of the whole system, the rates were as shown in Table 7.2.

The profits from the multiple exchange rate system. The Bank of Thailand made substantial profits from the multiple exchange rate system through buying foreign exchange from exporters at a low official rate and reselling it to commercial banks for the use of importers at a higher rate. We have seen that in 1951 a profit of 18 *baht* to the pound sterling was made on these sales. At the end of 1954 a profit of 10 *baht* was made on every pound sold by the Bank of Thailand at the preferential rate and a profit

[2] This episode is discussed further in Chapter 8. A full description is in Yang (1957: Ch. 8).

of 23 *baht* on every pound sold to the commercial banks at the rate of 58. Conflicting figures are available from various sources of the total profits in different years. We shall use the figures published in the I.M.F.'s *International Financial Statistics* (1948-) as the latest and probably the correct figures. These are, in *baht,* 430 million (1951); 670 million (1952); 510 million (1953); 620 million (1954); 20 million (1955).[3]

TABLE 7.2 Thailand, Exchange Rates at End of 1954
(*baht* to £ sterling)

Official rate	35	government receipts and expenditures, Rice Bureau exports, student remittances
Preferential import rate	45	certain essential imports (milk, medicines)
Partial export rate	55	rubber, tin (20% official, 80% free)*
Free rate: buying	60·07	(all other imports and exports)
selling	60·64	(invisibles and capital movements)

* In September 1952 the proportion of tin export income to be converted at the official rate had been reduced from 40% to 20%.

Source: I.M.F. (1948-), Bank of Thailand (1943-), Bank of Thailand (1958-).

The profits from an exchange rate system are similar in their economic effects to the revenue raised from an import tariff or an export tax. Their magnitude can be assessed in the same way. The profits can be related to the value of imports at the free rate. Assuming that the free rate would have ruled if the system had been replaced by tariffs, we can say to what level of uniform *ad valorem* tariff the system was equivalent. In 1952 the profits were 11·8 per cent of imports, in 1953 8·5 per cent, and in 1954 9·3 per cent. Thus the same revenue would have been raised in these years by a general import tariff at these rates. Of course, the multiple exchange rate system was not a form of *uniform* taxation; thus it had additional and highly significant effects owing to its selective nature. Furthermore, the equilibrium rate would have been somewhat below the free rate, so that these percentages are somewhat of an understatement. Another measure of the importance of the exchange rate profits is their relation to total government revenue. The profits were not, as we shall see, included in the budget, but if the collection had been made in the form of import duties or export taxes they would have been included, and in that case would have accounted for 11 per cent in 1953 and 12 per cent in 1954 of government revenue.

Finally, it is necessary for an understanding of Thailand's post-war monetary statistics to note how the exchange profits affected the monetary mechanism. The central point is that these profits, though in their basic economic effect similar to a set of export taxes and import tariffs, went not into the government budget but to the Bank of Thailand. Taken by themselves, they were thus a deflationary influence. On the other side of the picture, the government borrowed from the Bank of Thailand in order to

[3] Yang (1957: Table 26) gives the following figures, those for 1949 and 1950 being his own estimates: 336 m. *baht* (1949); 226 m. (1950); 227 m. (1951); 580 m. (1952); 478 m. (1953). I.B.R.D. (1959: 286) gives these: 660 m. *baht* (1952); 580 m. (1953); 630 m. (1954); 220 m. (1955).

cover its budget deficits, and this, by itself, was an inflationary factor. Therefore, if one wants to determine the net inflationary impact of the Bank of Thailand's combined dealings with the government and the exchange rate system one should subtract the exchange profits from its lending to the government. In effect, the government borrowed funds from the Bank of Thailand which, if they had been collected directly in the form of export taxes or import tariffs, would have gone straight into the budget. For this reason the government budget of deficit was to a considerable extent illusory, at least in 1952 and 1954, for a large part the government's finance was not really inflationary. In 1952 84 per cent of the government's borrowing from the Bank of Thailand was covered by exchange profits, in 1953, 27 per cent, and in 1954, 42 per cent. This consideration is important in avoiding a misleading interpretation of statistics of the government budget deficits.

The technique of taxing trade through the exchange rate system rather than through import duties or export taxes can also affect statistics of the sources of increase in the money supply. One possible procedure is to subtract the profits from the net value of money-generating official reserves; in this case an increase in exchange profits does not increase any of the determinants of the money supply. This is the procedure followed in the *International Financial Statistics* (I.M.F. (1948)) and in the figures of the Bank of Thailand (1943-). The alternative is to treat the profits in the same way as revenue from import or export taxes would be treated. Exports are valued at the free rate for the purpose of determining the *baht* value of a money-generating change in official reserves. Thus a rise in the profits raises the 'external' source of the money supply. But if the profits are not spent by the Bank of Thailand this is then offset by a reduction in the 'internal' source of increase in the money supply; the accumulation of profits by the Bank is equivalent to the effect of the government running a surplus due to the accumulation of revenue from export taxes. This method is used in the International Bank figures (I.B.R.D. 1959: 288). The point here is that the division between 'external' and 'internal' sources of an increase in money supply is to some extent arbitrary, depending on the way in which exchange profits are treated.

The state trade in rice and the net taxation of rice. An integral part of the whole system of government taxation of trade was the state control, taxation, and operation of foreign trade in rice. This needs to be seen in relation to the multiple exchange rate system.

Rice moved freely from producers to rice millers, at least since 1948. With regard to that part which was to be exported, the millers then paid a small export duty of about 4 per cent. The export rice then had to be sold to the Rice Bureau, an agency of the Ministry of Economic Affairs. The Rice Bureau in turn sold it to foreign buyers on the basis of government-to-government contracts. Its selling prices were usually below the world free market price of rice. Through the Bank of Thailand it converted its foreign exchange returns into *baht* at the official exchange rate, a conversion which—as we have seen—implied a tax on rice. Nevertheless, the Rice Bureau still made a substantial profit, since the *baht* price it paid to millers was considerably below even the *baht* it received when its sales price was converted at the official rate. Part of the profits of the

Rice Bureau then went into the government budget. There were thus three taxes on the export of rice: firstly the 4 per cent duty, secondly the profits of the Rice Bureau, and thirdly that part of the profits of the multiple exchange rate system (a large part) which was attributable to rice. In addition, the contract prices of the Rice Bureau were generally below the world free market prices. This may be explained partly by the lower quality of government-exported rice. But in so far as there was some element of charging below the equilibrium price, then the difference, or some part of it (bearing in mind that if all Thai rice had been unloaded on the free market, the free price might have been different) could be regarded as a tax, the benefit of which went not to the government or to the Bank of Thailand, but to foreign buyers.

The available figures of the profits of the Rice Bureau supplied by the Ministry of Finance have been cited by Yang (1957: Table 26), and are as follows:

	million *baht*
1949	329
1950	140
1951	130
1952	362
1953	322

When the figure for 1953 is compared with the International Bank's figure of 816 million *baht* for 'export and similar taxes' on rice—which must include the profits of the Rice Bureau but not the Bank of Thailand's profits—we may guess that the figures supplied by the Ministry of Finance are a large understatement of the total Rice Bureau profits. The explanation may be indicated by the following remarks by Ingram (1955: 186):

> These figures represent merely the profits transferred to the Ministry of Finance in these years. They do not represent the *total* profit of the Rice Bureau. The complete records of this agency are not available to the public. It is frequently alleged that part of the rice profits are being siphoned off by high officials, and for this reason it is unfortunate that the government does not render a full accounting.

What then was the total taxation of rice from the profits of the Rice Bureau, the profits of the multiple exchange rate system, and the ordinary export tax? Using the International Bank figures (reproduced as the first line of figures in our Table 7.6) which cover both the Rice Bureau profits and the ordinary export tax, and relating these to what the *baht* value of rice exports would have been, approximately, if the free rate had ruled, we obtain a ratio of 21 per cent for 1953 and 27 per cent for 1954. To this one must then add the export tax implicit in the multiple exchange rate system—estimated above at 27 per cent for 1951 on the assumption of an equilibrium exchange rate lower than the free rate—with the result that the total rate of tax on the export of rice was probably of the order of 50 per cent or more.

The very large gap between the world price converted at the free exchange rate and the Rice Bureau price to millers naturally provided an incentive to smuggling. Partly to divert smuggled rice, and partly to assist the difficult economic situation of millers, some private exports (about 5 per cent of total rice exports) were permitted. Rice for private export was

subject to licence and exports had to be made in the name of the Ministry of Economic Affairs. Returns up to the value of the Rice Bureau's standard export price had to be surrendered at the official rate while the excess could be converted at the free rate. The Rice Bureau charged a premium on licences to export privately, though this was never adequate to deprive private exporters of substantial profits from the transaction. The gap between the free world price and the Rice Bureau's contract price was sometimes quite substantial, for example in July 1953 the government-to-government contract price was 75 per cent of the commercial price. Hence the permission to export privately was a significant privilege.

Liberalization in 1955 and the Exchange Equalization Fund. In 1955 the multiple exchange rate system was abolished. A single exchange rate was established, supported by an Exchange Equalization Fund. Quantitative import restrictions ceased to apply to most imports. The export of rice was returned to private trade, and taxes on exports were adjusted partly to compensate for the ending of the multiple exchange rate system. Some of the factors explaining this important change in policies will be discussed in Chapter 8.

The exchange rate was unified in 1955 at a level approximately equal to the free market rate at the time, namely 58 *baht* to the pound sterling or 20·7 *baht* to the U.S. dollar. No par value was established with the International Monetary Fund; instead the Exchange Equalization Fund was established, and this fund has bought and sold foreign exchange in the market in order to keep the rate stable. During the period 1955 to 1963 the rate has fluctuated no more than 3 per cent around its average level. The reluctance to establish a par value reflected a characteristic Thai caution. In October 1963 a par value was finally established at 20·8 *baht* to the U.S. dollar, and since then the Exchange Equalization Fund has maintained the market value of the *baht* very close to this level.

In March 1955 the foreign exchange holdings of the Bank of Thailand were revalued from the original official exchange rate of 35 *baht* to the pound to the new rate of 58 *baht*. A substantial 'profit' of 2,500 million *baht* resulted, which was, of course, purely a paper profit, since the reserves valued in foreign currency had not altered. It enabled some of the reserves to be withdrawn from their use for the Note Issue Reserve and a part—to the value of 1,200 million *baht*—was used to become the initial capital of the Exchange Equalization Fund. It may be noted here that the revaluation of the reserves, while not affecting the total money supply, did affect the *sources* of the change in the money supply, as recorded by the Bank of Thailand. By raising the *baht* value of the reserves it appeared to increase the 'external' source of increase in the money supply offset by an equal decrease in credit to the public sector, reflecting the accumulation in various places, such as the Exchange Equalization Fund, of these same newly-created *baht*.

Now (1966) the official reserves of Thailand are held in two forms, the first the holdings of the Bank of Thailand and the second the holdings of the Exchange Equalization Fund. At the end of 1960 19·5 per cent of the total reserves were held by the Fund, and at the end of 1964 12·5 per cent. From most points of view the distinction between the two types of holdings is not significant. The control is the same, since the Fund is in fact managed

by the Bank of Thailand. The sum of the reserves represents the extent to which Thailand could sustain a drop in export income without necessarily reducing imports. The distinction acquires significance once account is taken of the legal requirement that the currency must have a specified minimum backing in gold or foreign exchange. Until 1958 the currency had to be covered 100 per cent in this way, but under the Revised Currency Act of 1958 the legal minimum was reduced to 60 per cent. In fact the Bank of Thailand's holdings since then have been consistently higher than required; at the end of 1960 gold and foreign exchange made up 72 per cent of the currency reserve, and at the end of 1964, 74·5 per cent. Nevertheless it is true that given this institutional constraint and given a policy of maintaining the foreign currency value of the *baht* with the minimum exchange or import controls, it becomes desirable that a sum should be set aside in a fund such as the Exchange Equalization Fund which does not form part of the currency reserve and which is therefore available to be sold on the market whenever the value of the *baht* might otherwise decline. It is similar to the pre-war Exchange Equalization Account of the United Kingdom.

Taxes and controls on trade since 1955

The rice trade. Since the general liberalization in 1955 involving the ending of the multiple exchange rate system and the substantial return of private trade in rice, the government has intervened in the rice export trade in three ways: it has imposed a new export tax on rice, called the 'premium'; it has continued to make certain government-to-government contracts; and it has maintained and sometimes used the power of licensing exports.

We have seen that up to 1955 rice exports were taxed in three ways. There was an ordinary export duty which varied according to types of rice, and was 4·2 per cent for white whole rice and 4·4 per cent for white broken rice; this tax remained after 1955. In addition there were the profits of the multiple exchange rate system and of the Rice Bureau, which together may have taxed rice by 50 per cent or so. These latter taxes were replaced in 1955 by the rice premium. This premium has to be paid in the form of a three-month promissory note when an export licence is obtained. It varies for different grades of rice and is fixed in specific form—so many *baht* per ton. It has been varied quite often, mainly to keep in line with the price, so as to avoid too great a change in the *ad valorem* value of the premium. It is used also, as we shall see, to ensure that sufficient rice becomes available to fulfil government-to-government contracts, and to prevent the domestic price increasing unduly when there is a marked rise in the world rice price, as in 1962. This rice premium was really a development of the premium that had been charged on privately traded rice before 1955, so that it was not entirely new. But, as we have seen, before 1955 only a small share of rice was in fact privately exported, and it must be regarded as essentially a new tax, replacing the profits of the Rice Bureau and of the exchange rate system.

The figures in Table 7.3 show the approximate *ad valorem* equivalent of the rice premium. It will be noted that it has been considerably less than the rate of tax implicit in the exchange rate and Rice Bureau trade system which it replaced.

TABLE 7.3 The Rice Premium, 1956-64

Year	Revenue from premium (*baht* m.) (1)	Value of rice exports (*baht* m.) (2)	Average premium (%)* (3)	Average premium per ton (*baht*) Govt traded rice† (4)	Privately traded rice† (5)	Total† (6)	Total‡ (7)
1956	842	3,086	27·3	—	—	—	748
1957	840	3,943	21·3	—	—	—	535
1958	812	2,968	27·4	—	—	—	717
1959	756	2,576	29·3	—	—	—	692
1960	745	2,570	29·0	420	638	584	619
1961	866	3,598	24·1	416	657	564	556
1962	804	3,240	24·8	237	703	550	633
1963	798	3,424	23·3	436	743	632	563
1964	1,090	4,461	24·4	547	736	650	575

* First column as a percentage of second column figures. Note that this is an average figure applying to all rice, whether government-traded or privately traded.

† These figures refer to crop years ending in September of the year indicated.

‡ These figures have been calculated by dividing revenue from premium (column 1) by tonnage shipped in each year according to the customs returns and are on a calendar year basis. The averages for the five roughly comparable periods cited (1960-4) show a discrepancy of only 1 per cent.

Source: (Column 1) The figures of premium revenue 1956-60 and 1962-3 come from the National Statistical Office (1956-(1956-8, 1963, 1964)), citing as their source the Ministry of Finance, Department of the Comptroller General. For 1961 the *Statistical Yearbook* gives revenue on a 9-month fiscal year basis, not cited above. The source for the calendar year 1961 estimate in the table and for 1964 is N.E.D.B. (1965a). These two sources otherwise quote the same run of figures over the years, but somewhat differing estimates are published in Budget Bureau (1956-), citing the Ministry of Economics, Department of Foreign Trade, as their source. Both sets are actual revenues. (Columns 4, 5, and 6) Export Division of the Department of Foreign Trade (as supplied to Dr D. Usher).

It is the government's policy to encourage the private trade in rice and it enters into government-to-government contracts only 'when appropriate', which means when it is desired by governments in importing countries. In the three years 1957 to 1959 about 22 per cent of total rice exports were subject to these contracts, and in the four years 1960/1 to 1963/4 the proportion was 32 per cent. The increasing importance of these contracts is explained mainly by the higher share of exports to Indonesia. The countries with which most of the contracts are made are Indonesia and Japan. Over the period 1957-9, of all government exports 34 per cent went to Indonesia and 26 per cent to Japan, and in 1960-4 61 per cent went to Indonesia and 13 per cent to Japan (FAO 1952-).

The operation of these contracts is the principal remaining function of the Rice Bureau—now the Rice Division of the Department of External Trade. In the actual mechanism of the contracts it is attempted to minimize the functions of the state. The Ministry of Economic Affairs carries out the negotiations, closely consulting with the rice traders. It does not sign the contracts until it has made the necessary agreements with the private exporters. The government administrative machinery is quite small and it could be said that the contracts are in fact negotiated by a syndicate of private firms with a foreign government, the Thai government intervening only as a guarantor of the buyers (Anon. 1961: 74). Nevertheless, the government does legally acquire the rice from the millers at one price and sell it at another, the difference being the rice premium. One question is

how the government ensures that private traders fulfil its contracts, since contract prices are sometimes lower than can be obtained in the open market. The answer seems to be that the premium charged on government-contracted rice is adjusted, if necessary being reduced below the premium charged on privately exported rice. As shown in Table 7.3, the premium per ton collected on government-contracted rice has been less than that collected on privately traded rice. Occasionally export licensing has also been used for this purpose.

The prices which are agreed upon are usually close to the market prices but do not necessarily coincide with them. Price comparisons cannot be made easily because the quality mix of private and government-contracted trade differs. There does seem to be a tendency for changes in government-traded rice prices to lag behind the variations in the private market price. This is shown in the Food and Agriculture Organization rice price indices for privately traded and for government-traded rice reproduced in Table 7.4. These indices refer to world trade as a whole, and not just to Thai trade. In the years of high rice prices—1957, 1958, and 1962—government prices lagged behind while in the years of low prices—1959-61—government prices were higher. Prices of privately traded rice reached a peak in 1962, but government-contracted prices were quite low in that year but rose in the following two years.

TABLE 7.4 Indices of Prices of Long-medium Rice in World Trade (1957-9 = 100)

Year	Private	Government	Total*
1957	101	98	100
1958	107	103	105
1959	91	99	95
1960	83	94	88
1961	93	97	95
1962	108	98	103
1963	103	104	103
1964 (prelim.)	100	109	104

* Weighting of total index, on basis of world trade 1957-9, is private 50·4%, government 49·6%.

Source: FAO (1952-).

The export of rice still requires a licence. Firstly this is to ensure payment of the premium, since a promissory note for the premium must be provided when the licence is obtained. Secondly it makes possible export control to avoid a rise in domestic prices when the Thai rice crop is exceptionally small or overseas prices are exceptionally high. Normally there is no limitation on the quantity exported, but effective export control has been applied on two occasions so far since 1955. Late in 1957 it became clear that the 1957/8 crop would be poor, so export quotas were imposed to ensure adequate local supplies without a rise in the domestic price. Exports in 1958 were only 72 per cent of exports in 1957. At first the quotas were allocated directly to traders on the basis of their past shipments, but in 1958 four traders' organizations were jointly vested with distribution among their members of quotas released month by month by the Ministry of Economic Affairs. A similar situation arose again in 1962; to prevent the rise in world prices raising domestic prices and also to ensure that the government obtained sufficient supplies to fulfil its contracts, regulations

were introduced requiring exporters to sell one ton of rice at fixed prices to the government for every ton exported. In effect export licensing is used for the same purposes as variations in the rice premium, and supplements the premium as an instrument of policy.

Taxes and controls on other exports. The multiple exchange rate system as it was near its end required that 20 per cent of export returns from rubber and tin should be surrendered at the official rate of 35 *baht* to the pound. To partly offset the abolition of this low rate in 1955, the taxation on rubber and tin was increased.

A 4 per cent duty on rubber was first levied in 1920. It was raised to 7 per cent in the mid-thirties, at which level it stayed until September 1955. A new scale of duties was then introduced. This was a sliding scale for sheet rubber. (For other types of rubber it remained at 7 per cent.) The scale ranges from 5 per cent to 20 per cent. On the basis of the assessed price of first grade rubber in June 1965 it was 10 per cent. The revenue raised from this duty in relation to the value of rubber exports has ranged between 1955 and 1963 from 8 per cent to 13 per cent. In addition, at the end of 1960 a replanting tax was approved which on the basis of early 1961 prices represented a duty of about 5 per cent.

There is no export duty on tin, but there is a royalty which has the same effect. This is calculated according to a complex formula incorporating a sliding scale. On the prices which have ruled from 1955 to 1963 the effective rate has varied from 15·7 per cent (1955) to 16·5 per cent (1963). With the establishment of the tin smelting plant at Phuket in 1965 all exports of tin ore were prohibited. The Thailand Smelting and Refining Company was given a five-year monopoly on the smelting of all Thai tin ore.

While until April 1958 the export tax schedule listed 25 items, covering almost all important exports, now the only other significant export tax is a 10 per cent tax on timber. As for export licensing, this remains only for the main exports: rice, rubber, tin, and maize. The licence for rubber is required to ensure payment of export tax. The licensing of tin was until 1965 required to enforce Thailand's obligation under the International Tin Agreement and, with the establishment of the smelter, has now been replaced by a prohibition of ore exports. In October 1961 export control on maize was imposed to control the quality of exports and the fulfilment of a contract with Japan. While the maize trade with Japan has always been conducted privately, since September 1962 the Thai traders have been organized in a syndicate which allocates quotas amongst the shippers, and there is a single annual Japan-Thailand maize contract concerned with such matters as price and quality, which is negotiated between a Japanese importers' syndicate on the one hand and the Thai Ministry of Economic Affairs on the other, the latter representing the Thai maize exporters and acting in close collaboration with the Thai syndicate (Lee 1963). The Ministry of Economic Affairs regularly proclaims f.o.b. Bangkok maize prices.

The export of sugar is, in effect, subsidized, the only such case in Thailand. Thai sugar is produced at costs well above world prices. Until 1960 there had been a duty of over 100 per cent; in 1960 a complete import prohibition was imposed. In 1961, against some opposition, a scheme was introduced whereby producers are taxed on the whole of their

production, the tax being refunded to them as a subsidy on exports. This means that prices to domestic consumers are raised, the excess of the price paid by consumers over that received by producers net of the tax being used to subsidize exports. This form of export subsidization is also used to assist the sugar industry in Japan and in Australia, and in Australia is called a 'home-price scheme'.

Import duties and restrictions. The purpose of import duties in Thailand is mainly revenue, not protection. Quantitative import restrictions, concessions on revenue duties on materials, and tax holidays, are the main protective devices. Some of the higher duties do have an incidental protective effect and in certain cases it is difficult to separate the revenue from the protective elements and motives. But in general the revenue motive is paramount; there has indeed been a reluctance to forgo revenue by reducing or eliminating duties on materials even though this would help a domestic manufacturing industry.

Under the Bowring Treaty of 1855 import duties for all articles were fixed at 3 per cent. It was only in 1926 that Thailand finally regained fiscal autonomy. A new tariff became effective in March 1927 and the yield of import duties more than doubled in one year. Since then the tariff has steadily increased to become eventually the largest single source of government revenue. By 1935/6 customs revenue was 22 per cent of the value of imports and 25 per cent of government revenue (Ingram 1955: 183). The schedule is frequently changed or adjusted, for example from September 1955 to June 1959 there were five main changes. Major tariff reforms took place in March 1960 and in December 1964. Before 1960 there had been only 197 specified items; this created problems of classification and many items came in under item 198—'not elsewhere included'. This schedule was replaced in 1960 by one based on the Brussels nomenclature, thus making the classification of items much easier. In addition many specific rates were replaced by *ad valorem* rates, and the Thai tariff is now mainly *ad valorem*. In the reform at the end of 1964, rates were adjusted upwards or downwards, where necessary, so as to make practically all rates multiples of 5 per cent, a useful simplification which students of tariffs would no doubt like other countries to adopt.

How high is the tariff as a whole? There are well known problems in constructing overall measures of the height of tariffs. But these problems apply mainly to countries which have more advanced industrial systems where the tariff is mainly protective. In these cases tariff rates vary greatly, and the high tariffs succeed in keeping out the particular imports on which high tariffs are charged. In Thailand, by contrast, tariffs are mostly designed to raise revenue and not reduce imports, and in general duties are not raised to levels where they have a serious effect on the volume of particular imports. Thus in the case of Thailand the overall ratio of the customs duties collected to the total value of imports gives a reasonable indication of the average height of the tariff. Accepting this measure, the ratio was about 20 per cent in 1958 and 1959, a little lower in the previous years, and about 23 per cent in 1961, 1962, and 1963, as shown in the last line of Table 7.6.

The tariff covers almost all imports, including imports of materials, unless exempted under the Promotion of Industrial Investment Act. In

1963 the largest sources of customs revenue were tariffs on petroleum products, accounting for 21 per cent of all customs revenue, tariffs on cars, trucks, buses, and other vehicles (15·5 per cent of customs revenue), and on textiles and clothing (13 per cent). The large share accounted for by all the remaining smaller items—50 per cent of customs revenue—emphasizes the wide range of the tariff. The biggest single source of revenue was the tariff on petrol. The duties on petroleum products are in specific terms and were increased by over 20 per cent in March 1960 and again by 13 per cent in 1963. The tariff per litre on diesel oil is only about one-seventh of that on petrol, a difference which is likely to cause some distortion in the pattern of petroleum consumption. The opening in 1965 of an oil refinery which is likely to satisfy most or all local needs means that the taxes on petroleum products are now collected in the form of excise rather than customs, though at the time of writing (1966) the actual rates remain unchanged. The range of duties on consumption goods is indicated by the examples in Table 7.5. Apart from tobacco, motor cars, and a few other items, other indirect taxes are relatively unimportant for imported goods, so that these rates do give an indication of the impact of the tax system on prices of these products. The purchase tax (business tax) on passenger motor cars is 20 per cent and on most electrical appliances is 12 per cent. It should be noted that the 55 per cent duty on tea is protective in intent and replaces import licensing. In their role as luxury taxes in a less developed country which has an inadequate income tax system some of these rates, for example on television sets, radios, and fountain pens, must be regarded as rather low.

TABLE 7.5 Thailand, Selected Import Tariff Rates, 1965

	%		%
Toys	80	Travel goods	40
Motor cars	60	Television sets	35
Tea	55	Various textiles	30
Watches	40	Cotton shirts	30
Jeeps	40	Footwear	30
Tobacco, cigars, and cigarettes	40	Radios	30
Woven fabrics, man-made fibres	40	Fountain pens	25
Other shirts	40	Bicycles	25
		Woven fabrics, cotton	25
		Concentrated canned milk	20

Source: Finance (1965).

Since 1955 quantitative import restrictions have applied to a small number of goods only and are used almost wholly for protective purposes. Indeed, the list of goods subject to import control gives a good indication of the range of Thailand's industrialization. In April 1965 the list contained seventy-eight items, many of them minor. In certain cases the quantitative restrictions supplement protective tariffs. In the cases of over sixty items licences are not usually granted (including gunny bags, cement, matches, knitted fabrics, canvas shoes, wooden or straw slippers, sandals, grey cotton shirting and cloth, cotton piece goods as loin cloth or *palai*) these being the products where local production is believed to be sufficient to meet demand. There are at present two items for which there are 'linking' arrangements, namely tea and coffee. Purchases from domestic producers must be at least 15 per cent of imports. Until recently there was also a

linking arrangement for gunny bags: three new gunny bags or four used bags could be imported for every one domestic bag purchased. In January 1959 all imports from China (mainland) were prohibited. In 1960 crude oil was added to the list of goods subject to import control in order to regulate the establishment of new refineries; now that a refinery has come into operation this control has ended. The list of goods subject to import control is frequently varied; it consisted of forty items at the end of 1955, directly after the liberalization, and since then has tended to increase, reaching seventy-eight in April 1965, reflecting deliberate protectionist policies.

The importance of taxes on foreign trade

The taxation system of Thailand has gone through three stages (Ingram 1955: 175-88). In the first stage taxes on opium and gambling were the principal sources of revenue—for example they amounted to 40 per cent of total revenue in 1905. Import and export duties, which were limited by the Bowring Treaty, provided only 11 per cent of revenue in that year. The first major change in the pattern of revenue since the time in the 1890s when systematic budgeting had first begun resulted from the attainment of fiscal autonomy in 1926. Import duties rapidly rose to become the principal single source of revenue. There was no similar development of export taxation at this time, and in 1938 export taxes accounted for less than 5 per cent of revenue. The third stage was the post-war period when export taxes in direct and indirect form came to equal or approach import duties in relative importance. In recent years the relative importance of export taxes has been steadily declining, and perhaps the taxation system is entering a fourth stage.

The importance of taxes on foreign trade during recent years (from 1953 to 1963) is shown in Table 7.6. This table shows that export and similar taxes together with import duties accounted for 47 to 55 per cent of total revenue over the period. These figures call for both explanation and adjustment. The explanation concerns taxes which are 'similar' to export taxes and which have been included. The largest element in the tax on rice since 1955 is the premium, not the tax which is called export tax; up to 1955 the largest element was the profits of the Rice Bureau. There are no explicit export taxes on tin and other minerals, but royalties, which have been included here, have the same effect. In the case of teak and other wood, both the export tax and other levies on forestry have been included. Table 7.7 shows a detailed breakdown for 1958 and for 1962 of the category 'export and similar taxes'.

An adjustment has been made in Table 7.6 for the profits of the multiple exchange rate system, which, as we saw earlier did not enter the government budget but accrued to the Bank of Thailand. It is shown in Table 7.6 that if they had been included in government revenue as another form of trade taxation, total trade taxes would have accounted for 57 per cent of revenue in 1953 and 56 per cent in 1954. This adjustment for the exchange profits is necessary if figures before 1955 are to be comparable with those after 1955, since increases in the rubber tax and tin royalty, and the introduction of the rice premium, were all associated with the ending of the multiple exchange rate system. When these figures are

TABLE 7.6 Thailand, Government Revenue from Taxes on Trade, 1953-64
(million *baht*)

	1953	1954	1955	1956	1957	1958	1959	1960	1961*	1962	1963	1964
Export and similar taxes:†												
rice	816	825	589	981	1,033	942	882	893	830	976	952	1,287
rubber	50	55	140	196	160	129	260	327	174	185	181	163
tin and other minerals	53	43	55	89	89	46	52	85	74	113	122	164
teak and other wood	79	92	95	101	112	118	89	52	35	42	48	49
other exports	33	45	42	50	42	13	17	5	6	8	8	10
Total	1,031	1,060	921	1,417	1,436	1,248	1,300	1,362	1,119	1,324	1,313	1,673
Import taxes	1,047	1,145	1,296	1,414	1,490	1,618	1,803	2,049	1,781	2,504	2,731	2,854
Total taxes on exports and imports	2,078	2,205	2,217	2,831	2,926	2,866	3,103	3,411	2,900	3,828	4,044	4,527
Income taxes (individual and corporate)	241	245	281	320	244	363	381	582	540	728	780	854
Business taxes	250	342	432	437	452	522	626	2,793	2,250	3,430	3,809	4,275
All other revenue	1,445	1,598	1,578	1,636	1,707	1,866	1,946					
Total reported revenue	4,014	4,390	4,508	5,224	5,329	5,617	6,056	6,786	5,690	7,986	8,633	9,656
Adjustments to cash basis	(–100)	+75	+433	–361	+36	–51	–17	–8	–7	–14	–48	
Adjusted total revenue	(3,914)	4,465	4,941	4,863	5,365	5,566	6,039	6,778	5,683	7,972	8,585	
Profits of multiple exchange rate system	510	620	20	—	—	—	—	—	—	—	—	
Total reported revenue plus exchange profits	4,524	5,010	4,528	5,224	5,329	5,617	6,056	6,786	5,690	7,986	8,633	9,656
Export and similar taxes as % of reported revenue	25·7	24·1	20·4	27·1	26·9	22·2	21·5	20·1	19·7	16·6	15·2	17·3
Import taxes as % of reported revenue	26·1	26·1	28·8	27·1	28·0	28·8	29·8	30·2	31·3	31·4	31·6	29·6
All trade taxes (including profits) as % of 'total reported revenue plus exchange profits'	57·2	56·4	49·4	54·2	54·9	51·0	51·2	50·3	51·0	47·9	46·8	46·9
Revenue from import taxes as % of value of imports	17·4	17·1	18·7	19·2	17·9	20·1	20·2	21·7	23·7	22·5	23·2	21·0

* The figures for 1961 are so low because they refer to nine months. Up to 1960 the fiscal year ran from January to December, in 1961 it ran from 1 January to 30 September, and from then on it ran each year from 1 October to 30 September. Thus the last three columns of the table refer to years ending in September.

† 'Export and similar taxes' includes the rice premium, and fees, permits, and royalties collected on export commodities such as rubber, teak, and tin.

Source: (above double line) for 1953-6, I.B.R.D. (1959: 284); for 1957-63, National Statistical Office (1956-(1964)), Budget Bureau (1956-). Profits of multiple exchange rate system calculated from I.M.F. (1948- (Supplement to 1965/6 volume: line 16c)).

TABLE 7.7 Thailand, Export Tax Revenue, 1958 and 1962
(million *baht*)

		1958	1962
Rice	export tax	131	172
	premium	812	804
Rubber	export tax	129	166
	fees and permits	—	19
Tin and other minerals	royalties	46	113
Teak and other wood	export tax	20	13
	fees and permits	98	29
Other exports	export taxes	13	8
Total		1,249	1,324
consisting of	export taxes proper	293	359
	rice premium	812	804
	royalties, fees and permits	144	161

Source: for 1958, Budget Bureau (unpublished); for 1962, Budget Bureau (1956-(1963: export taxes)); National Statistical Office (1956-(1963: premiums, fees, and royalties)).

compared with figures for later years in Table 7.6 it is clear that there has been a significant change since 1955. The rise in export and similar taxes in 1956 was not sufficient to offset the ending of exchange profits, and the average height and relative importance of import duties has increased. Comparing the two extreme years, 1953 and 1963, we find that taxes on trade as a proportion of 'enlarged revenue' (revenue which includes the exchange profits) fell from 57 per cent to 47 per cent. Furthermore, it is quite striking that since 1956 in every year the share of export taxes has declined and the share of import duties has risen. With export taxes down to 15 per cent of revenue and import duties nearly up to one-third of revenue, the fiscal pattern seems to be moving towards the pre-war situation. The fall in the share of export duties is explained by the declining share of rice in export income, the rise in the average import duty and the increased revenue from non-trade sources.

Allowance should also be made for the various other sources of revenue which depend on foreign trade. One might take into account the proportions of revenue from corporate income taxes and from business taxes which are derived from foreign trading companies, including petroleum distributors, and one might include part or all of the 15 per cent tax on profits of foreign companies remitted abroad. An important adjustment would concern tobacco. Apart from the duty on imported tobacco, the revenue from which is included in the figures in Table 7.6, there is a tobacco tax and in addition the contributions of the government's Tobacco Monopoly to the government revenue. These are taxes on both imported and domestically produced tobacco which in 1962 added 555 million *baht* to the revenue, or more than the individual income tax (451 million *baht*). Business taxes of all kinds accounted for 7 per cent of revenue in 1959 and 17 per cent in 1962. As already mentioned, these include sales taxes on imported goods, the rates being low and never above 25 per cent.

The reliance of government on revenue from taxes on foreign trade is common in South-East Asia and indeed in less developed countries generally (U.N. 1961). Thus in 1962 and 1963 the Federation of Malaya derived about 50 per cent of its government revenue from foreign trade taxes, both

import and export. In Indonesia the proportion has ranged from one-third to over one-half, a large part in this case being the profit from a complex multiple exchange rate system. The proportion in Ceylon in the fiscal year 1964/5 was 49 per cent. The basic reason is the difficulty of organizing and collecting other forms of taxation, principally income tax; trade taxation is administratively relatively simple, and, being an indirect tax, politically more acceptable. In Thailand the income tax collection machinery is still at a relatively simple stage; not only are the schedules quite moderate but it seems to be easy for most income earners, other than those employed by the government or by large foreign-owned corporations, to escape payment of tax altogether. The attractions of export taxation have in Thailand been a post-war discovery, the result of the high post-war prices of rice in the world market and the development of state trading in rice.

It has been the post-war development of export taxation, especially on rice, which has made possible an expansion of government revenue and hence expenditure. The result is that the government's activities have been exceptionally dependent on the prosperity of the export industries. This dependence is not only on those exports which directly yield revenue (mainly rice), but also on all other exports, for they make possible the maintenance of the level of imports. A decline in export income not only lowers receipts from export taxes but also reduces revenue from import taxes and from the income tax paid by those foreign corporations and their employees who are engaged in exporting or the distribution of imports. This dependence on taxes related to foreign trade would create difficulties if a development program were ever adopted which reduced the ratio of foreign trade to the national income—as a program of import-replacing industrialization might do. Furthermore, industrialization would involve a shift in the pattern of imports towards basic materials and intermediate goods which in most countries pay little or no duty. As we have seen, a special feature in Thailand is the dependence on one particular export tax, the tax on rice. Our figures show that in 1963 rice, which was 36 per cent of exports, paid 73 per cent of revenue from export and similar taxes. Yet it is not inevitable that the diversification of exports towards crops such as maize and kenaf which pay no tax at all must have an adverse effect on government revenue. For the diversification may have involved a more efficient allocation of resources yielding a higher total export income, hence a higher import bill and so higher revenue from import duties. Thus the net effect on revenue from trade taxes could even be favourable. At any rate, present trends do not justify concern, for the growth in import taxes has more than made up for (more or less) static revenue from export taxes. The ratio of government revenue to gross national product at market prices has remained remarkably steady; it was 12·5 per cent both in 1953 and in 1963 and has averaged about 13 per cent in the intervening years.

What is the incidence of the foreign trade taxes on the real incomes of different sections of the community? The effects of import duties are fairly straightforward; since imports are consumed primarily by the better-off sections of the community, import duties are a form of progressive taxation, making up to some extent for the absence of an effective tax on income and property. The only comment one might make is that the duties are possibly not adequate either in their general level or in the degree of

concentration on income-elastic goods to substitute adequately for effective income and property taxes. The matter is slightly more complicated in the case of the export tax on rice. The effects are of two types, direct and indirect. The direct effect is a transfer of income from rice producer and (possibly) trader and miller to the government. It is doubtful whether the foreign price has been much affected by the tax, so that there is not likely to have been a significant transfer from foreign buyers to the Thai government. The question is whether this tax system is regressive. There are two reasons to suggest that it is, the first being particularly important. Firstly, it is a tax paid by the poorest section of the community—the rice-growers —and thus, through the choice of the commodity taxed, is highly regressive, and certainly an inadequate substitute for a satisfactory income tax if equity is a consideration. Secondly, by taxing this section of the population through a tax related to the quantity or value of the final product and not the profits or surplus earned by producers (or perhaps the imputed value of the land) it is additionally regressive. A rice grower in the Central Plain who is able to produce a ton of paddy at a low cost pays the same tax as a grower in the Northeast Region who produces it at a high cost. (This is not to suggest that it is at present practicable to calculate the costs of producers and to tax them on the basis of their 'profit'.)

This, however, is not the whole story. There is also a progressive element in a tax which is after all a tax not on rice production but only on rice sold. The tax is not paid on rice produced for the farmer's own consumption but only on his marketed rice; since the better-off farmer is likely to market a larger share of his production, as between rice growers the tax is probably on balance progressive. The indirect effect of the rice export tax is that it lowers the price of rice which is marketed and consumed within Thailand. It has thus the same effect as a subsidy to domestic purchasers of rice—notably, but not only town-dwellers—which is financed by producers (and distributors) of rice. This is an important income distribution effect, clearly the principal way in which government policy in Thailand affects the distribution of income.

In addition to these income distribution effects the rice tax has accounting and resource allocation effects which may be of the greatest importance. By lowering the internal price of rice it understates the share of rice in the gross national income; it understates the level of national income in relation to other countries; it overstates the rate of growth since it underweights the rather slow-growing rice sector of the economy. It shifts, at least marginally, the allocation of resources away from rice towards other crops, such as maize. It introduces, in fact, a wide price distortion into the economy, wide because the production of rice for consumption within Thailand is such an important economic activity. All these matters are discussed more fully in Chapter 10.

8

Money and Banking

T. H. SILCOCK

Origin of Thai financial policies

One of the striking features of the Thai economy is the tenacity with which, even in most unfavourable internal and external conditions, a cautious and conservative monetary policy has been pursued with the aim of preserving the international strength of the *baht*. Like so much else in the modern Thai economy, this policy can be traced directly to the preoccupations of King Chulalongkorn during the period in which he was modernizing the country and opening it up to trading and political relations with the West.

He was well aware that one not improbable way in which his country could lose its independence would be by becoming indebted to foreign creditors and having restrictions placed on his freedom of action. He understood that economic motives were important in the expansion of European power: in the Bowring Treaty of 1855 his father had been virtually compelled to accept restrictions on Thailand's freedom to tax foreign trade (Ingram 1955: 34); he saw economic pressure, in the form of loans, being used to extend British influence in the Malay states; indeed he was eventually forced to cede Kedah to the British Empire because of loans from British subjects in Penang which the local ruler of Kedah could not repay (Thio 1956); moreover, he was much concerned with extending his own central power over his outlying provinces, to prevent local officials making money out of granting concessions to foreigners.

King Chulalongkorn's situation and temperament also made him susceptible to the attractions of Treasury control. He had a modernizing but basically autocratic temperament, with a desire to benefit from the advice of subordinates without losing control (Vella 1955: 335). He succeeded to the throne while still a boy, with a keen awareness that he needed to study statecraft in preparation for his duties. He travelled abroad to observe foreign techniques, visiting—among other places—Singapore and Calcutta. In studying the system of administration in these outlying parts of the British Empire he must have been profoundly impressed by the strict yet flexible control exerted through the colonial financial system, the budgeting, the co-ordinated approval of accounts, the audit system; in Thailand a functional Treasury Department of a

rudimentary kind was a very ancient part of the system of government (Seni 1964: 18), yet there was no such firm but flexible control by Bangkok over Chiengmai as London appeared to exercise in these remote areas.

One of his first acts after his coronation was to appoint an official to take charge of finances, regularize collection, and appoint supervisory officers (Vella 1955: 340). A beginning was made in the adoption of Western accounting procedures. Education in accounting has continuously expanded since that time, and this continues to keep some limited check on corruption in the Thai economy.

The Treasury was further strengthened in 1887 when it was separated from the Harbours Department and given a modern departmental structure (Govt of Thailand 1965: 93); and again in 1892 when the whole structure of the government was reorganized and all financial controls centred in the one office (Ingram 1955: 177). Even more significant, however, was the appointment of an Englishman, Mr Mitchel Innes, as adviser to the Treasury in 1896 (Bank of Thailand 1961: Pt 1, 56-7; Vella 1955: 343). From that time until World War II British subjects continued to be appointed as advisers, and their influence has had several marked effects on Thai financial and monetary policy.

The British advisers

The type of currency structure which emerged from the interaction of Mr Innes and his successors with the Thai finance ministers was one in which the 'watch-dog' functions of the Treasury were given great emphasis, the currency was placed on a gold-exchange standard with a foreign exchange reserve of at least 100 per cent, on the British colonial currency commission model,[1] and overseas borrowing was kept to a minimum and strictly confined to public works that could provide a specific revenue for interest and amortization. Budgets were strictly balanced, and in general there was a revenue surplus in normal years (Ingram 1955: App. B). The system of collecting revenue through officials who made their own profit on the collection was abolished, and later the tax farms on opium and gambling, which had been let to private individuals (mainly Chinese) were also converted to government monopolies (Skinner 1957: 121-2).

Generally the emphasis was on financial virtue. The Thais were encouraged to set strict standards in the collection and use of public funds, living within their income, borrowing only for strictly productive purposes, and keeping a large balance in reserve against their currency. It is worth while to inquire into the motives that prompted this behaviour, and the effects that it had on the Thai economy.

It would probably be a mistake to seek any recondite policy reason either for the emphasis on financial virtue by the British financial advisers or for the form in which their advice was accepted by Thai ministers (Ingram 1955: 170). There is no reason to suppose that any of the advisers were anything more than moderately capable civil servants, trying to impart to a government to which they were seconded the virtues to

[1] The origins and character of the system are described by Greaves (1954). For a more contemporary account of the origins of the system in South-East Asia see Anthonisz (*c.* 1906).

which they were committed and the techniques they knew. These were the prevailing financial virtues and techniques of the end of the nineteenth century, and in particular those which were considered appropriate in territories under British influence in the early days of indirect rule. They were the values and techniques which would give Thailand a financial good name internationally, and an efficient system of administration. There can be little doubt that these advisers regarded balanced budgets and strong reserves in the same way as they regarded personal integrity and centralized control. These were basic principles of honest and efficient government, logically based (no doubt) on the need for rational decisions about the use of public funds and on obligations to the holders of the currency, but no more to be discussed than courage or chastity. What they taught their subordinates was a code of behaviour embodied in a set of attitudes and responses. From the point of view of the King these were attitudes which would win Thailand international respect and hasten the time when it would be free to control its own revenues without restrictive treaty obligations, and they were techniques which gave him more revenue and greater control over the kingdom than he had before.

Some of the attitudes and techniques were, however, more appropriate than others to Thailand's special situation. Perhaps the least controversial of the changes (from a Western point of view) was the centralization of funds in the Treasury and the introduction of strict auditing. Yet even this had strange consequences in the development of Thailand which make it difficult for foreigners to understand the economy today. The Treasury became a group of people among whom, by selection, promotion, training, and practice, the code was developed, and in some degree, transmitted through the civil service as a whole.[2] Yet this did not change the system of patronage and favour from the King right down through the civil service, by which the royal authority was maintained. When the absolute power of the King, which harmonized the two systems of financial control and personal patronage, was removed in 1932, the resulting tensions became a serious handicap to economic development.

Chulalongkorn retained about one-eighth of the revenue as his personal civil list (Vella 1955: 396). Thus the separation of the King's personal funds from the state's funds did not represent a major personal sacrifice. He could still enrich his family and bestow a great deal of personal patronage. Moreover, he was able to win the loyalty and service of his subjects by the award of medals and honours; in Thai society these brought substantial economic benefits, not in cash, but in the services that ordinary people were eager to give those honoured by the King. At this stage, the salaries paid for the highest posts—those held by princes—were also very much higher than other salaries.

Within the system of absolute monarchy, Treasury control was no doubt seen partly as a foreign innovation that helped Thailand's reputation abroad and partly as an institutional manifestation of the Thai principle that the King's officials should not oppress his subjects (Wales 1965: 38, 320). The royal princes, several of whom had been educated abroad, were able to enjoy foreign luxuries as well as much personal patronage. Other senior

[2] For an interesting attempt to relate financial rectitude to the Thai value system see Puey and Suparb (1955: Ch. 21).

civil servants, enjoying status and personal services in their departments and outside, and with a salary sufficient to live with dignity, enjoyed the standing that they expected and that was expected of them. (Seni 1964: 27). Yet if once the exemption of the King from control and his power to supplement salaries by honours and personal favours were removed, the code implied by the Treasury and the Civil Service Commission would ultimately involve much more radical change, namely a limitation of the benefits of office to those formally laid down.

The conflict between the patronage system of values and that imported by the Treasury became apparent after the 1932 revolution when the system of awarding honours was abolished and the high salary scales formerly given to princes were cut down. Positions of power were inherited by a number of Western-educated civil servants who had neither the means to acquire Western material goods nor the willingness to accept status and personal services as substitutes. Since that time many of the features of the Thai economy have resulted from a simultaneous acceptance by the Thai administrative class of two systems of value, one which expects those in power to live at a high standard and give patronage to others, and another which expects them to obey the rules relating to public funds.

The other group of financial virtues inculcated by the British financial advisers was also only partly relevant to Thai conditions. Balanced budgets and an ample currency reserve have certainly made the *baht* a strong currency; but this strong currency was of relatively little value because Thailand was not interested in using her credit; she was reluctant either to float extensive public loans or to encourage foreign concessions or plantations. The Treasury advisers certainly do not appear to have pressed the Thais in this direction. A notable example of reluctance to borrow abroad was in irrigation (Irrigation: 1957). A scheme very similar to the Chainat scheme was recommended by Dutch irrigation engineers some forty years before it was actually begun. The dam, however, was to have been over five metres higher and would have provided much dry-season irrigation which the post-war scheme did not provide. A loan could certainly have been raised at that time and the whole scheme carried through much more cheaply than after the war, if only because the chief deterrent to a higher dam after the war was the cost of moving the town that had grown up at Chainat. Yet the scheme was rejected as beyond Thailand's resources.

Thailand, indeed, up to the early post-war years, seems to have gained little from its financial virtue. Inflation was forced on the Thais by the pressures generated by the Japanese army in World War II (Bank of Thailand 1961: Pt 1, 74-104); the reserves accumulated over so many years were frozen in London at the end of the war, and a part of them used to pay generous compensation to British miners and other claimants (Bank of Thailand 1962: 26, 32-3; Ingram 1955: 165); Thailand was forced to impose an exchange control system like any profligate nation.

Prince Viwat and Dr Puey

The inclination to virtue, however, remained in the Thai Treasury, and in the post-war period had spread to the new Bank of Thailand. This was due less to the British (and later American) financial advisers who

returned to Thailand than to a Thai prince, Prince Wiwatanachai Chaiyant, henceforth called Prince Viwat, who had been appointed as the first Thai adviser to the Treasury, after the revolution of 1932 (Bank of Thailand 1961: Pt 1, 56).

Prince Viwat had been educated at Cambridge and then, in his early twenties, appointed to a senior position in the Treasury. He had reorganized both the Department of Customs and the Department of Excise, and his appointment as the first Thai financial adviser was simultaneously a gesture to Thai nationalism and the removal of one of the most influential princes from an administrative to an advisory position. For the next quarter of a century he used his very great influence in support of the prevailing financial virtues. First he safeguarded the reserves against the threat of war by moving some of them out of sterling into gold and dollars; next, after setting up the Bank of Thailand, he fought a sustained and fairly successful rearguard action against Japanese inflationary pressure, trying to secure goods, or at least gold, in Tokyo, for as many of the *baht* issued to the Japanese army as possible, and also resorting to state lotteries (at the suggestion of Pridi), compulsory conversion of large notes to blocked deposits, and other measures to mop up currency.

After the war, both at the Ministry of Finance and as an unofficial adviser, he furthered a policy of using Thailand's favourable post-war situation to build up the reserves and strengthen the *baht*. This was done largely by strengthening the independence of the Bank of Thailand—through membership of international bodies and an independent constitutional structure—and by ensuring that the benefits from the world shortage of rice accrued in the form of exchange control profits to the Bank of Thailand.

It is fortunate for the development of financial virtue in Thailand that in 1959, the year before the death of Prince Viwat, Dr Puey Ungphakorn was appointed Governor of the Bank of Thailand, after a brief interval in which a single individual held both the posts of Minister of Finance and Governor of the Bank of Thailand and was subsequently arrested. Dr Puey had already once resigned the post of Deputy Governor on an issue of principle,[3] and his tenure of the governorship has been marked by a series of outspoken comments, both in his *Annual Reports* and in public speeches, drawing attention to current abuses (Puey 1964).

The deflationary bias

The general emphasis on financial virtue did not distinguish between personal integrity, Treasury control, and Gladstonian orthodoxy. Soundness and stability required all three and all were upheld as a moral system in conflict with other moral systems in Thai society. Thailand's war experience had led to inflation and loss of the currency reserves. The Ministry of Finance wanted to remedy the damage that had been done, not merely by rebuilding the reserves but by trying to raise the value of the currency toward the pre-war level. Indeed it felt an obligation to lower the cost of living and raise the value of the *baht* (Bank of Thailand 1961: Pt 2, 223-4). There was therefore a special emphasis on orthodoxy and even deflation at

[3] The issue was not made public. The fact that it was an issue of principle was communicated to me by Dr Puey himself.

this time.[4] The provisional sterling rate introduced for the immediate reopening of trade in January 1946 was 60 *baht* to the pound sterling. This was by no means unreasonably low. The official rate ultimately registered with the International Monetary Fund in 1963 was 58·24, after a further devaluation of sterling, and even this would probably make Thailand's industrial costs too high if the price of rice (and hence wages) was not kept down by artificial means. Within a few months, however, an effort was made to enforce a rate of 40 by a policy of strict exchange control (Mousny 1964: 4-6; Yang 1957: Ch. 3). Control proved even harder to enforce in the post-war period than during the war, and in 1947 gave way to the multiple exchange rate that is discussed in Chapter 7. On two other occasions (1949 and 1952) the deflationary impulse appears to have gone too far; it was only in 1955 that a more realistic policy was achieved.

The details of the exchange policy and its impact on trade are discussed in Chapter 7. Here we consider some of the background to the policy on each occasion.

In 1949 sterling was devalued from U.S. $4·04 to $2·80. Prince Viwat, who was Minister of Finance at the time, had foreseen some devaluation, and had recommended that the *baht* should retain its official parity with sterling, in view of Thailand's close trading relations with sterling countries. Thailand had recently joined the International Monetary Fund, and was obliged to consult it about any change in official exchange rates. Prince Viwat was in Europe at the time of the devaluation, but no doubt believed that the International Monetary Fund would support his view. He had, however, over-converted the politicians to a deflationary policy, and when the devaluation came they seized the opportunity to appreciate the *baht* against sterling from 40 to 35, without even consulting the International Monetary Fund (Bank of Thailand 1962: 37, n. 1).

There was an additional factor which no doubt weighed heavily with the politicians. At the end of 1949 control over rice by the International Emergency Food Control was to come to an end. Thailand had at first agreed in 1945 to hand over its surplus rice, up to a total of 1·5 million metric tons, without charge, mainly for use in British deficit countries in the region.

During the years 1946-9 it was apparent that the United States supported the Thais against any British attempt to extract rice by political pressure. The International Emergency Food Control had conceded higher and higher payments for Thai rice, on the grounds that inducements were necessary to persuade Thai farmers to produce rice and to assist the control of smuggling. Government-to-government contracts were shortly to be negotiated for 1950 and the Thais indicated that as the *baht* value was now higher they expected higher sterling prices. No doubt since a change in the sterling-dollar rate was involved and they had partly followed the dollar, they again expected some American support.

British and Indian press reaction was vigorous, however, and although in the following year the Korean War forced rice prices up, the Thais gained nothing directly from the appreciation against sterling. Prince Viwat

[4] After 1955 the emphasis shifted, with more stress on Treasury control and sound banking, but still with an anti-inflationary emphasis. Since 1963, though neither of the former emphases has disappeared, there has been more stress on integrity, professionalism, and training.

resigned from his post as Minister, partly because his advice had been ignored and partly because Thailand had defaulted on its obligation to consult the International Monetary Fund (Bank of Thailand 1961: Pt 1, 109-11).

The 'administrative appreciation of the free *baht*' in 1952, as described in Chapter 7, was also an instance of the deflationary bias of Thai financial doctrine, though on this occasion the Bank of Thailand was opposed to the policy of the government (Bank of Thailand 1962: 47-52). Thailand had in fact been experiencing some inflation during the past eighteen months as a result of the Korean War which created an active demand for Thailand's exports of rice, rubber, and tin. Inflation had even become a popular political issue, but the main trouble, from the point of view of the politically articulate civil servants and small traders in Bangkok, was the rise in the cost of rice and related foodstuffs. This was at least as much a phenomenon of relative prices as a monetary phenomenon. Rice was commanding better prices internationally and at least a part of this was being reflected in higher local prices of rice. If the exchange control system, the profits of the Rice Bureau, and the government budget had not siphoned off most of their advantage the Thai farmers would have enjoyed a much greater transfer of income from the rest of the community than they actually did.[5]

Prince Viwat, however, who was now again financial adviser, was heavily preoccupied with the technical factors that in his view were generating inflation (see Bank of Thailand 1961: Pt 2, 235-41). The Bank of Thailand had been building up the currency reserves out of the proceeds of exports delivered at the official rate, and had supplied only a part of these to the free market. Prince Viwat held that this purchase of foreign exchange for *baht,* without corresponding sales, had been one of the chief causes of inflation, and that now that the reserves were adequate foreign exchange should be sold. He considered the *baht* extremely strong, and believed that this policy would enable it to exchange freely at the official rate of 35 to the pound.

This, however, could in fact have been achieved only by a fairly considerable fall in import prices. Moreover, if the ending of the multiple exchange rate destroyed the mechanism by which the Bank of Thailand made exchange profits to offset the government's budget deficit, new taxation would be necessary which would either reduce rice prices further or lead to an indirect transfer of income from the rest of the community to rice farmers. No doubt Prince Viwat would have been quite content to see import prices fall, and underestimated the political pressure that the resulting losses would generate. It is doubtful, however, whether much could then have been done to introduce budgetary discipline without the Bank of Thailand's control over foreign exchange. This was achieved only slowly and by the use of some international pressure.

The Council of Ministers was not prepared to abandon exchange control at once, but wanted the Bank of Thailand to raise the value of the free *baht* by sales of sterling. The Bank had considerable holdings of sterling and the Council had laid it down as a principle that the reserves should not benefit foreigners. This may mean, as Yang suggests, that Thailand had experienced some difficulty in using its sterling.

[5] A parallel inflationary situation in Malaya is analysed by Meek (1961: Pt 2, Ch. 5).

Mom Luang Dej Snidwongse, Governor of the Bank of Thailand, had a more realistic appreciation of what could be expected to happen if imports were allowed to expand. Importers had already built up considerable stocks, reacting—with a few months' lag—to the scarcities they had experienced at the height of the Korean War boom. This was a period in which many of the politicians were building up interests in business firms, and heavy inventory losses would be bound to provoke demands for interference with trade. When the government forced the Bank of Thailand to adopt the policy of appreciating the *baht,* Mom Luang Dej resigned; but another Governor was found who was willing to carry it out.

At first the Bank of Thailand sold sterling only, at the lower rate of 45 *baht* to the pound. Later some of the dollar reserve was also sold. The result confirmed Mom Luang Dej's judgment.

Much larger amounts of sterling were bought than the government had anticipated, for speculative holding, for arbitrage on the Hong Kong market, and for imports, mainly of luxury goods. The running down of the sterling reserve alarmed the Bank of Thailand and the protests of importers at the overstocking of import goods had more influence with government ministers than Prince Viwat had anticipated. The government's willingness to impose severe deflation was short-lived. A few months later sale of sterling at 45 was restricted first to essential goods and then to a few very essential ones; by May 1954 the struggle was abandoned. The *baht* fell rapidly (partly as a result of French reverses in the war in Indo-China) and then recovered to roughly its present value.

It seems clear that there were political factors which would have made it difficult, whatever happened to Thai exports, to achieve the government's aim of raising the free *baht* to the official rate of 35 to the pound sterling, still less to appreciate it to the pre-war value as some politicians seem to have thought possible. Some of the ideas of the army politicians, who were beginning to acquire big financial interests at this time, seem to have been rather naïve. However, some appreciation might have been achieved if they had not also been mistaken about the trend of international rice prices.

There was widespread belief in South-East Asia in the early fifties that the Korean War boom in the demand for rice merely accentuated a normal long-run trend, and that the 1952-3 recession was a trivial short-run matter. Up to 1950 countries had been competing for rice allocations by overstating their requirements; the Food and Agriculture Organization had forecast rice demand on an optimistic nutritional needs basis, with little appreciation of the difficulty of achieving enough international redistribution of income to turn need into effective demand (see FAO 1948: Ch. 6; FAO 1952: 20). Naturally, therefore, rising rice prices were attributed to these long-term trends and to the post-war relaxation of controls, with little emphasis on the Korean War. It was not only in Thailand that policy-makers continued, well on into the Korean War, to be influenced by the ideas that had been propagated at the rice meetings in Singapore by the officials of the International Emergency Food Control before 1950.

The Thais, however, were slower than the Burmese and other rice producers in coming to terms with the new situation. This was partly because the trade was largely in the hands of the government, and civil servants are commonly less prompt than businessmen in day-to-day adjustments; moreover, in Thailand a loss of revenue could not be faced without

embarrassment. Probably even more importance, however, should be attached to the obviously considerable sums that were passing through the Rice Bureau into the hands of the politicians in power. These large amounts of money must have been a significant part of the unofficial power structure in Thai politics at the time. A switch to other sources could be made only gradually.

During the years between 1952 and 1955 it became apparent that, once the strong sellers' market had come to an end, private traders were more efficient than the government at finding markets for rice. The proportion of private trade in rice, and with it the budgetary income from rice premiums, increased, and it gradually became clear that it would be necessary to hand the rice trade back to private enterprise.

At the same time, Prince Viwat's idea of abolishing the multiple exchange rate came into favour, but with a less deflationary emphasis. Instead of trying to enforce the official rate, Thailand in effect accepted the free market rate but imposed taxes which were rather less than the equivalent of what had been handed over to the Bank of Thailand. This meant that the Bank of Thailand no longer had a surplus which could act as a check on inflationary government deficits. Up to 1952 a rather severe financial orthodoxy had enabled the Bank of Thailand to rebuild the reserves while partly offsetting the inflationary effects of financial indiscipline in various ministries and unofficial interception of public funds. Between 1952 and 1955 Prince Viwat and the politicians had tried actually to raise the value of the *baht* even though only limited financial discipline could be enforced. From 1955 on it was necessary for the Bank of Thailand to try to keep control over inflation without the possibility of offsetting it, except quite marginally. This meant that its emphasis shifted to financial discipline, first within the government and later in the banking system. The aims were still influenced by financial orthodoxy, but there was no longer any hope of sufficient surpluses to enforce a value for the *baht* in the neighbourhood of thirty-five.

In achieving financial control a number of instruments were becoming available. First the profits of the Rice Bureau, having been eroded by the fall in rice prices, were now transformed into a publicly defined premium which approximated to a tax, as described in Chapter 7. Probably nearly all of this has, from the beginning, found its way into the public revenue, though at least during the period of export quotas considerable sums were exacted through corruption as well. These must have been insignificant, however, in comparison to the amounts intercepted from Rice Bureau profits. It was also increasingly possible to mobilize overseas pressures, for example from the overseas aid agencies of the United States, against the personal interests of the politicians and to make effective use of co-operation with the International Monetary Fund and International Bank.

The Bank of Thailand

The Bank of Thailand was an offshoot of the Ministry of Finance that had come into being to meet the conditions of World War II (Bank of Thailand 1961: Pt 2, 3-71). In his early days as financial adviser Prince Viwat had devoted a good deal of effort to cooling the ardour of the Finance Minister,

Pridi Phanomyong, for a central bank.[6] He was afraid both of the inflationary dangers of Pridi's view that a central bank could overcome the governments' difficulties in collecting revenue,[7] and also of the financial hazards of starting an institution dealing in such large sums of money with so few qualified officials.

This was the reason for setting up the National Banking Bureau in 1940. It had some technical functions—managing certain government loans, receiving government funds on deposit, collecting cheques for the commercial banks, and later, controlling foreign exchange—and also the major function of training a corps of officials in preparation for the establishment of a central bank (Bank of Thailand 1961: Pt 2, 57-8, 60-5).

Within less than two years events compelled Prince Viwat to set up a central bank as a protection to the Thai economy against Japanese pressure. The establishment of central banks was the means by which Japan exercised control over the economies of most of the countries it occupied, for example the Philippines and Burma. These organizations were run by Japanese departmental heads. In Thailand a similar demand was made. The existence of the National Banking Bureau, however, and Thailand's status as a nominally independent ally, enabled Prince Viwat to argue that such a bank was already being organized under Thai control.

An Act was quickly passed enabling the executive to establish the Bank of Thailand by royal decree. The Bank opened in December 1942, with Prince Viwat as Governor. His staff, except for the small group who had run the National Banking Bureau, were wholly inexperienced.

The achievements of the Bank of Thailand have been, by any standards, impressive. We must, however, see these achievements—moral, political, and technical—as a whole, in the context of the modern Thai political structure and commercial banking system, if we are to form an adequate judgment.

Legally the Bank of Thailand's role in the Thai system is similar to that of most central banks. It is a juristic person with a constitution giving substantial independence of action (Bank of Thailand 1961: Pt 2, 65-71). The Governor and Deputy Governor are appointed and removed by the King on the advice of the government, and the directors by the Cabinet on the advice of the Minister of Finance; their personal liability for any loss of the Bank of Thailand's funds through wilful default or gross negligence differentiates them from ordinary political appointees and has in fact given them some sense of independent responsibility.

The Minister of Finance has only a power of general supervision and review, and cannot issue any orders to either the directors or the Governor. The Governor can appeal to him if he disagrees with a majority of the directors; otherwise, the Minister can influence policy only by removing directors, a very drastic and unusual step in Thai conditions.

The dual relationship with the government (usually the Prime Minister) and the Minister of Finance is interesting because of the special position of the Ministry of Finance to which reference has been made. Because of its

[6] I am indebted for this information to Dr Chote Khumbhandhu, the first scholar to teach economics in Thailand before the revolution, and one of the first advocates of a Thai central bank.

[7] According to Pridi (1947) one of the main functions of the central bank is to lend against government bonds, another is to pay government salaries by cheque.

long history and technical expertise the Ministry of Finance has its own system of values. The man chosen as Minister has normally worked for some years in either the Ministry or the Bank of Thailand. As a member of the Cabinet, however, he cannot always uphold among his colleagues the point of view dictated by sound finance. The Bank of Thailand, as an independent organization, can usually keep in touch with the Ministry of Finance, and sometimes express forcibly an attitude dictated by financial requirements. Dr Puey has stated that 'A Central Bank Governor should behave towards his Finance Minister as a dutiful wife should towards her husband. She can praise him both in public and in private, but any wifely criticism should be frankly offered in private' (Puey 1965: 5).

Dr Puey has certainly not shown any reluctance to criticize the rest of the government in public, particularly in the Bank of Thailand's *Annual Economic Reports* and in his speeches to the Thai Bankers' Association.

The Bank of Thailand has not only a unique influence on financial policy because of its close relations with the Ministry of Finance and the government as a whole; it must also, if it is to carry out its function of controlling the currency, exercise some supervision over the different commercial banks.

As Prince Viwat pointed out in his comments on the original Bank Charter (Bank of Thailand 1961: Pt 2, 66), one of the Bank's difficulties is that, without an effective money market, it cannot control credit except through legislative power, for which it is dependent on government. This wartime comment understated the real difficulty; relations with the Thai government as yet presented no problems, and the commercial banks were still mostly new and of no great political importance. To understand the framework within which policy is now exercised we must look at the structure of commercial banking in modern Thailand.

The commercial banking system: foreign banks

Commercial banking in Thailand can be classified along national and racial lines, into Western (including the modern-style Japanese and Indian banks), Chinese, and Thai banks, with some of the Chinese banks approximating more to Western banks and some to Thai. In 1965 thirteen banks were actually registered abroad. Of these, four were old-style colonial-type exchange banks, three of which had operated in Thailand since the nineteenth century and one since the twenties; four more were Chinese banks, one of them an old-style Singapore bank, two registered in China, and a modern Malaysian Chinese bank; the remaining five consisted of an Indian trading bank, and two American, and two Japanese banks, concerned with trade and development. The structure of the foreign banking system is set out in Table 8.1.

The Western banks influence the economy of Thailand in two principal ways. First, the mere existence of well established Western banks doing exchange business with foreign funds makes it difficult for the Bank of Thailand to establish a money market on Western lines, with a central bank monopoly of foreign exchange. Though Thailand has enough Thai banks to do without foreign ones, the Bank of Thailand is unwilling to squeeze foreign banks out by unduly hampering their exchange business.

TABLE 8.1 Thailand, Structure of the Foreign Banking System, Principal Assets and Liabilities as at 30 June 1965
(baht)

Names	Assets required by law		Deposits	Cash	Bills	Loans and overdrafts
	Deposits and Thai government securities	Immovable properties and other assets				
The Hong Kong and Shanghai Banking Corporation (1888)	18,000,000	12,000,000	287,867,948	70,790,204	56,120,418	158,519,813
The Chartered Bank Ltd (1894)	27,500,000	2,500,000	270,287,453	24,548,460	70,423,413	231,346,284
Banque De L'Indochine (1897)	13,760,000	6,083,000	76,154,450	8,901,476	44,863,148	81,840,755
Mercantile Bank Ltd (1923)	7,500,000	5,000,000	66,842,335	7,030,194	30,133,607	57,260,454
Four Seas Communications Bank Ltd (Sze Hai Tong Bank—1909)	9,000,000	—	22,728,291	11,113,817	43,528,007	12,139,309
Bank of Canton Ltd (1919)	5,000,000	—	58,932,146	22,118,081	31,470,868	21,098,935
Bank of China Ltd (1947)	9,000,000	1,057,143	56,647,661	74,111,402	51,700,957	57,901,920
United Malayan Banking Corporation Ltd (1964)	20,000,000	—	154,370,713	12,796,619	71,134,066	134,464,852
The Indian Overseas Bank Ltd (1947)	6,693,000	307,000	30,585,182	8,111,363	15,303,054	15,803,886
Bank of America, N.T. & S.A. (1949)	20,000,000	—	292,747,116	79,355,444	41,318,191	168,490,324
The Chase Manhattan Bank (1964)	20,000,000	—	147,959,627	26,979,921	44,791,737	123,422,939
The Mitsui Bank Ltd (1952)	60,000,000	—	192,298,512	27,338,815	37,022,344	353,474,767
The Bank of Tokyo Ltd. (1962)	30,000,000	—	245,442,855	9,436,906	40,300,343	309,627,962
Total	246,453,000	26,947,143	1,902,864,289	382,632,702	578,110,153	1,725,392,200

Dates at which the banks were established in Thailand appear in parentheses after their names.

Source: Bank of Thailand (1965a).

The foreign banks are both sounder than most Thai banks and uninvolved in Thai politics; if their business was captured by the politically powerful Thai banks, the Bank of Thailand's power to regulate credit would be further handicapped.

Next, it is important that the Western banks were originally all exchange banks, mainly financing trade. Although Thailand was never a colony, the foreigners who set up banks there were not establishing an independent banking system but financing trade with their home country. Hence these banks did not develop Western techniques adapted to Thailand's needs for fostering local economic development. In particular they did not develop a system of branch banking designed to encourage local lending on impartial financial principles related to liquidity and risk. Branch banking, when it began to expand after World War II, had no local Western model to imitate.

The structure of the Thai banking system has consequently been much influenced by the early presence in Thailand of Chinese banks which used Western technology to further a very different concept of banking.[8] The Sze Hai Tong Bank is the only Chinese bank registered abroad which has survived since the early twentieth century, but others—for example the Chino-Siam Bank that failed in 1913—also influenced the banking practices of the business community of Thailand.

These early Chinese banks were heavily involved in local business, and though they did not interfere at the time in Thai politics, they were fairly active in the politics of China. They became the natural model to follow when Bangkok traders—nearly all Chinese—began to set up their own banks.

It is characteristic of such banks that policy is oriented not towards a set of rational goals defined in terms of the institution as such, with the different interests of depositors, shareholders, borrowers, and directors influenced mainly by a code designed to accommodate them to one another, but rather towards furthering the diverse political and business interests of a group of people who come together to form the bank. Such a group will include bankers, who in Thailand will be men with marked business ability, knowledge of banking laws, wide social contacts, and skill in handling large sums of money to generate political and economic power; it will also include capitalists who are shareholders or major depositors or both—the 1962 Act led very easily to an expansion of capital by commercial banks from among this group; finally it will include prominent politicians.

Obviously it is impossible to describe in detail the activities of particular banks. The necessary research would be long, unpleasant, and perhaps dangerous both to the writer and to public order in Thailand. What follows is based on published sources, supplemented by a number of interviews given under the condition that neither the name of the informant nor

[8] There appears to be no satisfactory study of Chinese banking in the South Seas area. There is an informative account of the origins in Singapore by Tan (1961), an economically more sophisticated article by Lee (1966) on the same lines, and references to their exercise of control in Skinner (1958) and T'ien (1957), together with many occasional references in banking literature and South-East-Asian literature, but no one appears to have collected the material specifically related to Chinese banking.

enough detail for identification should be given. First there is an outline of the general types of business and the contributions and benefits of each category of member in the groups as a whole. Next there is a detailed account of the structure of the Thai banking system, designed to indicate the potential for various kinds of pressure and the environment in which monetary and banking policy is exercised. It is not implied that any identifiable individual is involved in the activities described. The situation is one of conflicting values in which, even when it is known that a particular individual is acting in a way that he would not desire to see published, this is no reason for condemning him. Identification might in such instances be interpreted as condemnation, even though the purpose of the analysis is to show that there is a real unresolved inconsistency of values in which decision is difficult for anyone—a situation in which any reader, if he were a member of Thai society, might not easily know how to act. In other instances, although the potential is there, a particular businessman or politician might be restrained by the financial value system from acting in this way.

Within the groups that make up the control of a Thai bank the bankers plainly benefit both in profit and in influence, the latter being relatively far more important than in a Western bank because of the greater element of discretion involved. The service they give to the large depositors or shareholders is not merely one of giving a return on their deposit or investment, but of advancing their business interests generally, in acquiring real estate, in securing supplies and outlets for produce, and generally in the expansion of their business interests. To politicians they can also give help in furthering business interests, in addition to income and credit; they can also be a channel for conferring favours on key supporters in the various services, without the embarrassment of direct money payments.

The capitalists, who are mainly Chinese, gain from the bank in a way that can be understood in terms of the role of capital in Chinese business generally in South-East Asia. Chinese business is generally far more decentralized than Western business, with more sub-contracting and regular but not institutionalized contacts in which credit is often a binding factor along with kinship or other social ties. The banker is an agent in extending a rather looser form of influence mediated through capital. He may bring syndicates and information together to provide sources of capital gains; he may lend to traders who in turn give extended trade credit, so creating an area of enterprise in which the banker's (and his partners') economic influence may be extended; he can secure some political protection for his partners' interests.

The politicians gain mainly by consolidation of their personal following, and also by wealth that enables them to fulfil the obligations that Thai custom expects of important people but that the legitimate political structure does not provide. Probably the main service they give is that, given the Thai social structure, their name on the Board is enough to discourage bank inspectors and other enforcement officers from going beyond (or even up to) the letter of the law in enforcing regulations on interest, foreign exchange, or business interests. Active intervention is probably usually unnecessary. It may, however, be used to affect the form of government projects, so as to enable the bank or its clients to secure contracts or other

advantages. In addition the funds of government enterprises or even departments may be deposited in the bank. Useful information, particularly in relation to real estate, may also be provided.

Among the banks registered in Thailand, the oldest is the Siam Commercial Bank, founded with a good deal of personal support from King Chulalongkorn in 1906 (Sommai 1963: 4-6). This has remained the bank of the royal family and the old aristocracy, and takes no part in the affairs of Thai banks in general. It was managed by foreigners up to World War II, and apart from training up some Thai staff has had little influence on the rest of the banking system.

In 1939 Pridi Phanomyong, having failed to convince Prince Viwat or his colleagues on the need to establish a central bank, decided to set up a new Thai bank, the Bank of Asia for Industry and Commerce, with a view to training Thais in banking. A large part of the funds for this bank came from the assets of Thammasat University, in the founding of which Pridi had also played a prominent part. The Bank of Asia was the first bank to be actively involved in Thai politics, and has continued to play an active part. In recent years it has been one of the principal agencies of co-operation between the leading Chinese and the Thai power *élite*. During the Sarit régime it was managed by Sarit's half-brother, and enjoyed privileges in the gold business and in the handling of state lottery funds; recently it has aroused considerable controversy by inviting the son of Prime Minister Thanom to join its Board. The Bank of Asia, however, was only the first of a series of banks that have taken an active part in Thai politics. Pridi founded a second bank, the Bank of Ayudhya, at the end of the war, putting his brother in charge. This bank failed when Pridi fell, but was reconstructed, and played a prominent part while Police General Phao was in power, its manager then being Lüan Buasuwan, the man responsible for financing the disastrous National Economic Development Corporation in 1954. Its present chairman (1966) is the Director-General of Police and it is now actively associated with Singapore interests in rubber and rice.

Another bank with considerable political influence, presently under the chairmanship of the Director-General of the Public Relations Department, is the Union Bank of Bangkok. The Managing Director, who is also the present president of the Board of Trade,[9] was formerly one of Prime Minister Sarit's chief agents, and has been mainly responsible for organizing the cartels controlling—from time to time—the export of rice, maize, sugar, and similar products. During the latter part of Phibun Songkhram's premiership, while Sarit and Phao were struggling for power, there was sharp rivalry between the Union Bank supported by Sarit and the Bangkok Bank supported by Phao, both in turn being prosecuted for financial irregularities.

The Bangkok Bank, a private bank which was started during World War II, was later expanded with funds from the Ministry of Economic Affairs. Under the control of a leading Thai-Chinese banker it again became a private bank under the protection of Police General Phao. After Phao's fall, this Thai-Chinese continued effectively to control the Bangkok Bank from Hong Kong, and invited a rising military man, General Prapas

[9] 'Board of Trade' is the recognized translation of *Sapha kan kha*, doubtless with a view to suggesting the considerable official recognition given to this body, though it is in fact only a private association of chambers of commerce and private firms.

Charusathiara, to become president. Now that Prapas is Deputy Prime Minister and Commander-in-Chief this has become one of the most important banks in Thai politics.

Beyond these four actively political banks are four others, the concern of which with politics is more marginal. The Thai Military Bank is politically less important than it appears; the chairman of its Board is the Prime Minister, Field Marshal Thanom; it was formerly controlled by a financier who was simultaneously Minister of Finance and Governor of the Bank of Thailand. It was also one of the three banks controlled by Field Marshal Sarit when he was Prime Minister. Nevertheless, although it undoubtedly helps to consolidate the power of the ruling army group, its political influence outside this group is rather small; its business is mainly within the army and it creates few important links between political leaders and key business interests.

The Thai Development Bank may well become politically influential, but is not at present considered so. It was established under the name of Tan Peng Choon in 1934 (Sithi-Amnuai 1964: 124), and for twenty-five years it was an old-style Chinese family bank with no branches. Then a military and police group bought it and almost immediately began to open new branches, the record number of twenty-nine being opened in the one year 1960, and fifteen more in 1961. The present chairman is the Commander of the First Army Division, a key political post since it controls Bangkok.

Another bank with only potential political significance is the Bangkok Bank of Commerce, the bank with the largest number of branches. This bank is partly owned by a well known political family that has recently been engaging in vigorous criticism of the government.

Of rather different political significance is the government-controlled merger of the Provincial and Agricultural Banks. The former was started in 1942 (when the foreign banks were closed down) largely to create opportunities for supporters of the *coup* group; the latter, opened in 1950 as a private bank by a Thai police officer and politician, soon ran into difficulties and was taken over by the government. These banks were merged under the control of the Ministry of Finance in March 1966; so long as the Ministry remains in control and acts in concert with the Bank of Thailand this merger may help to strengthen central bank control of credit.

The five other commercial banks registered in Thailand are of no current political importance. Two of them, the Thai Danu, run by Thais, and the Metropolitan, run by Thai-Chinese, cater mainly for the old aristocracy and the conservative Chinese families; the other three, the Wang Lee Chan, the Laem Thong and the Thai Farmers' Bank, are all Chinese family banks, the last-named being by far the largest and most important. Table 8.2 shows the structure of the Thai banks in 1965.

The Bank of Thailand's relations with the government

In its relations with the government the Bank of Thailand has plainly considered itself as responsible for the credit structure to the country as a whole (Puey and Suparb 1955: 134-5), rather than as an instrument of any particular government. To achieve this it has needed to establish a much greater moral authority than the Ministry of Finance. There are three reasons for this. First, the Ministry of Finance was originally organized on

TABLE 8.2 Thailand, Structure of the Domestic Banking System, Principal Assets and Liabilities as at 30 June 1965
(baht)

Names	Capital fund: Paid up capital	Capital fund: Reserve fund and undivided profit	Deposits	Cash	Bills	Loans and overdrafts
The Siam Commercial Bank Ltd (1906)	3,300,000	122,286,978	1,020,084,337	202,735,584	15,408,021	450,519,225
The Bank of Asia for Industry and Commerce Ltd (1939)	15,000,000	49,901,919	279,180,404	38,136,624	40,045,067	209,075,616
Bangkok Bank Ltd (1944)	100,000,000	95,153,905	2,663,596,761	615,748,393	1,382,699,664	1,508,055,682
Bank of Ayudhya Ltd (1945)	39,995,000	13,157,226	761,981,794	124,154,530	210,755,540	550,149,154
The Union Bank of Bangkok Ltd (1949)	20,000,000	11,069,358	351,875,663	68,173,122	55,990,030	172,685,561
The Thai Military Bank Ltd (1957)	10,000,000	27,619,102	418,374,153	155,403,905	72,889,738	305,412,322
Thai Development Bank Ltd (1934)	21,650,000	8,644,040	479,407,493	106,785,822	62,150,716	327,125,237
The Bangkok Bank of Commerce Ltd (1944)	12,000,000	25,826,980	750,152,294	133,329,706	94,192,947	455,273,802
The Provincial Bank Ltd (1942)	30,000,000	12,646,058	877,977,366	82,377,651	80,843,275	661,933,742
The Agricultural Bank Ltd (1950)	51,418,000	23,995,036	1,630,960,683	253,450,481	157,621,211	765,142,616
Other banks	54,679,400	156,825,058	2,167,929,325	396,736,069	765,652,328	1,381,401,140
Total	358,042,400	547,125,660	11,401,520,273	2,177,031,887	2,938,248,537	6,786,774,097

Dates of establishment of respective banks appear in parentheses after their names.
The table does not include the recently founded Asia Trust Bank Ltd for which figures in respect of 30 June 1965 were not available.
The merger of the Provincial Bank and the Agricultural Bank took place in March 1966.
Other banks include Bangkok Metropolitan Bank (1950), Laem Thong Bank (1948), Siam City Bank (1941), Thai Farmers' Bank (1945), Thai Dhanu Bank (1949), and Wang Lee Chan Bank (1933).

Source: Bank of Thailand (1965a).

modern lines by foreigners with all the prestige of a new technique, at a time when corruption, in the modern sense of the word, was not a problem. The King's servants had fully approved and legitimate ways of enriching themselves, which were expected to be kept within bounds. The new system of financial control gradually brought some order into this system. The Bank of Thailand, however, was established when the revolution had recently removed the element of royal patronage, making the whole system incompatible with what was expected of those in authority, while wartime inflation was making it essential for all civil servants to augment their incomes. To establish a moral basis of authority for a new institution in these conditions was much more difficult.

A further reason was the need to keep the Bank of Thailand largely independent of government control. In order to secure freedom from political pressures it was made an independent entity, and this freed it from control by the rules of the Civil Service Commission and the Comptroller General's Department. In the government of Thailand in general, it is usually in those sectors where central controls are relaxed, such as the government enterprises and the municipalities, that the worst financial irregularities are alleged. The Bank of Thailand, which through its inspectors exercises control, in a necessarily confidential way, over bankers who are among the richest men in the country, is itself free of all controls except public audit of its accounts. The opportunities for gain by any dishonest members of the Bank of Thailand's staff are almost unlimited,[10] yet it maintains a high reputation both in Thailand and abroad for its integrity.

Finally, unlike the Ministry of Finance, the Bank of Thailand has to exert its influence from outside the Cabinet. It has little political pull of its own and its weight largely depends on its reputation.

This moral influence has been achieved partly by careful selection, promotion, and dismissal. Prince Viwat appears to have been an excellent judge of character and the tradition has persisted. Moreover, advantage was taken of the Bank of Thailand's independent position to pay generous salaries. Bank of Thailand salaries, though below those of the better foreign firms, give incomes much higher than any honest civil servant can expect to earn; this is the key comparison for, although Bank of Thailand employees are not civil servants, the Bank's prestige gives them a status in the community little if any inferior to them.

The Bank of Thailand's authority also owes much to the example of its Governors. Reference has been made to resignations by Dr Puey, Mom Luang Dej, and Kasem Sriphayak. But perhaps the most important was the first of all, when Prince Viwat, the founder of the Bank of Thailand, unhesitatingly resigned in 1946 when the government compelled the Bank to sell some of its gold reserve in suspicious circumstances (Bank of Thailand 1961: Pt 1, 105-6). On this occasion the government replaced some of the directors also, but the attendant publicity appears to have frustrated whatever plans were afoot, for very little gold was in fact sold by the method desired by the government.

[10] See Bank of Thailand (1965b: 21-4) for an account of one of the few scandals involving Bank of Thailand officials. The Governor, Kasem Sriphayak, resigned because he had failed to prevent it.

Thus the moral authority of the Bank of Thailand has been built up at some cost; this is probably its chief source of influence. It has, however, used its moral authority and technical expertise to build up political supports, which have enabled it to play a very effective role in Thai politics, both in influencing government policy and in guiding the development of the banking system.

During the Japanese occupation its task of controlling inflation was partly technical but partly also political. It had to give the Japanese army sufficient facilities using the *baht* as currency to prevent it from issuing its own military scrip as it had done elsewhere; it had to use Thailand's very limited bargaining power with Japan to limit the effects on the balance of payments of the forced devaluation of the *baht* to parity with the *yen*. In addition, of course, it had to devise technical means of checking inflationary pressure. This was done largely by building up its moral and technical authority over the Yokohama Specie Bank, through which the Japanese conducted their exchange business.[11]

The success of the Bank of Thailand in maintaining Thai economic sovereignty and curbing inflation built up its financial influence with the politicians, and Prince Viwat used this in a series of memoranda on post-war reconstruction to try to create an anti-inflationary climate of opinion. He was, however, plainly worried over the trend of Thai politics and the difficulty of securing responsible financial policy.

During the war he was certainly in touch with Pridi, who was then both Regent and simultaneously the leader of the underground Free Thai Movement.[12] It is possible that Prince Viwat received detailed information about the Bretton Woods negotiations from this source before the end of the war,[13] and he may have decided even then that Thailand should seek membership in the International Bank and the International Monetary Fund. His open advocacy of Thailand's membership dates from his visit to Washington in early 1946, but the fact that he received assurance of British as well as American support for Thailand's membership at that time—in spite of marked coolness in the relations between Britain and Thailand—suggests that he had already played an active role. Thailand became a member of both organizations on 3 May 1949.

There was no great difficulty in persuading Thai politicians of the importance of belonging to both organizations. Field Marshal Phibun Songkhram, who had become the effective ruler of Thailand by the *coup d'état* of November 1947, had a special need to identify Thailand with the United Nations, because of his pre-war and wartime relations with the Japanese. Moreover, membership of United Nations bodies strengthened Thailand's autonomy; full fiscal autonomy had only just been regained before the war, and the government of Thailand considered it had achieved a considerable advance in the international status of Bangkok when the United Nations Economic Commission for Asia and the Far East, and

[11] This appears to have been done partly by detecting irregularities by that bank's staff (see Bank of Thailand 1961: Pt 2, 107).

[12] Several informants have emphasized that, in spite of their different politics, Pridi and Prince Viwat had strong feelings of mutual respect. For Pridi's wartime role see Wilson (1962).

[13] This is alleged by some who were in the Free Thai Movement. The published documents naturally reveal no such contacts.

other United Nations bodies, transferred from Shanghai to Bangkok in 1949.

Once Thailand was a member of the International Bank and the International Monetary Fund the Bank of Thailand was able to use this membership as a lever to move government policy in the direction of sound finance.

The two main instruments were first the annual consultations with the International Monetary Fund over the continuation of exchange controls and the multiple exchange rate policy, and later the negotiations with the International Bank over the loans for irrigation, harbour works, and railways. Details of the consultations and negotiations are not available as evidence in an analysis of policy. There are, however, certain pieces of evidence which suggest that the Bank of Thailand's role in negotiating external loans and administering exchange control gave it considerable influence when it agreed with the International Bank and Monetary Fund.

One suggestive sequence is the emphasis, in the Bank of Thailand *Reports* for 1950 and 1951, on the need to satisfy the International Monetary Fund concerning the Exchange Control Regulations, the report of successful negotiations in 1952 combined with recommendations for an improved tax system and better statistics to prevent inflation, and finally the reorganization of the statistics (with American aid) beginning the following year, leading up to the budgetary reform of 1956.[14] Another sequence is the International Bank loan of 1951 for port, railways, and irrigation, the appointment of advisers to help with these projects in 1954, further loans for railways and port in 1955 and 1956, and in 1957 the Yanhee irrigation and power loan and the arrival of the Survey Mission, which led to many major improvements in budgeting and organization. In both these sequences the Bank of Thailand is clearly not merely responding to outside pressure but mobilizing it for the improvement of the economy.

Can we draw from this evidence the conclusion that the Bank of Thailand simply co-operates loyally in carrying out the policies of the International Monetary Fund and the International Bank? While opposition of the Bank of Thailand to these international organs, if it exists, would certainly be concealed as far as possible, there seem to be instances when the Bank of Thailand's emphasis has been different. The Bank's early deflationary efforts, designed actually to raise the par value of the *baht,* were almost certainly a specifically Thai initiative. The Bank of Thailand may also have amplified an International Monetary Fund pressure for balanced budgets to press for improved information and more efficient procedure. Finally, it appeared quite early to go rather further than the International Bank was prepared to go (at least openly) in condemning Thai government participation in industry (Bank of Thailand 1943-(1954)).[15] In all this one must bear in mind the Bank of Thailand's moral and political role as the guardian of the currency and of financial virtue in Thailand, a role which the international organizations clearly cannot attempt to play.

Another source of influence for the Bank of Thailand is its role as guardian of the reserve funds. The Issue and Banking Departments are

[14] In the Budgetary Method Act of 27 November 1956 (see Govt of Thailand 1956).

[15] In the International Bank Mission Report of 1959, of course, the operations of existing government enterprises are vigorously criticized (see I.B.R.D. 1959: 93-4).

separated, as in the Bank of England, and the status of the currency reserve is thus quite clear: it is not the property of the government, and the Bank of Thailand could certainly resist pressures to change the character of the reserve (Puey and Suparb 1955: 134). Even more important, however, was the ownership—during the period of post-war reserve accumulation—of the stabilization fund built up from the profits on buying foreign exchange at the official rate and selling it at, or just below, the free market rate (Bank of Thailand 1962: 40-1).[16] More recently the management of the Exchange Equalization Fund has been a source of strength; this was originally based on the revaluation of gold and foreign exchange holdings in 1955, and since then may have been increased by exchange profits.[17]

The stabilization fund (which existed until 1955) enabled the Bank of Thailand to do a good deal of deflation, while inflationary spending by the government could be partly checked since it involved negotiating for Bank loans. The Exchange Equalization Fund has given the Bank of Thailand more autonomy and confidence in exchange matters.

The last source of influence of the Bank of Thailand, which arises directly from its prestige, is the wide publicity given to its *Annual Economic Reports,* and recently also to the Governor's speeches—especially the annual speech to the Thai Bankers' Association eagerly awaited by the press as a licence to criticize abuses publicly. In part these media are used to maintain a general alertness to the danger of deficits generating inflation (Bank of Thailand 1943-(e.g. 1950, 1951, 1953, 1963)); but more specific problems have been introduced from time to time. Criticism of the inefficiencies of government enterprises has been a frequent theme (Bank of Thailand 1943-(1954, 1958)); monopolies and other causes of high cost in exports are also often mentioned (Bank of Thailand 1943-(1959, 1961); Puey 1964). There are also references to foreign lenders and the need for scrutiny of borrowing abroad—a reference mainly to government and semi-government agencies which often use foreign credits as a source of private gain (Bank of Thailand 1943-(1959, 1962)). 'Influence' and corruption are also targets, particularly in the speeches, with enough detail suggested to cause some discomfort (Puey 1964).

Criticism in the speeches is frequently directed to abuses in the commercial banking system, such as unwise and illiquid lending, dishonoured cheques, dangerous borrowing from abroad, or banking anarchy due to excessive use of political influence (Puey 1964). This draws attention to the fact that control of commercial banking is an even more important part of the Bank of Thailand's function than exercising pressures on government policy.

[16] For further information on the Stabilization Fund and the Exchange Equalization Fund see Chapter 7.

[17] The fund attempts to offset only short-term fluctuations, not trends, buying and selling within a few weeks. These operations make profits; if it fails to detect trends and builds up or runs down stocks at prices not corrected by the operation, it will make losses on correcting its position. Only the annual foreign exchange holdings are published in International Financial Statistics, and the variations in these would tend to show mainly the losses. In 1956 and 1963 its holdings were 1·24 billion *baht,* having fallen to 0·82 billion in between. Valuing net sales and purchases at the average *baht* price of dollars each year, the net loss due to these trends was 1·8 million *baht* in seven years (less than one-quarter of 1% of its foreign exchange assets), a figure that could hardly fail to have been offset by profits on smoothing operations.

The Bank of Thailand's relations with commercial banks

In a general way the Thais have always recognized that control of both short-term and long-term credit is an important feature of economic sovereignty, but the problem of controlling bank credit has never been adequately solved. From the beginning it has involved political as well as technical difficulties, and the latest Commercial Banking Act of 1962 draws attention to some of the problems.[18] The Thai system uses, of course, several techniques that are common in other less developed countries, and some of these will be mentioned here for completeness. Attention will be drawn, however, to those elements in the control system which indicate the political and social features that appear to be special to Thailand.

In the early days of foreign exchange banking the Thais had neither the technical skill nor (probably) the political power to regulate banking activities. The founding of the Siam Commercial Bank was plainly designed to build up Thai power, both to compete with foreign banks and (ultimately) to exercise control over them (Bank of Thailand 1962: 1; Raksa 1965: Ch. 1). The original Charter of this bank was the first instrument of control over banking ever devised in Thailand (Sommai 1963: 5-6). It contained, in addition to a number of provisions designed to maintain liquidity and security, a clause limiting direct or indirect shareholding by foreigners to one-third of the total shares, and others requiring six-monthly reports to the Minister of Agriculture, and access by the government at all times to the bank's books.

The first legislation affecting banks was a set of Treasury regulations issued in 1929 under a law of 1928 regulating businesses affecting the safety and happiness of the people. This laid down for banks registered in Thailand regulations concerning capital (including a minimum requirement of 200,000 *baht*), annual submission of accounts, and restriction of non-banking business; required that their directors must all be Thai nationals; and prohibited the holding of real estate except for their own banking business. There appears to have been no attempt to control foreign banks until 1937 when difficulties as a result of the Sino-Japanese war affected one of the Chinese banks, and this, combined with the rising nationalist mood, led to an Act controlling all banking (Sommai 1963: 8). The preamble to the 1937 Act points out that control is still not strict, because the time for establishing a central bank in Thailand has not yet arrived. The banks were required to deposit cash or approved assets with the Minister of Finance, based on the amount of their capital, but otherwise the regulations were similar to those of 1929. The disposition to control the banks at this time was based partly on fears that they might be unsound, but mainly on the fact that they were run by Chinese and Europeans. The Thais lacked an effective instrument for controlling them, however.

The Act establishing the Bank of Thailand in 1942 had laid down cash reserve requirements for commercial banks related to the volume of their deposits. In the following year an Emergency Decree for the Control of Credit was introduced, establishing a comprehensive control of credit, with a view to curbing the inflationary pressure that was building up (Bank

[18] This Act is discussed in both Sithi-Amnuai (1964: Ch. 7) and Mousny (1964: 129-30).

of Thailand 1961: Pt 2, 211). This was mainly an attempt to make banks and insurance companies hold government bonds, but it also specified cash reserve requirements against current and deposit accounts. Unfortunately, this decree—after it had been in operation a few weeks—failed to secure the necessary parliamentary approval, and a milder Act, omitting some of the provisions relating to government bonds, was passed instead. This was an early instance of political pressure being mobilized, within Thailand, to frustrate financial discipline. The new Act, being an Emergency Act, had to be repealed in 1946.

The lack of any power to inspect commercial banks was felt as a handicap in controlling credit, and in 1945 a new banking law was introduced by Prince Viwat (Bank of Thailand 1961: Pt 2, 135-6), which in effect made the Bank of Thailand the main instrument for control of commercial banking, though most of the formal powers of control were given to the Minister of Finance. Rules were laid down giving the Minister power to suspend a bank's licence if it was conducting business in a way to cause serious danger to the public, to scrutinize its books without notice or authorize others to do so, and to take over the operation of any bank suspending payment. The Bank of Thailand was given wide discretion in determining the legal ratio of cash reserves to deposits, the range being from 9 to 20 per cent. The interest rate that banks could pay on different types of deposit was also fixed in relation to the bank rate as determined by the Bank of Thailand. In addition, the distribution of profits was restricted until capital and reserves reached an assigned proportion of all assets at risk. All these are fairly standard control procedures and their enactment showed little awareness of the control problems that would arise from the political power of the banks.

There is, however, an interesting memorandum by Prince Viwat discussing the regulation of commercial banks (Bank of Thailand 1962: 140), in which he shows full awareness of the problem that government control cannot be adequate to ensure safety of deposits without crippling the banks' activities, and yet any control imposes some moral responsibility on the government. The 1945 Act was intended to set standards for banking rather than to control it. It initiated the Bank of Thailand's practice of treating the differences in structure and motive between indigenous and foreign banks as due to moral deficiencies in the former. It is not clear, however, whether originally the intention was for the Bank of Thailand to act as the government's agent as fully as it later did. In any event there was clearly no desire to apply controls strictly at once. For example the control over interest rates paid on deposits was never effectively exercised during the whole period in which the Act was in operation. Prince Viwat originally indicated that he would prefer the banks to control competition for deposits themselves, and neither the government nor the Bank of Thailand intervened, even when banks were paying interest on deposits well in excess of bank rate.

It is indeed interesting that neither the government nor the Bank of Thailand made full use of the powers they had under the 1945 Act, even when on the face of it those powers would have been relevant to their objectives. When the government wanted to encourage the purchase of government bonds in 1956 it raised the rate of interest on them to 8 per cent (Bank of Thailand 1943-); this might well have had more impact if

effective action had been taken to control the rate of interest paid on bank deposits at the same time. In 1950, 1953-4, and 1957 the Bank of Thailand was becoming concerned about inflationary pressures; yet it did not attempt to raise the legal reserve ratios of the banks.

Probably political factors explain the reluctance to use administrative techniques. The long-run aim seems to have been to use monetary measures—in co-operation towards the end of the period with the Ministry of Finance—to get the banks dependent on the central bank for funds, while tightening up the internal structure by the system of bank inspections.

A new Currency Act of 1958, allowing a part of the currency reserve to be held in certain types of local security, gave the Bank of Thailand some power to influence the private money market; hitherto it had been constrained to use most of its funds for financing government operations.

It introduced a system of rediscounts, first in support of exports, and later to assist industry. At first the commercial banks would not use the facility, regarding the rate of interest of 7 per cent as too high (Bank of Thailand 1962: 79). At the end of 1959 a rate of 5 per cent was announced with a regulation that the commercial banks could not charge more than 7 per cent for the facility to the exporter. On this basis export credits began to expand intermittently, as shown in Table 8.3.

TABLE 8.3 Bangkok, Rediscounts by the Bank of Thailand by Commodities Covered

Commodity	1959	1960	1961	1962	1963	1964
Rice	295·9	486·4	551·8	380·9	317·8	420·9
Maize	26·4	142·3	110·6	81·8	100·3	322·1
Rubber		91·4	54·3	20·0	10·0	6·5
Tapioca products	—	8·9	22·6	23·6	50·9	44·5
Kenaf	—	18·1	19·5	6·9	9·2	22·9
Timber*	—	3·7	5·6	3·4	2·5	2·9
Sugar	—	—	—	—	3·7	47·3
Others†	3·9	18·8	17·2	143·4	57·0	46·1
Total	326·2	769·6	781·6	660·0	551·4	913·2

* Teak only in 1960 and 1961.
† Includes all commodities for which figures are not given.
Source: Bank of Thailand (1943-).

The financial instrument accepted for rediscount was the promissory note of an approved exporter to an approved bank. The promissory note is widely used in Thai trade. It could be issued against irrevocable letters of credit, usance export bills, or even overseas sales contracts. The Bank of Thailand was chiefly concerned to see that the credit was actually used to finance exports only.

The need to secure approval for the particular bank was intended to be used to enforce discipline in following regulations, and the amount of credit was limited in accordance with the bank's cash reserves and government bond holdings at the Bank of Thailand. Approval for the exporter was—among other things—a means of increasing the Bank of Thailand's knowledge about the export trade.

In June 1963 the Bank of Thailand introduced new rediscount facilities to enable approved manufacturers to buy the minimum necessary amount of

raw materials on credit through promissory notes rediscounted by approved commercial banks. A year later, manufacturers approved under this regulation were given additional facilities to enable them to sell their products on credit.

The objective of the rediscount facilities appears to be fourfold. First, the announced objective is to further export trade and industrialization using local credits; this is an acceptable national objective, incorporating national development aims. Next, another announced but less emphasized objective is to divert the attention of banks towards less profitable but more liquid types of business, so reducing risks of bank failures. A third objective can be inferred from general Bank of Thailand policy, namely to reduce the general level of interest rates in Thailand, by allowing a greater spread to develop between types of business according to liquidity and risk. Finally, the Bank of Thailand is almost certainly interested in increasing its own control over the short-term money market.

Inspectors under the 1945 Act were first appointed by the Minister of Finance from the staff of the Bank of Thailand in 1953 (Raksa 1965: Ch. 3). Their function was not primarily that of audit, though they were as much concerned with the validity of accounting procedures as with any other aspect of sound banking. It is apparent, however, that they were not completely free to enforce all provisions of the 1945 Act, and it seems a reasonable conjecture that political pressure on the Minister of Finance was one of the factors involved. Probably the pressures were disproportionately great in relation to certain banks; this would be consistent with recent efforts by the Bank of Thailand to use the Thai Bankers' Association as a pressure group in support of better banking practices and more effective control.

We may learn something from the new measures that were introduced in the new Commercial Banking Act of 1962. First the licensing and inspection regulations referred more specifically to the Bank of Thailand as agent, though the Minister of Finance remained the principal. A related and more substantial innovation was the protection of private accounts from government scrutiny in the course of bank inspection.

Up to this time the Bank of Thailand had followed the normal practice of treating the control exercised by government as the bulwark of financial virtue. Now it was beginning to emphasize sound *banking* practice and to take initiatives towards acting as a bank in promoting a new banking code.

Next there were changes in the cash reserve and capital reserve ratios, designed to promote the kind of banking which the Bank of Thailand wished to encourage. The Bank of Thailand was first given wider powers to vary both reserve ratios, the former within the limits of 5 and 50 per cent, the latter within the limits of 5 and 15 per cent; this was a normal technical instrument. It was also, however, given the power, if it wished, to specify the ratio between the banks' capital and any given category of asset—clearly a power to be exercised sparingly, but a useful one for setting minimum standards of banking practice.

Perhaps more important was the exemption of certain types of asset from one or other of these ratios, obviously with a view to stimulating bank holding of these assets, for example bills of exchange in payment of exports; another important provision allowed unobligated government securities lodged with the Bank of Thailand to rank as cash reserve up to

the extent of 25 per cent of the reserve.[19] There are also provisions designed to combat the role of commercial banks as private financial empires: only 40 per cent of the value of a bank's own capital may be lent to any one borrower (including his spouse, partners, and subsidiary companies), although bills of exchange for exports are not included in such loans; and no one person may be a director of more than one commercial bank.

Finally, instead of defining maximum rates of interest by reference to bank rate and keeping these rates in reserve, the new Act gives the Bank of Thailand power to prescribe maximum interest rates for particular kinds of deposit or loan—a power which the Bank of Thailand has exercised and is trying, with varying success, to enforce.

It is apparent from these changes that the main interest of the Bank of Thailand has been in ensuring adequate liquidity, increasing its power to control the money market, and modifying the structure of the banks away from that of semi-political institutions furthering the interests of particular groups towards impersonal, rational agencies creating a market for various types of liquid assets. In this, though the main control has necessarily been one of curbing undesirable practices—and this has by no means ceased to be necessary—there has been some limited success in fostering new kinds of credit, particularly through rediscounts.

Before considering further implications of these controls it is necessary to draw a parallel between the relation of commercial banks to the Bank of Thailand and the relation of individual ministries to the Ministry of Finance.

Role of the Ministry of Finance

Policy is made in Thailand as a result of a balance of political forces, and this is particularly true in the financial field. Until the setting up of the Budget Bureau in 1959 financial allocations were largely a result of interactions between the operative agencies, which were the ministries and departments, and a regulating agency, the Ministry of Finance. The ministries and departments are—like similar agencies in a democratic régime—engaged in furthering political goals in the process of carrying out specialized functions of government. The goals themselves, however, are different, being related to the Thai political system of groups supporting the Prime Minister or potential *coup* leaders, and the methods of securing them depend partly on functional success, partly on economic factors and patronage. The structure has been discussed more fully in Chapter 4. This system of political groups is limited in its disruptive effects by centralized institutions such as the Ministry of Finance and the Civil Service Commission which are staffed by people trained to carry out certain rules and observe certain codes, and in general the actions that are taken are a resultant of positive pressures—professional, political, and personal—working through the operative ministries, and checks operating through the enforcement of codes by the centralized control institutions.

This interaction results in a good deal of inertia, though the position has improved with the increasing importance of the Budget Bureau and the National Economic Development Board. These—especially the latter—are relatively professional bodies, yet their function is not primarily a screening

[19] Since raised to 50%.

but a promotional one. They can and do take up suggestions from the keen civil servants in the departments and attempt to promote and control simultaneously.

It is now well known, as a result of public discussion since the death of Field Marshal Sarit, that during his régime a considerable flow of funds passed through the Prime Minister's hands, mainly from sources other than irregularities in the ministries,[20] and mainly to his political and military supporters. These funds, paradoxically, made it possible for him to make the financial system more efficient.

It is perhaps not altogether fanciful to compare Sarit's handling of financial controls with that of King Chulalongkorn. He did not, of course, have a substantial civil list, and therefore could not reward his supporters openly, but by keeping his system of patronage (at first) largely clear of the machinery of government he was able to build up a more orderly system of finance.[21] The Budget Bureau was set up within the Prime Minister's Department in 1959; thereafter, accounts were far more detailed, with a better basis for both revenue and expenditure estimates. The systems of collecting sales taxes and income tax were reorganized to eliminate leakages and produced a substantial increase in revenue in 1961 (when calculated on a twelve-month basis) and 1962 as shown in Table 8.4.

TABLE 8.4 Changes in Thai Government Revenue, 1960-3
(million *baht*, rounded)

Types of revenue*	1960	1961†	1962	1963
Income taxes	582	720	728	790
Sales taxes:				
general	712	833	1,457	1,544
commodity taxes	552	615	399	401
royalties on natural resources	127	142	161	173
total	1,391	1,590	2,017	2,118
Customs duties	3,294	3,730	3,666	3,865
Fees and permits	201	257	232	249
Other taxes and duties	675	703	727	924
Non-tax revenue	643	586	615	697
Total revenue	6,786	7,586	7,986	8,633

* In this table revenue is classed according to Budget categories. Its subdivisions therefore differ from those of Table 7.6, which classifies revenue from trade broadly according to sector origin.

† The financial year in 1961 ran from 1 January to 30 September. For comparison with other years the revenue under each heading has been raised by one-third.

Source: National Statistical Office (1956-(1964)).

Effects of interactions on policy

The Bank of Thailand's relation to the commercial banks has something in common with the relation of the Ministry of Finance to the operating departments. It is attempting to impose a code of banking practice, largely imported from the West, on a commercial banking system much of

[20] Part of the state lottery funds, three banks, and interests in contracting and other businesses are the best known of these. It is interesting that one of the state's main claims on his estate was for nearly half a billion *baht* of unpaid income tax.

[21] In the latter part of his tenure of power, his extensive and decentralized domestic commitments apparently drove him to more direct misappropriation of state funds.

which grew up with Chinese banking traditions. It encounters the constant difficulty that its main instruments of control are negative, and the effect of exercising them may be to hamper development.

It is no more possible for an individual Thai bank to conduct its business along the lines of a typical bank in Europe or America than it would be for a Thai ministry to function like a European ministry. The structure of competition is different, and the political interactions between the Thai military *élite* and the mainly Chinese individuals who have the banking skills inevitably give rise to different motives and patterns of behaviour.

Aggregate money supply. The first point which needs consideration is the policy for controlling the total money supply. Here it seems clear that the main anxiety of the Bank of Thailand has been to counter long-run inflationary pressures rather than maintain at all times a level of aggregate demand that would make for maximum growth. This is because the instruments of control are relatively blunt, and also because there is considerable doubt whether macroeconomic factors related to the money supply as a whole are as important for growth as redirection of the energies of the financial institutions into growth-promoting activities. The Bank of Thailand is more often concerned to control speculative or dangerous investment of deposit funds than to adjust the total amount of lending.

This in itself is a rational emphasis. Thais have been persuaded to adopt the banking habit to a remarkable extent in half a century, and especially in the period since World War II. Deposits in commercial banks have increased about eight times in this period, while the gross national product has probably increased less than three times and the currency circulation about three and a half times (I.M.F. 1948-(Supplement to 1965/6 volume)). Increasing use of the banking system has been accompanied by dangers, and the authorities have had to take over two banks. It is natural that they tend to use their limited powers partly to curb any long-run tendency to inflation and partly to keep the commercial banks as liquid and safe as possible.

The Bank of Thailand's powers over the total money supply are of three kinds. First, it has fairly considerable legal powers over the commercial banks. It can vary the proportion of capital to total liabilities, the proportion of the 'cash' reserve to demand deposits, and the proportion of government bonds which commercial banks may hold in their cash reserve. It can also grant permission (which is often requested) to lend more than the statutory maximum of 40 per cent of the equivalent of a bank's capital to any one borrower. Strictness or laxity in granting this concession could influence the volume of credit (Raksa 1965: Ch. 2). Finally, it can use the power which was given by the 1962 Act, to specify the ratio of any particular class of asset to banks' total deposits.

Of these legal powers, only the power to vary reserve ratios appears to have been specially designed to influence the money supply, though in fact the increase early in 1966 of the proportion of government bonds that could be held in the 'cash' reserve was apparently a mild inflationary measure designed to meet some complaints that the increasing cash reserve of the Treasury and American restrictions on overseas lending were having a deflationary impact on Thai banks.

TABLE 8.5 Thailand, Factors Affecting the Money Supply
(million *baht*, rounded)

Year	1 Change in domestic bank credit			2 Change in offsetting items (increase = minus)					3 Change in foreign assets	4 Change in money supply (1+2+3)
	total	to public sector a	to private sector b	total	time and savings deposits a	govt or govt-organization deposits b	counterpart fund c	others d		
1955	-930	-1,478	548	-716	-151	65	-90	-540	2,436	790
1956	1,105	540	565	-808	-428	-76	-233	-71	204	501
1957	951	458	493	-606	-297	-61	-101	-148	123	468
1958	1,063	422	641	-408	-315	-46	77	-124	-400	255
1959	1,105	546	559	-439	-157	-205	-76	-1	-42	624
1960	1,034	185	849	-913	-448	-562	-14	110	891	1,012
1961	659	-166	825	-1,243	-678	-330	-79	-155	1,572	987
1962	2,010	805	1,205	-3,184	-1,775	-710	-23	-676	1,192	18
1963	961	-156	1,117	-1,016	-1,378	371	83	-91	843	788
1964	2,216	552	1,664	-3,048	-1,453	-1,098	101	-598	1,875	1,043
Average	1,017	171	847	-1,238	-708	-265	-35	-229	869	649
Average (1956-64)	1,233	354	879	-1,296	-770	-302	-29	-194	695	633

Source: Bank of Thailand (1943-(1964)).

Because of the political difficulties of changing reserve ratios or operating against particular banks, it is understandable that these legal powers are unlikely to be used for week-to-week adjustments of the money supply. A more promising instrument would appear to be a Thai version of open market operations. The Bank of Thailand could curtail or expand the rediscount facilities or it could take a more active role in distributing government or Treasury bills for the government, holding them itself to expand the currency or selling them to limit the expansion through the resulting influence on commercial banks' liquidity. In fact, overriding considerations of policy appear to have prevented the Bank of Thailand from using either of these instruments at all extensively.[22] On the one hand the Bank of Thailand is attempting to expand the rediscounting operations as rapidly as is consistent with security; the reasons for this have already been discussed. On the other, it has pressed the government so hard to avoid central bank borrowing and to limit its internal borrowing (in the main) to loans from the public and the commercial banks, that it could hardly go far in refusing to sell government securities to the market, even if it temporarily wished to expand the money supply. It can so far do little more than accept a passive role of selling such government securities as the market will take.

In these respects the Bank of Thailand appears to be willing to exercise some short-term control, but only within rather narrow limits set by the general policy. Two other possible instruments of control are apparently not used at all for internal short-period adjustments: these are the Exchange Equalization Fund and the United States Counterpart Fund. The former is used exclusively for eliminating casual or speculative short-run variations in the exchange value of the *baht,* without regard to any internal monetary effects. The latter is not controlled by the Bank of Thailand at all, and though it is managed with some concern to prevent major inflationary impacts, it is not treated as a regulator.

The main sources of changes in the money supply are shown in Table 8.5. For the purpose of looking at Bank of Thailand policy in general, we might perhaps treat the overall balance of payments situation and the size of the government deficit as factors outside the Bank of Thailand's control. The Bank can, however, accentuate or minimize the effect of these factors by technical operations. Some of its operations would, admittedly, have an effect on the figures themselves, but most normal market operations would affect them little in the short run. Table 8.6 compares the actual change in the money supply each year with the change that these factors would cause. If we compare columns 4 and 5 we should expect an active policy of stabilization to give figures in column 5 higher than those in column 4 when those in column 4 were less than the average growth rate of the money supply, and lower in the opposite case. The comparison gives a rough indication that monetary policy has had a generally stabilizing effect, but has not achieved much precision. In two cases, 1957 and 1962, there was over-correction that aggravated instability, but in every other year there

[22] A study of the possibilities of the Treasury bill market as a control instrument is at present being made at the Bank of Thailand. Some of the information here is taken from a preliminary article, 'Tua ngoen khlang' (Treasury bills), to appear shortly in the Bank's *Monthly Bulletin.*

TABLE 8.6 Thailand, Exogenous Factors and Money Supply
(million *baht*, rounded)

Year	1 Government deficit (surplus = minus) total	monetary operations a	use of cash balance b	net borrowing c	2 Balance of payments (current account)	3 Capital movements	4 Influence of 1+2+3 on money supply	5 Actual change in money supply	6 Change due to internal policy
1955	647	(13)	(–70)	(704)	–520	750	877	790	Correction
1956	672	(16)	(–1)	(657)	–504	871	1,039	501	Over-correction (stabilizing)
1957	438	(16)	(–64)	(486)	–948	1,212	702	468	Over-correction (destabilizing)
1958	470	(16)	(89)	(365)	–1,663	813	–380	255	Correction
1959	630	(18)	(–121)	(733)	–1,392	1,294	532	624	Correction
1960	–58	(8)	(–504)	(438)	–790	1,120	272	1,012	Over-correction (stabilizing)
1961	–25	(9)	(–133)	(99)	149	1,302	1,426	987	Correction
1962	205	(21)	(–777)	(961)	–1,348	2,299	1,156	18	Over-correction (destabilizing)
1963	563	(63)	(432)	(68)	–2,286	2,638	915	788	Correction
1964	631	(65)	(–563)	(1,129)	–1,097	2,294	1,828	1,043	Correction
Average	417	(25)	(–171)	(564)	–1,040	1,459	837	649	

Source: (column 1) I.M.F. (1948-(Supplement to 1965/6 volume)); (columns 2 and 3) Chapter 6, Table 6.4.

was some correction—in two cases an over-correction that increased stability.

The average rate of expansion of the money supply has been lower than would be indicated by the effects of government deficits and external factors, 649 million *baht* as against 837 million. The causes of the difference can be inferred from Tables 8.5 and 8.6. First, although the changes in foreign assets have been noticeably greater (column 3, Table 8.5) than would appear from the balance of payments figures in the next table,[23] this is more than offset by the fact that a high proportion of the government deficits have been absorbed by deflationary influences. Bank credit to the public sector (even when allowance is made for the exceptional reduction caused by the revaluation of the reserves in 1955) has not significantly exceeded expansion in the deposits of government departments and organizations. The main reason for this is probably the success of the Bank of Thailand in selling government bonds to the public, and the policy of building up the Treasury cash reserve in recent years (as shown in column 1 b, Table 8.6). Bank credit in the private sector has been restrained by Bank of Thailand controls so that it is less than the sum of the offset columns, 2a and 2d. The latter has been swollen by large increases in commercial bank capital brought about by the pressures of the 1962 Act.

The rate of increase of the money supply has also been not significantly higher than the rate of expansion of the gross national product. So far as they go, these figures indicate that if the economy has become more monetized over the last few years this has had to be done by increased velocity of circulation in certain sectors, against mild deflationary pressure by the monetary authorities.

On the whole, however, the evidence shows a comparative absence of interest by the Bank of Thailand in estimating closely and trying to maintain that rate of expansion of the total money supply that would maintain maximum economic growth.

It is questionable whether it would be advantageous to Thailand if the Bank of Thailand became more sensitive to fluctuations in the total volume of money. Clearly Thailand has an economy very unequally monetized, with only limited mobility between different areas, yet—because of the branch banking system and the high administrative centralization in Bangkok—statistics are collected for the country as a whole. It is perfectly possible for inflationary pressure to appear in the neighbourhood of a new government development or in an area growing a new export crop, while Keynesian unemployment exists in other parts of the country. As at present organized, the branch banking system certainly does not generate enough monetary flexibility, because (to a very large extent) it is an instrument for concentrating funds in relatively few hands, mainly in Bangkok. The Bank of Thailand has opened one branch at Hadyai in the far south and is planning to open others. An interest in the detail of branch banking is clearly something to be welcomed. It is probable that a more active policy in relation to the total volume of money would tend to divert attention from divergences in regional needs for credit, as well as from the financial structure of commercial banking.

[23] This is a result of a bias in the errors and omissions figure in the balance of payments statistics (see Chapter 6, Table 4) showing an average surplus of over 200 million *baht* per year.

Interest rate structure. Management of interest rates is another branch of policy that can be understood only in relation to the structure of the banking system as a whole. The Bank of Thailand has issued several official statements indicating a policy of reducing interest rates, and it possesses considerable legal powers to prescribe the different rates in the market. Its main problem, however, is to keep down the interest rates paid for deposits, in face of the keen competition for deposits between the different commercial banks. One essential of a bank in most countries is complete confidence in its management's solvency and integrity. This requirement led in Thailand before World War II to foreign banks doing more business than most Thai banks, while the Siam Commercial Bank always appointed foreign managers. The code of banking practice transmitted and observed by these foreigners was one based on making a current account in a bank equivalent to money. Like all professional codes, this one contained both standards of behaviour and restrictive practices. Competition for deposits tends to bid interest rates up until a bank cannot afford to hold a high proportion of short-term liquid assets, the rates on which are internationally determined; such competition was therefore discouraged.[24]

The wartime origins of the Thai banking system did not foster a Western type of banking code. Banking is relatively easy during the early stages of an inflation, and confidence is less important when holding even the currency is risky. Since the war, confidence of Thai depositors has clearly depended on the Bank of Thailand's controls and the government's manifest intention to preserve Thai banking, demonstrated by its intervention to protect depositors' interest when two banks were in danger of failing. Wartime inflationary experience led to competition for deposits and payment of interest on current accounts (sometimes disguised as deposit accounts), but this has been accentuated since the war.

The present situation, in which strenuous competition between commercial banks has driven interest rates up to 3 per cent even on (effectively) current accounts, suggests legal action by the Bank of Thailand to enforce lower interest rates.[25] There are, however, considerable political difficulties in enforcing the legal rate structure on the more influential Thai banks. An attempt to reduce rates might simply strengthen the financial power of banks politically strong enough to resist the Bank of Thailand. Clearly the Bank of Thailand's strategy is to mobilize support from other banks for any pressures which it wishes to exert. Meanwhile it continues to persuade banks to take larger portfolios of Treasury bills and government bonds, on which open market operations in the direction of lower rates might ultimately be undertaken.

It has indeed begun to exert pressure on short-term interest rates through operations with Treasury bills. The Treasury now has a considerable cash reserve and recently Treasury bills have been sold more for the effect on the money market than because of an urgent need for finance. On the Bank of Thailand's advice the maximum annual rate of interest on three-month bills was reduced to 4½ per cent in June 1965, and in October sixty-day bills were introduced at a maximum rate of 4 per cent. The Bank of Thailand has also introduced a new system of rediscounting Treasury

[24] There is an interesting reference to this control in the *Viwat Memorial* (Bank of Thailand 1961: Pt 2, 148).

[25] Action along these lines was taken in June 1966 as this chapter was being written.

bills at varying rates, which makes them, in effect, more liquid than before. In 1964 the Bank of Thailand reduced the interest rate on government bonds from 8 to 7 per cent and undertook to repurchase them at a discount. All of these were significant efforts to establish lower interest rates on the more liquid assets.

It must be emphasized that the aim is not a general reduction of all interest rates. The Bank of Thailand's anxiety about inflationary dangers might indeed lead it to doubt whether a higher aggregate level of investment could be allowed in Thailand without additional private saving.

The main aim is to secure differential reductions in certain parts of the capital market. Lower interest rates on circulating capital would facilitate competition by weakening the power of trade credit; lower interest charges by some of the branch banks could lead to the absorption of under-employed resources.

Credit risks and the banking system. We may, however, doubt whether the Bank of Thailand is not applying an excessively Western stereotype for commercial banking. Some bank activities should no doubt be concerned with providing a near substitute for money, and the central bank should take some steps to see that this is as secure as possible, but it may be necessary in Thai conditions to accept the fact that banking institutions will engage in more risky lending, passing on some of the risk to their depositors at a suitable risk premium. This situation might be regulated and institutionalized through such techniques as deposit insurance, limited strictly to deposits bearing no interest, or regulations insulating the risks of bank subsidiaries from affecting the security of depositors. Innovations in the control of bank branches, to make them more effective as agencies for local development, seem especially necessary.

It is natural that the Bank of Thailand, which derives much of its influence from its reputation abroad for integrity, should try to propagate the image of a banking system as something with uniform standards everywhere. The high prestige which Western institutions enjoy among the bureaucratic *élite* lends support to this policy. Naturally, the Bank of Thailand does not wish to play the 'front man' to commercial banks which attract deposits from the public and loans from abroad mainly because of the Bank of Thailand's inspections and control.

Thai commercial banks should, indeed, be prevented from receiving, for various risky operations in which they wish to engage, the protection that they now enjoy as providers of a supplementary currency. They need not, however, be prevented from engaging in these operations. It is probably desirable that ordinary people—other than current account depositors—should lose money either through failing to read balance sheets or through trusting men who proved to be law-breakers. It is clearly undesirable that, in a system tending toward private enterprise, so high a proportion of the losses from breaches of the rules should fall on the government, or the public in general, and so low a proportion on private individuals. The middle-class indignation against the peculations of Field Marshal Sarit was largely a ritual gesture to Western values, as it were atoning for the genuine respect given to his widespread patronage and generosity. It would have been much stronger—and not limited to Sarit alone—if most of the losers as well as the gainers had been private individuals.

Financial controls, systems of accounts, and bank and company legislation fulfil, in Western capitalist societies, certain functions of protecting particular interests. Those whose interest would be threatened by breaches are prepared to defend the systems vigorously. In Thailand most of these controls have been introduced by a Western-oriented bureaucracy. Eagerness to extend the system tends to express itself in inhibiting risks that might damage public confidence. It is arguable that well publicized withdrawal of public protection, followed by losses through breaches or evasions, would actually strengthen the system by identifying particular interests with its maintenance.

A similar argument may be applied to modifications of the capital market. The official policy at present is apparently to limit the investments of the commercial banks, other than their advances, increasingly to short-term securities such as Treasury bills or bills of exchange, and government bonds, and to control advances in relation to the total capital of the bank concerned. The banks are not to be encouraged to participate actively in the development of either agricultural credit or a market in stocks and shares. The reason for this, in terms of the stability of the currency, is obvious. Yet it is far from clear that this is the best way of promoting development. It implies leaving long-term financing to the government-sponsored Industrial Finance Corporation of Thailand, which can hardly be encouraged to engage in anything very risky, and the small and rudimentary Bangkok Stock Exchange, which is trying to set standards for registration but has access to only a very small section of the finance in Bangkok. It also means concentrating loans to the rural sector in the hands of the National Agricultural Credit Bank to be established by the government. The commercial banks are in touch with most of the people with available risk capital in the country, and it would probably be desirable to give them more access to these areas while clearly separating these functions and attendant risks from their purely currency functions.

Steps may also need to be taken in the market for foreign funds to allow, and indeed compel, foreigners to take greater risks in lending for particular projects in Thailand. The present situation is one in which standard procedures exist for any public borrowing abroad, but municipal enterprises, government undertakings and the like are often able to avoid these procedures and obtain suppliers' credits and other finance, knowing that, for the sake of Thailand's overseas credit, debts are unlikely to be repudiated. Since October 1960 a government Foreign Loans Sub-Committee has existed, under the chairmanship of the Governor of the Bank of Thailand, and overseas obligations should not—in accordance with a Cabinet policy statement of that date—be incurred without approval of this committee. Nevertheless it is possible for departments and organizations to incur such obligations, especially on suppliers' credits, if they have sufficient political support to avoid prosecution.

It would appear to be desirable for respected authorities like the Bank of Thailand to publicize abroad the existence of this committee, and insist that adequate formal procedures exist by which lenders to institutions in Thailand can ensure that the loan will not be dishonoured if there is a shift in political power. Fair warning should be given that those who play politics in Thailand, and rely on the power of a particular politician to

push a scheme through without formal consideration by the committee, are gambling on the continued political power of their backer. Such gambling is by no means necessarily harmful to Thailand in its present phase. Thailand is certainly not yet in a situation in which proper financial controls are universal. There may be development projects which are genuinely viable because of the political support of some general or the economic co-operation of some bank, but could not be authenticated in proper documents, because some of the individuals concerned are engaged in irregularities. If foreign individuals wanted to lend to such projects the Bank of Thailand might better serve economic development (and, in the long run, financial virtue too) not by preventing them but by insisting that they evaluate and bear their own political and financial risks, and that the credit of Thailand is in no way involved if they lose their capital.

The Thai political machine is so much involved with the economy, and the edges of what is official and what is private are at present so blurred, that it may be wiser to emphasize the control procedures that are available, and to insist that without these there is no public liability, than to pretend that all public concerns are in fact fully under control.

An example from the past may illustrate the point.[26] When an American bank lent money to the National Economic Development Corporation (NEDCOL) in 1954 it relied on the facts that Lüan Buasuwan, who was arranging the finance, was supported by General Phao and by Prime Minister Phibun Songkhram and that Thailand's credit was sound. It did not consider that it needed to weigh the risk that a subsequent Prime Minister might argue that the support of these politicians was worthless, because the loans had been made to an organization deliberately kept outside the formal control of the Ministry of Finance. In fact arguments of this kind nearly did prevail after Phao and Phibun fell from power. Thailand may have been right to honour NEDCOL's debts, but the Foreign Loans Sub-Committee should make it quite clear that in any analogous situation in future it would advise against honouring any such debts, whatever office-bearers had supported the incurring of them, if the full normal procedure of committee approval had not been carried out.

To summarize, it is probably desirable that both foreign suppliers and local investors should lose money as a result of breaches of financial rules, so as to generate a determined opposition to any such breaches. The Bank of Thailand and the Ministry of Finance are not custodians of the credit standing of every Thai or the security of every investor, and it may be desirable to limit controls so as to allow genuine risks to fall on others besides the government or the public as a whole.

[26] This example is based on the International Bank Mission Report (I.B.R.D. 1959: 91-2) and on personal interviews.

9

The Thai Rice Trade

DAN USHER

The work and the cost of the rice trade are of interest not only because of the importance of rice in Thai economic life but also because the trade has been the subject of controversy in Thailand in recent years. This has come about in two ways. Firstly, it is widely believed in Thailand that much of the poverty of the farmers may be attributed to exploitation by traders and middlemen; if only the traders could be by-passed, and a more direct route found between the rice farmer and the rice-consuming public (such as co-operatives or public trading companies), then farmers would be more prosperous and rice cheaper in the shops. Secondly, one's view of how the rice trade works is essential to one's assessment of the effects on farmers and other social classes of the Thai export tax on rice. For many years there has been a running debate within the Thai government as to whether the export tax should be maintained or abolished, and one ingredient of the debate is the question of who the beneficiary of the abolition of the export tax would be. Some say that abolishing the export tax would not help the farmers very much for the greater part of the potential increase in farmers' prices would be siphoned off by traders. Others say that traders' markups tend to be constant and not very sensitive to changes in the rice price, so that changes in the world price of rice or changes in rates of the Thai export tax are fully passed on to the farmer. On the latter view the burden of the export tax falls wholly on the farmer, and the farmer would be the chief beneficiary of its abolition.

We can go a long way towards settling both of these issues, that is deciding whether the farmer is exploited by the trader and assessing the distribution of the burden of the export tax on rice, by finding out what traders charge for their services. This chapter is a report of an attempt to do so. During the first three-quarters of 1965 I travelled widely in Thailand, inquiring about prices and costs from farmers, traders of many kinds, and officials. From these interviews I was able to build up the pattern of rice prices from the farm through the different stages of trade to final consumer.

A word might be said about the method of study. The study was not particularly scientific or systematic; there was no set questionnaire and the questions themselves varied from one interview to the next, because I could not anticipate what the different costs would be. Spoilage, weight loss, theft,

cheating on weights, bribery, changes in definitions of units, customary gifts, as well as ordinary costs of production have to be taken into account.

There was a problem of sifting truth from falsehood. Some traders do not tell the truth because they do not like inquisitive people, or because they have something to hide, like cheating on income tax or earning more for their services than their customers would tolerate if they knew the truth. The main test of truth was consistency, internally within an interview and among the accounts of different traders. On the whole the rice trade is highly competitive, so that one can ask the same set of questions to many traders in the same line of business. The truth about the trade comes up again and again, but it is unlikely that many traders who are not given the opportunity to compare their accounts would lie in the same way. The process of finding the truth is simplified by the fact that one man's buying price is another's selling price, so that there must be consistency among the stages of trade as well as within each stage of trade.

My impression is that the small traders, in effect all traders but the exporters at Bangkok, were on the whole quite open about the details of their business, much more so than Western traders in Thailand and elsewhere usually are. More often than not the trader would tend to overstate rather than understate his profit margins in the first round of questioning. This was partly because he would leave out some of his costs, but partly because he had in his mind a target rate of profit that he felt he ought to earn but in fact rarely did. Cross-examination usually reduced rather than increased the initial profit figures. There is a danger in this method of study that the investigator may impose his own standard of reasonableness on to the data, accepting observations that accord with his presuppositions and rejecting those that do not. No doubt this process took place to some extent in the collection of the material in this paper but I doubt that the main results were affected very much.

Despite the occasional falsehood and the unwillingness of some traders to talk about their businesses, the information was on the whole easy to collect. Most of the information I required was so well known in the trade that there was no incentive for anyone to go to the trouble of concealing it. My program of estimating the costs to the public of the rice trade required at a minimum that I know such things as the total cost of each stage of trade—transport cost and the difference between the miller's buying and selling price. This sort of information cannot be concealed from buyers and sellers, so there was no reason to conceal it from me. Also, since pure profit margins of the traders are usually a very small part of their gross margins, one can get a fairly good idea of the breakdown of expenditure without being able to guess profits within a few hundred per cent. Men can become very rich on profit margins small enough not to have any appreciable effect on the figures I was trying to collect.

A general view of the rice trade

The function of the rice trade is to collect from the farmers the surplus of rice over and above their own needs, to mill it, and to distribute the rice where and when it is needed for export and by people in Thailand who do not grow rice themselves. The trade can conveniently be divided into

purchase of rice from the farmers, milling, storage and interest cost, transport, retail selling, and export. Each division of the trade is discussed separately below and an estimate is made of its cost. The total cost of the trade may then be computed just as if the thousands of small firms engaged in the different facets of the trade were parts of a single rational enterprise, for without formal co-operation among traders and without central direction of any kind, the different firms combine into a mechanism that is highly sensitive to local or temporal variation in demand and that succeeds in placing the rice where and when it is required.

The trade is analysed by functions rather than by types of firms. There is, of course, a close connection between types of firms and economic functions because it is convenient for firms to specialize in particular aspects of the rice trade. The economic motive for specialization is not reinforced by sociological considerations like caste, and in fact some firms participate in many parts of the rice trade. Though most purchasing of rice from the farmer and most transport is conducted by specialist firms, some millers engage in both these activities when it is advantageous to do so. Equally, the farmer may own and operate a truck or a small rice mill or may profitably store rice. There are a few large traders who participate in every phase of the business, from purchase of rice from farmers to export.

The great sociological division is between the farmers and officials who are Thai and the traders of all kinds who are Chinese (by 'Chinese' is meant immigrants from China or their descendants). The Chinese are not allowed to own farm land until the second generation and in practice they rarely do at all, except for vegetable farms near Bangkok. There is some animosity between the two racial groups and part of the feeling against traders is racial rather than economic. However, the Chinese are gradually assimilating into the larger Thai community, and Thais are beginning to enter business. Certainly there is none of the dramatic conflict between locals and overseas Chinese that is found in other parts of South-East Asia.

The direction of trade is generally south, from the rice surplus areas of the North, Northeast, and Central Plain to Bangkok for local consumption and export, and to the rice deficit areas of the southern peninsula. There are exceptions to this general movement. Low grade rice and bran for animal feed sometimes move into the North from the Central Plain, and against the usual flow of traffic in the Northeast. Also the North occasionally imports white rice at the same time as it exports glutinous rice.

Rice as a commodity

Rice is not a homogeneous product. This lack of homogeneity is reflected in the price of rice, and had to be taken into account in this study lest a price differential due to quality differences be mistaken for a cost of trade or an anomalous market situation.

Six types of economic difference in the quality of rice may be distinguished.

1. Glutinous as against 'white' rice. These are the two main divisions among species of rice grown in Thailand. White rice is what is called Patna rice in England. Glutinous rice, which is actually whiter than white rice, is rarely seen in Europe. It is the staple food among the Thais in north and northeastern Thailand, and is used in desserts elsewhere.

2. Percentage of broken grains. Rice selling in the shops or for export may consist of completely unbroken grains of rice, or of rice broken up so finely as to be nearly flour, or of any stage in between. Consumers of rice prefer unbroken grains, and this type of rice sells at about twice the price of rice broken into tiny pieces.

3. Length. Long-grain rice of 5-7 mm is considered better than short-grain rice of 5-6 mm.

4. Colour. Chalky kernels or kernels that are red or yellow are considered undesirable.

5. Old as against new rice. Thai consumers pay a 15 per cent premium for rice from the previous year's crop (old rice) over the price of rice from the most recent crop (new rice).

6. Species of rice. Thai consumers feel that within the general category of 'white' rice certain varieties taste better than others, and this is recognized in the formation of prices.

There are differences in the grading of rice in the export market and the domestic market. The problem of grading in the export market is to reduce the diversity among qualities and textures of rice to a few grades that can be described in telegrams without having to produce samples of the rice, and that make sense to European buyers who do not have the sophistication about rice common among the Thais and Chinese in Thailand. In grading rice for export, the percentage broken is treated as the primary characteristic of rice, and other qualities are attached to it.[1] Thus rice which is classed as 100 per cent (that is 100 per cent unbroken) is categorized not merely by its percentage broken but by its colour and size as well. Completely unbroken rice that is yellowish or short-grained is not classed as 100 per cent rice in the export trade. Such rice is normally mixed with a certain percentage of badly broken rice so that the result just passes all the tests of 5 per cent or 10 per cent (broken) rice. Most of the exports to Europe are of 100 per cent and 5 per cent rice. Exports to Indonesia and Laos are of 35 per cent rice. Rice for export is inspected to ensure that standards are maintained.

Grading in the domestic market is a subtler process. There is no need to enforce classifications because consumers can judge the value of rice for themselves before buying it. The Thai consumer is generally less concerned that the rice be of uniform size and shape (though this is important) and more with texture and, above all, taste. It is customary for Thai people to associate rice with the location where it is grown, to speak for instance of rice from Saraburi, Khonkaen, or Mae Chan. The association of qualities of rice with places is due to soil conditions, water availability, climate, and, partly as a consequence of these, to the type of rice seed used. In some places rice is graded in the shops in a manner similar to, though less rigid than, that used in the export market. In others, locality as well as percentage broken is recognized directly as the distinguishing feature of qualities of rice. These methods of evaluating rice may not be as different as they

[1] The grades in the export trade from best to worst are called 100% (three grades), 5% super, 5%, 10%, 15%, 20%, 25% super, 25%, 35%, 45%, A1 (four grades), C1 (three grades) and C3. All the characteristics of each grade are specified in detail in the export market.

seem at first; each is a way of recognizing, describing, and pricing a mix of many qualities.

The purchase of rice from farmers

Many millers buy rice directly from farmers, but the business of buying rice is sufficiently different from the business of milling rice that the two operations are usually conducted by separate firms. The rice buyer, known in Thailand as 'the middleman', usually lives in the village with the farmers and he often combines rice buying with other commercial activities. The middleman is usually prepared to buy the farmer's rice in smaller quantities than the miller will accept. This gives the farmer the opportunity to sell his rice bit by bit as he needs cash, and the middleman can combine purchases from many farmers into larger lots suitable for sale to millers. The middleman is often the owner of a truck and the activities of crop buying and of transport merge imperceptibly. The same agent may be prepared to transport the farmer's grain to the mill or to buy it from him at the farm. Buying rice from farmers may be time-consuming because there is bargaining over measures as well as over price. It is customary for farmers to sell rice by volume rather than weight, the unit of measurement being the *kwian,* equal to fifty baskets, called *thangs,* of 20 litres each. (A *kwian* of unmilled rice, called paddy, weighs approximately one metric ton.) The amount of rice that fits into a *thang* depends on how tightly it is packed in and on how the heap of rice in the basket is levelled off. There are many tricks known to farmers and to traders for increasing or decreasing the amount of rice in a *thang* and a long argument may take place before a bargain is struck. One miller told me that he buys rice from the middleman in the period right after the harvest when he is working his staff to capacity at the mill, but that he buys directly from the farmer later on in the season when there is less rice brought for sale to the mill and his staff have less to do.

Among the middlemen interviewed was a pair of ladies in partnership. When I met them they had just bought a truckload (10 tons) of rice and the account was as follows:

TABLE 9.1 The Accounts of a Middleman

	Baht per *kwian*
Paddy bought from farmers	700
Rent of truck	20
Loading charge (paid to farmers)	20
Unloading charge	5
Measuring fee (paid to millers)	1
Total cost	746
Selling price to miller—700 *baht* per ton, or 756 *baht* per *kwian* (1 *kwian* of rice (of that variety) weighs 1,080 kg. on the average).	
Net profit	10 *baht* per *kwian*

The net profit of the middleman varies considerably from transaction to transaction, depending on how accurately he is able to guess the weight of the rice and how shrewd a bargain he is able to make with the farmer. These middlemen said that 10 *baht* per ton is about typical over the year, but other informants gave the impression that 20 *baht* was more nearly the

rule.[2] This pair of middlemen handled about 600 tons of rice per year, which should have yielded them an income of 6,000 *baht* from the business. They engaged in other businesses in addition to the buying of rice.

Thais generally believe that the farmer is systematically cheated by the middleman because the middleman is cleverer than the farmer or because the farmer is in debt to the middleman. I came across farmers who habitually sold to one middleman or miller to whom they were in debt, but this was the exception rather than the rule and it may be that even these farmers would have sold to another buyer if their regular buyer paid appreciably less than the going market price.[3] The great majority of farmers seemed to be able to compete on equal terms with the middlemen. Most farmers received bids from many traders before they sold their rice, and were too well aware of market conditions to be cheated to any great extent. Though cheating on measures undoubtedly exists, there are reasons for doubting that it is done on a large scale; the force of competition would be enough to check it. A miller or middleman who cheated on weights would have to be very shrewd for if he were caught once, or even suspected of cheating, the word would get around and farmers would demand a higher price from him than from other traders. The one case in which a miller openly admitted that he cheated was of this kind. The subject came up when my comparison between cost of paddy and value of rice appeared to show that he was consistently losing money. When allowance was made for cheating, between 3 to 10 *thang* per *kwian,* his gross income returned to the usual range.

Milling

Paddy (rice in the form that is produced by the farmer) consists of the white kernel of rice, surrounded by thin layers called bran, and covered by a thick layer called husk. Milling separates the kernel from the husk and bran. Some of the grains are inevitably broken in milling, and as broken grains are worth less than whole grains, these are separated out in the milling process.

A typical mill might separate its output into six categories: head rice (consisting of 100 per cent rice, 5 per cent rice, or possibly as low as 15 per cent), half broken grains (A1), quarter broken grains (C1), very small broken (C3), fine bran, and coarse bran. The bran is used to feed animals. The husk is sometimes used as animal feed, but normally it has no commercial value and is used as fuel to run the mill.

The operating and financial statistics of a typical mill are presented in Table 9.2. This account as it stands shows the costs and revenue as if the mill bought paddy and sold the rice from the paddy at the same time. Actually mills tend to stock up on paddy just after harvest season and to let their stocks run down during the rest of the year. To the figure of gross

[2] Other middlemen said that their gross markups between buying and selling prices were 30, 40, and 50 *baht,* and one middleman said that his net profit after all expenses was 20 *baht.* Millers' discounts for buying rice at the farms instead of at the mill were 10, 20, 30, 50, 60, and 70 *baht.* All these items were inclusive of transport cost and the discount of 70 *baht* included transport for 65 kilometres.

[3] A recent credit survey has shown that while 68% of Thai farmers are in debt at some time during the year, only 8·6% are in debt to the buyers of their crops (Pantum *et al.* 1963).

profit in the table must be added the income derived from buying paddy in the season when it is cheap and selling rice evenly all through the year. We discuss stockholding separately.

The ratios between the paddy milled and the rice produced differ primarily with the varieties of the paddy but partly as a result of weather, soil conditions, and the type of mill used. The weight of rice, excluding bran, is usually about 66 per cent of the weight of the paddy, but I have seen this percentage vary from 60 to 67, though perhaps the low figure was due to a miscalculation by the miller or to part of the rice getting mixed up with the bran. The division of rice into head rice, A1, C1, and C3 is the most common one but some mills grade rice differently, and rice might be mixed and regraded in the export trade.

TABLE 9.2 A Model Account of a Rice Mill

Output from one ton of paddy

Class of rice	kg.	Price at mill per kg.	Value
5%	420	1·25	525
A1	180	0·7	125
C1	42	0·63	26
C3	18	0·58	10
fine bran	66	0·3	20
coarse bran	30	0·13	4
Total sales from one ton of paddy			710
Price of paddy at mill			630
Gross income			80
Expenses:			
labour	30		
food for labour	8		
milling tax	26		
other	6		70
Gross profit per ton			10
Daily capacity of mill (24 hours)			27 tons
Output per year (mill working 24 hours per day, 200 days per year)			5,400 tons
Annual gross profit			54,000 *baht*
From which must be deducted:			
10% income tax			5,400 *baht*
10% graft			5,400 *baht*
Net profit for mill owner			43,200 *baht*
Assuming the value of the mill to be 10,000 *baht* per ton daily capacity, or 270,000 *baht*, the rate of return on fixed capital is 16 per cent.			

Table 9.2 shows the gross income from milling to be 80 *baht*. My information on this comes from comparing paddy prices with the value of rice produced as shown in the table, and from asking millers directly. The calculation did not always yield the same result as the direct question because a miller expected a change in the price of rice or of paddy between the time of buying and the time of selling or because he happened to be making what he knew to be temporarily high profits when I spoke to him, or because he preferred to mill at a loss than to allow labour to stand idle. Labour in the rice milling industry has a guaranteed annual wage. Millers do not as a rule lay off labour whenever there is a slack period but only when they believe their mills to be permanently overstaffed.

Nevertheless I believe that the gross profit, stated in the table as 80, is rarely above 100 *baht* or below 75 *baht* over the year.[4]

It is more difficult to estimate the relative place of the components of income. The milling tax is simply 3·85 per cent of gross sales.[5] The item 'food for labour' is included in the accounts because it is customary in Chinese business upcountry for employers to provide labourers and sometimes their families with food and lodging. The reluctance of employers to lay off labour when business is temporarily slack makes labour a fixed cost in any given year; the cost of labour per unit of output is therefore high when business is poor and low when business is good. I have seen estimates of labour cost per ton milled as low as 15 *baht* and as high as 50 *baht*.

The figure of 10 *baht* gross profit per ton must be taken with a grain of salt. I arrived at this figure by asking millers directly, 'How much on an average do you earn, after all expenses?' The answer was usually about 10 *baht* and the one miller who actually told me his total profit made 9 *baht* per ton. This figure is especially unreliable because businessmen are, understandably enough, reluctant to reveal their incomes to inquisitive strangers, and because profit in a small firm is intrinsically ambiguous. A small businessman in stating his profits rarely makes allowance for the labour of the employer or his family, or deducts some or all of their living costs as an expense. A rice miller does not distinguish in his accounts between food that he buys for his labour and food that he buys for himself.

I have only two observations on the price of a rice mill. A mill with a capacity of 12 tons per day was bought for 150,000 *baht* and a mill with a capacity of 80 tons per day was bought for 800,000 *baht*. If the value of a mill is 10,000 *baht* for every ton of capacity and if the mill is worked for 24 hours per day for 200 days per year (rather more than most mills do) earning 10 *baht* per ton, the annual rate of return on the value of the mill would be 16 per cent.

The rate of income tax is taken from the tax code. It is difficult to say how much millers actually pay since it is widely believed and probably true that many of them cheat on their income tax. This is another reason why profit figures are so hard to get and so unreliable.

Every miller with whom I discussed the subject admitted that he had to pay graft in some form, though few cared to say how much. One miller mentioned that he had to bribe tax officials; another claimed that he had to provide sacks of rice for the provincial governor and for his relatives in Bangkok; another complained about the police. A miller who was a graduate lawyer and from a prominent family said that he could avoid all forms of graft except payment to the railroad officials to get wagons quickly.

[4] A sample of comparisons of receipts from rice and paddy prices yields the following figures: 95, 85, 0, 75, 66, 70, 95, 90.

[5] It is assumed in the compilation of Table 9.2 that the miller pays the full rate of tax. Many millers pay less tax than they ought to because it is not feasible for the tax collectors to keep true records of the output of every mill in Thailand. At least one-third of the tax can be collected because tax collectors can demand to see tax receipts on all rice (amounting to one-third of the crop) that is exported. This situation has led to the development of a market in tax receipts. A miller who has paid the tax can sell the receipt to an exporter who has rice on which the tax has not yet been paid. The current price of tax receipts in Bangkok is about half the rate of the tax.

The only miller who would give me a precise figure on the amount of graft he paid said it amounted to 10,000 *baht* out of a gross profit of 70,000.

In addition to the big commercial mills that separate rice into five or six grades and mill from 15 to 100 tons per day, there are small mills of 3 or 4 tons capacity that simply separate rice from husk and bran. These mills produce an inferior product[6] and their function is to mill rice for farmers when there are no big mills nearby, or when the amount of rice the farmers want milled at one time is less than big mills can conveniently handle. The usual charge to the farmer is the bran plus 50 *baht* per ton, yielding the miller about 75 *baht* per ton altogether. Small mills burn liquid fuel rather than rice husk. Liquid fuel is expensive but it permits the engine of the mill to be turned on and off several times a day.

Storage and interest charge

Most of the rice crop is harvested in the winter months and must be held back and released gradually to consumers as they require it. At the peak period just after the harvest, at least one year's supply and probably much more is held in stock somewhere. A great part of the stock is held by farmers, who constitute four-fifths of the population and usually keep enough paddy after the harvest for their own needs during the year. Some farmers prefer not to sell their surplus paddy all at once after the harvest but to hold it back until the price goes up later in the year or to sell it gradually as they need cash so as to avoid having to hold a large amount of cash that might be stolen. Some farmers cannot hold stocks because they are in debt; these farmers borrow before the harvest rather than save after it. It is difficult to say what proportion of farmers save paddy after the harvest and what proportion borrow before the harvest. The credit study cited above has shown that only 32 per cent of the farmers are free of debt throughout the year. However, some of the loans are long-term ones for the purchase of land and equipment, and over half are to relatives or neighbours who may charge low interest and may not press for immediate repayment.

Millers also hold large stocks of rice. One miller told me that his stocks over the year varied from one-third of total output soon after the harvest to virtually nothing prior to the harvest season. Again supposing that the value of the mill is 10,000 *baht* for every ton of capacity and that the quantity of rice milled over the year is 200 tons for each ton of capacity, and placing the value of a ton of paddy at 660 *baht,* the value of the stock of rice held (at the peak period) would be ($\frac{1}{3}$ x 200 x 660) 44,000 *baht* for every 10,000 *baht* worth of plant and equipment.

Certainly amounts of stock held vary enormously from mill to mill. The point of this rough calculation is that millers may easily have more money tied up in stocks of rice than in the mills themselves, and if both forms of capital yield an equal return, a miller ought to earn as much from stock-holding as from milling. The expected earnings from stockholding consist in the gradual appreciation of rice over the year. Millers have learned to release rice over the year in such a way that it appreciates just enough to

[6] Rice that is inferior economically may be excellent nutritionally, because most of the protein in rice is in the bran and the outer layers of the kernel that are largely cut away in milling.

compensate them for storing it; less appreciation and the millers would not store rice at all; a greater appreciation would induce excessive storage which would in turn force up price early in the year.

The rate of return to storage may be estimated from the gap in the prices of new and old rice. A comparison of new and old rice over a number of years has shown that the average annual appreciation in the price of 5 per cent rice is 17·9 per cent; this yields a miller or farmer a net return, over storage cost, of 13 per cent. The rate of return on storing paddy for a full year is lower, about 10 per cent, because the premium on old rice applies only to the higher grades of rice (see Usher in press).

Stockholding introduces a major element of uncertainty into the milling business. Though the markup between new and old rice is quite predictable, the price of rice in general can fluctuate by as much as 100 per cent over the year, and a fluctuation of 50 *baht* per ton overnight is not uncommon. Thus a miller who earns 10 *baht* on the average per ton milled and who holds one-third of his annual output can lose or gain more money in a day on changes in the grain price than he earns in a year in the normal course of milling.[7]

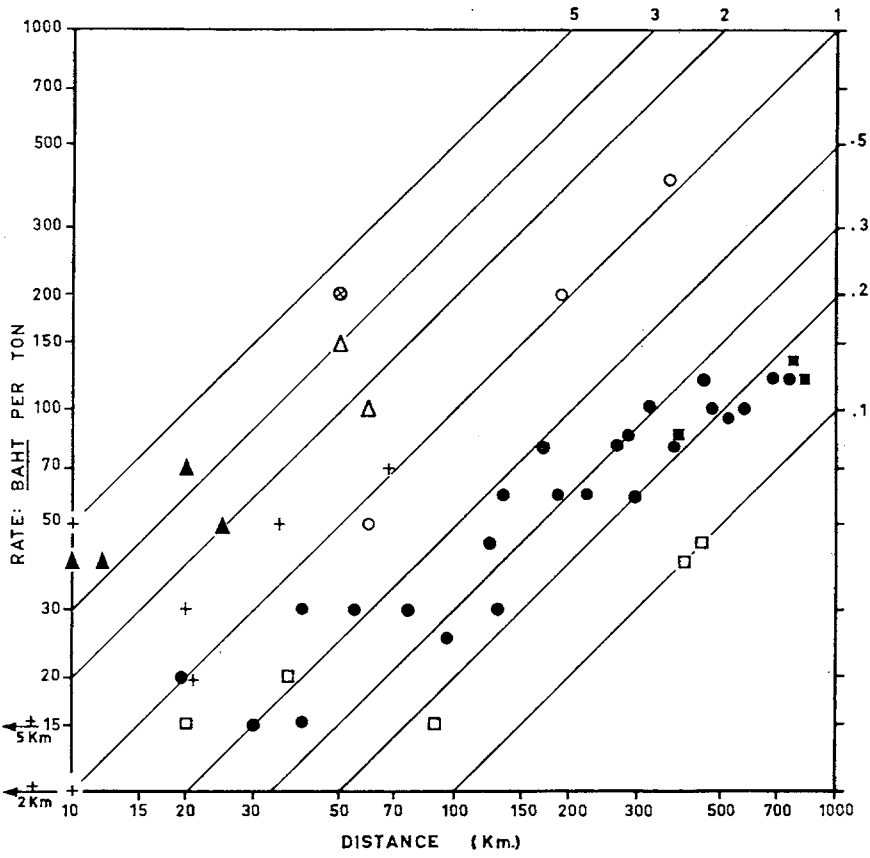
As might be expected, a risk of this magnitude gives rise to a system of hedging. It is customary for millers to borrow money at a rate of interest to be determined by the rice price at the time the money is paid back. The expected rate of return on this loan is the expected appreciation of the rice price, which is approximately 18 per cent. The actual rate of return depends on the percentage change in the rice price over the duration of the loan.

Transport

The cost of the principal means of transport—river boat, railroad, truck and *kwian* (ox-cart or buffalo-cart)—is shown in Chart II. The horizontal axis represents distance and the vertical axis represents the cost of transport per ton of rice or of paddy. The log scale is used on both axes to spread the points out evenly on the page and to allow points of equal cost per unit distance to lie on parallel straight lines. Each point on the graph represents an observation of the cost of hiring a particular means of transport to carry rice or paddy between two specific places. Points of origin and destination are not shown on the graph but the means of transport are indicated by the way the points are marked. The observations were made in the first half of 1965.

[7] The reason that the millers would like to see the rice premium abolished is not that they expect to increase their margins, because they are aware, or ought to be, that competition among them would at once pass the advantage on to the farmer, leaving margins the same as before. Millers are against the rice premium because of the profits they would make on rice already held if the premium were abolished. It would take years of normal milling to earn as much as would be made instantly on the approximately 70 per cent increase in the price of rice that the abolition of the rice premium would entail. (An abolition or reduction of the rice premium would yield farmers a maximum benefit if its announcement were timed just before the harvest when the bulk of the country's rice stocks are in the form of growing plants still owned by the farmer. However, the rice premium is like the bank rate in that any change in the rate must be announced unexpectedly and made effective at once; expectation of change can disturb the export market, inducing exporters to hold back exports or to export as much as possible depending on whether the premium is to be reduced or increased.)

Chart II Transport Costs in Thailand



The diagonal lines trace out points of equal rate per unit distance (*baht* per ton-kilometre)

Key to symbols

- ● trucking on public roads (rice in sacks), February-March 1965.
- ○ trucking on public roads—dirt roads in very poor condition (rice in sacks).
- ■ railroad, door to door including Express Transport Organization service (rice in sacks).
- □ boat (paddy).
- ▲ ox-cart (carries only ½ ton).
- △ jeep (carries 1 ton).
- ⊗ small boat, upstream in rainy season.
- \+ *either* miller's reduction in the paddy price for collecting paddy at farm *or* commercial trucking rate for the same service.

River transport is generally the cheapest form, costing as little as 0·1 *baht* per ton kilometre. The defects of river transport are that it is too slow and that it requires additional shipment by truck unless the origin and destination of the cargo happen to be on banks of accessible rivers. Nevertheless river transport is generally chosen in preference to road or rail when all three are available and when the distance is long enough to make

the difference in transport cost significant. For instance, most of the paddy and rice shipped from Nakhornsawan to Bangkok is carried by boat because the fare is 4·5 *baht* per 100-kilogram sack as against 6·5 *baht* by rail and 8 *baht* by truck. River transport is cheap when fleets of five to ten boats each carrying 30 to 80 tons of rice are pulled by one steamboat; these are the observations in the lower right-hand part of the chart. The observation marked 'small boat upstream' near the top of the chart refers to a small boat carrying less than one ton upstream in a small river.

Though there is a public trucking company, most road transport is conducted by small private companies in fierce competition, and rates are exceedingly sensitive to market forces, the length of the haul, road conditions, and the state of demand for trucking services at different times of the year.

The very lowest trucking rate on the chart, 0·16 *baht* per ton-kilometre, is for the longest haul, 750 kilometres, and the rate in *baht* per ton kilometre increases steadily to a high of 5 *baht* per ton kilometre when grain is carried for very short distances. The high rates are partly due to road conditions or to the absence of roads, for it is customary to drive trucks over fields in the dry season to pick up grain from farms that are not located on roads. Equally important as an explanation of the tendency towards high rates on short hauls is the trouble and expense of arranging the contract and the fact that the time lost in loading and unloading is the same no matter what the length of the haul. The transport of rice from Mae Chan in Chiengrai province to Lampang (268 kilometres to the south) is an example of the sensitivity of trucking rates to the state of demand. The rate varies from 15 *baht* just after the harvest down to 6 *baht* in the off-season. The rise in price at peak demand automatically channels the stock of available trucks to those millers who need them most, while free entry into the business keeps prices down to a point where trucking firms do neither better nor worse over the year than other types of business.

Rates on dirt roads often double in the rainy season and they can increase four- or fivefold if, as between Chiengmai and Maehongson, it is necessary to switch from a six-ton truck to a jeep that carries only one ton. As an example of the costs on good highways and bad, we may compare the costs net of graft on the roads of equal length between Mae Chan and Lampang and between Korat and Bangkok. The former is part dirt road and part bumpy paved road, the trip takes nine hours, and the rate varies between 6 and 15 *baht*. The latter is an excellent paved road, the trip takes about five hours, and the cost is constant at about 4 *baht*. It is said that trucks going into and out of Bangkok have to pay bribes of 200 *baht* per trip.

The public trucking firm, Express Transport Organization, has its head office in Bangkok and district offices throughout the country. Its pricing policy up country is to accept market rates as it finds them and to set its prices to meet the competition of private traders. But in trade with Bangkok its rates are higher than those of private trucking firms. At a time when private truckers in Lampang were offering to ship rice to Bangkok at 12 *baht* per sack, the Express Transport Organization was quoting a price of 25 *baht* for the identical service.

The ox-cart and the jeep are the most expensive forms of transport. The jeep is used only when a road is so bad that a truck cannot pass over it: a

jeep normally carries about one ton of cargo. The ox-cart carries about half a ton. It is used to carry paddy from the field to the farm and from farms to mills nearby. It is competitive with the truck only over very short distances.

Until quite recently transport by rail was cheaper than by truck, but competition has reduced truck fares to a point where truck and rail can compete equally on price, and truck has the edge on rail in speed of delivery. The general pattern seems to be that trucking rates tend to rise above rail rates in the peak season and to fall below them in the off-season. The rail fare from Ubon to Bangkok (door-to-door inclusive of trucking services by the Express Transport Organization) was 13·5 *baht* as against a trucking rate of about 18 *baht* in the peak season and 12 *baht* during the rest of the year. In some areas it is still necessary to pay graft to get a railway car quickly. Though I have heard stories of graft amounting to over half the official rate, competition with trucking has reduced the rate of graft substantially and in the one instance I am reasonably sure of, the rate of graft was 9 per cent of the official price.

Ownership

Ownership involves three functions: providing circulating capital to buy the rice or paddy, bearing risk of damage to the grain or of changes in its price, and making connections (that is deciding where and to whom the grain is to be sold next). Naturally ownership commands a reward. A trucker who buys paddy from a farmer and sells it to the mill expects a larger income than he would get if he carried the paddy on commission for someone else.

Part of the responsibility of ownership can be delegated to separate firms. Bangkok commission agents specialize in making connections between exporters and upcountry millers. The normal commission is 0·5 *baht* per *hap* (60 kilograms). There are at Lampang firms that sell on commission for millers in Chiengrai. Making connections through a commission agent is particularly efficient when there are large distances between buyer and seller, while direct meetings between buyer and seller are often cheaper when the distance between them is small. That is why the retail market in Bangkok, in which individual purchases by retailers are as a rule too small to justify the service of a commission agent, draws on the millers nearby, while the export market draws on millers throughout the country. Millers can sell the risk of ownership by insuring rice against damage and by hedging as described above.

Retailing

Rice is such an important commodity to the Thai that it is sold in specialist shops dealing in rice alone. Though there are local variations, the general pattern is that rice is sold in three sorts of unit, sacks of 100 kilograms, *thangs* of 20 litres weighing approximately 16 kilograms, and litres. Families normally buy rice by the sack. This might seem like a large quantity to buy all at once, but rice is easily stored and it takes the place in a Thai household of bread, flour, and potatoes combined.

A typical rice shop buys sacks of rice at prices ranging from 130 to 200 *baht,* depending on the quality. The normal markup outside Bangkok is about 5 *baht* per sack (I have seen it vary between 3 and 10 *baht*) when the rice is sold by the sack, and the markup in Bangkok would be about 7 *baht.* An extra 5 *baht* would be added to the markup when the rice is sold by the *thang,* and another 5 *baht* again would be added, bringing the total markup to 15 *baht,* when rice is sold by the litre. A typical rice shop might sell 200 to 300 sacks of rice per month, yielding a gross income of 2,000 to 3,000 *baht.*

Sometimes retailers buy rice directly from mills nearby. There are truck owners in Bangkok who buy rice at the mills and resell it to retailers. There are also wholesalers who have established places of business and warehouses of some size. Wholesalers are not numerous because their services would be superfluous in most parts of the country. They are to be found when rice must be transported some distance between the miller and the retailer. Wholesalers in the North sell glutinous rice to shops in the Central Plain.

The export trade

There are two forms of export of rice in Thailand, a private trade and a trade by means of government-to-government contracts. In both forms of the trade, the exported rice is bought from millers and placed in ocean-going ships by exporters licensed by the Ministry of Economic Affairs. Rice exporters must be owners of rice mills or of large godowns. There are now about fifty licensed exporters, and the list is in practice closed.

The official rules governing the conduct of the exporters in the private trade give one the impression that the trade is a government-sponsored cartel. Every week there is a meeting of the exporters' representatives, called the Rice Committee of the Board of Trade. They draw up a price list for all grades of rice. The list is submitted for approval to the Ministry of Economic Affairs. If the Ministry approves the price list, and it has never failed to do so, then the prices become official and the Ministry of Economic Affairs undertakes to forbid the export that week of rice priced at less than 97 per cent of the official quotation. The Board of Trade arrives at its price list by adding up the wholesale price of rice, the export taxes (including the rice premium), the cost of sacks, and a much inflated estimate of the exporters' costs. There was once a system of quotas among the rice exporters, but I believe that this system has fallen into disuse.

In the circumstances of the export trade, one might expect to find a cartel disguising itself as competition. The reverse appears to be the case in the Thai rice trade, where competition has disguised itself as a monopoly. The apparatus of officially sponsored prices is a façade ignored in practice by the exporters who accept prices well below the officially-sponsored limits wherever competition forces them to do so. The only explanation I can think of as to why this façade of monopoly is maintained is that it is vestigial or forward-looking. One hears that the cartel once had teeth, and perhaps the interested parties in the government and in the trade feel that one day it may have again.

Tax is by far the greater part of the markup between the Bangkok wholesale price and the export price f.o.b. On 100 per cent or 5 per cent

rice there is a rice premium of 950 *baht* per ton, plus an export tax 4·2 per cent of the value f.o.b., amounting, for instance, to 113 *baht* on rice selling for 2,700 *baht* per ton, so that the total tax on this rice would be 1,063 *baht*.

Rice for export is packed in bags each containing 100 kilograms, and costing 8 *baht* per bag or 80 *baht* per ton of rice. Transport from the exporter's godown to ocean-going ships is conducted by a shipping company owned by one of the cabinet ministers, at a cost of 17·5 *baht* per ton. The total exporter's cost exclusive of the cost of bags but inclusive of transport from the godown to the ships has been estimated to be between 50 and 60 *baht*. It is unlikely that exporters' profits over and above all operating costs exceed 5 *baht* per ton over the year. (Fifty exporters shipping out 1½ million tons over the year can become very rich on a net profit of 5 *baht* per ton, even though this represents only one-fifth of 1 per cent of the rice price.) Profits on individual shipments vary enormously because the day-to-day variability in the rice price is far greater than the normal profit and exporters have to make contracts months in advance.

The total markup in export on 5 per cent rice costing 2,700 *baht* per ton f.o.b. is therefore approximately as follows:

Tax	1,063
Bags	80
Exporter's charge	60
Total	1,203

which means that the Bangkok wholesale price of the rice would be 1,497 *baht* per ton excluding the container.

Rice for export is inspected for quality by the Far Eastern Superintendence Corporation on licence from the Thai government. A charge of 2s.6d. is paid for this service by the buyer of the rice.

The Ministry of Economic Affairs, responsible for government-to-government trade, relies on the exporters to purchase rice and place it on to ocean-going ships. For this service the exporters are paid 75 *baht* per ton over and above the cost of rice in bags in the Bangkok market. There is a persistent rumour in Bangkok that the exporters are obliged to pay out 10 *baht* per ton to unofficial channels.

The cost of the rice trade as a whole

The costs of the separate components of the rice trade examined so far one by one may be combined to form a picture of the total cost to the community of the service that the rice trade performs. A typical example of the pattern of rice prices from the farm price of paddy through the milling costs to the Bangkok retail price and the export price f.o.b. is shown in Table 9.3. This table is based on information provided by a particular mill, doctored slightly in the light of information provided by other mills. The table shows the price chain and distribution costs of a mixture of 672 kilograms of rice plus a certain amount of bran yielded by one ton of paddy. It is supposed that the rice is milled and sold quickly so that there is no interest or storage cost, and that bran is always sold to the farmers at the mill.

The farmer's shares of the Bangkok retail price and of the export price f.o.b. are shown in the top left- and right-hand corners to be 79 per cent

TABLE 9.3 An Example of the Chain of Rice Prices in Thailand
(prices and costs of one ton of paddy yielding mainly 100% quality rice, milled about 30 km. from Bangkok, Feb. 1965)

Rice sold to Thai consumers at Bangkok				Rice exported		
% of Bangkok retail price	Price of rice	Costs		Costs	Price of rice	% of export price f.o.b.
79	770		paddy price at the farm		770	46
3		30	transport to the mill	30		2
			The Miller's Accounts			
			Costs			
82	800		paddy price at the mill		800	48
			expenses when rice is sold at the mill: unloading 5; labour 35; tax 35; profit 12 — expenses when rice is sold in Bangkok: unloading 5; labour 35; tax 36; transport to Bangkok 18; commission 5; other selling expenses 10; profit 12			
9		87	total milling cost	121		8
			Income			
			rice sold at the mill: value 650, 38, 139, 23, 27; *baht* per kg. 1·57, 0·92, 0·82, 0·57, 0·30 — milling out-turn: grade of rice 100%, A spec., A, C, bran; kg. 420, 42, 170, 40, 90 — rice sold at Bangkok: *baht* per kg. 1·62, 0·97, 0·87, 0·62, —; value 680, 41, 148, 25, —			
88	860		price of rice sold at the mill — wholesale price of rice sold at Bangkok		894	54
3	27		price of bran sold at the mill		27	2
			transport charges (per sack of 100 kg., 1 truck 1·5, loading and unloading 0·5 each) — export tax (4·2 %)	69		4
2		18	rice premium	631		38
7		67	retail markup (10 *baht* per sack of 100 kg.) — exporter's gross margin (60 *baht* per ton)	40		2
	945		Bangkok selling price of rice — selling price of rice f.o.b.		1,634	
100	972		rice price inclusive of the value of the bran sold at the mill		1,661	100

and 46 per cent respectively. The latter figure is low because 42 per cent of the export price, or nearly 100 per cent of the farm price, is paid out as export tax. The farmer's share of the final proceeds from one ton of paddy is not uniform over the country; in general the farmer gets a higher share of the retail price the closer the farm is to the mill, the closer the mill is to the place where rice is sold retail, and the better the quality of the paddy. Other computations of the same kind have shown the farmer's share of the final price to be 92 per cent, 89 per cent, and 86 per cent when rice is sold to consumers at the mill. Sales to Thai consumers at Bangkok resulted in farmers getting 74 per cent of the value of 10 per cent rice from the Northeast and 71 per cent of 5 per cent long-grain glutinous rice from the North. The figure of 79 per cent in the table is probably quite representative of the conditions facing farmers in the Central Plain.

By European or American standards this total distribution cost of only 20 to 30 per cent of the retail price is very cheap indeed. Some comparable American figures are shown in Table 9.4.

TABLE 9.4 Farmer's Share of the Consumer's Dollar Spent for Selected Food in the United States

Eggs	69	Tomatoes (fresh)	37
Beef	66	Oranges	32
Pork	59	Orange juice (frozen)	31
Potatoes	38	(canned)	26
Milk	48	Cabbage (fresh)	28
Apples	42	White bread	19
Flour (white)	38	Tomatoes (canned)	17
Lettuce	38	Corn (canned)	15
		Corn flakes	16

Source: USDA data from Kohls (1961: 104).

Taking the closest American analogy to rice to be flour or potatoes, for which American farmers get only 39 per cent of the retail price, we see that distribution in America costs three times as much as distribution in Thailand when costs are measured as percentage deductions from the retail price.

We find an even more striking illustration of the cheapness of the Thai distribution system by completing the chain of prices beyond the export price f.o.b. right to the retail price facing the English consumer. In Table 9.5 the mix of rice of Table 9.3 is assumed to be shipped to England and the standard U.K. markups per ton are applied. The English markups are higher than Thai markups as a percentage, and the process of compounding has inflated absolute markups in the U.K. to the point where the English retailer gets more for his services in selling the rice than the Thai farmer gets for growing it. The English retail price and distribution costs in Table 9.5 are for rice in coloured cardboard packages; a few pennies can be cut off the retail price by packaging in cellophane bags.

Conclusion

Information about the cost of the rice trade casts some light on the two quasi-political questions, questions of exploitation and of the beneficiaries of an abolition or reduction of export taxes on rice, posed at the outset of this chapter. Exploitation is, of course, an ambiguous word. If exploitation

means that traders get, for instance, over half of the retail price, then the farmers are not exploited. If exploitation means that farmers are getting less for their products than they would under a reasonably efficient publicly operated distribution system, then I doubt very much that the rice farmers are exploited. If exploitation means that there is some amount, however small, of monopoly power in the trade, then perhaps farmers are exploited, but not by more than a few percentage points of the farm price. This issue would not be worth mentioning except that it has such importance in the popular mythology of how the economy works.

TABLE 9.5 The Chain of Rice Prices from the Thai Farmer to the English Consumer

(The ton of paddy yielded 672 kg. rice)	*Baht* per ton of paddy	£ per long ton
Farm price (paddy price less the price of bran)	743	19·37
Middleman	30	0·78
Paddy price at mill	773	20·15
Miller's gross margin	121	3·15
Bangkok wholesale price	894	23·31
Jute bags (a bag for 100 kg. of rice costs 8 *baht*)	54	1·41
Export tax and rice premium	700	18·25
Exporter's expenses and profit	40	1·04
F.o.b. Bangkok *baht* per ton of paddy	1,688	44·01
	£ per metric ton of rice	£ per long ton
F.o.b. Bangkok £ per metric ton of rice (£1 = 58 *baht*)	43.31	44·01
Charge of European exporter (2s.6d. per metric ton)	0·125	0·127
Quality survey (2s.6d. per metric ton)	0·125	0·127
Freight	6·50	6·60
Interest (½%), insurance (½%), weight loss (1%)	1·00	1·02
C.i.f. London (1 long ton = 2,240 lb; 1 metric ton = 2,204·62 lb)	51·06	51·88
U.K. tariff		6·00
U.K. landing charge		2·95
Cleaning (£4), fumigation (5s.), new bags (£1.15s.)		6·00
Rent of warehouse (incl. transport, etc.)		1·00
Weight loss in cleaning (1%)		0·68
Total cost of rice wholesale		68·51
Packaging 1¼d. and distribution 1¼d. (per lb)		23·33
Gross profit of importer and wholesaler (10%)		9·19
Price to shop		101·03
Shop margin (20%)		20·21
Retail price (1s.1d. per lb)		121·24

The abolition of the export tax on rice would cause an increase in the farm price equal to the amount of the tax if the cost of the rice trade remained constant. There is no reason to suppose that the cost of the trade would increase appreciably in the short run, but in the long run the rise in the rice price might affect the cost of the rice trade through a general rise in the cost of living and in wages. However, the cost of living would rise less than does the price of rice and the rise in wages would not exceed that in the cost of living, so that the cost of the rice trade would increase at most in proportion to the rise in the domestic price of rice, and probably much less, because the wages in the rice trade tend to be influenced by urban wages. Even if the cost of the rice trade increased in full proportion to the rise in the domestic price of rice, the farmer would maintain his

share (75 to 80 per cent) of the rice price and would have that proportion of the tax removed.

It is sometimes alleged that the trade would siphon off the benefit of the abolition of the export taxes on rice, not through an increase in normal costs, but through an expansion of monopoly profits. We can virtually rule out this possibility by looking at the magnitudes involved. Profits in the export trade, where monopoly is most likely to arise, are said to be in the order of ¼ to ½ per cent of gross sales abroad, a reasonable proportion considering the great volume of trade in the hands of a few firms. The significance of this small percentage from the point of view of the farmers is that profits in the export trade can increase by hundreds per cent without reducing the farmers' income very much.[8] If there is potential monopoly power in the export trade, it can be exercised now, and if there is not, then the abolition of the export tax on rice would make no difference.

In view of the amount of public discussion in Thailand about bribery and corruption, it is surprising how unimportant it is from a purely economic point of view. If rumours are to be believed there are altogether about 40 *baht* of bribes per ton of rice imported, 20 *baht* in transport, 10 *baht* in the export trade, and another 10 *baht* thrown in for good measure. This is less than 2 per cent of the export price and less than 4 per cent of the normal farm price. It looks as though corruption in this trade is more a social and political problem than an economic problem. Perhaps it is one of the great advantages of the capitalist system that there are few officials and that these can be made quite well off through bribes without affecting the economy very much.

Finally there is the question of why the Thai rice trade is so cheap compared with trade in England and America. A possible explanation is that the comparative advantage of England and America is in producing things as opposed to services, and that trade combines pure services like retailing (at which Thailand has a considerable comparative advantage), and trucking (which is the aspect of the industrial revolution most easily carried over from one country to another). The Thais may not be as efficient as the English or Americans in manufacturing, and Thai agricultural productivity—tons of grains per man employed—is less, but the Thais trade as efficiently as English or Americans and can handle trucks just as well. Hence distribution is cheap, and the real economic problems of Thailand lie elsewhere.

APPENDIX Notes on Other Trades

The information in this appendix was collected in the same way as the information about the rice trade, but these trades were studied less thoroughly and the information is presented here in a more summary fashion.

Basket weaving

One of the textbook problems of less developed countries is seasonal unemployment of agricultural labour; the farmers have too little to do except at harvest time and at planting time. Farmers with whom I discussed

[8] The price of rice in Thailand has changed as much in the last few years owing to changes in the world price as it would change in response to the full abolition of the export tax.

this problem tended to find it amusing. They had always assumed that the farmers work hard and city people are idle. If farmers have spare time after repairing houses, irrigation ditches, and roads, they can engage in cottage industries. Among these are production of knives, thatches, cloth, musical instruments, and weaving baskets for the storage and transport of agricultural products.

The basket weaving business that I saw was conducted by a husband and wife in a tiny village. They bought baskets without handles from workmen in the village, added handles with the help of hired labour, and every week the wife brought the baskets to be sold at Bangkok 100 kilometres away. They made 300 baskets per week, and their accounts were as follows:

TABLE 9.6 Basket Weaving: Output, Expenses, Revenue, and Income (*baht* per week)

Output:		
300 baskets, in equal numbers of large, medium, and small		
Expenses:		
Cost of baskets (except handles)		525
100 large baskets @ 2 *baht* each	200	
100 medium baskets @ 1·75 *baht* each	175	
100 small baskets @ 1·50 *baht* each	150	
Materials for handles for 300 baskets		120
Payments to employees for making handles		39·2
100 large handles @ ¼ *baht* each	16·7	
100 medium handles @ ⅛ *baht* each	12·5	
100 small handles @ $^1/_{10}$ *baht* each	10·0	
Transport to Bangkok		53·3
$^1/_6$ *baht* per basket	33·3	
bus fare of trader to and from Bangkok	20	
Total		737·5
Revenue:		900·0
9 *baht* per three baskets, one large, one medium, and one small		
Income per week		162·5

The figure of 163·5 *baht* is the weekly income computed by deducting revenue from expenditure. When I presented this figure to the basket weavers they said it was too high and that the weekly income was closer to 120 *baht*. This often happens in questioning people about details that are not written down. Perhaps some of their living expenses were deducted in arriving at the lower figure.

Each of the makers of baskets could do five per day, which would yield an income of 8·75 *baht* ([2 + 1·75 + 1·5] × 1⅓). The cost of the raw material was 0·35 per basket or 1·75 for five baskets. The daily income of the makers of baskets was 7 *baht* per day, which turned out to be exactly equal to the farm wage at harvest time in that area.

Wood

The most important fact in the economic organization of the wood trade is that the value of wood f.o.b. is considerably greater than the cost of extraction. The problem in setting the rules for the industry is to conserve

this limited and valuable resource, and to assure that the surplus over the cost of production accrues to public revenue rather than to private gain.

The forests are in the public domain, and there are three types of organization for extracting the wood; two types for teak, most of which is exported, and one type for other woods used at home:

1. The complete process from the cutting of teak trees to the export of planks is conducted by a public company called the Forestry Industry Organization (F.I.O.).

2. Teak trees are cut and the logs transported to Bangkok by the F.I.O., which then auctions off the logs to private sawmillers who cut the logs into planks for export. (About half the teak logs are processed entirely by the F.I.O. and the other half sold to private sawmillers.)

3. Concessions to cut and mill wood other than teak are granted annually to private sawmillers.

The first system is notorious for wastefulness and inefficiency, and the third is conducive to bribery because the sawmiller's income depends crucially on how much wood the officials decide to allocate to him that year.

The second system has the effect of channelling about 60 per cent of the export price of teak into the public revenue; this is by far the highest ratio of tax to export earnings of any of the products of Thailand (details are shown in Table 9.7). The cost of cutting trees was estimated for me by an official of the F.I.O., and the milling and exporting costs were estimated by one of the sawmilling companies. The extent of the public revenue derived from teak is not generally appreciated because it appears under four separate headings: royalties, export duties, business tax, and profits of a public corporation. The item 'profit of the F.I.O.' under the general heading 'Tax' was estimated by taking an average of the revenue per cubic metre derived from the auctions of logs during the first half of 1965, and subtracting from this the cost of cutting trees and transporting the logs to Bangkok.

TABLE 9.7 Teak: Components of the Selling Price f.o.b. per Cubic Metre of Planks, 1965

Cutting trees and transporting logs to Bangkok (F.I.O.)*		1,333
Milling, expenses of private firms		500
Expenses in export		70
Graft +†		30
Tax		2,727
business tax‡ (4·4% of selling price)	205	
export duty‡ of 10%	466	
profit of the F.I.O.§	2,056	
Total selling price		4,660

* 600 *baht* per cubic metre of logs with a conversion between logs and planks of 0·45.

† Estimated to be 10 *baht* in milling and 20 *baht* in export.

‡ Paid by private sawmills.

§ The difference between the estimated cost (600) to the F.I.O. per cubic metre of logs and the average revenue from the auctions (1,525) is scaled up by the inverse of the conversion between logs and planks (0·45). Of this amount 80 *baht* per cubic metre of logs appears as royalties to the Thai government and the rest as profit of a public company.

The total Thai exports of teak were 100,000 cubic metres in 1960 and 32,000 cubic metres in 1963. If the full potential tax from teak of about 2,500 *baht* per cubic metre found its way into the public revenue, the teak trade would have yielded 250 million *baht* in 1960 and 80 million *baht* in 1963.

Opium

The lightest of all commodities per unit value turns out to be the one for which the price increases most rapidly with the distance from its place of origin. This is illustrated in Table 9.8.

TABLE 9.8 Opium Prices
(*baht* per kg. of raw opium)

	Source 1*	Source 2†
Burma (near Chinese border)	—	130
Laos (farmer's price)	240	—
Thailand (farmer's price in remote villages)	300	620
(farmer's price near towns)	800	880
Chiengmai	1,200	—
Bangkok	1,400	1,250
Hong Kong	3,800	—
New York‡	38,000	—

* This source is A. Messing-Mirjinsky of the Narcotics Bureau of ECAFE, Bangkok.
† Various informants.
‡ Opium would normally be brought into the United States in the form of heroin or morphine which are much more concentrated than raw opium and have a correspondingly higher price.

The opium traded in Thailand is either grown by the local hill tribes or is brought across the border from Laos or Burma. A rough estimate of the amount of opium grown in Thailand may be got by multiplying the number of hill tribe families by an estimate of the typical output per farm. There are said to be 50,000 hill tribe families corresponding to a total population of about 300,000 people; a typical output of opium per family is said to be about 4 kilograms; therefore the total national output of opium is estimated at 200 tons. The value of this output at the farm price (700 per kilogram) is 240 million *baht;* the value at the Bangkok price is 480 million *baht* or about ½ per cent of the Thai gross national product; the value at New York prices is 7·6 billion *baht* or over 10 per cent of the Thai gross national product.

Sugar and tobacco

Sugar and tobacco have certain economic features in common, and public policy toward these crops seems to be very much the same. The economic similarities between the crops are: (i) both are only half agriculture in the sense that processing of the crops after they leave the farm contributes as much as farming to the value of the final product consumed; (ii) neither crop can be stored in the form in which it is harvested; both crops must be processed as soon as they are cut.

This second characteristic requires either that the crops be grown on farms large enough to have their own processing equipment or that farmers be tied to processers of the crops through long-term contracts. Thailand has relied primarily on the latter system. Both in sugar and in Virginia

tobacco the processers are given local monopolies of areas within which it is their responsibility to induce farmers to grow enough to keep the processing factory supplied with raw material. Both crops have been officially encouraged by public assistance of one kind or another.

The export of sugar is promoted by taxing all domestic output of sugar and using the proceeds of the tax to subsidize sugar export; the amount of the tax is 0·5 *baht* per kilogram and the rate of subsidy depends on the proportion of sugar exported.[9] There is, of course, a tariff on sugar which ensures that foreigners cannot take advantage of the high domestic price of sugar at the same time as Thai producers are finding it profitable to export.

Most of the Virginia tobacco grown in Thailand is purchased by a public company, the Thai Tobacco Monopoly, the sole producer of cigarettes. The right to export tobacco is limited by law to four private firms that arrange export for other firms for a fee.

TABLE 9.9 Miscellaneous Retail Traders: Sales, Man-days of Work, and Income

	Sales (*baht*)	Man-days	Income (*baht*)	Income (% of sales)
A mango seller: a lady sells mangoes from a small boat to passers-by on the Chao Phya River.	171 per 500 mangoes	1	21	12
A house-to-house fruit seller.	224 per 97 kg. of fruit	1	29	13
Vegetables: a trader buys directly from farmers who bring vegetables to his stall in the market of a small town.	110	1	28	25
Beef: a trader buys cows from farmers, arranges for the slaughtering, and sells the meat in the market of a large town. The farmer is paid 1,251 *baht* for a cow yielding meat of various grades, fat, hide, etc., worth 1,451 *baht* retail, a total markup of 16% over the farm price. The income figure of 138 *baht* is the traders' net return after expenses.	1,451 per cow of 300 kg. live weight	half day each for trader and several of his adult sons and daughters	138 per cow or 276 per day	9·5
Pigs: butcher sells meat from two pigs every three days in a market in a small town. Expenses in excess of the cost of the pig were only 28 *baht.*	2,494 per slaughtered pig of 203 kg.	1½	130 per pig or 86 per day	5
Clothing: sold at a stall in the market of a small town. The trader holds a much larger stock than he can sell in a day.	350	1	45	13

[9] Actually the tax is earmarked 20% for research and technical assistance and 80% for subsidy. The rate of subsidy is set by the government from time to time and there is no simple mathematical formula that adjusts the subsidy automatically. The subsidy was 2·2 *baht* per kilogram in early 1965, when the world sugar price was about 3½ *baht.*

TABLE 9.10 Miscellaneous Wholesale Traders: Cost of Merchandise, Operating Expenses, Sales, Income, and Man-Days of Work

	Cost of merchandise (*baht*)	Operating expenses (*baht*)	Sales (*baht*)	Traders' income (*baht*)	Man-days	Gross margin (% of sales over costs)	Income (% of sales)
Cattle: two traders purchase 70 cows from farmers in the far north of Thailand, and transport the cows for sale in Bangkok.	82,250 for 70 cows with average weight of 320 kg.	10,407 including compensation for 1% of cows dying *en route*	97,650	4,993	30	19	5
Garlic: farmers sell garlic to the trader at his shop in a town in north Thailand, and the trader sells the garlic at the Bangkok wholesale market.	319 for 63·8 kg. at the shop, which after trimming weighs 60 kg. at Bangkok	49	377	9	?	18	2½
Exporter of jute.	3,438 at Bangkok per ton of jute	1,011 of which 96 is tax	4,466 c.i.f. London	17	?	31	⅓
Bananas: middlemen sell bananas to and retailers buy bananas from the trader at his shop in the Bangkok wholesale fruit market. The trader usually handles about 7,500 bunches of bananas per day.	5,250 for 7,500 bunches of bananas	100	5,650	300	one man-day each for trader and three children	8	6

Domestic trade in food products other than rice

The distinction between retailer and wholesaler is not at all clear in Thailand. Distribution from the farmer to the final consumer may be conducted by a single firm or it may be broken down into many stages each conducted by specialists. As there are no legal or social restrictions on how much distribution one firm can engage in, the extent of vertical integration depends entirely on whether and to what extent there is a convenient and efficient division of labour possible among firms. The presence of many intermediaries between the farmer and the consumer is not in itself a cause of the farmer's getting a small share of the retail price, but rather it is an effect of the need for a complex distribution mechanism that might be just as expensive or more so if the division of labour among firms were given up.

The six firms briefly described in Table 9.9 are being called retailers because they all sell directly to the public, but in fact two of the six buy from farmers. The income figures were computed by subtracting the trader's total expenses from his total sales per day or per physical unit. In each of the items in the table the trader told me that the income figure arrived at in this calculation was typical, but I suspect that the income figures are a bit high because no allowance is made for disasters like cows dying or perishable merchandise left unsold at the end of the day. Allowance is made for normal spoilage in the first three items because the relevant economic unit of output of farms is not fruit or vegetables at the farm gate but fruit or vegetables at the market. Income is shown in the last column as a percentage of sales rather than of cost of the food to the trader, because operating expenses have equal status with the cost of merchandise in the trader's calculation.

The traders in Table 9.10 are wholesalers only in the sense that they do not deal with the public. They have more capital than the retail traders, their volumes of trade are much larger, and their profit margins are much smaller. The exporter of jute who said that his profit over the year was between ¼ per cent and ½ per cent of sales was by far the largest of the traders, and he probably handled over 100,000 tons per year. The profit figures are intended to be net of all operating expenses but gross of office overheads. Little significance can be attached to the gross margin between costs and sales because the costs of operation are too different from one trade to the next. Gross margins of wholesalers vary from as little as 2 per cent for bulk products like canned milk to 15-20 per cent on imports of household items, to about 35 per cent on machinery, and to over 100 per cent on spare parts that must be stored for years and may in the end never be used at all.

10

The Rice Premium and Agricultural Diversification

T. H. SILCOCK

Conceptual problems of Thai rural development

Problems of planning rural development in Thailand raise difficult conceptual issues, in addition to the normal political, administrative, and technical difficulties of implementation. Unresolved questions, both of national income calculation and of welfare economics, have a bearing on Thailand's rural development policy, and make it peculiarly difficult to bring its problems into focus. Two different national income issues have been raised, one by Usher (1963) for Thailand itself, the other by Sherwood (1956) mainly for Malaya—though the significance of his analysis for Thailand is perhaps even greater than for Malaya. Thailand has a large food surplus, and by imposing high export taxes on rice, uses this to keep its cost of living well below what it would be if the main food items were priced at the world level (Ingram 1955: 167-8). This in turn through low wages makes it possible for Thailand to maintain relatively free imports without destroying its industries, and the same advantage could with better local facilities promote a reasonable rate of import-substituting industrialization. Conventional methods of accounting make it difficult to assess in terms of national income either Thailand's relative advantage from its food surplus or the benefits and disadvantages of its rice policy.

For policy purposes, however, national income is, at best, only a simplified approximation to welfare analysis. Here, too, we are on difficult ground. The policy of taxing the rice growing peasants, keeping the cost of living low, and investing heavily in roads, irrigation, power and other economic infrastructure for the promotion of private enterprise was not deliberately adopted to promote economic development. Nevertheless it could, perhaps, now be defended as an instrument for promoting economic development by accelerating the change from traditional agriculture to modern agriculture and industry, both by carrots (in the form of capital invested in infrastructure) and by sticks (in the form of pressure on income). Rural Thais clearly expect and wish their government to lead them through a process of modernization; there is not the usual expectation that some catastrophic event, like independence or revolution, will automatically produce the necessary change; nor is there the usual resentment against the heirs of colonialism. The people, however, naturally grumble

from time to time about particular taxes or other pressures that bear on any particular group. In these conditions it is difficult to construct an intellectually satisfying criterion by which to judge disputable policy issues.

Common sense[1] would appear to indicate that technical change should be accelerated, by subsidizing irrigation and fertilizers, giving credit facilities to the more successful farmers, keeping the cost of living low, and continuing to build up import-substituting industries by providing basic facilities. The following results might be expected: to maintain rice exports and the food surplus by raising productivity per head and per acre; to let the area under rice increase more slowly than population; to reduce the numbers engaged in rice growing but increase their incomes, though most of these incomes would still be below the national average. Low incomes would still drive farmers into more capital-intensive and technology-intensive methods of rice growing (which would be subsidized), or out of rice growing altogether into other occupations. Those who remained in traditional rice growing would suffer, but the number of these would fall as technical progress was achieved. One of the main justifications for this policy is that it builds into the microeconomic structure of the economy a pressure towards technical modernization, by exaggerating the income effects of change. Another is that it retains the possibility of comparatively free trade (since it sustains Thailand's own import-replacing industries by a low cost of living based on low food prices). This brings the benefits of a relatively wide range of choice. Unluckily neither of these justifications is easy to express in precise welfare-economics terms.

Pressure towards modernization, beyond the pressure generated by improved productivity and its automatic increase of income, could be defended on the grounds that the government can anticipate—as peasants cannot—the effects of population pressure on land resources, capital formation, and the dependency ratio (as discussed in Chapter 2); and this legitimately gives the government a greater sense of urgency than that felt by the people. The defence is reasonable if progress is actually being achieved, especially in a country where the government's leadership is as much accepted as it is in Thailand, but it is difficult to weigh these arguments against our rather vague but strong value judgment, which condemns deliberate taxation of the poorest part of the population.

Effects of the undervaluation of rice

Thailand is still very much an agricultural economy. About 80 per cent of the population earn their living in agriculture, though by the conventional calculation the fraction of the gross domestic product that they produce is only a little over 35 per cent.[2] Of this, rice is about two-fifths.[3]

[1] This is a persuasive term used to inculcate the writer's value judgments which, regrettably, cannot be summarized in the form of a welfare function. These judgments include the belief that both a rapid increase in national income per head and an increase in individual use of reason and measurement in the conduct of affairs are desirable objects of policy.

[2] This, as Usher has shown, slightly exaggerates the poverty of Thai farmers, because a higher proportion of women are recorded as workers in agriculture, owing to the difficulty, in subsistence agriculture, of distinguishing home activities from 'productive' work.

[3] The proportion of rice in agricultural output appears to show a long-term downward trend, though this has been reversed in the last two or three years; for further discussion see the last section of this chapter.

These proportions are, however, deceptive. The heavy premium and export duty paid on exported rice keeps the local price of rice low. The pattern would change if we valued rice at the international price.

The extent of the reduction in price can be estimated for the crop year 1962/3 by taking the proceeds of the rice premium, 798 million *baht* in 1963, and dividing them by the total amount, 1·42 million tons, which was exported in that year. This gives the average revenue levied per ton on rice as 563 *baht*. Virtually all this reduction would fall on the farm price, and we shall, in the first instance, assume that all the rice sold for human consumption is priced 563 *baht* per ton too low.

This is a conservative estimate. A thorough analysis of the economics of the rice premium, prepared by Dr Usher (1965) while this chapter was in draft, analyses in detail the effect on each grade of rice if the rice premium on that grade were abolished. Dr Usher's analysis yields a greater addition than mine to the farm price of paddy for three reasons: first, he includes *all* taxes, including export duty, municipal tax and premium—I have taken premium only; next, about one-third of the rice export is on a government-to-government basis, and the average premium on this is only about three-fifths of that on private exports (in part this is due to lower grades in the government-to-government contracts, but there is probably also a substantial element of monopsony); in addition there is a problem of averaging the different premiums on the different grades—the higher the grade, the higher the premium. My analysis implicitly assumes that different grades are produced in about the same proportion as they are exported. Dr Usher, on the basis of his own researches, uses as weights typical proportions of a given white rice crop which differ from the proportions found in the export trade. No detailed comparison is given, but the premium structure itself would tend to discourage export of the higher grades.

The total crop of paddy, about 9·3 million tons, may be reduced to 8·37 million tons to allow (roughly) for paddy used as seed and feed. At a conversion ratio of 66 per cent this gives 5·52 million tons of rice. Raising the price of all this rice by 563 *baht* per ton would add 3·11 million *baht* to the value of the rice produced on Thai farms.[4]

Such a revaluation would change the structure of the Thai gross domestic product. The 9·46 thousand million *baht* due to rice production would rise to 12·57 thousand million. As a proportion of all agriculture, rice production would rise from 39 per cent to 46 per cent, and agriculture itself would rise from 37 per cent to 40 per cent of the gross domestic product at market prices.

Is it legitimate to assume an undervaluation of 563 *baht* per ton? If the Thai rice premium, by reducing the world supply of rice, significantly affected the price, or if a part of the total premium were absorbed by a fall in the cost of collecting Thai rice from the farms for export, it would not be legitimate. We consider these questions in turn.

[4] Dr Usher's addition to the value of rice from abolishing the rice premium is more than twice as large; but the representative ton of rice which he uses is white rice, which was very low in price in the year in question and on which the consequent proportional rise from abolishing the premium would be very high. If the total crop were like Dr Usher's representative ton, the gross domestic product from rice would be only about 7,000 million *baht*, yet he applies the proportional increase to the much larger actual gross domestic product.

The international trade in rice is a very variable one, depending heavily on the weather in both importing and exporting countries; in the short run a given Thai rice crop may be important enough in a year's trade for the Thai rice premium to affect world rice prices. Several countries try to insulate their internal market (mainly by government contracts) from the world price; Thailand, which exports a high proportion of its rice, can affect the international trade price by adjusting its own premium and hence its current exports while other countries' arrangements remain unchanged. The total of world rice production, however, is more than thirty times the whole output of Thailand and in the long run it is supply and demand in the markets of all the producing and consuming countries that determine world prices. In the long run the adjustments of different countries, which depend on policy and bargaining power, will accommodate themselves to one another, and changes in the rice premium will have little effect on the international price; we can assume that the premium is forcing down local prices in relation to a norm which, though not constant, can be taken as given in relation to the Thai market.[5]

The premium probably does not significantly affect the cost of collection of Thai rice. All studies agree that distribution is reasonably competitive[6] at the local level, and this is confirmed in the analysis in Chapter 9, though temporary cartels have been organized from time to time at Bangkok. It is possible that these rings would be less frequent if the margin between subsistence level costs of Thai rice and world prices were lower, but these again are occasional and short-run phenomena. Milling and distribution costs are another matter; the cost of financing collection depends partly on the price paid for rice, since interest charges are part of the cost of distribution. If there were no premium or export duty and the merchants had to buy rice at a price nearer world prices their interest charges would be higher.[7] Moreover, labour costs throughout the economy, and not only in rice milling and marketing, are almost certainly kept down by the low price of rice. This will be considered later when we discuss the detailed effects of the rice premium on local prices and income distribution.

The total value added by the collection of rice for export is not separately given in the national income statistics. It seems likely that a more accurate appraisal of the undervaluation of rice would have to attribute some part of it, though less than a proportional part, to the collection of rice and not to farm income.[8] It is unlikely, however, that the undervaluation on the farm would fall below 500 *baht* per ton of rice, or about 330 *baht* per ton of paddy.

This undervaluation has, of course, different effects according to whether it falls on rice consumed on the farm itself (where it is simply a conventional valuation in the national accounts), on rice exported, or on rice locally sold, whether to other farmers or in the towns. The undervaluation

[5] Usher (1965) suggests that the long-run effect of the abolition of the rice premium might be a fall of about 3 per cent in world prices.

[6] Compare, for example, Ingram (1955: 228); Sharp *et al.* (1953: 17); Long *et al.* (1963: 52-3).

[7] The Bank of Thailand has introduced a rediscount system in recent years to keep down interest rates on rice exports (see Chapter 8).

[8] Usher (1965) treats the distribution costs as fixed, though he allows for the possibility of some effect on them.

of rice ultimately exported raises technical problems concerning the role of export duties in the national accounts, but is otherwise a fairly simple matter. The undervaluation of rice locally sold raises more complex problems. It is desirable to have some idea of the quantitative importance of these different parts of the total rice crop.

Farm consumption

First we must try to determine what proportion of the rice is simply consumed on the farm. In the main the undervaluation of this rice, as a result of the premium keeping the internal price low, is simply a matter of book-keeping. Thai farmers produce this rice for their own consumption largely for traditional reasons, as part of their way of life. The price at which it is valued is scientifically largely indeterminate.[9] This is not to say that the subsistence farmer's behaviour, in growing for his own consumption without regard to the price, is irrational. Adhering to the traditional way is rational if no other way is known—even if better ways might be known to others—or if the risk of loss through adverse price changes is felt to be more important than any gain that is likely to be secured.

How large is this production? Fortunately we have two sets of figures, one for 1952/3 and one for 1962/3, which—with some manipulation—enable us to analyse what happened to the rice crop in these two years. The 1953 *Thailand Economic Farm Survey* gives, for a reasonably reliable sample of farms in each of six more or less homogeneous regions, both the value of paddy sold and the value of paddy retained for home use. These can be used to show the proportions of the total crop used in each way.

TABLE 10.1 Thailand, Home Consumption and Sale of Rice by Region, 1952/3

	Total production of paddy ('000 metric tons)	Total production of rice ('000 metric tons)	Proportion home-consumed (%)	Proportion sold (%)	Total rice home-consumed ('000 metric tons)	Total rice sold ('000 metric tons)
Northern*	554	365·6	61·28	38·72	224·06	141·54
Northeastern	1,800	1,188·0	80·25	19·75	953·37	234·63
Central†	3,631	2,396·5§	46·91	53·09	1,126·96	1,269·54
Southern‡	617	407·2‖	61·57	38·43	247·43	159·77
Whole kingdom	6,602	4,357·3	58·55	41·45	2,551·82	1,805·48

Exports 2,091,000 metric tons paddy = 1,380,000 metric tons rice.

No deductions made for paddy used as seed and feed. Official estimate of paddy taken from stocks 512,000 metric tons = 333,000 metric tons rice.

* 'North' from Agriculture (1953) less Uttaradit and Tak.

† 'Central Plain' plus 'Southeast' from Agriculture (1953), plus Uttaradit, Tak, Kanchanaburi, and Prachuabkirikhan.

‡ 'South' plus 'Southwest' from Agriculture (1953), less Kanchanaburi and Prachuabkirikhan.

§ Proportions from 'Central Plain', 'Southeast', 'North', and 'Southwest' weighted 20·17, 1·51, 0·41 and 0·58 respectively.

‖ Proportions from 'South' and 'Southwest' weighted 5·068 and 1·452 respectively.

Source: Agriculture (1955-(1955: Tables 10, 12)); Agriculture (1953: Tables 1, 73, 106).

[9] It is, of course, convenient to value it at the same price as the rice sold for internal and external consumption, and the effect of this latter price on welfare is discussed in later sections. Compare also Chapters 6 and 9.

Adjusting these proportions to the four main regions used in the agricultural statistics for the crop year 1952/3, we can estimate the total rice home-consumed and the total rice sold for each region. Table 10.1 gives an analysis of the 1952/3 crop along these lines.

It will be seen that about two and a half million tons of rice, nearly 60 per cent of the crop, were consumed on farms in 1953. This includes some rice retained as seed and animal feed. The figures on stocks published at this time were based on very doubtful estimates, and have since been discontinued. For the year 1952/3, however, they are probably approximately correct. Paddy production was 200,000 tons below the trend value (132,000 in rice equivalent), and rice exports were about 200,000 tons above the average. The 1952/3 figure of 333,000 tons drawn from stocks therefore seems fairly reasonable. Since exports were 1,380,000 metric tons, approximately one million tons from the 1·8 million sold off farms were exported from Thailand, leaving some 750,000 tons for local sales, including food preparations and animal feed.

For 1962/3 we have much more detail, in *Household Expenditure Surveys,* which—at the time of writing—have been published for the whole kingdom except the non-metropolitan area of the Central Plain. These surveys give, for towns and villages separately, a breakdown of rice consumed into rice bought in markets and rice home-produced or received without charge. Nearly all the latter will be payment in kind for some farming factor of production, but clearly the total is not fully comparable with the figure for rice consumed on farms in 1953. Some, for example, will be rice supplied in kind as rent, wages, or other payments to non-farmers. None will be rice used as seed or animal feed. In addition to the budget surveys themselves, a special nutrition survey based on them gives for towns and villages in all areas—including the Central Plain—the consumption of rice and flour per head over a seven-day period.

From these two sets of figures we can analyse the use of the 1962/3 rice crop, subject to suitable assumptions about the Central Plain's pattern of rice consumption, and the proportions of its total population living in municipalities and sanitary areas. We have assumed the same proportion of rice home-produced in both towns and villages as in the East, mainly because the East is the region most like the Central Plain, with similar *total* consumption of rice per head, in both towns and villages. We have also assumed that 17 per cent of the Central Plain population live in municipalities and sanitary areas, the same as in the East. (The municipal population in the Central Plain in 1960 outside Bangkok-Thonburi was 8·3 per cent of the total, and in the East 9.5 per cent; the number of sanitary areas in both regions was slightly over 25 per million inhabitants; and we may expect the areas adjacent to Bangkok-Thonburi to have expanded slightly faster than the rest of the municipal population since 1960).

Table 10.2 is an analysis of the consumption of the rice crop in the crop year 1962/3, which approximately coincided with the *Household Expenditure Surveys* year.

The total rice consumed, as indicated in the table, uses up almost exactly the whole year's crop, allowing nothing for seed, animal feed, or meals consumed ready prepared. No stock figures are available, so we cannot say whether stocks have increased or decreased.

TABLE 10.2 Analysis of Consumption of Rice in Thailand, 1962/3

	Annual consumption of rice per head (kg.)	Population ('000) (1962)	Estimated total consumption of rice ('000 metric tons)*		Proportion home-produced (%)	Total consumption home-produced rice ('000 metric tons)	Total local purchase of rice ('000 metric tons)
Bangkok-Thonburi	99·06	1,786	176·92	(0·41)	0·0	0·0	176·92
Towns:							
Northeast	140·19	746	104·58	(42·48)	7·2	7·53	97·05
East	118·30	284	33·59	(0·15)	15·8	5·31	28·28
North	158·81	867	137·68	(75·34)	31·6	43·51	94·17
South	126·98	602	76·44	(0·47)	7·6	5·81	70·63
Central except Bangkok	117·68	917	107·91	(0·52)	12·0	12·95	94·96
Total towns	122·7	5,202	637·12	(119·37)	11·8	75·11	562·01
Villages:							
Northeast	187·62	8,666	1,625·88	(1,197·33)	75·9	1,234·05	391·84
East	166·40	1,386	230·64	(5·13)	70·4	162·49	68·15
North	185·02	5,326	985·39	(604·58)	74·8	737·07	248·32
South	159·64	2,938	469·02	(9·30)	60·3	282·82	186·20
Central	166·24	4,477	744·27	(6·06)	72·0	535·87	208·40
Total villages	177·8	22,793	4,055·20	(1,822·40)	72·8	2,925·29	1,102·91
Grand total	167·6	27,995	4,692·32†	(1,941·77)	64·5	3,027·40	1,664·92

* Figures in parentheses refer to glutinous rice.
† 1962/3 total crop, milled equivalent = 6·127 million metric tons (glutinous 2·043 million metric tons)
1963 exports = 1·430 million metric tons (glutinous 0·140 million metric tons)
Available for home consumption, change in stock, seed, etc. = 4·697 million metric tons (glutinous 1·903 million metric tons)

Source: National Statistical Office (n.d.a); National Statistical Office (1956-(1964)).

It is interesting that a similar inflation of the *Household Expenditure Surveys* figures, for glutinous and white rice separately, gives figures equal to the total crop of each. This suggests either a systematic underestimate of the total rice crop or an overestimate of consumption, but the discrepancy is not unreasonably large. The *Census of Agriculture* total figures for rice production agreed fairly closely with the estimates by the Rice Department, but the post-enumeration survey suggests that the area cultivated was underestimated by 7·2 per cent and the output by 6·1 per cent. This would correspond much better with the *Household Expenditure Surveys* figures.

It appears from Table 10.2 that some three million tons of rice were consumed from home production. The local rice trade, strikingly enough, is rather more than twice as large as the figure derived from 1952/3. About two-thirds of the rice bought locally was bought in villages, and one-third in towns.

We may next inquire whether it is likely that the difference between the proportion of the total crop consumed which was consumed at home in 1952/3—just under 60 per cent—and the proportion in 1962/3—about 50 per cent—is likely to represent a genuine shift away from subsistence agriculture. First, we must emphasize that the figures are not fully comparable. The 1952/3 figure probably includes some paddy used as seed and animal feed. The 1962/3 figure does not, but it clearly includes some rice supplied as payment in kind in non-farming households. This difference in basis, and the relative unreliability of both sets of figures, make the evidence rather weak; but this was a period of considerable diversification of agriculture, with large increases in rubber, maize, kenaf, and cassava, and also of increasing urbanization—the percentage of the total population living in municipalities rose from 10·8 to 12·5 during the ten years from 1952 to 1962.

The actual amount of rice eaten by rice farming families seems to have increased by rather more than 16 per cent, allowing for non-food consumption on farms in 1952/3. If we compare the three-year period ending with the crop year 1952/3 with the corresponding period ten years later (in order to eliminate exceptional climatic effects), the rice crop increased 23 per cent. This increase arose from a 12 per cent increase in the yield per hectare and an 11 per cent increase in the area of rice holdings.

The figures suggest that the number of rice farmers increased by some 11 per cent or a little more, that they took a part of their increased productivity in increased home consumption of rice, and that the greater part of the increase went into local sales rather than exports.

It is difficult to estimate precisely the local sales in 1952/3 because of uncertainties over stocks; the estimate of 750,000 tons is very rough. Nevertheless, if we take it as a basis and try to relate it to the population structure in that year we can glean some information. The 'town population' in 1952 corresponding to that in the *Household Expenditure Surveys*, 1962-3 is not known, but if we make the plausible assumption that sanitary areas grew between 1952 and 1962 at about the same rate as municipalities outside the metropolis, the figure would be 3·4 million, as against 5·2 million in 1962. Since Bangkok, with its relatively low rice consumption per head, was a smaller proportion of the total in 1952 than in 1962, the average consumption per head in towns in 1952/3 is unlikely

to have been below the 1962/3 figure of about 120 kilograms per head, even if there was some increase in consumption during the decade among the poorer workers. It seems likely, therefore, that more than 400,000 tons of the local sales would be needed for 3·4 million in the towns, leaving only about 350,000 tons for village sales. Indeed, this is probably an upper limit; it allows nothing for sales for rice products or animal feed. We can probably say that village sales of rice increased at least threefold during the decade.

The rural population[10] was 17·4 million in 1952 as against 22·8 million in 1962. The sum of farm consumption and village trade in rice gives a total for rice consumption of 2·9 million tons in 1952 or 167 kilograms per head per year. Unless the total rice crop was underestimated, total *human* consumption, in the form of rice, was almost certainly less than this, to allow for rice used as seed and feed. If the *Household Expenditure Surveys, 1962-63* have any validity the official estimate (for the whole country) of 132 kilograms consumption per head in the 1950s can hardly be correct; it would imply a rural consumption level of under 140 kilograms at that time and an increase of over 25 per cent in a decade; but rural consumption may have been as low as 150 kilograms. Even this would mean an 18 per cent increase in rural rice consumption per head (from 150 to over 177). It seems much more probable that the rice crops were underestimated in 1952/3. The *Economic Farm Survey* (Agriculture 1953) suggests an underestimate by about 10 per cent of the area under paddy; if the crop were 10 per cent larger, human consumption of rice in rural areas could be over 160 kilograms per head, with an average increase in rural consumption per head of under 10 per cent between 1952/3 and 1962/3.

However we adjust the figures, it seems clear that the consumption of rice per head has increased in rural areas during the decade in question. This probably indicates that diversification and improved productivity in rice have actually eliminated some fairly acute poverty in rural areas. This coincides with the general belief in Thailand that the country is fortunate because it has plenty of rice—'enough left over for the dogs'.

It seems probable also that the relatively low price of rice has discouraged farmers from selling as much of their rice as they would otherwise have done, and that a higher proportion of the increased income due to higher rural productivity has actually been taken in rice than would have happened without the rice premium.

Exports

So far we have considered the effect of the rice premium mainly on that proportion of the rice crop—about one half—which is consumed on farms. Here the effect is mainly a distortion of the appearance rather than of the reality. In so far as rural Thais have taken out rather more of their increased income in rice than they would otherwise have done this tax has caused some loss of real income; in so far as the trend towards marketing of rice (as a result of improved transport and diversification) has been checked, there has also been some loss of real income; but there seems to be some evidence that these effects are not large. The distortion of the

[10] I.e. the population outside municipalities and sanitary areas.

appearance is, however, important if it causes underestimation of the significance of rice in the whole economy or in particular issues of policy.

We turn next to the exported part of the rice crop, on which premium is actually paid. This raises two questions, the effect on national income estimating and the incidence and effects of the tax.

Being an indirect tax, the rice premium is excluded in calculating net national income, though it is sometimes argued that since export duties do not significantly affect the price of the product sold they should be treated in the same way as direct taxes. Now the argument for not deducting direct taxes is that they have no direct and observable influence on price levels, even though they will, of course, affect particular prices in different ways. Conventionally we treat the net domestic product at factor cost as a figure net of indirect taxes because these taxes directly cause a divergence between market prices and factor costs. With some export duties (for example those on rubber) it is arguable that they do not directly cause any such divergence, but have a diffused effect on the economy rather like a direct tax, though less equitable. The export duties on rice, however, plainly have a direct effect on the relation between prices and factor costs which is symmetrical with the effect of certain types of import duty. They affect Thailand's competitive position in very much the same way. This brings us face to face with the problem of why we try to measure income at factor cost.

Superficially, of course, we are simply avoiding double counting. An indirect tax normally raises the price at which a vendor sells to a final consumer, and since this is the point at which income is reckoned, if we do not deduct the tax the national income is raised by the rise in price (it is, of course, raised again if the government spends the proceeds). Yet there is in fact no increase in productivity, and the increase in income is illusory.

When an export duty is levied on one of the major necessities of life, a crop in which Thailand has a trading advantage, this keeps down the wage level, the cost of living, and the prices of many other locally produced goods in relation to foreign imports. We are, however, reckoning the income in *baht,* and from this point of view the export duties are keeping up the price of imports in terms of Thai factor costs.

So long as we make no rash assumptions about purchasing power parity, it is right to deduct the indirect taxes on rice not because they add to the price of rice abroad, but because they lower the level at which a host of transformations and substitutions take place within the economy and hence make international goods dear. We must, however, be aware that the *baht* is undervalued as a result of this process, and Thai real incomes, in terms of the goods Thais consume, are in reality higher than they appear.

In an interesting article in *Economica,* Usher (1965) draws attention to the misleading impression that Thai national income figures create in comparison with those of the United Kingdom, because of the much lower prices of untraded goods and services in Thailand and the generally lower price level. The actual figures cited probably depend very largely on the distortion of factor costs in Thailand by the rice taxes. Usher, however, alludes only very indirectly to any interference with trade in Thailand and attributes the large differences which he finds between prices of untraded

goods and services in Thailand and in the United Kingdom mainly to differential transport costs on internationally traded goods.[11]

It is, of course, true that national income calculations are by their very nature spatially extended,[12] so that goods and services are priced in terms of the set of psychological marginal rates of substitution and of technical marginal rates of transformation that prevail at any given point. It is also true that national income *comparisons* made in seminar rooms, in editorial offices, and in national planning bureaux, tend to solve intractable index number problems in a rough and ready way, and make simplifying assumptions that the multiple difficulties of interspatial comparisons tend to cancel out. There are, however, systematic biases which the spatially extended national income calculations introduce into national income comparisons, and these would cause the Thai national income to be undervalued even without the rice taxes.

A country like Thailand which, at the beginning of this century, through improved market opportunities, came to produce a surplus of its staple food, with transport still relatively poor and expensive, would certainly have its income undervalued in any comparison. Local production of fruits, buildings, textiles, and so on, would be priced at levels depending on substitutions and transformations linking them to the local price of rice, which would be low because of the cost of transport. The real income would no doubt be fairly low because of poor productivity and high internal transport costs, leading to limited specialization; but it would appear much lower than an income derived from similar skills and productivity where the population had expanded through dependence on an exported raw material, and most of the food had to be imported. As transport costs fell the difference between the subsistence-export type of economy and the mining camp, subsistence-import type of economy would tend to diminish, but Thailand has prevented this from happening by the rice premium.

This suggests that even without the rice taxes Thailand might tend to undervalue its rice surplus; a switch away from rice to industrial crops would have more effect on the apparent than on the real national income. The rice taxes, which in themselves tend to promote a switch away from rice, greatly exaggerate the tendency towards undervaluation of the existing national income and overestimation of the effects of change.

It would require a much more elaborate system of national accounts than Thailand is likely to achieve, to estimate the full effects of the rice taxes on Thai factor costs. Some quantitative discussion is, however, possible. Factor costs would be affected mainly through the cost of living, and the expenditure surveys indicate that expenditures on rice (including home-produced rice) range from just over one-quarter of household expenditures in villages in the Northeast to about one-fourteenth in Bangkok-Thonburi. The low rice prices would also influence the prices of goods and services mainly produced by and for Thai farmers, like fruit and vegetables and rural housing, which together would have a roughly equal weight to rice in the index. The wage level at any given level of productivity may therefore be kept down about 10 per cent by the rice taxes—approximately a one-third reduction on one-fifth of the expenditure for rice, with smaller

[11] But see Usher (1966).

[12] 'Spatially extended accounting' is contrasted with 'point accounting' which is the valid basis for comparisons, in the article in question.

proportional reductions on an aggregate expenditure of similar size on other goods.[13]

Local sales

An alternative approach to this problem can be made by considering the third part of the rice crop—that which is neither exported nor consumed on farms, but sold locally. In the initial estimation of the distortion introduced into the national income accounts by the rice taxes, the under-valuation was applied to the whole crop other than that used as seed and feed. Adjusting the price of the rice consumed at home is mainly adjusting a conventional figure; adjusting the price of rice exported raises certain problems concerning the conventions of national income accounting which have been discussed above, but is a relatively simple matter. But if we value the third part of the crop, the rice sold in Thailand, at a different price from that which actually prevailed in the market, we must either make complex hypothetical assumptions about what would have happened in the absence of the rice premium, or we must find some way of allowing for the redistribution that actually took place between sellers and buyers of rice, as a result of the manipulation of the price.[14]

Because taxes on rice are a fairly important constituent—over 10 per cent—of total revenue, we should need to make fairly drastic policy assumptions to allow for their abolition. It is simpler to treat the output of rice in Thailand as all having a true value on the farm, for national income purposes, based on its international value less the cost of collection, and to treat the effect of the rice premium on the internal price as a tax on rice sellers and a subsidy to rice buyers.

A fairly substantial part of this tax (of nearly 1,000 million *baht*) is transferred from rice farmers to other farmers, or other village people. The figures of local sales in Table 10.2 suggest that the proportion is as high as two-thirds. If we revalue the whole rice crop gross of rice premium, the proportion of this that is taken away from rice farmers for the benefit of other country people is 620 million *baht* (1,102,000 tons locally traded at 563 *baht* per ton) or about one-twentieth of the inflated income of 12·57 thousand million *baht*. In order to gain some idea of the proportional gain in real income that accrues to other rural people we need a rough division of the gross national product between urban and rural people. Table 10.3 is based on the household budget surveys and the national income figures, and makes an approximate division, for private consumption expenditure only, between urban and rural populations in each region.

The total private consumption expenditure for all regions coincides remarkably well with the aggregate 1963 figure for personal consumption expenditure in the domestic market, the difference being only 8 per cent, which is mainly accounted for by miscellaneous services not covered under

[13] This figure is considerably less than Usher's, which—on a comparable basis—is 18 per cent for urban people, for the following reasons: firstly, Usher gives a proportional fall in rice prices of 37·5 per cent instead of one-third because of differences in weighting and also use of white rice only, as already mentioned; and secondly, he uses the expenditure on all food products as his weight, though he calculates the fall only in agricultural products that are not exported. My figure for Bangkok-Thonburi would be less than 10 per cent.

[14] Usher assumes equivalent revenue raised by an income tax which does not affect relative prices. His method of assessing redistribution differs widely from mine.

household expenditure. There is also fairly good agreement with the new regional gross domestic product figures, the difference between private consumption expenditure and gross domestic product in each region corresponding fairly well to indications of the size of capital formation and government expenditure in the different regions.

TABLE 10.3 Analysis of Total Private Consumption Expenditure, Metropolitan Area, Towns and Villages, 1962-3, and Comparison with Regional Gross Domestic Product, 1962 and 1963

Area	1962-3 private consumption expenditure per head (*baht*)	1962 population ('000)	1962-3 total private consumption expenditure (*baht* m.)	1962 regional gross domestic product (*baht* m.)	1963 regional gross domestic product (*baht* m.)
Bangkok-Thonburi	3,137	*1786*	*5,603*		
Other central:					
towns	2,900	917	2,659		
villages	1,879	4,477	8,413		
Total		*5,394*	*11,072*	*33,703*	*36,294*
East:					
towns	2,883	284	819		
villages	1,879	1,386	2,604		
Total		*1,670*	*3,423*		
Northeast:					
towns	2,520	746	1,880		
villages	1,020	8,666	8,839		
Total		*9,412*	*10,719*	*11,368*	*12,045*
North:					
towns	2,066	867	1,791		
villages	1,130	5,326	6,019		
Total		*6,193*	*7,810*	*9,116*	*9,959*
South:					
towns	2,652	602	1,644		
villages	1,738	2,938	5,900		
Total		*3,540*	*7,544*	*8,937*	*9,348*
Metropolitan	3,137	1,786	5,603		
Total towns	2,574	3,416	8,793		
Total villages	1,394	22,793	31,775		
Grand total		27,995	46,171	63,129	67,650
Total private consumption expenditure by local residents				46,815	49,980

Source: National Statistical Office (n.d.a); N.E.D.B. (1965c); N.E.D.B. (1966c).

If these figures are approximately correct, the income from rice—about nine thousand million *baht* at the existing valuation—is a little under 30 per cent of total rural income. We cannot, however, draw the conclusion from this that those who sell rice in the rural areas have 30 per cent of the income, and those who buy it 70 per cent.

Very large numbers of Thais grow rice and other crops as well. If these are net sellers of rice the proportional burden of the rice tax on their income is less than if they produced rice only. Many will grow some rice for their own use, on which they make an accounting loss as a result of the rice premium, but will partly offset this by buying additional rice more cheaply. If the rice growers were an entirely separate group we could say that about 5 per cent of the income they would have earned was being transferred to other rural workers and that the subsidy to these others

increased their real income by about 2½ per cent. The subsidy is partly passed on to urban consumers in the form of lower prices of fruit, vegetables, and fish, which are predominantly bought in the country, but also supplied to the towns. This is an additional stimulus to industrial development, over and above the low price of rice. It would be much more effective if some of the obstacles that result from the current economic and political structure could be overcome.

Mobility and switching

The operation of the rice premium as a combined tax and subsidy represents a very substantial inducement to Thai farmers to switch from rice to other crops and other occupations outside agriculture. Until very recently this inducement had worked to increase the diversification of Thai agriculture by greatly expanding the output of other crops than rice, while discouraging the expansion of rice production. For decades up to 1940 rice production had expanded by opening up less and less fertile land, and technical progress had not sufficed to maintain average productivity. The trend was resumed with the stimulus provided by post-war smuggling. From the Korean War until about 1958 there was little or no increase in area, and average productivity increased slightly. The last few years, however, have seen a marked expansion of rice production again, mainly as a result of irrigation and of successful efforts to increase productivity in rice growing.

It has already been suggested that the underlying economic policy which determines the microeconomic structure of the Thai economy is a reasonably sound one, in that it puts some pressure on the traditional Thai rice farmer to change, while at the same time protecting the most efficient import-replacing industries by low labour costs. But if pressures of this kind are to work effectively they need to be supplemented in two ways. First of all, it is of no use putting on pressure if the agent under pressure is not free to change. This is particularly true of pressure on individuals whose resources are already limited. There is no great advantage in setting up a steep income gradient between two positions between which movement is to be encouraged, if the channels between these positions are clogged or non-existent. We must therefore inquire whether the basic conditions—social customs, land tenure, credit, transport—are conducive to movement, what movements are in fact possible, and whether supplementary policies do anything to encourage them.

The second point we need to consider is that if a gradient is deliberately created there are likely to be unintended and perhaps undesirable side effects from the raising of one end and the lowering of the other, in relation not to one another but to the rest of the economy. Lowering the price of rice generates a flow out of subsistence farming into commercial farming, but it also lowers the price of rice relative to fertilizer cost or the interest charges on irrigation schemes. It may be impracticable to explore, let alone to eliminate, all the possible adverse consequences, but the most important ones need attention; we must try to judge whether those that could not be eliminated would significantly reduce the gains to be derived from the policy as a whole.

In considering the obstacles to change in Thai society and the effects of policy on such obstacles, one must first consider what kinds of change from

traditional rice agriculture will be conducive to rapid growth. Are we thinking primarily of production of a greater rice surplus for sale, production of other export crops, or non-agricultural pursuits? The obstacles to change in methods and to movement within agriculture are less severe than in many less developed countries, and mainly arise from deficiencies in knowledge, credit, and transport. Here the trend in public policy has, on balance, tended to reduce the obstacles. There has been little pressure to improve rice production methods, but adequate pressure to move from rice to other crops. In movements out of agriculture some of the obstacles are still serious, but in the long run government policy will probably reduce them also.

Thai society is not a society in which tightly knit bonds of village or family operate to inhibit changes in rural practices. The absence of a recent national revolution probably makes for conservatism, but this is partly offset by the prestige enjoyed by the royal family and the realization that the adoption of new and scientific techniques has, for a century, enjoyed royal patronage. Because of the flexible system of purchase and sale of land, the bilateral family system, the belief in individual advancement by individual merit, and the virtual absence of any rigid local organizations, it is not necessary to change a whole framework of society before an individual farmer can change. Easy sale of land makes changes in the scale of operations fairly straightforward, and facilitates change of location or occupation.

Compulsory education, now nearly half a century old, has fostered strong personal ambitions for advancement. Though the chief outlet for such ambitions is probably examination success and the civil service, the existence of these ambitions creates a favourable climate for the limited extension activities of the different departments—farmers' groups, young farmers' clubs, and similar groups, largely on American models—which try to spread new techniques.

Recent improvements in transport, both by rail and by road, have clearly increased the possibility of switching from subsistence agriculture both to export crops and to cultivation of fruit and vegetables for the home market. Most of the discussions of transport in the plan and elsewhere stress this aspect of the road-building program.[15] It is, however, doubtful whether the chief significance of road development is in the reduction in the cost of transport of produce, which tips the scales as between subsistence production and production for a market, or the stimulus to local travel, communication, and imitation, which breaks up established customs and introduces new knowledge. It is notable that the Friendship Highway to the Northeast has greatly stimulated the growth of maize in the region; the reduction in cost was no doubt considerable, but this is an area where transport by rail was formerly possible, and it seems unlikely that higher transport cost would have deterred production if the opportunities had been known. An important stimulus came from increased access to the countryside by potential buyers, in some cases processing the maize mechanically on the farm by portable shellers (Brown 1963: 8-9). Over the last decade there has been a great expansion in the country bus services both of the Transport Company—a government company—and of private operators;

[15] N.E.D.B. (1964a: 27-8); N.E.D.B. (1962: 60); I.B.R.D. (1959: 134); but emphasis on social aspects may be found in Platenius (1963: 86-8).

many new small hotels have grown up, and travellers can readily cover the whole kingdom from Bangkok in search of business.

Before World War II Thailand was a country virtually without a road system. This had been in part deliberate policy, adopted for the sake of the revenues of the state railway system. In 1965 Thailand had become a country in which the road system was used. It was still in many places a bad system, liable to severe flooding, and inadequately maintained (I.B.R.D. 1959: 129-39; N.E.D.B. 1964a: 108-9), but this had generated a strong political demand for its improvement. This is part of the reason for the switch of emphasis from the eight-year plan for extended highway construction to the new five-year plan mainly for improvement and hard surfacing of existing trunk roads.[16]

In addition to the great expansion in the number of people travelling on business over the national road network, feeder roads have been developed and are being expanded in key areas by foreign aid under the development plan, for example, by Australia in the northeast (N.E.D.B. 162: 102; Platenius 1963: 84) and Japan in the south, as well as the considerable program of American aid (USOM/Thailand 1962: 27-31). With these roads again, the emphasis in planning is on reduced transport costs to enable subsistence producers to turn to market agriculture; this is no doubt of some importance, but even where water transport was previously available, the fact that few people ever visited the village must have been a factor making for conservatism, which a country bus no more than three kilometres away would do much to overcome. One of the most striking changes in the last decade has been the great increase in the number of farmers who are aware of change and of increased individual income as possibilities. New roads and country buses, expanded centres of administration in every province, and the widespread diffusion of battery-operated transistor radios, have all contributed to this change.

An important obstacle to economic development in rural areas has been lack of credit. For rice farmers short-term credit is often necessary merely to tide over a temporary disaster, since a single bad harvest can be crippling to a farmer who grows mainly for his own consumption (National Development 1964a; Udhis 1963). The main emphasis in the Thai co-operative movement, from its beginnings in 1917 until World War II, was on protecting Thai villagers from becoming permanently indebted or losing their land as a result of such credit needs. The movement was thus partly a welfare movement and partly an instrument of Thai nationalism against predominantly Chinese middlemen. In this form it reached its peak at about the time of the Korean War, and village credit societies have since then stagnated. Their total impact has never been significant.

During the last decade there has been a gradual shift of emphasis toward using the movement as an instrument of development, and a realization that this involves changes in techniques. The unlimited liability type of village co-operative has an advantage in reducing the costs of supervision, and it also helps to encourage thrift; it is thus able to channel funds to farmers at a reduced cost and to help increase the farmers' own savings. With these small village societies, however, trained men were far too few

[16] N.E.D.B. (1964c: 6). There are other political factors at work but the net effect has probably been to increase the effectiveness of the highway program.

for the co-operatives to have much influence on the pattern of behaviour, or to encourage productive borrowing. Some societies did not collect all the payments due. Even where they did, their function was rather to rescue Thai farmers in distress from onerous credit terms than to help modernization.

The new pattern began with the large co-operatives at Pakchong and Cha-Choengsao. These are societies with a membership of several hundred, employing well trained workers on scrutinizing loan applications to ensure productivity, and with limited liability, but a system of mutual guarantee by groups of members. They cover a wider area than the village co-operatives and are able to select enterprising farmers with good records as members. They have had considerable success in raising their members' incomes, and have built up large reserves and attracted much local attention. As a result other large co-operatives have been set up at Rayong and Khonkaen, and it is proposed to set up others to work with the proposed new agricultural credit bank (N.E.D.B. 1962: 50-1; National Development 1964a: 8-9).

The result of the new emphasis will probably be improved opportunities for the more enterprising farmers to change their crops or production methods. This represents a more efficient use of existing trained manpower. There is evidence, however, that in other respects also there is recognition that the bottle-neck in using credit to promote change more widely is trained manpower. A new co-operative training school has been established in Bangkok, and co-operation has been introduced as a subject in rural primary and secondary schools.

Obstacles to movement right out of agriculture into other sectors mainly depend on certain rigidities in the present structure of Thai society. These result from the hold of the Chinese over most of the economy and the tendency for patronage to become centred in urban institutions such as ministries and their affiliated industries, so that opportunities for advancement for those coming from rural areas tend to be blocked. Since these are not matters of rural development they will not be considered in detail here. Considerable success has been achieved in assimilating the Chinese population into Thai society by a combination of pressure and protection. If this assimilation is combined with the often enunciated but not yet adopted policy of eliminating public enterprises, some of the obstacles to movement out of agriculture will be removed.

Effects of different policies

The general policy of putting pressure on the Thai farmer and indirectly subsidizing other farming and other economic activities by rice taxes, while at the same time removing restrictions on mobility, has resulted in a remarkable development of other crops, rubber, maize, kenaf, and cassava, to which attention has already been drawn in Chapter 6, as well as (probably) a great increase in the production of fruit and vegetables. It is noteworthy that farmers have been very responsive to price changes in kenaf and maize and probably (subject to a lag) in rubber also. Table 10.4 shows the increase in the output of these crops during the years 1951-63. The enormous increase in the output of kenaf in 1961 is a result of crop failures in Pakistan and resulting high prices; maize expansion is partly due to the rapidly expanding Japanese market, rubber expansion to delayed response to the high price in the Korean war boom (Brown 1963; see

TABLE 10.4 Thailand, Output of and Gross Domestic Product Originating from Various Crops, 1951-63

Crop	Unit	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Rubber	'000 tons	111	100	98	120	133	137	136	141	174	171	186	195	198
	baht m.	2,222	1,351	901	1,079	1,852	1,521	1,455	1,136	1,816	1,873	1,519	1,393	1,252
Maize	'000 tons	42	45	51	62	67	115	137	186	317	544	598	665	858
	baht m.	36	33	64	57	81	133	127	165	270	467	570	566	806
Cassava (roots)	'000 tons	256*	257*	282*	283*	258*	225*	418	487	1,083	1,222	1,726	2,077	2,111
	baht m.	26	26	28	28	26	22	42	78	173	229	397	779	476
Sugar-cane	'000 tons	1,291	1,476	1,820	2,437	2,699	3,830	4,147	4,309	4,988	5,382	3,983	3,155	4,733
	baht m.	128	146	180	244	300	437	460	405	484	495	373	327	403
Kenaf	'000 tons	20	13	14	8	19	17	18	30	50	181	337	134	212
	baht m.	30	19	12	13	24	44	39	65	95	488	1,041	267	325
Ground-nuts	'000 tons	76	76	78	92	94	101	118	121	124	152	108	112	113
	baht m.	149	180	270	283	276	258	408	365	334	542	303	332	301
Pineapples	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	91	123	149	256	450	321	289
Bananas	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	326	268	357	425	646	652	796
Watermelons	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	20	23	30	121	117	118	186
GDP from fruit	*baht* m.	1,820	1,701	2,101	2,126	2,302	2,485	2,559	2,908	2,805	2,850	2,957	3,187	2,992
Chilli	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	21	24	27	47	70	71	77
	baht m.	335	354	300	277	167	156	268	123	169	345	374	397	514
Onions	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9	15	14	39	41	50	37
	baht m.	8	14	8	7	5	7	15	29	17	83	91	84	66
Garlic	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12	15	18	28	34	43	36
	baht m.	5	6	5	4	4	4	4	60	67	167	308	251	65
Cabbage	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11	17	16	28	36	38	60
Chinese olives and Chinese cabbage	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24	30	31	55	62	154	196
Eggplants	'000 tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	34	67	40	47	61	58	74
GDP from vegetables	*baht* m.	680	484	599	605	655	707	728	827	799	811	842	907	852

* Chonburi province only.

also Chapter 6). The increase in the output of the fruit and vegetable items is conjectural, since the G.D.P. figures are mostly based on assumed constant consumption per head, and output figures are indicative only, not wholly reliable. There has almost certainly been a large and steady expansion as a result of the opening up of the country by increased transport.

In rubber and in maize the expansion of production has owed something to deliberate government policy: in rubber Thailand has followed a lead given by Malaya, in maize it has received active help from the United States. The expansion in fruit and vegetables has been more spontaneous; and partly because it has been little assisted, partly because its magnitude has been difficult to estimate, it has received less attention. Nevertheless it is probably of comparable significance and importance. There have also been notable expansions in livestock production and fishing.

Effects of undervaluation of rice on decisions

Detailed policy for the expansion of other crops should, however, be considered in relation to the policy for the expansion of rice production. Here we must ask how far the emphasis in the policy has been rational and how far it has been distorted by the misleading price patterns to which reference has been made earlier. A misleading price pattern can distort policy either through sophisticated efforts at rationality, using false figures, or through marginal adjustments being made, on the basis of prices which were meant to have other effects, and are inappropriate to the particular case. Examples of the former are some of the arguments about double cropping, of the latter the failure to expand adequately the use of fertilizer.

The misleading price structure arises, as we have seen, from two sources. On the one hand the rice taxes directly depress prices by about one-third; on the other, Thailand's true position is better than it appears because it developed by a process in which improved demand and improved public order resulted in a substantial export surplus of its main subsistence crop, while internal communications and the cost of collection were still quite high; this meant that the national income was valued, for many subsistence items, at prices depressed by internal transport costs below the new international price levels, while for most less developed countries the opening up of new areas for mining or plantation products has led to a mining camp type of price structure with high costs of living. It is much more difficult to allow for the transport effect than for the rice taxes, but both need to be considered. Transport costs have certainly fallen, so that the transport effect must be less important than before.

So far as rice production is concerned, the aim implicit in official policy appears to be to increase productivity per head and per acre, with relatively little opening up of new land and much diversification. This implies a constant or even reduced labour force in rice growing while the population as a whole increases. The main instruments for increasing productivity are irrigation and extension work based on improved seeds. The amount spent on these could be affected in two ways by the rice premium. Total government revenue is increased by it; but the relative importance of expenditure on rice production might be reduced if the departments and planning authorities compared the effects of such expenditure with that on improving other crops by valuing the results of each at prevailing prices. It might

well seem more worth while to spend effort on promoting the development of 1 million *baht* worth of tobacco on newly cleared land than on raising the output of existing rice land by 1,000 tons, which would yield only about 750,000 *baht* to the farmer because the price of rice was held down. Probably the second effect—which would be irrational—has so far been relatively unimportant. This is not because allowance is properly made for price distortions but because until very recently cost-benefit analyses have had little influence on irrigation policy, and such analyses as have been made have been based on theoretical, engineering figures of the area affected, rather than accurate estimates of changes actually made. Moreover, expansions in the budget allotted to rice research and development in recent years have resulted not from calculation but from the increased pressure generated by the establishment of a separate Rice Department within the Ministry of Agriculture in 1955. It seems likely that if the policy of diversification through the rice premium is to be combined with use of a considerable part of the funds derived from it in promoting more efficient rice growing, some institutional changes may be needed. Fairly sophisticated policy directives might meet the situation in irrigation, but it is difficult to see how the right kind of bias in favour of rice can be achieved without many more trained workers.

This is not to say that the policy is irrational; use of the price mechanism to generate movement by farmers out of traditional rice growing simultaneously into three alternative occupations[17] is well adapted to Thai social and political structure; but it involves treating rice production by modern methods—using irrigation and flood control, fertilizer, pest control, seed selection, and, where suitable, machinery—as one of the alternatives to be subsidized while traditional rice growing is depressed. Since this cannot be done by setting different prices on rice grown in different ways, subsidization must be so contrived by other means that practices which will bring additional rice yields are at least as profitable as if there were no rice premiums. This can probably not be achieved precisely, but the concept would imply certain changes in practice in different departments.

In the Royal Irrigation Department there are two branches of policy in which this concept would be relevant. First, in cost-benefit analyses special treatment would have to be given to rice. At present cost-benefit analyses for allotting priority to projects are still fairly new, and are not matched against any subsequent evaluation study. Even where they operate, however, they value crop gains at the prices they will bring to farmers. It is necessary, instead, not merely to value rice at the international price, but also to give some further loading. The rice premium policy is preferred because the low price of the staple food gives Thailand an advantage in economic growth. This advantage is only effectively possible while there is a rice surplus, and improved productivity is needed to maintain this without denuding the forests, while population is expanding. Hence the Ministry of National Development, to which the Royal Irrigation Department is subordinate, should determine a policy price for rice that would achieve this objective, and ensure that this is used in all calculations. The relatively good cost-benefit ratio of the Mae Klawng project, for example, is partly due to its irrigating an area of mixed, high-value crops; the project is, no doubt,

[17] I.e. scientific rice growing, other commercial agriculture, and industry.

a good one, but its relative standing would be changed by a revaluation of rice.

The second branch of the policy concerns the Department's attitude to special charges for irrigated land and special payments to farmers for their maintenance work on the channels; this might also be affected by the concept of inducements to higher productivity in rice. Faults in maintenance of distribution channels have so far lessened the efficiency both of the main Central Plain irrigation scheme (N.E.D.B. 1964a: 64-5) and of the many irrigation tanks in the Northeast (Chira 1964). Irrigation is treated as a service for which farmers pay by their taxes and the Department does not therefore charge special rates for irrigation according to benefit. It also requires farmers whose lands are irrigated by a system to assist without payment in the maintenance of the system's distribution channels. Benefits are very unequal, and where the total supply is short as in the Northeast, some farmers have an interest in the channels falling into disrepair. At present ditch-riders are being trained to help overcome these difficulties.

It might be possible for rice premium funds to be used to pay farmers for maintenance work. Those who did not grow rice could then be required to pay dues according to benefit received, on the grounds that they did not contribute to the rice premium fund, while rice growers would pay nothing, provided they met certain standards of improved cultivation laid down by the Rice Department.

Administration of any such scheme would present problems. The Rice Department is in a different ministry from the Royal Irrigation Department. Moreover the latter, though widely respected for its outstanding technical efficiency, is relatively weak on the economic side of its work, and co-operation with other departments is hardly its strong point.

Turning to other measures for stimulating rice production, there might be no great institutional difficulty in administering subsidization of recommended practices in rice growing, since the Rice Department is a separate department in the Ministry of Agriculture from that dealing with other crops. The staff, however, would at present be totally inadequate for administering an adequate subsidy scheme. This is particularly true of subsidizing fertilizer.

It is especially necessary to subsidize fertilizers for rice growing because, in the Central Plain, the risk of loss through flooding has hitherto made use of fertilizer unprofitable, and this risk is now being reduced by the irrigation schemes. If there were no rice premium, fertilizer would be profitable even with existing risks in many parts of the country, but probably not sufficiently so for farmers near the subsistence level to use it (Uexkuell 1964: n.36). In principle, a sufficient subsidy for fertilizer for rice growers would cause excess use and waste on other crops. In practice, leakage would be inevitable, but in view of the importance of rice in total agriculture this would probably not be excessively harmful.

One instance in which undervaluation of rice as a result of the premium may have practical importance is double cropping of rice in irrigated areas. At present this is a matter of keen controversy. Some double cropping was recommended in the International Bank Mission Report (1959: 36), but the Rice Department has marked reservations concerning the areas in which double cropping is to be preferred to planting of a different crop in the off-season (Agriculture 1963: 4). The Ministry of the Interior has been

using its local government powers to foster enthusiastically the double cropping of rice, and its Minister (the Deputy Prime Minister) has been able to divert officers of the Rice Department to this work, notwithstanding the Rice Department's view that equivalent funds could be used to add more to the much larger main rice crop. So far as it is a question of substitution between two different crops of rice, the argument is one of technical fact, as to where the impact would be greatest. Some of the arguments against double cropping are, however, more doubtful.

It is argued, for example, that double cropping is worth while to Malaya which has to buy its rice abroad at high prices, but not to Thailand with its low internal price (Agriculture 1963: 1, 5-6). This not only leaves out of account the duty that accrues to the government on the marginal rice, which is nearly all exported; it also ignores the advantage Thailand derives from a large surplus of its main food item, which ensures a low internal cost of living.

There is no one definitely calculable price for rice which should be used in determining policy, but the appropriate price in comparisons of this kind should not be merely the local price of rice.

Other crops

In the main, as we have seen, the diversification of Thai agriculture has been brought about by opening up the country physically and psychologically, and pressing down the price of rice. There have, however, been three major specific measures aimed at diversification, in addition to numerous minor research and extension activities. These have covered maize, rubber, and livestock.

Maize. Maize growing has been deliberately stimulated by the breeding and introduction of new varieties; more recently strong efforts have been made to reduce the moisture content so as to improve its acceptability. The breeding research was undertaken initially by the United States Operations Mission, in an effort to devise suitable crops to substitute for rice in upland farms in the Northeast (USOM/Thailand 1962: PD6; Brown 1963: 8-10). Experiments with Guatemalan and Hawaiian varieties were followed up by extension activities that certainly helped to stimulate the expansion that took place in the late 1950s. It is noteworthy, however, that though the Northeast has benefited, more than half the maize is now grown in the Central Region. More recently Japanese financed research has been investigating ways to reduce the moisture content of Thai maize. If these efforts are successful not only will Thai maize do better in its principal market, Japan, but the limitation on the distance which it can be carried by sea—a limitation due to moisture, which at present virtually excludes Thai maize from more distant markets—will be removed.

Rubber. Rubber, though originally introduced to Thailand by a government official has in fact received relatively little government encouragement until very recently. The coupons introduced to control rubber production under the international restriction of the 1930s were retained for some years even after World War II, when the international scheme was no longer in effect. Some new planting took place—as a by-product of felling of jungle for food crops—during and immediately after the Japanese occupation; much more was undertaken during the Korean War. A great deal of this

planting was illegal, and many illegal smallholdings are known to exist at present. This has been a handicap in developing replanting with modern high-yielding rubber, whether budwood or clonal seeds. The government has established two modern experimental stations in the South—the main rubber-producing area—one at Kor Hong, between Hadyai and Songkhla, at the main communications centre, another at Thanto, between Yala and Betong, in one of the main rubber-growing areas. In addition there are extension offices and smaller experimental plots, mainly producing budwood for distribution, in nearly every province (Agriculture 1962). They are often handicapped in their extension activities both by the unsatisfactory legal status of some of the holdings and by racial difficulties, since the planters, though Thai nationals, are mainly of Malay or Chinese origin, and the distribution is mainly in the hands of Chinese firms financed from Penang or Singapore.

In addition there are difficulties arising from the domination of parts of the rural areas in the extreme southern provinces, Nara-thiwat, Yala, Songkhla, and Satun, by communist terrorists from Malaysia.

In December 1960 a replanting scheme based on the Malayan one was introduced by the Sarit government (N.E.D.B. n.d.: 31). It consists of a levy on all rubber exports which is paid into a replanting fund. Officials of the fund then approve grants for replanting, and these grants are payable, partly in cash and partly in supplies, on satisfactory completion of different stages of the replanting program. The total grant was 1,500 *baht* per *rai,* a little under U.S. $200 per acre, until 1964, but has since been increased to 1,850 *baht.*

So far as possible a lenient attitude is adopted to previously unregistered holdings, but this probably gives opportunities for corruption. The government is aware of the replanting difficulties experienced by small farms, and the official policy is to give preference to applications from small farms, though, unlike Malaysia, Thailand does not give them higher grant per unit of area. Initially, as might be expected, it was the larger-scale farmers who realized the advantages of the scheme, but the policy has had some effect in reducing the average area approved for replanting per holding over the years. In 1961 it was 18·6 *rai* per holding for the whole country; in 1965 it was only 9·1 *rai.* Table 10.5 shows the change, by groups of *changwats,* in the size of the average replanting approval from 1961 to 1965.

TABLE 10.5 Rubber-growing Regions of Thailand: Average Areas of Plots Approved for Replanting by Rubber Replanting Areas, 1961-5

	Average size of plots approved for replanting					
Administrative areas*	1961 *(rai)*	1962 *(rai)*	1963 *(rai)*	1964 *(rai)*	1965 *(rai)*	Average 1961–5 *(rai)*
Chanthaburi (Southeast)	11·3	8·8	8·5	7·5	7·3	8·5
Phuket (West coast)	31·0	19·1	15·7	11·3	10·6	13·4
Trang (South Central)	13·4	11·2	19·0	8·2	8·0	9·4
Songkhla (Isthmus)	21·1	16·3	16·3	11·4	10·4	13·7
Yala (South)	39·2	24·2	24·1	15·7	12·2	20·2
Nara-thiwat (Far South)	19·2	12·6	12·9	10·0	9·0	11·1
Whole kingdom	18·6	13·4	15·6	9·6	9·1	11·0

* Except for Nara-thiwat, each of these comprises two or more *changwats.*

Source: Figures on rubber replanting supplied by the Rubber Division, Department of Agriculture.

TABLE 10.6 Rubber-growing *Changwats* of Thailand: Total Area Planted with Rubber, 1962, and Areas Approved for Replanting, 1961-5, by *Changwats*
(Figures are rounded and do not add up to rounded totals given.)

Changwat	Total area under rubber 1962 ('000 *rai*)	Areas approved for replanting					Total 1961-5 (*rai*)	% of total planted area approved for replanting	Area receiving hurricane relief from replanting fund 1962* (*rai*)
		1961 (*rai*)	1962 (*rai*)	1963 (*rai*)	1964 (*rai*)	1965 (*rai*)			
Chanthaburi	79·5	1,989	3,001	1,425	1,125	917	8,482	10·7	—
Rayong	55·1	275	1,231	1,390	983	1,240	5,119	9·3	—
Trat	29·8	399	1,191	302	466	531	2,889	9·7	—
Other S.E.†	0·2	32	—	—	—	—	32	16·0	—
Phuket	80·8	893	994	1,019	947	576	4,429	5·5	31
Ranong	5·7	299	104	8	47	52	510	9·0	—
Phang-nga	88·2	575	623	1,324	2,657	1,544	6,723	7·6	1,322
Trang	274·0	3,162	2,193	1,708	1,800	3,149	12,012	4·4	109
Nankhorn-srithamrat	182·5	1,329	1,631	5,762	8,541	3,699	20,926	11·5	39,240
Suratthani	39·7	131	1,208	1,697	5,458	1,508	10,002	25·0	9,722
Krabi	67·4	1,256	1,692	640	1,340	1,248	6,176	9·2	219
Chumphorn	4·6	—	—	140	41	163	344	7·5	—
Songkhla	415·7	5,115	7,025	5,547	5,182	5,950	30,819	7·4	12
Satun	61·9	1,057	972	783	1,051	766	4,629	7·5	—
Phatalung	40·4	332	352	425	788	983	2,880	7·1	490
Yala	400·8	2,430	3,435	3,064	3,194	2,436	14,559	3·6	—
Pattani	310·0	2,280	1,780	1,653	1,699	1,545	8,957	2·9	—
Nara-thiwat	533·5	2,897	4,749	4,967	6,206	7,861	26,680	5·0	2
Whole kingdom	2,670·7	24,454	32,179	31,845	41,525	34,167	165,968	6·2	51,154

* A small amount of hurricane relief was also approved in 1963 but is not included in the official figures.
† These figures are unreliable: the total figure of some 200,000 *rai* is attributed to the *changwat* of Nakhornayok, where no planting is recorded. The 32 *rai* replanted are attributed to Chonburi in which no acreage under rubber is reported.

Source: Total area by *changwats* supplied by Dr Niwat Tulyayon of the Bangkok Bank from his own research in the rubber-growing regions. Replanting figures supplied by the Rubber Division of the Department of Agriculture.

There has, however, been inadequate research into the difficulties of replanting very small holdings in Thai conditions. Five *rai* is about the minimum area that can be replanted without the young trees suffering from shading by neighbouring trees (Bauer 1948: 25-30). This means that holdings of under twenty *rai,* of which there are very large numbers, have to sacrifice an unmanageably large share of their income by cutting down their trees. They are obliged to plant a cash crop between the growing trees for at least two or three years to alleviate the sacrifice, and little research has yet been done into the effect on the rubber of different crops that can be grown in south Thailand.

Moreover, the planting scheme may have come too late. It ran into misfortune right at the start. After only one full year of operations, severe hurricane damage in the Trang and Phuket rubber replanting administrative areas led to a decision by the government to divert some of the replanting fund to hurricane relief. Some of the relief funds may have been spent on replanting, but they were not granted under controlled conditions. This limited the funds available in 1962 and 1963. The replanting in 1964 was a record, but the total fell again in 1965.

Table 10.6 shows the progress of the replanting scheme, province by province, from 1961 to 1965. It will be seen that only a little over 5 per cent of Thailand's rubber-holding area has been approved for replanting in five years. Not even all of this will be replanted, for at least some fail to replant or to maintain their holdings. The poor performance in the three provinces of the extreme south, Yala, Pattani, and Nara-thiwat, which contain nearly half the total area under rubber, may be partly due to security conditions, racial difficulties, and illegal planting, but even elsewhere the record is hardly satisfactory. It is best in Nakhorn-srithamrat and Suratthani, partly because these are in the immediate vicinity of the Nabon Rubber Estate Organization where high-yielding strains are demonstrated.[18]

With the emergence of the stereo-regular rubbers and installation of additional capacity for the production of synthetics in most industrial countries the price of natural rubber is likely to fall drastically (Silcock and Fisk 1963: Ch. 4; see also Chapter 6), making the task of inducing small farmers to replant much more difficult. To meet the needs of the present situation it will almost certainly be necessary to encourage new planting in much land at present reserved. Probably the most rapid and effective method would be to encourage plantation development on new land by the Chinese capitalists who now do most of the distribution.[19]

Livestock. Government efforts to increase the supply of livestock were mainly concerned with replacing herds destroyed during World War II, improving the breeds of cattle, pigs and poultry, and introducing an adequate system of protective veterinary medicine (USOM/Thailand 1962: PD8-9). Very considerable increases in output took place in the early fifties, mainly as a result of American technical aid. The livestock industry,

[18] Contact with the Replanting Fund through its hurricane relief activities, or the need for change as a result of hurricane damage, may also have been important; these were areas badly affected by the hurricane.

[19] At the time of writing (mid-1966) investigations are being undertaken in the south under the Colombo Plan with a view to introducing either estates or group projects on the Malaysian pattern.

however, did not share in the renewed expansion of the economy after 1959. This failure and the reduced emphasis on livestock in the development plan are probably related to developments in distribution, about which it is difficult to secure precise facts. Well publicized efforts of private meat producers to corner the Bangkok market led to the establishment of a monopoly, the Union of Animal Product Traders, as a subsidiary of the Bangkok municipality. Apart from the municipal shares and those owned by another public corporation (see Appendix A Chart III), virtually all the shares in this concern are owned by the family of the Deputy Prime Minister. During the last few years efforts in livestock promotion have been concerned with better breeds and improved health (N.E.D.B. 1964a: 81).

Fruit and vegetables

Thai fruit and vegetables for the most part enjoy tariff protection, not so much against foreign fruit and vegetables of the same variety as against different fruit and vegetables, a taste for which might otherwise spread from the European community and Western-educated Thais. This protection, and also the absence of any colonial phase in Thai history, have tended to keep the food habits even of very wealthy Thais more different from those of the West than in other less developed countries of a similar state of development. In this and in other respects the marginal propensity to consume imports as income rises is probably rather low in Thailand.

It is difficult to assess in welfare terms the increases in income which are represented by the considerable expansion in the output of Thai fruit and vegetables, and earlier of the local meat supply. It is apparent that Thais of all classes are becoming much better fed, with a cost for most foodstuffs far lower than in neighbouring countries. Judging by the proportion of their total income available for non-food items very large numbers of middle class Thais must be as well off as middle class people in far wealthier countries. In terms of their incomes, of course, certain highly prized Western luxuries like cars and refrigerators are fantastically expensive; yet because of the continuity of the culture, a large part of the income of wealthier Thais is spent on the living expenses of kin or other dependants, who give part-time personal service while training or working in other occupations. This luxury, which is highly prized, not only for the services but for the sense of consequence it gives, is relatively cheap, because of low food prices and the strong pressure to gain access to the modern, urbanized sector of the economy. Yet this is not a result of an oppressive society. The Thai middle class generally sees its role as a modernizing one; it tries to find niches in the economy for the dependants it introduces, and costs are cheap far more because of low food prices and the strong pull of modern city life than because of rural poverty.

It is, of course, true that the entire system rests on the back of the traditional Thai rice farmer. He is taxed not only for government revenue which helps to maintain an aristocracy; he is also, indirectly, taxed to subsidize the exporter of maize, rubber, cassava, and kenaf, the producer of fruit and vegetables, the predominantly Sino-Thai-owned industrial sector, and the government enterprises. Yet a substantial part of this taxation is spent on either improving productivity in rice growing or providing opportunities for moving out of it, and generating a fairly high

rate of growth for the economy. Some of the detailed points on which the distortions inherent in the present system appear to have led policy astray have been mentioned above, however.

Growth in the agricultural sector

A final point relates to the effect of the rice premium on measurement of the rate of growth of the agricultural sector of the economy. In the decade up to 1961 the growth of the gross domestic product due to agricultural crops was not entirely regular, but was nevertheless substantial, averaging about 6 per cent per year. Income due to rice increased at only about half this rate. During the next two years, after the initiation of the development plan, the rate of growth in income from agricultural crops increased, but there was an actual decline in crops other than rice, while the rice crop increased by over 10 per cent per year. In part this was due to a number of individual factors, such as the fall in the price of rubber and the end of the exceptional boom in kenaf, while a part of the increased rice crop may have been due to good seasons. The point that needs to be made, however, is that the undervaluation of rice causes a damping down of the apparent rate of increase during the first half of the plan in comparison with what was actually achieved.

The period for which statistics are available is too short and random variations in agriculture are too great for any precise reckoning to carry much weight. If, however, the rice crop had been revalued upwards by about 30 per cent, the rate of increase in the whole income from agricultural crops would have been very much higher. The true rate rose above 7 per cent while the apparent rate was below that of the previous decade.

The achievement of a long-run movement by those who had been subsistence farmers from rice into other crops, is an important part of Thai progress, and has almost certainly been assisted by the effect of the depression of the price of rice on costs and inducements. This same depression, however, tends to undervalue the importance of another achievement, the expansion of the productivity of rice growing. Measures are needed, and are being taken, to help this expansion. They are measures to which special attention must continue to be given because both sophisticated techniques of planning and automatic responses may otherwise be distorted by a price policy the general effects of which elsewhere seem to be beneficial.

11

Promotion of Industry and the Planning Process

T. H. SILCOCK

Introduction

We can detect two main impulses towards economic development in Thailand during the past thirty-five years. On the one hand there is a nationalist impulse,[1] concerned with acquiring for the Thais themselves more of the fruits of economic progress formerly gathered by foreigners. On the other, there is the modernizing impulse of the Chakkri kings and the bureaucracy they trained (Landon 1939), the sense that Thailand was a backward country with much to learn from foreign nations, the sense of obligation to learn foreign techniques and thereby transform the Thai people and their environment.

Both of these impulses can be seen at work in the two divisions of the economy considered in this chapter: the promotion of modern forms of organization and technique, and the changing attitudes to planning of the economy. On the whole the nationalist impulse has probably had more influence on industrialization, and the modernizing impulse on the development of planning strategies. If we are to understand the process of change, however, we must realize that the nationalism is nationalism of an *élite* group which sees the economic interest of the Thai people largely in terms of its own economic interest. Modernization has been introduced from above, and has taken the form of adoption here and there of specific changes seen from time to time as desirable, without the imposed (and often resented) change in institutions that characterized colonial societies.

This chapter is divided into two main sections. In the first we consider the efforts to promote industrialization, including under this heading all the attempts to transfer to Thai ownership or control institutions using modern mechanical or administrative techniques. In the second we consider the changes in the overall planning of the economy, and the development of national planning techniques.

Promotion of industry before and during World War II

Promotion of industry was undertaken on a very limited scale under the absolute monarchy, the only government factories of any importance being

[1] Economic nationalism in Thailand is to be the theme of a study by E. Ayal of the M.I.T. Centre for International Studies. I am grateful to Dr Ayal for showing me parts of the manuscript of this book in advance.

paper and textile factories (Ingram 1955: 139-40). At the time of the revolution in 1932 the young intellectuals from Paris, who were the brains of the revolutionary movement, had the idea of importing machinery with which to produce all the essentials of life in a civilized state (Pridi 1947). None of them had any conception of the skills or organization involved. One of their chief aims was to take the economy of Thailand out of the hands of the Chinese and Europeans. They were unable, because of dissensions between the civilians and the military in the revolutionary party, to do much in the way of implementing the economic plan produced by Pridi Phanomyong (Pla Thawng 1964; Wilson 1962: 16-18; Vella 1955: 376-7). Nevertheless the sentiment in favour of industrialization enabled a small beginning to be made in more realistic promotion of industry.

In 1936, as a result of previous efforts by some of the civil servants, the Department of Commerce set up a Division of Industrial Promotion, originally headed (on a part-time basis) by the manager of the existing government sugar factory at Lampang.[2] This was a relatively practical group, at least on the technical side, concentrating on developing and expanding existing skills in simple and labour-intensive operations like hand weaving, toys, and leatherwork, while gaining knowledge about factory processes first by registration and then by inspection. A factory control law was promulgated in 1939.

War conditions first in Europe and then in Thailand itself led to a rapid expansion of this division: its industrial promotion section began fostering factory production of local consumer goods—textiles, hats, leather goods, umbrellas—and undertook training in some of the necessary skills; its distribution section established shops to sell Thai industrial products in provincial centres. In 1941 it was expanded to a department and in 1942 to a ministry. It had divisions for research and promotion (field investigations into raw materials, studies of adaptation of processes, and encouragement of interest in industrial careers), for factory industry (promotion, examination, and control), and for industrial products (standards, market research, and marketing). It compiled registers of skills, operated a loan fund for small industries, and in several cases initiated production of urgently needed goods and then handed the undertaking over to private enterprise.

The experience gained during the war was mainly technical and administrative. It was not a period to teach adaptability to the changing conditions of a market nor close attention to costs. Nevertheless the influence of this period should not be ignored in considering Thai industrialization. In November 1944 the Ministry of Industry's building was bombed and its records burnt. Even before this the economy had been fairly effectively disrupted by interruption of almost all transport. Yet the physical destruction may well have been less important for industrialization in Thailand than the setback to the whole industrialization program introduced by post-war political changes.

[2] Most of the material on the early history of industrial promotion is taken from the 1959 *Annual Report* of the Department of Industrial Promotion, which contains a history of the early work of the Department and the text of many of its early plans (in Thai). This has been supplemented by inquiries from Thais who were concerned with industrial development at this time.

The immediate post-war period

The immediate post-war period was one in which the fortunes of war appeared to have favoured the British merchants doing business with Thailand and their Chinese compradors and business associates. Much of the driving force of the Phibun government before and during the war had been anti-Chinese and (to a lesser extent) anti-Western feeling. It was comparatively easy for Chinese and British commercial interests to exert diplomatic pressure against Thai government activities that were competitive with them. To Thai nationalists this was a period of the return of the compradors, and political conditions were unfavourable to the work of the Ministry of Industry. Its budget was curtailed and many of its ablest civil servants left.

One of the effects of this disruption was to check the expansion of the Ministry of Industry into research activities and preparatory work for large-scale industrialization. When the initiative to such industrialization began to emerge again it took the form of several different government undertakings affiliated to different ministries; the Ministry of Industry had a few of its own, such as a Thai metal-goods factory, but it had concentrated most of its energies on the promotion of relatively small-scale labour-intensive undertakings, such as rattan goods, umbrellas, enamel goods, and pins and clips.

The years 1946 and 1947 in which the Ministry of Industry began to disintegrate were years in which several economic and political factors contributed to the growth of state enterprises as sources of income for particular ministries. First there was inflation, with inadequate increases in official salaries. Next, elected representatives were almost universally expected to favour supporters and constituents in the distribution of war surplus and relief goods, which rapidly led to widespread corruption. Attempts to control foreign exchange too closely overtaxed the administration. Thai nationalists had, during the war, established provincial trading companies in every province, nearly all with Chinese managers, as a means of getting the trade out of private Chinese hands; naturally, especially when China was on the winning and Thailand on the losing side, these led to collusive attempts to cheat the government. Perhaps more important than any of these, the almost universal prevalence of smuggling, brought about by the free rice delivery to the United Nations, led to general disregard of any rules that could be broken. Thais generally attribute the growth of large-scale corruption in government either to the provincial companies during the war or to the activities of the elected politicians in the immediate post-war period.

Emergence of industries under the ministries

When Phibun returned to power as the result of an army *coup* in 1947 the situation was one in which the emergence of industries using public funds within the different ministries was a natural development. A tradition of public involvement in industry had grown up, together with much improved industrial skills, during the war. Salaries of government servants were inadequate and it was politically and economically difficult to raise them (see Chapter 4). A group of generals had helped to restore Phibun's power and their loyalty needed to be rewarded and retained; and they in

turn needed to win support at least from the higher levels of the bureaucracy (Wilson 1962: 177-9).

At first some of the industrial development was carried on within existing departments.[3] Several of the present large-scale enterprises under the general responsibility of the Ministry of Defence began as operations within the government itself; for example the Weaving Organization, which now has a capital of 118 million *baht,* began in 1955 by taking over operations that had been built up over several years in the Department of Military Industry, while the oil refinery and oil explorations at Fang in Chiengmai province were originally a part of the army's Energy Department. The same pattern is repeated in the Forestry Industry Organization, which began in the Forestry Department of the Ministry of Agriculture. This has a monopoly of teak and of other forest products in special regions; it also has a large, wholly owned subsidiary, the Thai Plywood Company. In the Ministry of Economic Affairs the government Warehouse Organization grew out of previous trade in rice and other business with the provincial trading companies, which were originally under the control of the Department of Internal Trade, but many of which became partly owned state enterprises after the war.

It must be emphasized that neither at this stage nor later, when separate organizations were set up, were the political benefits from this industrial activity confined to fraudulent interference with the flow of funds to or from the government. No doubt a great deal of this occurred, and would be carefully concealed, but other benefits not legally barred by the Thai system and not even considered improper are equally important, and must be taken into account in any description and analysis. First, there was the opportunity of patronage. Next, there were bonuses for performance that could legitimately be given to one's followers, and fees for attendance on business committees. Finally, there were all the various shades of business relationship, for political civil servants are not barred from having business interests, and though there are restrictions on ordinary civil servants these can be evaded by transparent devices without any moral stigma; the supply and distribution systems of government enterprises provide many opportunities. An important stimulus to developments of this kind was the setting up, under the general supervision of the Defence Department, of the War Veterans' Organization in 1948, the purpose of which was to create business opportunities for returned soldiers.

The movement for the establishment of separate organizations with only a loose government control began to gather momentum in 1953. The motives for this were complex; it is easy to assume that the chief motive was greater freedom to make private gains, but this is probably only a small part of the truth. First, there was a political motive. In 1951 an agreement for technical co-operation had been signed with the United States. In the same year, as a result of negotiations with the International Bank, the Railways and the Port Authority had become separate organizations. To the Thai politicians and bureaucracy it seemed as if direct

[3] Most of the material in this section is based on the Thai *Budget Documents* (Budget Bureau 1956-(1966: Vol. 4, 360-1451)), which give detailed information about the origin, activities, affiliation, and finance of most of the government enterprises. The financial information is usually by no means clear, but this is a useful source on other matters. The *Government Gazette* (Govt of Thailand 1949-(1949-58)) has also been consulted, and the information supplemented by interviews.

government operations were suspect abroad, but state-supported enterprises, in which they could participate, were acceptable and might even qualify for foreign aid.

There was also a legitimate economic and managerial motive for establishing state enterprises. The rules of the Civil Service Commission and the Treasury were not only hampering to patronage and corruption; they also hampered appointment on merit, rapid promotions, flexibility of operation, and other activities that could stimulate efficiency. There were thus solid and fairly respectable reasons for growth of state enterprises in 1953, but less acknowledgeable ones were probably also influential. The end of the Korean War brought a slackening in international demand for rice and a consequent fall in the profits to be made out of the Rice Bureau (see Chapter 8); at the same time the heightened tempo of the civil war in Indo-China hampered the smuggling of gold and opium that had been bringing large profits to some of the political leaders. There was also a shift in the attitude of the Chinese community away from solidarity against the attacks of Thai nationalism towards accepting Thai assimilation policies and trying to secure the protection of Thai generals and politicians (Skinner 1958: 302-19). American aid and World Bank loans were beginning to make the direct operations of government departments uncomfortably familiar to foreigners; dissensions within the ruling party, particularly between General Sarit and General Phao, may also have increased the risks of operating within the government machine. One weapon of political rivalry is prosecution in the courts for irregularities.

Thus in February 1953 an Act was passed laying down the conditions for establishing new government organizations, and several of the major government enterprises were set up as separate legal entities: the Express Transport Organization under the Ministry of Communications with its monopoly of many key road transport operations, the Thai Television Company with its multiple control by different government organizations and armed services and its huge capital equipment, the Poultry Organization and the Market Organization in the Ministry of the Interior, the Fish Wharf Organization in the Ministry of Agriculture, and the North East Gunny Bag Factory, shortly to be taken over by the National Economic Development Corporation. There were also a number of smaller government organizations. Of all these, only the Television Company introduced any important industrial skills, though the Poultry Organization may, at a cost, have raised agricultural skills. For the most part their official justification was the reform of abuses or inadequacies in marketing, and their achievements, if any, have consisted in increased participation of Thais in business and increased integration of a limited number of Chinese. The International Bank Mission Report referred, among other evils, to the tendency of government enterprises to discourage private investment in similar fields, the difficulty of interpreting their control structure and accounts, and their habit of lending public funds to one another (I.B.R.D. 1959: 93-4). All these evils appear to have been there from the beginning.

The most ambitious of the government enterprises, and the one which brought the system into some discredit through becoming a political scandal, was the National Economic Development Corporation Limited (NEDCOL). This initially had a complex structure of ownership by a few private individuals and several different government organizations. Only

the private individuals paid anything for their shares. As a result of complex manipulations involving foreign lenders, the government organizations' shares were never paid up. Like most of the Thai government enterprises, NEDCOL had managers with limited commercial experience and began buying up and extending, or building, heavily over-capitalized factories, with expensive machinery. There were delays in starting the factories, and obligations to foreign banks fell due in 1957 with no money to pay them. The financial organizer, who had been backed by some of Thailand's leading politicians, was killed in an air disaster. None of his colleagues appear to have known his plans, if any, for meeting the financial crisis. The government had to take over the corporation's debts, to avoid defaulting on overseas obligations. Field Marshal Sarit, who ousted Field Marshal Phibun Songkhram by a military *coup* a few months later, made a major political issue of government losses of funds through NEDCOL, and thereafter discouraged the formation of new government enterprises.

By 1957, however, a good deal of Thailand's limited industrial capacity had come to be controlled by state enterprises. There were state enterprises producing on a factory scale in paper, sugar and gunny bags, forestry products and plywood, stationery, pharmaceuticals, light engineering, cement, oil refining, and brewing. Powerful vested interests in the bureaucracy had become involved with these undertakings, and dislodging them was difficult.

After the assumption of absolute power by Sarit in 1959 a government committee was set up to investigate the affairs of these enterprises and recommend either ways to make them profitable or their discontinuance. In general, however, even after the appointment of this committee there were strong political pressures to increase the capital supplied to these industries, and few have been discontinued or handed over completely to private enterprise.

The disadvantage of these enterprises is not only a distributive one, of private interception of public funds; patronage leads to a considerable waste of manpower, and the need to arrange commissions and the like in face of some professional scrutiny probably leads to both excessive and inappropriate capitalization. In addition, although private enterprises are normally allowed to compete with these state ventures there is a natural fear that government purchasing and even new regulations will be used to favour state enterprises against private competitors.

Promotion of private industry

Thai promotion of public enterprise has not, however, in the past fifteen years, been marked by any opposition to private industry, even when owned by foreigners. Indeed, as early as 1954 an Act was passed to promote private industry. This Act was largely ineffective, and was criticized in the International Bank Mission Report for appearing to want to restrict and control rather than to encourage industry (I.B.R.D. 1959: 98). At this time the Thais were attempting to use promotional privileges not as an overall measure to encourage virtually any industry, but as a measure to promote the type of industry which they considered would benefit their economy. This in itself was sounder industrial policy than the undiscriminating promotional inducements sometimes offered in such conditions, but the attempt at control lacked technical knowledge.

The policy, indicated by the conditions laid down in 1955 for promotion of industries under the 1954 Act (Govt of Thailand 1949-(3 June, 21 Oct. 1955)), is clearly one of using their hard currency and stable market as a bait to attract industries of a certain minimum scale, contributing some additional technical knowledge, or fostering a local raw material industry. For example, cotton spinning units, to gain promotion, were to have not less than 3,000 spindles, enamelled metalware was to cover the whole process from the making of forms to completion; glass works were to have a 4,000 ton capacity, use modern machinery to produce a product to international standards, and use local raw material.

The implied aims of this policy were neither unreasonably restrictive nor unwise. But in its administration firms seeking promotion were required to submit detailed information to officials whom they had no reason to trust. Not only could this information lead to corruption in the granting of permits; it could also serve the business interests of bureaucrats. The pre-war Industrial Division had acquired much of its knowledge from factory inspections, but at that time there were few business interests owned by bureaucrats and no tradition of collaboration with shrewd Chinese entrepreneurs. In the post-war period a number of instances occurred of Thai imitations of foreign products (I.B.R.D. 1959: 105-6). Naturally, therefore, the 1954 Act was rather unsuccessful in promoting private investment in Thailand.

The problem is not an easy one. The Thai administrators are certainly not interested in recreating the pre-war situation in which a major part of Thailand's economy was owned and operated by Europeans or Chinese. European or American investment must involve Thai participation, while Chinese investment must involve assimilation. This is not too difficult to ensure under the system of state enterprises and active intervention by Thai government departments in the economy. The Europeans employ Thais directly, not only in technical positions for which they can be trained, but also in administrative positions, where their contacts can be useful and where they can handle gifts and favours that a European responsible to overseas superiors might find difficult. Similarly the situation was a suitable one for politico-economic co-operation between Chinese and Thais, often leading to close social relationships and even intermarriage. For rapid economic growth, however, the system of state enterprises has proved too inefficient. It is necessary to develop a Thai managerial class, with similar aims to those of the bureaucracy, but consisting of different individuals.

Public and private salary structure and conditions

It is, however, proving quite difficult to develop such a class. The prestige of the bureaucracy is high, but even more important is the opportunity for really large gains from corruption and other irregular practices when conditions are favourable. Some idea of the sums which private industry has to pay to attract a managerial class, and (by implication) some appreciation of the value to a Thai of the prestige and opportunities in government service can be obtained from a comparison of Tables 11.1 and 11.2.

Table 11.1 shows the salary structure of the Thai civil service. Virtually all ordinary civil servants have to fit into this scheme, though there are a

TABLE 11.1 Salary Structure of Thai Civil Service Under Civil Service Act 1959

Normal entry

Grade and function	4. Clerks, etc.				3. Executives		2. Section heads, District officers			1. Division heads		Special Directors, general u. secretaries		
Class	3	2	1	Spcl	2	1	3	2	1	2	1	3	2	1
Initial salary (*baht* per month)	450	550	650	750	750	1,000	1,200	1,500	2,200	2,650	3,600	4,300	5,700	7,650
Annual increment (*baht*)	25	25	25	50	50	50* 100	100	150	150	150† 200	200* 300	300	500	350
Highest salary (*baht* per month)	525	625	725	900	900	1,200	1,500	2,050	2,650	3,200	4,300	5,200	7,200	8,000

Degree entry

Degree and minimum length of course	B.A. 4 yrs	B.A. 5 yrs	B.A. 6 yrs	M.A.	Foreign degrees
Initial salary in above scale	900‡	1,100	1,400	1,400	Individual assessment§

* First two increments at lower rate.
† First increment at lower rate.
‡ Revised to 1,000 in 1966.
§ Normally M.A. 1,750-1,900; Ph.D. 2,350.

Source: Kasem (1962), supplemented by personal inquiry.

few special ranks approved for expertise without administrative responsibility, which are treated as equivalent to particular administrative ranks, mainly in grade 2. It is a most inflexible structure, and there are strict rules governing movement from one grade to another, though in exceptional cases more than one annual increment may be given, or an increment deferred.

The table does not, of course, show the various supplements which have a clear cash equivalent, such as remissions of income tax or school fees, payments for attending meetings, and the pension after retirement. These are highly prized but would not add very appreciably to the effective salary. It must also be remembered that the large private firms themselves give a number of similar benefits, though usually on a smaller scale.

TABLE 11.2 Thailand, Salary Structure in Fourteen Leading Private Firms,* 1963

Function	Typist a	Junior accounting clerk b	Accounting section head c	Sales executive d	Public relations manager e	Chief engineer f
Lowest salary paid† (*baht* per month)	812	657	2,004	4,800	7,812	14,092
Highest salary paid† (*baht* per month)	4,794	6,855	10,800	20,200	20,690	43,743
Average salary paid (*baht* per month)	1,290	1,876	3,139	7,262	11,660	17,907
Average salary plus cash supplements (*baht* per month)	1,675	2,184	3,881	8,370	12,694	28,204

* American International Insurance Co. Ltd, Bank of Thailand, Bangkok Bank, Bank of America, Caltex Oil (Thailand), Christiani & Neilsen (Thailand), Esso Standard Eastern, East Asiatic, Gety Bros., Lever Bros., Mobil of Thailand, Siam Cement, Shell of Thailand, and Tippetts-Abbett-McCarthy-Stratton.

† These are not the averages of the lowest and highest salaries paid for all firms, but the lowest and highest in any one firm. The range is therefore wider than the range in any one firm.

Source: By courtesy of Mr Tawai Bunnag, Personnel Manager of Esso Standard Eastern Inc. of Bangkok, from a confidential survey conducted by that company for comparison of salaries and other benefits by individual firms in Bangkok.

The salary structure can be compared with that shown in Table 11.2, which is taken from a study prepared in 1963 by the personnel department of Esso Standard Eastern Inc., not for the purpose of comparison with government salaries, but for inter-firm comparisons. Under conditions of anonymity the detailed salary structure and supplementary benefits of all 14 firms were set out. The present table selects only six posts, for the purpose of comparison with approximately equivalent ranks in the government service. It must be borne in mind that some of the highest salaries may be paid to foreign staff, and this may influence the top levels in line 2 (Highest salary paid). We can, however, fairly legitimately compare the lowest points and the averages with corresponding payments in government. The typist and junior accounting clerk in columns a and b approximately correspond to grade 4, the accounting section head to grade 3, the sales executive to grade 2, or rather lower, the public relations manager to grade 1, and the chief engineer to a special grade post.

A rough comparison shows that at the lowest level the private industry salary is approximately double, or a little less. At the higher levels it

becomes treble the government figure. Yet there is relatively little loss of staff from government service to the private sector.

If we treat the private sector figures as a market rate, we have an indication that elements other than salary—including, of course, psychological elements like prestige, and the anticipation of advantage later—must be about equal to the salary in the lowest ranks and twice as great in the highest ones. Clearly these supplementary elements have become essential to the structure of the service.

The Thai element in the higher levels in the private firms earns these high salaries partly by special relations with the bureaucracy. This makes it more difficult to build up a separate Thai managerial class, and also prevents this class from developing aggressively competitive ideas. Yet at present the various supplementary earnings of the bureaucracy are clearly essential to its structure, and its capacity to retain staff.

Improvement of the status and earnings of the senior civil service, therefore, seems to be critical, and it is surprising that more pressure in this direction has not been exerted by those giving aid to Thailand. The Public Administration Service of the United States Operations Mission and the International Bank Mission have already made a number of detailed suggestions for improved grading and salary levels, but so far these have had little effect (I.B.R.D. 1959: 223-8; Marsh and Barbour 1961; Barbour 1964; Fisher 1965a, 1965b). Funds supplied to the Thai government or to particular state enterprises are usually closely supervised, either by foreigners or by carefully selected Thais, to ensure that they are actually spent on the particular projects for which they are supplied, but there is no corresponding insistence on professional standards in other branches of the departments assisted, even though Thai nationalism is by no means hypersensitive and several of the more professional bureaucrats would welcome such pressure.

It is easy to appreciate the difficulties of exerting pressure. The pretext for doing so would probably have to be aid on a wider basis, for example to a ministry or department as a whole. At the same time many of the factors that limit the civil service's professional independence are deeply imbedded in Thai social structure. It would be necessary at first to compromise, for example, with at least some continuing business interests in the senior civil service and some exercise of patronage, and such compromise could endanger the careers of foreigners involved. Control on a project basis is clearly tidier, and may indeed be inevitable.

Changes in policy under Marshal Sarit

Attracting foreign industry. Without considerable changes in the character of the bureaucracy any clear separation of a Thai managerial class is unlikely. Large-scale private industry may be slightly more efficient than the corresponding state enterprises, but it is unlikely to operate in conditions of genuine competition. Nevertheless, changes were made after Sarit's 1958 *coup* which were designed to foster private industry more effectively, and these have had some limited effect.

The aim was partly to diminish the opportunities for special arrangements between particular ministries and foreign industries, and partly to create opportunities for local small industries to grow. This was done by some minor changes in the legislation, and more important changes in institutions.

There was hope at first that the legislation would be changed in some dramatic way. Arrangements were made through the United States Operations Mission for advice to be given by a team of American business consultants, headed by G. B. Beitzel (Investment Board 1959b), on methods of attracting private investment, and suggestions were offered that most of the state enterprises should be sold to private buyers, that all machinery for use in Thailand should be admitted duty free, and that the area of discretionary decision in granting inducements to private business should be drastically reduced in a number of ways, mainly by admitting broad categories without much detailed definition. The government made strong declarations of a change in policy in favour of private enterprise, and a new Investment Law was enacted. The detailed provisions of the law, however, offered very little more in the way of promotional privileges than had been offered in 1954, the main difference being an increase in the range of industries to be promoted and more generous initial income tax concession.[4]

There was no inducement which was not discretionary. The significant reform was the establishment of the Investment Board (1959a: 11-12) as a single government entity to take the decisions.

The chief significance of this was not that the Board was less liable to corruption than particular departments—though there seems in fact to have been an improvement there. It was rather that decisions were centralized, and that they were not, at least at first, related to the patronage systems of particular departments or ministries. The Board began engaging in a good deal of publicity to attract foreign capital, and the result has been some increase in the number of applications for promotional rights, and a greater increase in the number actually granted: in approximately four years under the 1954 Act there were 93 applications, but very few granted; in 1961 alone there were 103 applications of which 41 were approved; in the period from January 1961 to June 1965 promotional privileges were granted to 300 companies (N.E.D.B. 1965b: 3). Indeed, since 1962 when a new Promotion of Industrial Investment Act was passed the character of the Investment Board has changed and it has undertaken detailed work in preparing prospectuses to attract particular industries. A further Act was passed in 1965 and under the second economic development plan the Board will be given a much enlarged secretariat with several technical advisers (I.B.R.D. 1965: 9).

There are, of course, dangers in the growth of a specialized secretariat attached to this Board, so long as the character of the Thai bureaucracy and its relation with the private sector remain unchanged. It may lead to increased arrangements for special privileges, and so weaken the competitiveness of the private sector. A more important difficulty, however, is the character of the industry that is being introduced by this approach.

We may begin by considering the strategy of industrial promotion as implied by the classification of industries for promotion and the conditions laid down for the various types of industry. Industries are classified under the 1962 Act into three groups, A, B, and C; group A is granted automatic and complete exemption from import duty and business tax on raw or necessary materials, group B is granted automatic reduction of the duty

[4] Compare the notification for 21 October 1955 (Govt of Thailand 1949-) with the 1962 Act (Investment Board 1966); see also Chapter 6.

and tax by 50 per cent, group C may be granted reductions by up to 33⅓ per cent subject to Cabinet approval (Investment Board 1966: 4-5). The nominal basis of classification is that group A industries are 'vital and necessary to the economy of the country', group B industries are 'less vital and necessary . . . than those under group A', while group C includes other industries on which conditions are imposed.

This basis for classification is clearly operationally meaningless. Table 11.3 shows the industries included in groups A and B, with a summary of the conditions imposed. Group C (not shown in the table) lists seventy-eight other industries, several of them overlapping appreciably with A or B. Minimum size limitations in fifty-six of them are based on capacity, in nineteen on investment, the other three being unlimited. In all but two, machinery and equipment must be approved by the Board. Local materials must be used in eight, either mainly or exclusively. Two are required to train Thais, two to conform to international standards.

Since no effective principle of classification is given we must attempt to deduce the policy from the actual lists. Group A contains a large number of very capital-intensive industries such as smelting and production of machinery and Kraft paper. The remainder are mainly chemical and electronic. Group B does not differ appreciably from group A, except that most of the pure assembly industries are included here, so preventing assembling from giving complete duty-free access to the Thai market. Apart from this distinction, there appears to be a disposition to give A grading to the more capital-intensive undertakings, and those that rank as modern.

The conditions imposed in the higher grades are also indicators of policy. Nearly 40 per cent specify 'international standards' while less than one-quarter make any reference to local raw materials, and none requires training of Thais. For every promoted industry in these two groups the Board must approve the machinery and equipment used. This last requirement plainly has undesirable implications when the Thai bureaucracy is so actively involved in business, but in present conditions this is probably a less important danger than that of insisting on unreasonably up-to-date and elaborate equipment. The strong emphasis on international standards and recently developed industries is a sign that, in industrial promotion, the modernizing tendency is frequently carried beyond what rational calculation would dictate.

It is arguable that in less developed countries it is better to use the most recent techniques even though most of these were devised for countries with very different relative supplies of capital, labour, and skill. Research skills are scarce in such countries—even though they might be less so if learning were differently organized (see Appendix B)—and adaptation may be more costly even than waste of scarce capital. But if the most recent techniques are to be used it is essential at least to select *industries* in which the latest techniques are not too capital-intensive. Thailand appears to be wasting its supplies of capital by its policy, and since much of this is foreign private capital the future foreign exchange cost is likely to be heavy.

After 1965 Thai planners were beginning to realize the importance of linkages and to lay more emphasis on use of local raw materials. An

TABLE 11.3 Thailand, Promoted Industries in Categories A and B with Summary of Size and Other Conditions Laid Down

A

Iron smelting, O, m
Steel making, O, m
*Tin smelting, A20t, m, p^2
Lead smelting, O, m, p^1
Zinc smelting, O, m, p^1
Copper smelting, O, m, p^1
Antimony smelting, O, m, p^1
Tungsten smelting, O, m, s
Manganese smelting, O, m, s
Tractor producing or assembling, A0·1, m
Motor vehicle spare parts, O, m
Bicycle or tricycle, B5, m
Int. combustion or electrical prime moving engine, B3, m, s
Agric. machinery, B2, m
Water pump, B1, m, s
Machine tool, B2, m, s
Cast-iron, steel, plastic, etc., pipes, B10, m
Motor tyre or tube, A50, m, 1 (mainly)
Carbon dioxide, D2t, m, 1, s
Caustic soda, D5t, m, 1, s
Sodium carbonate or soda ash, D25t, m, 1, s
Ammonia, D10t, m, 1, s
Nitric acid, D5t, m, 1, s
Hydrochloric acid, D3t, m, 1, s
Concentrated latex, A400t, m, 1
Chemical fertilizer, D50t, m, 1, s
Plastic powder, B10, m
Synthetic fibre, D3t, m
Lac products, A500t, m, s
Household, electric appliances, B1, m
Fungicide or insecticide, B5, m, s
Radio parts, B1, m
Television parts, B1, m
Other electronic products, B1, m
Photographic films, B2, m
*Sweet condensed milk, A150t, m, 1 (sugar)
Vegetable oil, D 0·5t, m, s
Cold storage, C100t (outside Bangkok C20t), m
Calcium carbide, D3t, m, 1, s
Kraft paper, D100t, m, 1, s

B

Ship building, B2, m (ships not less than 100 tons)
Passenger car and truck producing or assembling, A 0·3, m
Int. combustion or electrical prime moving engine assembling, B3, m, s
Agr. machinery assembling, B2, m, s
Water pump assembling, B1, m, s
Machine tool assembling, B2, m, s
Carpenters' or blacksmiths' tools, B2, m
Sewing machine prod. or assembling, B5, m
Sewing thread, 1000 spindles, m
Paper, A2000t, m
Wood-pulp, A2000t, m
*Electric wire or cable, B3, m, s
Electric accessories, B 0·5, m, s
Household electric appliances assembling, B1, m
Spectacle glass or lens, B2, m
Fountain pen, A100, m
Food canning, A500t, m, good quality food 1 (mainly)
*Concentrated cream or evap. milk, A50t, m and approved formula
Grease, A540t, m and approved process

Size Conditions

O—all sizes
An—annual production capacity n thou. units
Ant—annual production capacity n tons
Dn—daily production capacity n thou. units
Dnt—daily production capacity n tons
Bn—minimum capital investment n million *baht*, not including land or circulating capital
Cnt—refrigeration of n tons

Other Conditions

m—machinery and equipment approved by the Board of Investment must be used
s—production according to international standards
l—local materials must be used if suitable quality available
p^1—purity 99·8%, smelting losses not more than 5%
p^2—purity 99·5%, smelting losses not more than 2%

* List now closed.

Source: Investment Board (1966).

inquiry into some forty promoted companies held by the Investment Board early in 1965 showed that 70 per cent of them used only a small quantity of local raw material and the rest none (Chalie 1965). It has been hinted that new tax incentives to use local raw materials may be given (Pote 1966: 9).

There has also been some anxiety at the concentration of promoted industries in Bangkok, but this probably misses the essential problem: so long as policy is directed towards 'international standards' and modernization, the industry promoted will not be that best adapted to Thai factor supplies. There will be at least some economy in capital and in the investment process by siting a plant in Bangkok, and labour requirements will be at least rather better met there, where standards of skill are abnormally high in comparison with the rest of Thailand.

Turning to the actual industries promoted, we have no figures giving a breakdown by industry. The *Performance Evaluation of Development for 1965* (N.E.D.B. 1966b), however, informs us that 'nearly half of the industries which receive tax incentives . . . include manufacture of tyres, metal products, chemical and pharmaceuticals, electrical and mechanical equipment, and assembly plants for automobiles, radio and television set'. In addition mention is made of the new tin-smelting plant and of a tractor factory. This information strongly suggests two kinds of industry as preferred for promotion: heavy industry involving large overseas investments in fixed capital, and local assembly or finishing or branded products seeking access to the Thai market.

Characteristically, Thai statistics give much more information about the capital invested in promoted industries than about the Thais employed in them or trained by them. One figure (for 1965) reported to the International Monetary Fund (N.E.D.B. 1965b) suggests that the average work force in a promoted firm up to that time was about 160. Clearly the proportion of all Thais employed in manufacturing who are employed by promoted firms must still be very small, between 10 and 20 per cent. The amount of capital involved, however, is certainly not small. The registered capital of all promoted industries by the end of 1965 was just over 25 billion *baht* (Pote 1966: 4), approximately one-seventh of the total investment of the private sector during this period, but registered capital is only a small proportion of their total investment. A high proportion (in some cases 90 per cent) of the capital of these firms is in the form of loans—often suppliers' credits or loans from overseas banks. The total investment (plant, equipment, and working capital) of promoted firms in Thailand during the seven years 1959 to 1966 inclusive was 125 billion *baht*. This is well over half the total investment of the private sector.

It is apparent that in the sphere of industrial promotion policy Thai administrators have not acted as if capital was a scarce resource in which economy was desirable. Thailand's credit is good, and there is a sense in which—in the short run—funds borrowed abroad for industrial development (or supplied as equity capital) are not competitors with public investment projects for a limited supply of resources. But they all generate either inflationary pressure or foreign exchange obligations, and either the market mechanism or public policy should reflect Thailand's great lack of new capital resources. Moreover, even if private capital were a completely

separate fund that was limited mainly by the availability of profitable opportunities and could not be used in any other way, it would still be desirable that a higher proportion of it should be channelled into the small industries.

The reason for the continuing emphasis on capital-intensive and highly 'modern' plant, in spite of the scarcity of capital, is probably partly the opportunity that modern machinery—particularly if supplied on credit—offers for private gain by individual members of the bureaucracy, but this influence is believed to be diminishing. Much more important is the prestige of Western equipment and modern techniques, in a highly *élitist* society where prestige has come to be expressed largely in terms of overseas degrees.

It is to be hoped that the growing influence of capital from Japan and also China (Taiwan) may help to correct this tendency. Japanese capitalists have had more recent experience of applying scientific methods in conditions of capital scarcity, though it has yet to be seen whether this will make them better able to adapt to Thai conditions. Table 11.4 shows the ownership of capital in promoted industries in Thailand up to 31 July 1966. Unfortunately comparative figures year by year are not available, but it is common knowledge that Japanese participation is increasing. Greater participation by Japan is one of the results of the negotiations of the Bank of Thailand (see Chapter 1) and the promotional activity of the Investment Board, and it may be expected gradually to improve the ratios of labour to capital and product to capital in Thailand's industrial sector.

TABLE 11.4 Thailand, National Ownership of Registered Capital in Establishments which had Concluded Agreements and Received Promotion Certificates by 31 July 1966

Nationality	100% Thai or foreign establishments (*baht* m.)	Joint venture establishments (*baht* m.)	Total (*baht* m.)
Thailand	927·2	1,025·7	1,952·9
Japan	119·9	291·9	411·9
China (Taiwan)	—	172·0	172·0
U.S.A.	10·0	123·5	133·5
U.K.	1·0	27·9	28·9
West Germany	—	25·8	25·8
Malaysia	—	26·8	26·8
Denmark	—	22·5	22·5
India	12·0	4·1	16·1
Australia	—	14·6	14·6
All others	—	11·7	11·7
Total	1,070·1	1,746·5	2,816·7

Source: Investment Board, Research and Statistics Division.

The Industrial Finance Corporation of Thailand. Another institution set up after the 1958 *coup* to promote private industry was the Industrial Finance Corporation of Thailand (I.F.C.T. 1964). Although both the Investment Board and the I.F.C.T. treat foreign and local firms alike, the main aim of the former seems to be to attract foreigners to invest in Thailand while the main aim of the I.F.C.T. seems to be to build up local enterprises. Probably several of the firms assisted by the I.F.C.T. are promoted industries, but the published figures do not reveal this. This

corporation was originally headed by Prince Viwat and was sponsored by the International Bank and the Bank of Thailand. Shares in it are held by several of the Thai banks and the foreign banks doing business in Thailand, as well as 13 per cent of the total by the International Finance Corporation, a subsidiary of the International Bank. The procedures adopted, and the appointment of directors by outside interests, probably ensure that its loans are made solely on financial criteria.

The I.F.C.T. is prepared in some cases to take an equity interest, though never more than 10 per cent of the total capital or one-quarter of all the shares. Loans are also made at 7 to 9 per cent, which is well below the market rate, and in addition advice on management and engineering is given. Yet the I.F.C.T. has normally found it easier to obtain capital and loans for relending than to find suitable borrowers. By March 1965 it had actually disbursed just over 60 million *baht* in loans and equity participation to some forty companies, but the total capital available was over 80 million and it would not be difficult to raise more. Table 11.5 shows the total loans approved by industry. About one-quarter of the funds approved had still not been disbursed, but this does not represent a long time lag, since nearly all of it was in three large loans approved in the last few months of the period under review.

TABLE 11.5 Thailand, Loans approved by the I.F.T.C. by Industry Groups to 1964

Industry group	Total	Textiles	Ceramics	Chemical and pharmaceutical	Radio and electric	Tobacco curing
Number of companies	43	4	3	3	3	4
Loans approved (*baht* m.)	84·55	4·7	3·1	3·5	5·0	4·2

Industry group	Automobile parts	Other metal products	Soap and vegetable oils	Rubber and plastic	Paper and products	Others
Number of companies	2	6	5	3	2	8
Loans approved (*baht* m.)	1·4	16·2	5·1	3·2	8·65	29·5

Source: I.F.C.T. (1964).

The industries not separately listed include one cold storage deep freeze plant, one hotel, and one plant manufacturing milk products; their loans, 5, 7, and 8 million *baht* respectively. The others are quite small loans. It is clear that the range of industry fostered by the I.F.C.T. is fairly wide and that the I.F.C.T.'s activities give scope for some development of independent and competitive industrialization.

The scale of operation is, however, very small in relation to the total funds which could be made available. It is one of the difficulties of the I.F.C.T. that—partly because of the sources of its funds—its standards of investigation and documentation must be much stricter than those demanded by Thai commercial banks, even though interest charges are lower. In an economy with so many irregularities over taxation, protection, and the like, the need to reveal so much information may well be a sufficient deterrent to offset a saving of about 5 per cent on interest charges. The I.F.C.T. has been subjected to some public criticism, especially during

1966, for its restrictive attitude, and though it is difficult to see how, with its extensive international participation, the I.F.C.T. could act differently, this strengthens the case for working out unorthodox credit systems by which the commercial banks could do more lending to industry without endangering their currency functions (see Chapter 8).

Miscellaneous measures. Another venture for the stimulation of industry is the establishment of industrial estates. This technique, which has contributed to industrialization in Malaysia, was advocated in the International Bank Mission Report (I.B.R.D. 1959: 104), and has been supported by foreign advisers several times since then. Following the advice of an American company (N.E.D.B. 1964a: 89; I.B.R.D. 1965: 10) (whose report has not been published) it has been decided to try to arrange for one or more estates of this kind to be developed by private enterprise, with the government granting basic facilities. In the special conditions of Thailand it is obvious that there is some advantage in having private enterprise undertake this task, especially if competition between two or more private undertakings can be arranged. Since the report has not been published, it is not clear whether this is intended.

There are, however, a number of difficulties. Under existing Thai law private land could not be acquired under compulsory purchase, if the development was to be undertaken by private firms. The government would not wish, however, to leave the selection wholly to private enterprise: not only is the public provision of utilities involved; the siting of blocks of industries must have a profound effect on the whole economy. Indeed it is understood that a number of possible sites were discussed in the consultants' Report. Clearly it is necessary to keep the Report secret, to prevent land speculation, at least by the general public. Yet this inevitably means that several aspects of the siting of industry will be inadequately discussed, probably even among some of the departments concerned. A further problem is that if rival undertakings are involved—especially if one or more of them are foreign—considerations of equity may make it difficult to use favourable conditions in industrial estates as a device for decentralizing industry, if this should ever be required.

A further development which the Thai government relates closely to its policy of promoting private industry is the development of tourism. The Tourist Organization of Thailand was set up in 1959 after the second Sarit *coup* (N.E.D.B. 1964a), and partly as a result of the recommendation of Beitzel (Investment Board 1959b: 15-16). Tourism is designed not merely to earn foreign exchange directly through bringing wealthy tourists to spend money in Thailand; it is also believed that more knowledge about Thailand by tourists (who will include businessmen) will indirectly foster business investment in Thailand. It seems doubtful, however, whether this will stimulate the kind of investment that is most needed. The stress on picturesque ceremonies and luxurious accommodation may well interest foreigners in the possibilities of the Thai market, and give them the chance to meet the Thai administrative class socially. This is more likely to lead to investment as a gesture to the current ideology in return for privileges in the market than to the serious studies of such topics as Thai factor supplies and institutional structure, that would lead to real growth-promoting investment. Of course, contact is better than lack of contact; there is

serious investigation being done by the Investment Board, the Applied Science Research Corporation, and other bodies, and any businessman visiting Thailand may make suitable contacts which will lead to professional relations. There is, however, a potential conflict of aims in tourism: the general cult of picturesqueness, luxury in the heart of Bangkok, and euphoria may gain maximum exchange earnings but will do little to promote knowledge of Thailand as it is. Without this, investments are unlikely to promote much development.

Small industries

One of the most recent types of industrial promotion is the attempt to assist the very small industries, employing a little machinery and under fifty workers. These are regarded as potential sources of Thai enterprise, and a division has been established within the Department of Industrial Promotion of the Ministry of Industry to foster their development by establishing a Small Industries Service Institute, and by conducting studies of existing small industries and possibilities for developing others, beginning with the Northeast. The death of the first United Nations Adviser in this field within a few months of his appointment has delayed the program. A loan fund of 60 million *baht* has, however, been set up by the government to lend to small industries through its own subsidiary banks, the Provincial Bank and the Agricultural Bank (N.E.D.B. 1964a: 89-90; Muni 1965). The banks are charged only 3 per cent and allowed to lend at rates up to 10 per cent to cover the costs of supervision and risks of default. These loans are processed in the Small Industries Loans Office in the Department of Industrial Promotion. It may prove difficult to lend this money effectively until the promotional work is considerably expanded; the problem in such cases is always to maintain effective follow-up. As the Division of Small Industries is expanded it will be possible to improve business techniques as well as mechanical ones, so that this credit can be effectively used.

Aid to small industries is likely to prove exceptionally important in Thailand. There are nearly 30,000 very small undertakings—foundries, food manufacturers, dressmakers, repair shops—all over Thailand (Muni 1965). Two-thirds of them are outside the metropolis.

An approximate estimate of their contribution to gross domestic product in 1963 can be derived from Table 11.6. We may reckon all the output of industries outside the Central Plain, except that of the food manufacturers (a large proportion of which would come from large rice mills) and one-quarter of the rubber in the South (a few large rubber mills) as output of small industries. This gives a figure of rather more than 1,000 million *baht* as non-food small industry output outside the Central Plain. Within the Central Plain we have no means of knowing at all precisely what proportion of the net non-food output of 4,121 million *baht* comes from small industries. The total number of factories in the Central Plain is given as 14,591, and only about 1,000 of these are medium or large—employing over fifty workers. The remaining 13,500 are a little less than half the small industry factories in the whole kingdom.

Making some allowance for expensive high-grade output in the metropolis we can take it that these 13,500 small units produce the same value as small industries outside the Central Plain. Hence we estimate non-food output of small industry in the whole kingdom at about 2,000 million *baht*.

The greater part of food industry is rice milling. The small mills, of about three tons per day capacity, are certainly small industry, and there are other small food industries, but any estimate of the proportion of all food manufacturing output which comes from small industries is much more conjectural.

TABLE 11.6 Thailand, Numbers of Factories, and Value Added in Various Classes of Manufacture by Region, 1963

	North-east	North	South	Bangkok-Thonburi	Other Central Plain	Whole kingdom
Number of factories	6,434	5,158	3,159	9,495	5,096	29,342
Value added in manufacturing (*baht* m.):						
food	747	586	226	1,209		2,768
rubber products	4	—	177	48		229
other manufactures	303	313	252	4,073		4,941
Total	1,054	899	655	5,330		7,398

Source: Muni (1965: 1); N.E.D.B. (1965c: 60).

We can conclude that probably rather more than one-third of the output of non-food manufacture is produced by small industries. If food manufacture is included the proportion of output coming from small industries cannot be less than one-quarter, and is probably about one-third.

The rice premium keeps labour costs low for small industry and so gives it some blanket protection against imported goods that are partial substitutes. Many of the entrepreneurs are Chinese who are only partly assimilated into Thai society, but are industrious, adaptable, and ambitious. The aim of the Small Industries Division is to increase their numbers to 100,000 in ten years, but raising their output is even more important. With rapidly improving transport facilities, some of these are likely to be able to expand and raise their productivity. What is important is not excessively easy loans, but opportunities for those who can learn and improve their productivity to expand rapidly. We have seen above that there are strong influences tending to waste capital in relatively small capital-intensive undertakings with limited external economies. These will help relatively little—directly or indirectly—in providing additional employment. To absorb even a moderate influx of labour into the towns it will be necessary for the small industries to capture a good share of the expanding market for consumption and intermediate goods. This they can probably do by adopting improved techniques which use relatively little capital, such as better accounts and records, improved tools and flow of work, better lighting, better quality control, and standardization, together with inexpensive machinery. On economic grounds it is important that instruction in these matters should be given by flexible-minded and well informed people with no strong preconceptions in favour of particular foreign methods. On social and political grounds it is desirable that these should be Thai civil servants trained in Thailand and giving instruction related to the Thai environment and in the Thai language. At present it seems most improbable

that adequate numbers of such civil servants will be produced, for reasons which we discuss in the section on manpower planning.

In addition to a moderately generous provision for loans and a still far too small division for the promotion of small industry, the government has announced its intention to set up government-owned industrial estates especially for small industries (Muni 1965: 3). Some of the difficulties of establishing private industrial estates have already been discussed, but there are dangers in this apparently paternal approach to the location of small industries. One of the most important conditions of a good small industries program is that it should modify the conditions of competition but not weaken competition itself. The aim should be to promote the success of those with the best potential for productivity and growth. It is legitimate to try to overcome the small industry's lack of knowledge, weak bargaining power, and the fact that firms are themselves unknown to potential creditors; they should not, however, once these handicaps are corrected, be cushioned against competition. Unfortunately the establishment of these conditions involves quite high professional qualities in the civil servants concerned. If the staff for proper supervision is not forthcoming, and if loans and sites are allotted to some among the many firms on favourable terms, small industry promotion may easily become a field for political patronage or worse.

Summary of industrial promotion measures

We can sum up Thai industrial promotion policy as follows. It began as a combination of nationalism and modernization, with the aim of substituting a modern, Western-oriented economy, controlled by the Thai administrative class, for the trade economy dominated by Chinese and Europeans. Under the influence of fascist-type ideology from Japan a beginning was made in establishing industries before and during World War II, some Thais learning industrial skills and a few Thai administrators learning about factory structure in the process. After a period in which government industrialization was discouraged, these skills were utilized in building up state enterprises under the different ministries. Chinese management and commercial skills were allied to Thai political protection and the use of Thai public funds. These led to wastes of manpower through patronage, over-capitalization as a result of leakages and commissions, and waste on a considerable scale. With Sarit's taking over of full power a shift in emphasis took place towards private industry, with promotional privileges organized through the Investment Board and loans made by the Industrial Finance Corporation of Thailand. This has led to some acceleration in the pace of industrialization by local entrepreneurs, and some inflow of foreign capital. Because of the continued involvement of the Thai administrative class, much of the latter has been in over-capitalized, small-scale enterprises designed to appeal to the Thai government rather than to develop much wealth from Thai resources. An important field of industrial promotion which the government has recently entered is the active promotion of small industries. Suitable development in this field could be very important both for the supply of enterprise and for the absorption of surplus labour, but such development is likely to be hampered by difficulties in recruiting and training sufficient civil servants of the right quality.

Beginnings of national planning

We turn next to consider the general planning of the economy. Here we have a situation in which the original approach to planning by Pridi and his followers was a vague combination of nationalism and modernization, with no detailed knowledge of the changes that would be involved. There was a strong reaction against this plan and later steps towards planning for a national policy were motivated by nationalism rather than by any belief in planning as a modern technique. More recently it has come to be realized that in Thai conditions even a highly decentralized, private-enterprise economy cannot be achieved without the establishment of some quite sophisticated machinery for co-ordinating the activities of the public sector. The close involvement of the bureaucracy itself in the economy has created difficulties, and emphasis has been shifting towards manpower problems and the importance of training.

As we have seen in Chapter 4, the first economic plan, prepared by Pridi Phanomyong, was one which in principle embraced every detail of the economy, since virtually all Thais were to be employees of the state; but in fact the only details given were details of the salaries that were to be paid, and some detailed suggestions for taxes to be levied. The need for organization and for technical training was almost wholly ignored. There was a strong reaction against any such radical transformation, and even at the point of maximum involvement in the war on the totalitarian side there was far less central direction of Thailand's economy than of that of Britain or the United States. Thailand was never strongly committed to the war. Its aim was survival, by conceding to the Japanese as little as was needed to prevent massive intervention.[5] The main reason for handing new industries over to private enterprise during World War II was not ideology, but simply a lack of staff in government service to manage the operations that had to be undertaken.

The National Economic Council

The re-emergence of rudimentary ideas of central planning in 1950 was prompted mainly by nationalist motives. Almost up to World War II the main economic departments had been handled by foreigners and the British financial adviser had returned after the war. Until the end of 1949 the rice trade was effectively in foreign hands, with the obligation to deliver rice at first free, later at controlled prices. Much of the wartime effort to divert other trade out of Chinese hands had been undone when the United Nations forces were in Bangkok. The post-war liberal régime had, however, been thrown out by Phibun's *coup,* and Phibun, who knew little about the economy but had formerly pursued a strongly anti-Chinese policy, wanted to regain control of the business life that had fallen into Chinese and foreign hands. It was not felt to be possible to gain United Nations support without repudiating any tendency towards detailed national planning, but the government needed technical advice on many economic questions if it was to re-establish economic sovereignty.

It was in these conditions that, early in 1950, Phibun established the National Economic Council on the basis of an Act passed in 1949 (see Snoh 1965; Prayad and Snoh 1965; Govt of Thailand 1949-(13 Feb.

[5] See the discussion of wartime financial problems in Chapter 8.

1950)). The Council was intended as a technical advisory body with the duty of conducting research and advising the government on economic questions as a whole and on questions of detail related to different sectors. The aim was to bring together people with expertise on various aspects of the economy to constitute special advisory committees on those aspects. However, the presence in these committees of Western-trained civil servants with an appreciation of the need for facts and statistics led in time to the development, with some foreign assistance, of procedures for deriving and using better information.

The Council was organized in five different boards, the Economic Board of Agriculture, the Economic Board of Finance, the Economic Board of Commerce, the Economic Board of Industry, the Economic Board of Communications, each with seven to nine members. Apart from the chairman, hardly any of the members of boards were members of the Council itself, which had twenty members, mainly senior civil servants and politically influential people. It was among the members of the boards, however, that some of the economic and statistical experts who have since come to occupy key positions began to make their influence felt.

The Royal Decree organizing the Council did not give it a professional secretariat, but there was a rudimentary departmental structure on which it proved possible to build. Apart from the central office, there were three small divisions, a division of experts, a division of statistical compilation, and a division of statistical analysis. The division of experts was not to be a professional body; there was only one small section provided for research, and plainly nothing more was intended than searching existing records for answers to specific queries. The statistical compilation division, however, was more promising, having sections concerned with natural resources and agriculture, transport and industry, finance and trade, and social and public works. Before this, statistics had been collected in particular departments but there had been no responsibility for co-ordination. There was still much co-ordination to be done, but this division represented a beginning.

Early in 1951 an aid agreement was signed with the United States, and several programs of aid began to be suggested. If the Thai government was to retain control it was necessary that it should undertake the co-ordination of these different programs. A committee was therefore set up, closely associated with the National Economic Council, and with considerable overlap of membership, with which foreign advisers could co-operate in co-ordinating all aid from abroad. This Thai Technical and Economic Co-operation Committee, by working out priorities, bringing in foreign experts, and sending young Thais for specialized training abroad, introduced several changes in the structure of the government and the economy during the next ten years.

Another step in the direction of national planning was the establishment of a 'Committee for the Formulation of the National Economic Plan', though this was not in fact a planning committee but merely screened the rapidly increasing capital budgets financed from Thai government funds.

The first national income estimates ever made for Thailand were presented to the National Economic Council by an American financial adviser, Joseph S. Gould, in 1952 (Gould 1952). This was a pioneering and in many ways inadequate set of estimates for 1938/9 and for the years

in 1946 to 1950 inclusive. The figures are not nowadays often reproduced, but the Report not only established several methods and procedures, but also recommended the setting up of a permanent National Income Research Division. As a result of this a National Income Division of the National Economic Council was established under a United Nations technical adviser in 1954. This may be regarded as the source of all further development in the field of national income (see Chapter 5).

The National Economic Council itself made no further moves towards overall planning of the economy, not because the Secretary-General and the active members of the different committees were uninterested, but because the Prime Minister rightly or wrongly believed that the Americans, on whom he chiefly depended for economic aid, were opposed to any overall planning of the economy. Two important events changed this situation and prepared the way for the adoption of a national economic plan: one was the Report of the International Bank Mission, for which the Bank of Thailand had prepared the way; the other was the accession of Sarit to power.

Developments following the International Bank Mission

The International Bank Mission recommended new administrative machinery for dealing with the economy, with more emphasis on development (I.B.R.D. 1959: 308-14). It suggested abolishing the National Economic Council and instead setting up a National Development Board. This was to consist only of the key ministers concerned with economic policy, namely Finance, Economic Affairs, Interior, Agriculture, Industry, Communications, and Education. It would have a greatly enlarged planning secretariat including the Statistical Office and National Income Office of the National Economic Council, as well as the bureau that acted as a secretariat to the Thai Technical and Economic Co-operation Committee. Moreover, this enlarged planning secretariat was to be under the direct control of the Prime Minister. It was to be in close touch with the new Budget Bureau that was also recommended as a branch of the Ministry of Finance, but the National Development Board was to be clearly separate from the Ministry of Finance.

At the time this suggestion was made Sarit was already the effective power in Thailand, although not yet the Prime Minister. After the *coup* which made Sarit Prime Minister, the International Bank Mission's recommendation would have been much less suitable. Probably the International Bank envisaged the 1958 situation as permanent, with a military group under Sarit continuing to hold power, but with a Prime Minister who was in effect the appointed head of the professional civil service rather than a politician engaged in harmonizing interests and consolidating power. This relatively disengaged Prime Minister was to have a professional development secretariat under his control which would enable him to bring effective pressure to bear on the different ministries concerned with economic matters.

When Sarit himself became Prime Minister there was no longer any advantage, from the point of view of the International Bank's objectives or the national interest of Thailand, in having the Prime Minister directly in control of the secretariat. This is not because Sarit could have been expected to use the secretariat directly to further his own financial interest.

Sarit certainly had interests to further, but would not have used the secretariat for that purpose; the appointments he made, both in the National Economic Development Board (N.E.D.B.) and in the Budget Bureau, show that he intended these to be effective professional bodies. However, what was required in the national interest for both the N.E.D.B. and the Budget Bureau was that they should be insulated as far as possible from the pressures in which the Prime Minister was involved.

In the event, the Budget Bureau was set up not in the Ministry of Finance but in the Prime Minister's Office, but was put under the direction of Dr Puey, Governor of the Bank of Thailand. The N.E.D.B. was given a large controlling board consisting of the Prime Minister, two Deputy Prime Ministers, a Secretary-General, and forty-five other members, which delegates effective power to an executive committee of nine experts, including the Secretary-General (Snoh 1965). It is not easy to assess either the motives for these departures from the International Bank's recommendations or the pressures which were brought to bear. Probably the transfer of the new Budget Bureau to the Prime Minister's own office was mainly intended to give it more influence and greater inclination to development rather than to cover up the Prime Minister's own financial dealings. The N.E.D.B. needed to handle considerable amounts of foreign aid, and Sarit may have realized that the structure of his personal power was known to the main aid-giving agencies, and that control by him would have been suspect abroad.

The first national economic plan

The new system did not, of course, eliminate all chances of improper practices in the planning process, but it did put most of the decisions in the hands of fairly young, highly qualified professionals who were not as yet much involved in a patronage system. Moreover, Sarit himself was strongly committed to the idea of a national economic plan, and was prepared to put his power behind getting a plan made and then implemented. Though it was July 1959 before the N.E.D.B. was established, he wanted to announce the first national economic plan on the second anniversary of his revolution, in October 1960. There was thus only just over a year for preparing the first plan, for submission first to the full Board and then to the Council of Ministers.

The plan was completed in time, and began to be implemented as from 1 January 1961. The timetable, however, strongly influenced the form of this first plan. It was decided to make it a six-year plan, divided into two halves. The first half was hardly a plan at all, though it brought the planning machinery to bear on the existing development ideas of the departments of the central government, allotting the available funds with a view to maximum co-ordinated achievement rather than simply curbing a wide variety of miscellaneous departmental demands (Phaisan 1963: Ch. 2). A few overall targets were set up of the normal type for less developed countries, for example an annual growth rate of 5 per cent in gross national product, 3 per cent in agriculture, and 4 per cent in exports and imports. The aim was to increase revenue by 500 million *baht* in the first year, and (by checking the expansion of ordinary expenditure) gradually to raise the proportion of development expenditure from 20 to 29 per cent.

By the end of the first three-year period a number of changes had taken place. First, there was an important change in the machinery for implementing the plan. In the last year before his death (1963), Sarit transferred all the departments most concerned with development into a single ministry, the Ministry of National Development (1964b). This is a most heterogeneous ministry, including the former secretariat of the Thai Technical and Economic Co-operation Committee, now expanded to a department, the Royal Irrigation Department, the Department of Land Co-operatives, and others. At the cost of some complexity both in this and in other ministries, this arrangement has removed some of the inertia which previously hampered the work of these ministries.

The administrative scope of the N.E.D.B. was slightly reduced, leaving it more of a planning and screening agency. Not only was the Thai Technical and Economic Co-operation Department moved, as we have seen, to the Ministry of National Development, but the National Statistical Office also became a separate office under the Prime Minister's Department. The N.E.D.B. had now had four years of planning experience. Most of the targets of the first half of the plan had been met, and both revenue and domestic borrowing had exceeded expectations (Phaisan 1963: Ch. 3). At the same time it had come to be recognized that the rate of population growth—at over 3 per cent—was higher than had been expected, and still rising. Overall targets were raised, for example gross national product was to rise at 6 per cent and total investment to be raised from 15 per cent of gross national product to 18 per cent in the second half of the plan.

It is not at all easy to assess the impact of planning experience on the allocation of resources, apart from the effect on the departments themselves of having professionals in the Prime Minister's Office scrutinizing their plans and expenditures in relation to their effect on development. The difficulty in assessment arises from the comparative importance of foreign loans and foreign aid in the total resources available, and the fact that in the first three years of the plan these foreign resources were not included in the overall allocation. We can compare the allocations from the Thai budget itself in the first and second parts of the plan, and this is done in Table 11.7. Looking at the relative proportions, agriculture and communications have retained between them about half the total development expenditure but there has been a noticeable shift of emphasis towards the latter. The already heavy Thai emphasis on transport and communications development has been considerably increased. The proportion allocated to industry and mining has been cut back, in accordance with the policy of limiting the extension of government industries. Among the social services there has been a relative shift from education to public health. There has also been a considerable expansion in the proportion allocated to community development and public utilities.

Apart from the curtailment of industry and mining—which the experience of the first three years suggests may not in fact be effective in actually curbing expenditure—the changes in relative proportions hardly coincide with announced planning policy. One of the announced intentions of planning policy is to pay more attention to productivity of agriculture and less to extension of the area cultivated. There is also increased anxiety about manpower—both in quantitative and qualitative terms. Increased relative

TABLE 11.7 Thailand, Total and Percentage Planned Expenditures, and Actual Expenditures 1961-3, and Planned Expenditures 1964-6

Sector	From state budgets 1961-3			From state budgets 1964-6		From state budgets and foreign loans and aid	
	Planned expenditures		Actual expenditures	Planned expenditures		Planned expenditures 1964-6	
	(*baht* m.)	(% of total)	(*baht* m.)	(*baht* m.)	(% of total)	(*baht* m.)	(% of total)
riculture and co-operatives	1,434	26·1	1,395	2,022	18·5	2,975	14·9
lustry and nining	451	8·0	821	455	4·2	1,196	6·0
wer	244	4·4	510	566	5·2	1,798	9·0
mmunications and ransport	1,523	27·8	1,599	3,902	35·6	7,005	35·0
mmunity development and public utilities	559	10·2	346	1,688	15·4	3,746	18·7
blic health	202	3·7	222	646	5·9	974	4·9
ucation	732	13·3	560	1,169	10·7	1,806	9·0
serve provision	343	6·3					
unterpart fund				500	4·5	500	2·5
tal foreign loans and aid			about 6,500*			9,051†	
tal	5,488	100·0	about 12,000	10,949	100·0	20,000	100·0

* Derived from text of plan.

† Included in above figures. Here shown for comparison with unanalysed figure in 1961-3 column.

Source: N.E.D.B. (1964a: Ch. 3, Table 1, Ch. 4, Table 1).

attention to communications and a relative switch of funds from education to public health are not perhaps what one might expect.

Explanations may be sought partly in a comparison of actual with planned expenditures in the first three years and partly in the availability of foreign aid. The figures for planned expenditure including gifts and loans from abroad show an even greater relative share going to communications and transport. Moreover, the planners appear to have provided more for those lines where the previous provision was fully spent.

It would, however, be a great mistake to make very much of these comparisons of relative shares of expenditure. There is not enough information for any firm conclusions to be drawn. So far as the figures go, they suggest that the chief importance of the plan was not in enabling the government to find rational statistical criteria for allocation of resources and to improve allocation accordingly, but merely in improving the knowledge of what was being done, and in increasing the influence, in the work of the departments, of those who were interested in measurement.

Manpower planning

As a result of the sending of several well qualified Thai representatives to a United Nations manpower conference in Tokyo in 1963 at about the same time as the results of the 1960 census were beginning to shock Thai administrators, there was a sudden increase in the Thai government's

interest in manpower problems (see Chapter 2). Several different reports were solicited from United Nations agencies, and a Manpower Planning Unit was set up within the N.E.D.B. to co-operate with the Planning Unit in the Ministry of Education. In view of the unreliability of many Thai statistics and the still greater unreliability surrounding all forecasts of growth in Thailand, it is hardly surprising that the different manpower reports gave differences of emphasis. The general shape of the recommendations, however, was fairly clear. In the 1970s and thereafter Thailand would be short of people trained at the middle level, technicians and junior executives, both for the improvement of agricultural productivity and for advising and staffing the new industries. On the other hand, both at the primary level and at the university and other tertiary levels the need was not so much for increased numbers as for improved quality.

Steps are being taken to adapt the manpower supply. The second half of the first plan and still more the second plan envisage an expansion in the number of secondary schools, both comprehensive and vocational, to meet the need for technicians (I.B.R.D. 1965: 14; N.E.D.B. 1964a: 142-4). Moreover, it has been appreciated that the prestige of the universities plays an important role in attracting students into secondary schools, and an attempt has been made to improve the quality of students entering vocational schools by making the core academic subjects common to all and so making it possible for the exceptional pupil to enter a university from one of these schools (Freeman 1964: 73-81). Unfortunately this has had the effect of depreciating the practical subjects, and attracting into these schools pupils with no interest except in doing well in their core subjects in the forlorn hope of entering a university.

In so *élitist* a society as that of Thailand it is, of course, sensible to use the possibility of entering a university as an inducement to influence many who will not succeed in entering. Arranging the avenues to success is a most important instrument for transforming the conduct of a whole society, as the Chakkri kings well knew. It would, however, be more helpful to treat the core subjects as merely a necessity to enable the vocational school student to profit by a university education if he attained it; entering a university from a vocational school should be a recognition of excellence—particularly originality and inquisitiveness—in the practical subjects, preferably combined with some actual work in them. A 'back-door' entry of this kind would give a better inducement, and do more for the university, than a theoretical chance in a general competitive examination. Between American advisers who do not approve of *élites* and Thais who understand their own society but do not fully appreciate the values they need to foster, the system of selection has here gone astray. By selecting a few original and practical students from vocational schools and training them as scientists the universities would produce a type badly needed in Thailand, but much more important would be the influence on the far more numerous pupils who would never reach a university but would learn to value the original application of their intelligence to practical work.

In the universities themselves the problem of raising standards is being tackled in a number of different ways. Kasetsart has already been briefly discussed in Chapter 4. In the older universities development plans have been prepared which give a good deal of emphasis to graduate work. Politically this can be presented as reducing the need to send students for

graduate study overseas (Chulalongkorn 1960). The more sophisticated academics believe that it will necessarily increase the amount of research done in the universities and thereby raise the quality of teaching as a whole. It would be even more important if an increased supply of material in the Thai language made it possible for lecturers to assign reading with a reasonable hope that most—and not only the linguistically gifted—could actually do it. It would be a major improvement if this allowed a reduction in the crushing number of lecture hours.

In the more fundamental parts of manpower planning, in relation both to the middle levels and to the universities, it is necessary to consider both the structure of Thai society and the values and skills that have to be trained. The Thai problem here is one almost unique to Thailand, and Thai planners seem to have given it too little attention. On the one hand Thai society is one with a strong emphasis on leadership, and a potentially flexible social structure in which advancement based on merit is fully acceptable. There is a tradition of influencing behaviour by processes of selection, and at least some realization that the values and skills for which people are selected need to be changed.

There are several different *élites* giving leadership. The significant ones, in relation to education, are the military power *élite* and the bureaucrats. The former are primarily nationalist, concerned with independence, language, and traditions; the latter are modernizing, but tend to see modernization largely in terms of Western degrees and culture. The selection processes which tend to emerge in the school system are based on success in understanding Thai language and culture, and learning the skills that will lead to examination success in foreign degrees.

It is pointless to lament the lack of agricultural extension workers and civil servants with practical skills in helping small industries, if the selection process in schools and universities does not give advancement to those who can use reasoning in a practical way to solve Thai problems. More emphasis within the universities on research directed to finding out what young Thais need to be taught, and more emphasis in university entrance-selection on originality and practical application of knowledge could influence not only the character of the leadership but the availability of necessary values and skills at intermediate levels.

This would appear to be a field for fruitful co-operation between the King, in a non-political patronage role, and new Thai learned and professional organizations; they could jointly do much to influence selection processes in the future.

Attempts to improve the quality at the primary level have so far largely been limited to central and regional retraining of existing primary teachers by American aid projects. The government itself is pressing on with its plan to spread to the whole nation the extension of primary education from four to seven years. Unless the birth rate can be speedily checked by extensions of family planning, this will inevitably lead to an even lower ratio of teachers to pupils than the present one by 1971, and still greater inadequacy in the training of teachers in comparison to what is required; teachers' training colleges will increase by only about 20 per cent between 1963 and 1971, while the number of teachers increases by about 70 per cent. It would appear that concentrating on better training and better teacher-pupil ratios would give better results than extending the years of

primary schooling: the able and industrious would be better grounded and better selected for secondary education later; those who were neither able nor industrious would probably be no better off with seven years of even worse teaching than they would be with four years in smaller classes with better trained teachers.

Unfortunately the government has attended less to the real resources involved than to finance. This has led to the transfer of some primary schools—and plans to transfer all—from the Ministry of Education to local authorities, in order to tap local revenues.[6] Since all local authorities are in fact subsidiary to the Ministry of the Interior, this may well still further lower the quality of primary education. Teachers will be responsible for curricula to one ministry while their promotion will depend on another, and security influences may well come to play an unhealthily large part in school life.

The Manpower Unit is concerned not only with forecasts of the overall manpower situation and recommending attempts to remedy it; it is also—and perhaps more importantly—concerned with collection and analysis of statistics bearing on manpower. It reviews, and attempts to aggregate over the whole economy, the manpower effects of every project, so as to make recommendations on approval, timing, and the like, to ensure that there is neither acute shortage of manpower nor serious unemployment.

To sum up the treatment of manpower under the plan, it appears that attention has, in a sense, been paid to the quantitative aspects both of the special reports that have been made and of the government's own projections. The need to expand middle-level education has been partly met by expanding the number of vocational and comprehensive schools; there has even been a realistic attempt to tackle, by inducement, the problem of persuading pupils to enrol for these schools. The need to concentrate on improved standards in tertiary and primary education has been partly met by extending, in both cases, the period of study. It is doubtful whether these policies have adequately tackled the overall problems involved. Planning in detail should, however, help to anticipate and forestall special manpower difficulties.

Miscellaneous developments

One further respect in which the second plan has been an improvement on the first has been the attempt to make it more all-embracing by including closer forecasting for the private sector. This has been done in two ways. On the one hand a committee has been set up to attempt to derive forecasts of various investment plans in the private sector. Working subcommittees of the Private Sector Planning Committee of the N.E.D.B. have been established for manufacturing, trade, and services. These are intended to give 'guidance in the formulation of national economic policies' and 'identification of promising business possibilities'. Clearly such subcommittees may bring some mutual benefit.

Of more professional interest is another attempt at aggregation, the use of fairly simple macroeconomic models. A model of the Thai economy mainly for short-term forecasting purposes was prepared originally as a doctoral thesis (Chinnawoot 1964). More recently a sectoral model for

[6] Political aspects may also be important (see Chapter 4).

long-term planning has been prepared and a modified version of this or a parallel one on the same lines is to be used for 'testing the internal consistency and reasonableness' of the projections built up by the N.E.D.B. (I.B.R.D. 1965).

In fact Dr Chinnawoot's second model, 'A Trial Application of a Macro-economic Model for Sectoral Projection and Planning', presented with considerable diffidence concerning the reliability of the data, seems to have had some influence on the thinking of the planners. His anticipation of an 8·2 per cent rate of growth that could be financed within the N.E.D.B. financial framework, and the fact that even his revision to more cautious assumptions still gave a rate of 7·8 per cent may have encouraged the adoption of an overall rate of 7 to 8 per cent as the target.

Four points need to be made concerning the detail of Dr Chinnawoot's projections. First, because of the international tin control scheme, forecasts for the mining sector were difficult to make; when suitable corrections were made, however, it seemed that the government planners were underestimating the mining output that could be expected from investments envisaged. Next, a much larger effort in investing in construction appeared to be required than the government had in view. Thirdly, the government targets in wholesale trade would be unreasonably restrictive. Finally, though the figures were both too few and too unreliable for any confidence, there seemed to be evidence that the capital output ratio in manufactures had been falling in recent years. It should be noted that if the methods of measurement and aggregation used allow properly for deduction of the cost of expensive imported semi-manufactures, this last conclusion would tend to contradict the suggestion in the early part of this chapter that many of the new industries recently introduced were capital-intensive finishing plants designed mainly to win a market for such imported semi-manufactured goods.

A minor part of the planning machinery during the first national plan was the establishment of regional planning committees, each under the chairmanship of a prominent politician, to draw up plans for the development of the Northeast, the North, and the South (N.E.D.B. n.d.; N.E.D.B. 1962). These were drawn up shortly after the first national plan. For the most part they merely brought together the various targets from the national plan as related to a particular region, and their purpose was to give the regions a sense of participation. The planning committees were, however, committees of Bangkok civil servants, with virtually no regional participation, and they operated from Bangkok. A part of the Northeast plan, however, was the development of a regional centre at Khonkaen, partly to take advantage of the irrigation and power project at Nam Phawng, partly to stimulate mineral production and also cotton growing in the area stretching from Khonkaen to Loei, and partly to provide, in the heart of the Northeast, a centre for small industries and agricultural and educational services. This is intended to be the first of several such centres in the different regions.

The significance of the regional plans is primarily political; not only does it produce a sense of participation, but by giving powerful politicians a responsibility for a particular region it does actually generate some pressure in favour of transport, education, and the like, in relation to the industry and the local social and political problems of a particular region.

This is a far less effective method of securing some regional co-ordination of departmental effort and some local participation than the district and state red books and operations rooms in Malaysia, but it is at least some improvement on leaving inter-departmental co-operation solely to contacts at the national level. Inter-departmental co-ordination in development effort is in fact weak in Thailand, and one of the chief strengths of the Accelerated Rural Development teams has been that they have achieved a co-ordination of different kinds of development effort in particular regions.

The regional committees have been continued as part of the planning machinery, but although an outline of the second national plan has been prepared, it is not yet certain whether separate regional plans will continue to be produced.

Conclusion

The first plan, when we remember that growth up to 1959 had been fairly moderate and that only a year was available for making a plan, was a reasonably ambitious one, and the second part set revised targets which were higher than those accepted in the first. Growth has continued and though we cannot be sure how much of the agricultural growth is due to good seasons, the revised targets appear to have been achieved. The usual bottle-necks of inflation due to inadequate saving and balance of payments difficulties have not so far hampered Thailand's growth. The first draft of the second national plan is based on a growth rate of about 7 per cent per year (I.B.R.D. 1965: 3) but this is to be revised upwards, probably to 8 per cent.[7]

The target would be fairly ambitious. Probably foreign exchange will be no problem; Thailand has ample reserves and excellent credit. The necessary increase in capital formation may be possible only if commercial banks can participate more, and this would probably involve a change in the techniques of financial discipline to maintain the safety of the currency. Possibly the chief danger is inadequacy of trained manpower. It is becoming increasingly clear that social and cultural changes are necessary if the required increase in quantity at the middle levels and improvements in quality elsewhere are to be achieved. The Thais are naturally averse to making drastic changes in their culture and institutions for the sake of economic development. The solution may be in the emergence of strong professional organizations, perhaps under royal patronage, oriented towards the needs of present-day Thai society rather than towards the West, and with an emphasis on local scientific research as a basis for local training. There is considerable value in the modernizing impulse of the bureaucracy, in so far as it leads to an emphasis on measurement, applied reason, and a professional approach. These values are not necessarily incompatible with much of the *élitist* structure of Thai society and many of its cherished Buddhist values. They need, however, to be sustained by professional institutions independent of, and acting on, the day-to-day political process.

The need for independent growth of professionalism is an aspect of the promotion of private enterprise that has received too little attention in Thai planning and policy.

[7] Private communication (1966) together with Thai delegation Report (I.B.R.D. 1965).

12

Summary and Assessment

T. H. SILCOCK

Introduction: the challenges

Most of the separate contributors to this volume have given assessments of particular aspects of Thai policy. It is the function of this concluding chapter to draw the different approaches together and attempt some overall assessment.

Economic progress is desired in Thailand not only for its own sake; forces which—for the purposes of these studies—may be treated as exogenous, have imposed on the Thai people a number of challenges, and economic progress is needed partly to meet these challenges. The Thais realize, probably more clearly than the people of most less developed countries, that economic progress may demand changes in their social customs and political structure; they realize that making these changes will demand effort, analysis, and further training. It may be helpful to state explicitly and concisely the nature of the challenges. We can then go on to consider the agents of change: how they come to be selected for their positions in current Thai society, and what kinds of policy this situation is generating in particular fields of social and economic endeavour. From an assessment of the probable effects of these policies on future development it may be possible to suggest lines of action that are open to certain groups of individuals—within the limits of the roles they have to play—not only in Thailand itself but among those trying to aid the country's progress.

The challenges can be broadly grouped as social and demographic on the one hand, and economic on the other. There are also, of course, political challenges. Thailand values its national independence highly, and many Thais feel that this is threatened now, as it was during the European expansion in the late nineteenth century. This volume of studies, however, is social and economic, not political. Except where political challenges have a direct bearing on social and economic policy we have not attempted to discuss them.

Demographic challenges

Increasing rural pressure. The social and demographic challenges in turn can be subdivided into two broad groups, those arising from the increased

rate of growth (see Chapter 2) and those arising from changes in social mobility (see Chapter 4). The former are problems which Thailand faces in common with most other less developed countries, though Thailand's geographical situation gives some of them—at least superficially—a special twist. The problems arising from changing mobility, while not wholly peculiar to Thailand, are sufficiently individual to put Thailand in a special category.

The rapid rise in population is due in Thailand as in other less developed countries to success in controlling the death rate while the birth rate has changed little. This has led to the usual problems: difficulty in creating new capital fast enough because of the need for supplying an expanding labour force with the existing level of capital per head (see Chapter 2); difficulty of maintaining consumption standards and educational standards because of the increasing number of children per worker; and increasing tenancy (see Chapter 3), difficulties of forest conservation, and other evidences of pressure on the land. Thailand has no overall shortage of land yet, but its government is beginning to feel some anxiety at the cutting down of the forests (particularly, of course, the teak forests) and the danger of erosion or even climatic changes as a result. There is perhaps less anxiety than there should be at the prospect of ceasing to have a rice surplus; the low internal price of rice gives Thailand a freedom to pursue relatively liberal policies which many less developed countries lack, and this depends on a rice surplus which is becoming precarious (see Chapter 10).

These population problems have led to continuing controversy about family planning policy. Here the social and economic aspects, which clearly suggest that some expansion in family planning is desirable, are being weighed against military aspects where the issue is more obscure. It will therefore be necessary to give some attention to military implications in the overall assessment of policy, but since this involves other social and economic factors it is not possible at this point to do more than summarize the main conclusion. This is that short-run military considerations clearly favour an extension of family planning while long-term ones are more doubtful. As these facts become better known, policy is likely to depend on whether the chief military danger is seen to be urgent or not (see Chapter 2).

Increasing rural mobility. Changes in mobility are not uncommon in less developed countries; rapid developments in some (but usually not all) branches of transport and complex transformations of traditional life have affected mobility in different ways in different countries. In Thailand the pattern of change has been far from straightforward. On the one hand social mobility has in the past been unusually high for a traditional society, both among the Thais themselves and among the Chinese who have been coming to Thailand for more than two centuries (see Chapter 4). On the other hand the transport system was until very recently slow-moving and little developed. There have been dramatic changes both in social mobility (see Chapter 4) and in the transport system (see Chapter 9) in the last thirty years and especially in the last fifteen.

Emerging class structure. In both Thai and Chinese society there has developed a relatively more exclusive upper class, with increasing barriers

to social mobility. Among the Thais this has been due to the increasing importance of foreign degrees and the relative advantage which those born into the administrative class have in obtaining such degrees. This is not a completely rigid class barrier but it has important effects, not least on the behaviour of the very large numbers who try hard to surmount it. Among the Chinese the corresponding barrier has been the prestige now enjoyed by those who have become assimilated to the Thai administrative class, a process which requires both wealth and time. Here again the class barrier is not a rigid one, but the effect on Chinese business may not be wholly favourable.

This emergence of a rudimentary upper class and the cessation of Chinese immigration are accelerating the assimilation of Chinese to Thais at all levels—an assimilation which has at most times been rather easier in Thailand than in the rest of South-East Asia. This will have significant consequences in a generation or less, but it must be emphasized that it is not yet complete. A very substantial part of all small commercial undertakings—retail trade, construction contracting, industry, and mining—is still in the hands of incompletely assimilated Chinese. They are still rather more likely to employ fellow-Chinese, but the barrier to Thai participation in such business is clearly becoming weaker.

The rapid improvement in transport (especially road transport) has meanwhile interacted with the flexible and pragmatic rural social structure of Thailand to produce considerable migration from the more densely to to the less densely settled rural areas, partly as a response to population pressure. So far there has been surprisingly little movement to the towns (see Chapter 2).

There have been many reasons for this—the availability of new land, concentration of commercial opportunities in Chinese hands, the still comparatively short distance over which rural people are willing to migrate, and the lack of any important centres except the metropolis. Most of these factors are diminishing in importance, and continued rural population pressure will probably lead to increased movement to Bangkok.

Economic challenges

The economic challenges can be described more easily. Apart from those arising directly from population pressure they arise from a few clearly defined international trends. First, there is some long-run uncertainty over the prospects for rice, arising from the extremely marginal nature of the international trade in that crop, and the need to balance population trends against technical progress in large countries where major change is inevitable (see Chapter 6). Rice, however, is a reasonably good prospect compared to rubber and tin, the former threatened by synthetic rubber unless the improved technology in natural rubber can be exploited by Thailand's small rubber producers, the latter uncertain beyond the next few years because of both increasing aluminium capacity and probable exhaustion of Thailand's tin reserves. Against these may be set fairly good prospects for the newer exports, maize and tapioca.

A second international trend is that towards larger scale in industrialization. Thailand has a relatively small market and is not well placed for forming a common market with neighbours—except possibly Malaysia. This sets difficult problems in the strategy of industrialization.

Finally, like nearly all less developed countries, Thailand confronts an expectation of economic growth which is very difficult to meet. Probably Thailand is better placed than most less developed countries in this respect. It has not had to create a national myth to sustain the struggle for independence by arguing that only colonial rule stood in the way of prosperity. On the other hand royal patronage of modernization has made the average Thai expect to have to change his economic and social practices. The atmosphere is more pragmatic, less millennial, than in most less developed countries. Nevertheless the opening up of transport and radio communication has certainly led to some expectation of improvement in living standards.

Agents of change

The agents of change in Thai society desire economic progress not only to meet this expectation, but also out of a combined sense of national pride and national shame. Their national pride will not allow them willingly to accept a level of income or a rate of growth similar to Thailand's neighbours in South-East Asia. As an independent country which has never been a colony, Thailand should, they feel, set its standards on equality with other independent nations which have not recently been colonies. Moreover, economic progress is seen as necessary for providing the social services which are required to counter subversion and preserve the country's independence from communist pressure.

The policies by which change is to be promoted are, however, partly determined by the character of the groups which are trying to promote it. These are three separate groups each with its own structure and selection process, though there is a good deal of interaction and even intermarriage between them—namely, first the military leaders or military power *élite*, next the government servants, or bureaucratic *élite*, and finally the Chinese bankers and business leaders, or business *élite* (see Chapter 4).

The selection processes by which the military leaders have risen to gain control over the machinery of state are very obscure, since few army officers are willing to comment on such matters, especially to foreigners, and most published material is highly conjectural. We cannot tell the relative importance of military ability and of good family and social connections in reaching the level at which it is possible to bid for power. Virtually all army officers are trained in the Thai military college, not overseas, and the fact that they are selected partly on personal grounds probably eliminates those who are not Thai nationalists committed to army traditions. At the higher levels, in the actual rivalries for power, an unofficial following in the army and perhaps in the civil service is important, and this depends on wealth usually derived from the backing given by Chinese businessmen. The groups who have held power have had to act within the limits imposed by the forces keeping them in power. The techniques which they employ are not those foreseen by the British advisers who introduced a merit system of recruitment and a structure of Treasury control; and the conflict between their system of control and the official one influences policy in several fields. They have, however, provided reasonable stability of government during the period since the absolute monarchy.

The bureaucrats are selected, like bureaucrats in many other countries, mainly by ability to pass examinations. In Thailand, however, the prevalence of overseas university education in recent years has given great advantage to those growing up in the comparatively westernized homes of Bangkok civil servants. It is this group which has the strongest impulse to modernize Thailand, introducing both in government departments and in its private businesses techniques observed overseas. This modernizing influence includes a good deal of functional rationalism, but techniques are often attempted which are not very appropriate to Thai resources: particularly in the plans of government enterprises the justification advanced for a new machine is usually a frank imitation of foreign techniques, with little reference to local costs or markets. Promotion in the service is based on a mixture of three factors: formal evaluation of qualifications, seniority, and patronage. Respect for authority is very great, but it is primarily respect for one's superiors in the service, a structure symbolically headed by the King. The political heads, who are less Western-orientated and less professional in their approach, and who have a rather weak basis of legitimacy for their authority, need to have informal methods for controlling the bureaucracy, and this prevents the emergence of a fully professional civil service system. In furthering their professional objectives the bureaucrats are often ready to use foreign support: soliciting aid missions to throw light on particular areas such as statistics or budgeting where information tends to favour a rational and professional approach; seeing that key projects are financed by foreign aid so that they will be properly supervised; using Thailand's membership in international organizations to curb interference with foreign exchange or trade. This is not, however, a one-sided process; the politicians have been able, largely through their friends in the banks, to use private international credit to circumvent internal controls, and have also at times played on international incidents or local subversion to emphasize their own strategic role and discourage a too circumspect attitude to the giving of aid to Thailand.

The bankers and businessmen have acquired their position partly by wealth and partly by the capacity, through adjusting to the Thai politicians, to give protection to other Chinese against the pressures of Thai nationalism. Their wealth can come from many sources, but wealth as a criterion of selection tends to produce leaders who are hard-working and economically realistic and adaptable. Within the Chinese commercial system, however, wealth is derived also from social skill and extensive business contacts, often bound together by credit. To sustain their position these businessmen need to provide incomes and other assistance to their political friends, but they must also be under constant pressure to help to protect particular positions of monopoly among their clients and supporters within the Chinese community. Their attitude to the bureaucrats, who try to limit the opportunities for political intervention in such matters as trade controls, must therefore be rather ambivalent. Limitation in general would have its advantages in helping to prevent disruption of the business community, even while efforts would be made to circumvent particular limitations. Acquiescence of the Chinese community in general in a system of live and let live may account for the otherwise puzzling moderation of an army group which controls the machinery of state, is

involved in many types of business, and yet generally limits its intervention to patronage, commissions, and other minor irregularities, and rarely exercises direct and open power in support of its interests. There is no open alliance between the bureaucrats and Chinese businessmen, but the latter are unlikely to press their interest to the point of disrupting a system favourable to Chinese business interests in general.

Thai policy: resultant of interaction or rational plan?

The sketch of the different agents of change given above suggests that Thai policy is a result of interactions inhibiting too much government intervention, rather than a rational response of any one group, such as the bureaucracy, to Thailand's situation. The so-called liberal policy of Thailand thus appears more like classical liberalism, where business is guided by the hidden hand of competition mainly because checks and balances make the government relatively weak, than like a modern liberal policy of using the price system as a regulating and decentralizing instrument.

Our first step in assessing the achievements and prospects of the Thai economy must therefore be to consider whether Thai economic policy is a more or less rational strategy for economic development or a result of interacting forces. A liberal policy—or at least a private enterprise policy—has often been enunciated. The Thai bureaucracy appears to be a fairly well organized, effective body, concerned with carrying out this policy. If this is the true situation we might argue that any successes achieved by Thailand arise from rational policies that might therefore be recommended to any other effective bureaucracy in a similar position, while any apparent failures could be dealt with by recommending some modification of the nature or degree of decentralization. If, on the other hand, Thai liberal policy is mainly the result of internal interactions which inhibit effective government intervention, we may perhaps join those who recommend as a prescription for development almost any weakening of the bureaucracy, particularly if an active entrepreneurial group like the Overseas Chinese is available (see for example Riggs 1963, Bauer 1957).

Both these views are over-simplifications of the Thai situation. First, they are not necessarily as sharply contrasted as the above presentation suggests. On the one hand we might argue that a combined group, including the politicians to give a national emphasis, the bureaucrats to infuse scientific method, and the businessmen to introduce adaptability and flexibility, might jointly produce a more rational policy than any one group conditioned only by its own selection processes. If we are content to look at policy in a very approximate and imprecise way this argument has some merit. Probably Thailand has in some measure benefited from the interaction of these different groups, but not on a basis of mutual discussion and an agreed policy. Alternatively we could treat the bureaucrats as responsible for the detail of policy, and describe their policy as rationally adapted to the national interest, taking into account the pressures arising from rule by a military group and from the dominance of Chinese business methods. It is very doubtful whether this can give a completely correct interpretation. It may adequately explain trade and monetary policy, but in other spheres we are compelled to take into account an

interaction of pressures in which the bureaucracy is neither able to play the role of co-ordinator nor actuated predominantly by rational, professional considerations. On the other hand it is impossible to sustain the opposite position, that development has occurred solely because the bureaucracy has been too weak to interfere with the country's intelligent and vigorous Chinese entrepreneurs. The bureaucracy has lacked neither strength nor intelligence though it has often been slow-moving. It has certainly had an impact on the economy. It has been actuated by a mixture of public interest and self-interest, not usually by ideology. This has made it pragmatic and able to learn from mistakes. Moreover, because committees are profitable to individual civil servants, consultation between different departments on all kinds of topics is frequent in Bangkok, even though co-ordination may sometimes be poor in the field. Pragmatism, communication, and capacity to learn are no small part of rationality in policy-making.

Achievements of Thai policy

Before considering the detail we may first comment that Thai policy appears to have had a considerable measure of success. Not many less developed countries have been able to raise gross domestic product in recent years by some 9 per cent per year, or net national income per head by about 5 per cent per year (see Chapter 5). Admittedly the choice of the years 1958-62 may give a slightly favourable impression; admittedly also the artificial valuation of rice may mean that—with a different taxation policy—growth in some of the years in which rice output was increasing relatively fast would have appeared greater, and growth in others less. The general overall picture is, however, a favourable one.

Nor is this because Thailand has exceptionally favourable conditions. It is not one of the less developed countries which is favoured with oil reserves. It is quite generously endowed with tin, but not nearly as well as Malaysia and Indonesia, and so far no other important minerals have been found. Its chief advantage is rather large reserves of good agricultural land, so that it has so far suffered less than most less developed countries as a result of the population explosion, and has been able to derive great benefit from foreign aid in the construction of roads. This in itself is not sufficient to allow us to attribute most of its development to good luck rather than good policy.

It should probably be regarded as an additional point in Thailand's favour that this growth has been achieved without, as yet, exhausting any important once-for-all resource. Weak control immediately after the war, when local operators took over the former European concessions, did lead, it is true, to substantial overcutting of teak, but the resources are now slowly being replenished; in any case this is a relatively minor matter. Growth has not been at the expense of the foreign exchange reserves, which were very low at the end of the war and have been rebuilt since then to a level among the highest in the world in relation to a normal year's imports (see Chapter 6). In many less developed countries the early stages of inflation are a mild tonic to development, though in time this leads to the automatic adjustment of contractual payments and the like, and so enforces more acute inflation to achieve the same effect, with eventual dangers to

the structure of the economy itself; Thailand has had negligible inflationary pressure during this period of rapid growth. It could be argued that this has been a weakness of Thai policy, and that even greater growth could have been achieved. The point is that—whether this judgment is correct or not—there must be considerable merit somewhere in Thai policy if this rate of growth can be achieved without using such inevitably fairly short-lived resources.

Detailed assessment of different aspects of policy

Policy and prospects can now be assessed in terms of the challenges outlined above and the developments discussed in the different studies in this volume. Since it is part of the thesis of this chapter that Thai prospects are reasonably good because the different elements in the government have both private and public interests in promoting development, have reasonably good communication with each other, and learn from past mistakes, rather than because a sound and co-ordinated strategy already exists, an attempt will be made to summarize briefly the way in which the different policies have emerged. It will be apparent that in most fields the policy-makers have become more effective in responding to the challenges and more aware of the problems that need to be solved to achieve further improvement.

Agriculture

In agriculture the nature of the challenge has already been outlined. Population growth has been accelerating and up to the present a considerable part of the rural increase has stayed in the rural areas. It has moved to new areas, some of them improved by irrigation, but these movements have not been sufficient to prevent the gradual increase of tenancy and indebtedness—phenomena due to increasing pressure of population on the land. The factors inhibiting movement to the towns are diminishing in importance with improvements in transport and the emergence of a Thai urban proletariat. Nevertheless a massive influx to the towns would create problems. If the movement to new areas continues it could first repeat the history of the first half of this century—the opening up of poorer lands might lower productivity more than technical progress could raise it—and within half a century the land would be used up. Moreover the export prospects for rice, on a long-term view, are rather precarious. Changes in agricultural practices and in crops are necessary, and the comparatively flexible rural social structure makes it possible to achieve some progress in this direction by manipulating the price structure. It is, however, becoming increasingly apparent that extensive training programs are needed in addition.

The different agricultural policies have not been worked out as a co-ordinated plan to promote rural development. Most of them have been responses to particular situations. The rice premium, for example, which is discussed briefly in Chapters 7 and 9 and at greater length in Chapter 10, grew out of a nationalist drive by the Thai army leaders to intercept for themselves and the Thai government the profits that before World War II had gone to Chinese wholesalers and British and Danish exporters, and

after the war were again going back to them.[1] The profits of the Rice Bureau went partly to private pockets and partly to the government. The combined effects of a buyers' market from 1953 and of the efforts of the Bank of Thailand and other members of the bureaucracy from 1955 led to some of these profits going back to Chinese private enterprise but most of it going into official funds.

As the premium became more of an administrative instrument it was realized that it could be used to keep the cost of living down—first as an emergency measure against anticipated shortages, later as a more general instrument of policy. This in turn led to the recognition of the rice premium as a tax, with important effects on the internal price structure. Subsequent awareness of the political and security implications of taxing the rice farmers for the benefit of other sections of the community led first to greater emphasis on expenditures on rural infrastructure and later to proposals to abolish the premium. These were rejected, but a fund was established to return a further part of the rice premium to rice farmers in the form of development expenditures. This implies a recognition of the distribution effects, but the policy implications of some of the allocation effects have still to receive attention. A 'policy price' for rice which could be used in assessing such things as irrigation projects and fertilizer subsidies would be one way of allowing for these. Some of the uses of the proposed fund for improving rice yields may, however, at present be held up by shortage of suitable research workers and extension workers.

Other branches of policy bearing on agriculture have developed from more or less independent origins. Irrigation has for many years been a rather independent department with good internal morale but less good relations with other departments. We have seen that discussion of the taxation of farmers strengthened its claims for public funds. On the other hand the growth of national planning exposed some economic weaknesses. There has been increased use of cost-benefit analysis and training of staff to base this on actual measurements and check against subsequent performance. Increased awareness of the gap between irrigation potential and actual use has led to increased work on ditches and dykes, and to training of staff for supervision.

The policy of looking at land resources as a whole originated in anxiety at the depletion of teak reserves by overcutting, and the fear of some officials that the forests would be denuded (Puey and Suparb 1955: Ch. 5, Sect. 1). A policy of reserving forest areas for both productive and protective purposes was initiated in 1938 but was largely ineffective for lack of trained staff. It was nearly twenty years before a national forestry plan was adopted, and reservation began to be undertaken in earnest as new staff were trained.[2] This has stimulated the reservation of land for future co-operative land settlement schemes also. The attempt to enforce control has involved difficulties with both opium growers in the north and rubber growers in the south.

[1] Originally, of course, the rice monopoly was imposed on Thailand as a means of meeting its undertaking to deliver its surplus rice free of charge. The rice premium arose at a later stage from a policy of allowing some private trade as an inducement not to smuggle—the inducement proved too generous and private trade was allowed subject to a premium. See Chapter 7.

[2] See Krit (1957: 11, 23), and N.E.D.B. (1964a: 78).

Commonly in less developed countries the enthusiasm of forestry officials, unchecked by economic criteria, has somewhat damaging effects on development. In Thailand, however, the development of policy decisions in relation to the land as a whole has led to rather earlier preoccupation with the need to raise output per acre than might otherwise have come about. The overall aim of keeping 50 per cent of the whole kingdom under forest may ultimately prove too conservative but the immediate effect of adopting it has been to impart an added sense of urgency and an added coherence to agricultural planning.

Research and extension work has been undertaken with restricted budgets and a very small trained staff for over thirty years. Expansion over about the last fifteen years has been due first to American and international aid and next to the stimulus of the national plan. Expanded research on topics such as rice strains, rice diseases, and soils, with American aid in the early fifties was part of the world-wide concern over prospects for rice supplies at this time—itself a product of rationing and misrepresentation in the immediate post-war years, and of long-run population trends in Asia. Expanded American research into livestock and maize were at first partly directed to supplying alternative—and climatically more suitable—means of livelihood than rice in the politically sensitive Northeast, but the results have benefited other regions more than the Northeast itself. The national plan, and perhaps even more the preparation for the regional plans, stimulated further research related to the different regional resources. There is, however, a great scarcity of rural research workers, and extension workers to diffuse the benefits of their research.

There has also been a shift in policy on co-operatives, away from the humanitarian and partly nationalist emphasis of the pre-war and immediately post-war years, to an increasing recognition of the shortage of trained co-operative officers and a greater emphasis on development. These have helped to create the new larger-scale co-operatives.

Looking at rural policy as a whole, certain trends appear to have emerged from the capacity of Thai policy-makers to adapt to the facts of the situation. There has been an increasing disposition to take advantage of the flexibility of Thai rural social structure by operating through the central manipulation of the price of rice. Increasing awareness of the land resources of the kingdom as a whole has developed, and this has led to a stronger sense of urgency in increasing productivity per acre. There has been a growing emphasis on government provision of the infrastructure required for economic development. Finally there has been increasing emphasis on the need for more trained manpower—especially at the middle levels—if development is to succeed.

These policies have contributed to an enviable rate of growth in rural output. How far have the challenges been met? The government has come to realize that Thailand must prepare now for increasing population pressure, and has attempted to deal with this by irrigation and measures to raise productivity. As yet there seems to be little realization that problems of indebtedness, tenancy, and internal migration are all fundamentally problems arising from changes in the relative amounts of labour and other factors. It is, however, being recognized that in many different spheres increased research and better training in applying its results are necessary.

In its agriculture Thailand has largely avoided the 'dual economy' characteristics of the former colonial countries. There is not a highly capitalized plantation sector alongside the peasant sector. Fairly large-scale, highly capitalized undertakings exist in the countryside, but they are service undertakings complementary to peasant agriculture—irrigation and road building undertaken by the government, distribution and processing undertaken by private entrepreneurs. In countries where plantations exist there is often some research done, but extension work to peasants may be either politically obstructed or biased towards the technique appropriate to plantations. In Thailand there is less pressure to recommend inappropriate rural techniques, but the extension workers are very conscious both that they are too few and that not enough is really yet known about what is needed to help the farmers. It may be possible by a changed population policy to ease the pressure slightly, but some increasing pressure is inevitable.

Industrial development

One of the main challenges confronting industrial development policy is to meet this pressure, and to provide opportunities in the towns for the labour force which—whatever is done about population policy—is bound to flow out of the country areas into the towns as population rises, rural productivity rises, and the area of land cultivated is not allowed to rise correspondingly (see Chapters 2, 11). In industry the problems of change are complicated by the combination of increasing rural social mobility and increasing social stratification in the towns; lingering racial factors are also important. There is a form of 'dual economy', with the 'traditional', small-scale sector including both Chinese and Thai entrepreneurs (not yet fully assimilated to one another), while the modern industrial sector is partly operated by separate ministries in the government.

One of the reasons why small-scale undertakings are able to survive so tenaciously in less developed countries is that their advantage in overhead costs is much greater than in the developed countries. People trained in scientific techniques are very expensive. When the market is relatively small this disadvantage is accentuated, and when in addition the management imitates foreign techniques inflexibly it is accentuated still further. The manager of a small local rice mill or workshop making furniture or pottery is not scientifically trained; he works within the framework of his local culture. In Thailand, if he is a Thai he may have some patronage from a government department or one of its subsidiary organizations or some member of the bureaucracy; if he is a Chinese some merchant supplying his raw materials or buying his product may be partly financing him. Relations with his own workers may similarly be based on patronage. Yet he is unlikely to be purely traditional within his own sphere of knowledge. He will be a man of some enterprise imitating what he can pick up of new techniques and adapting them to his purposes.

There are very large numbers of these small undertakings throughout Thailand, and if the smaller rice mills are included probably one-quarter to one-third of the value added in manufacturing would be found in such undertakings. It is important to give them technical help to enable them to expand their capacity. They use less of the limited supplies of new

capital, and much less of the limited supplies of trained manpower, per employee or per unit of output, than modern factory operations.

On the other hand there is a need for a limited number of modern industrial plants. Some of these use little local capital because they are financed from abroad, and they can train Thais in advanced industrial skills and absorb some of the influx of labour. It is even more important that some of them provide a basis or a finish to a local manufacture that absorbs and trains more labour.

Thai industrial policy has been an outgrowth of plans which originally were little more than an attempt to use political power to transfer the more modern sectors of the economy from foreigners and Chinese to the Thai bureaucracy. The ministries were used as instruments for this purpose, culminating in the National Economic Development Corporation, which involved a large number of government organizations as well as individual members of the bureaucracy.

After 1957 the emphasis shifted towards an attempt to get more industries established in Thailand, without much distinction between local or foreign ones. At this stage industries were seen mainly as a sign of economic progress, bringing Thailand up to the level of other modern nations. Private enterprises were—like the public enterprises—seen as a source of wealth to the bureaucracy and the politicians as well as the public, but private enterprise was regarded as more efficient. Since 1959 the encouragement of industry by promotional inducements, official studies, and government-sponsored credit has continued at an increasing pace.

With the growth of national planning, and especially the preparations for the second national plan, there has been some shift in emphasis toward seeing industry as a particular sector of the economy, the growth of which should be related to future supplies of labour, capital, and skills, and to national income. This may lead to firmer criteria for promotion policy. Thailand is not likely in the near future to be short of foreign exchange. There is no advantage in incurring costs such as loss of revenue and higher local prices to replace imported by home-produced goods unless the presence of the industry in question will generate further development.

The policy of trying to foster small industries is of fairly recent origin and has not yet had much impact. Some work of this kind was done during World War II, but largely for lack of resources for anything else. It was only with the emergence of national planning that the fostering of small industries by deliberate government initiative was seen as suitable to Thailand's present pattern of resources. This policy will demand a substantial training program if it is really to generate improved practices on a large scale.

On the whole industrial policy seems to have been less successful than agricultural policy in meeting the present challenges. If participation by the bureaucracy had been more widespread and open there would have been more interest in efficiency, even if pricing policies were monopolistic; but interest in the government enterprises participation is commonly indirect, by subterfuge and patronage, and this is an inefficient or positively wasteful type of stimulus. Participation in the promotion of private industry has similarly been indirect and largely concealed. There has certainly been some growth in industry and—even during a period of rapid agricultural

advance—a slight growth in the proportional share of manufacturing industry in the gross national product. It has not, however, developed to a level where it could provide rapidly growing opportunities in the towns as the influx of population from the rural areas expands.

The main reason for this seems to be a failure to establish a more effective separation between the roles of the managerial and bureaucratic classes, and also a failure to train an adequate group of executive government servants to study, stimulate, and guide small industries.

Trade policy

Trade policy confronted the challenge of uncertain prospects for some of Thailand's main exports (see Chapter 6) after an earlier phase when the main threat was inflationary pressure arising from the high international price of rice. The successful handling of these problems seems remarkable when we recall that up to 1926 Thailand's freedom to control its foreign trade was severely limited by the leading European powers, and even for the next ten years to 1936 was restricted by an agreement imposed by the United Kingdom. It might have been expected that a strongly protective tariff policy would have been pursued as an instrument of nationalism and an assertion of independence. In fact, however, the revenue code—mainly the work of Prince Viwat (see Chapter 8)—was almost entirely an instrument for the collection of revenue and had little protective intention or effect.

One of the reasons for Thailand's lack of interest in protective tariffs in the early stages of its release from foreign control was the fact that national economic problems were seen in terms of fostering Thai business, as distinct from Chinese or European business in Thailand, rather than in terms of bringing particular kinds of business into Thailand. Because of its very conservative monetary policy Thailand had never experienced foreign exchange problems until after World War II. At that time, because of the wartime role of the Bank of Thailand, the post-war balance of payments problem was seen as a monetary matter to be handled by financial techniques.

The highly effective rice premium—the origins of which have already been discussed—is a controversial instrument; but in conjunction with Thailand's flexible social structure and heavy expenditures on transport it has simultaneously both promoted diversification of agriculture and allowed—without damage to Thai industries—a very flexible and competitive system of trade to develop. It is a novel form of protection the full implications of which are still being explored, and the damaging side-effects corrected.

It is also worth emphasizing that one of the chief defences of a relatively liberal trade system in Thailand is the conviction of a few key policy-makers that interference with trade seriously increases the amount of corruption in government. Any excessive opportunities for corruption are seen as a political danger in Thailand, building up the power of particular groups within the government. Hence, though Thailand is clearly an example contradicting the extreme liberal view that corruption is a direct function of government interference with trade, its experience supports the view that

where corruption is—for any reason—a major problem, the case for a relatively liberal policy is strengthened.

Monetary policy

Monetary policy is not in itself a response to any of the major challenges that have been outlined above. It is rather seen by its makers as a defence of one of the fundamentals of sovereignty and of a code of moral practice essential to the functioning of the economy. Here too the scope and emphasis have changed with experience. A stress on nineteenth-century monetary orthodoxy has been modified to sound financial control and safe banking practice, and this in turn to a regard for professionalism and integrity. In part it has been possible, as a result of experience, to modify the negative and restrictive controls to more positive efforts to promote a rational credit structure and an interest in development. But the need to defend the traditional codes against a hostile environment has tended to preserve the restrictive attitude.

Even in monetary policy, however, it has become increasingly apparent that more detailed knowledge is necessary and hence more training is required. Three specific instances may be cited. The attempt to influence the trade and industrialization of Thailand through the Bank of Thailand's rediscount policy has involved increasingly detailed and flexible criteria for lending, which require a better informed and better trained staff. The extension of central banking to branch centres, first in the south, with planned extensions in other regions, is clearly intended to build up a staff with greater knowledge of the details of branch banking. Finally, the active fostering of professionalism in the Thai Bankers' Association looks like a preparation for more systematic professional training at a later stage.

National planning

We may now turn to ask how far co-ordination of economic policies through national planning machinery has helped Thailand to respond successfully to its social and economic challenges (see Chapter 11).

The extent to which co-ordination has been improved by the planning process should not be exaggerated. It is true that foreigners advising the Thai government have often been inclined to criticize poor co-ordination between the technical officers of different ministries in the field. This weakness, however, is due neither to lack of contact in the field nor to poor communication in Bangkok, but to other causes, which planning might conceivably remedy if it greatly expanded its regional side, but has certainly done little to remedy yet. Improved co-ordination, where it has come about, has been due to the Accelerated Rural Development teams, a product not of planning but of the security situation. So long as there is so little transfer of staff between ministries and so much dependence on patronage it will be difficult for local administrators to have the moral authority to co-ordinate the technical officials in their areas.

Planning has not replaced a lack of co-ordination at the centre, for (as we have seen) good co-ordination was already there. It has not promoted regional or district co-ordination as yet, though Malaysian experience suggests that a combination of regional planning and semi-military methods might help in this sphere. It has not removed such weaknesses as

arise from the involvement of Thai politicians and civil servants in business; indeed the committees established under the second plan to co-ordinate the planning of the private and public sectors may well accentuate such weaknesses. The advantages of national planning must be sought elsewhere.

It must also be pointed out that quite rapid growth appears to have been achieved before the first plan was published. At constant 1962 prices the average rate of growth of the gross national product in 1958 and 1959 was over 10 per cent. This was actually a considerably higher rate of growth than during the first years of the plan. As already mentioned, the detail of the allocation of growth between particular years depends on conventions concerning the valuation of rice (see Chapter 10), rice crop fluctuations make the choice of the year important in calculating an average rate of growth, and the use of output of agricultural raw material as a basis for calculating production in certain manufactures adds another slight element of unreliability (see Chapter 5). We cannot therefore be certain that Thailand's growth rate is outstanding among less developed countries at present; nor can we say with confidence that the beginning of a more rapid rate of increase occurred a few years before the system of national planning was adopted. It appears probable, however, that the rate of growth on any reasonable reckoning is high, that it is at least partly due to Thai economic policy, and that it is not wholly—perhaps not even mainly—due to the national plan, though it is quite likely to be partly due to the same forces as gave rise to the plan, beginning about the time of Marshal Sarit's assumption of power.

Probably the first national plan did no more at first than to give articulation and numerical form to a new sense of vigour and co-ordination which Sarit had already infused into the government. This, however, was an important thing to do; an important part of the forces formerly inhibiting growth was an inertia due to the wasting of effort in reciprocal checks. Sarit was willing to listen to even quite junior officials with ideas for development, and, if he was convinced, to drive them through into action, sometimes making a profit for himself in the process. At the time at least a part of his personal gain was probably a necessary cost of the vigour he imparted; he was not particularly dependent on a delicate balance among a considerable number of important generals and civil servants whose interests needed to be placated. He enjoyed a great deal of personal power, much of it due to the vast sums of money he was able to disburse. Once the national plan was in existence, and ambitious targets were being fulfilled, some of the rivalry and much mutual criticism between ministries began to take the form of appraising performance against targets. Ministers were forced to attend to statistical evidence, and even seek more of it, as they became more dependent on the able technicians who could make suggestions that produced results. The succession of a more honest but much less vigorous Prime Minister on the death of Sarit has therefore not led to any noticeable loss of momentum.

Another result of setting up the national planning machinery has been greatly to increase the habit of thinking of the nation's economic problems as a whole. One consequence of this is a preoccupation with national aggregates—gross domestic product, gross capital formation, growth rate

of gross national product, and so on. This has good and bad effects statistically and good and bad effects on policy, which may be worth enumerating. Statistically it stimulates additional effort to measure and enumerate more accurately and comprehensibly; but it also tends to call forth disproportionate effort to derive some figure for an unimportant or almost meaningless component in a total such as income from ownership of rural dwellings, when the same statistical resources might have produced information, for example, on the relation between money income from rice and expenditure on textiles by provinces. In policy, it will help to focus effort on relatively abstract national goals, so generating co-operation and professionalism; but because the figures are likely for some years to be both unreliable and hard to interpret, they may give rise to unnecessary moods of euphoria or depression.

Probably a more important effect than that of attending to national aggregates is the gradual identification of significant areas for further effort. The three most important of these are first the recognition that the limit of further expansion of the area of cultivated land is growing uncomfortably near, and that therefore attention must be given to all the various methods of increasing the yield of real income per acre; next the attention now given to the effects on such matters as productivity and education, of the rate of increase in population; and finally the great emphasis, in almost every branch of economic policy, of the present and prospective shortage of middle-level trained manpower.

Manpower

Manpower policy raises a number of difficult issues, yet is clearly one of the most important branches of policy at the present time. In some degree we can separate aggregate manpower—or population—policy from the policy of providing for, and allocating among alternative uses, manpower trained to different levels.

In population policy there is one important practical issue, the extension of family planning services. The recent experiments in Ratburi and elsewhere have shown a large potential demand for these services. They could be rapidly expanded, and this would have large and irreversible effects on the rate of growth of population. The socio-economic effects of these changes can be divided into short-run and long-run effects, both of which can be predicted with some confidence, even though we cannot foresee the size of the changes precisely. These effects, however, have to be weighed against short-run and long-run politico-military effects where prediction is more difficult. However, because of their importance, some assessment must be attempted (see Chapter 2).

The main short-run socio-economic effects of a sharp fall in fertility would be first a decline in the number of dependants per worker, leading to a rise in consumption per head directly and also an additional rise indirectly because a part of the higher real income per head would be invested; next there would be an easing of the burden of expanding education and hence an improvement in standards at all levels. Both these effects would be noticeable within a decade. In the longer run there would be more subtle changes, such as a rise in the average age of the population and a slowing down in the rate of urbanization, but the most significant

effect would be that real pressure on the available land would be delayed for some time, giving a chance for industrialization to absorb it effortlessly when the time arrived. There can therefore be little doubt that the socio-economic effects would be beneficial in both the short and the long run.

The short-run military effects, though perhaps less obvious, are equally definite. There can be no effect on military manpower within two decades, but in less than one decade the effect on national income and hence on resources for weapons or strategic materials would be a perceptible increase. Within a decade also, improvements in education would help to increase the earning power of the surplus rural population which has already been born and may well become a security threat within ten years if it is not absorbed.

There are no military disadvantages in the short run, except that which arises indirectly from long-run ones—possible anticipation of Thailand's future power. Anxiety arises from the long-term implication—a lower total population in an area where neighbouring populations are expanding rapidly. This by itself would be a source of concern, for population is certainly still a component of military power. The uncertainty about the long-term prospect arises from the fact that a lower growth rate of population would lead not only to a more rapid growth of national income per head but almost certainly to a more rapid rate of growth of total national income. It is impossible to tell whether the present situation, in which national military power seems much more closely correlated with national income than with population, will continue. Continued nuclear stalemate and an expansion of guerrilla-style war as the only possible form of war might restore the importance of population, though other developments are possible which would raise the relative importance of weapons and equipment still further. Moreover, in the long run there are even more intangible factors. A large population might be valued for its own sake, or alternatively it might be held that some of the special and unique features of Thai culture depended on avoiding congestion and pressure.

These are clearly important matters that have a bearing on the situation and that only Thais can decide. How much importance should be given to them in comparison with socio-economic considerations and short-term military considerations may well depend on whether there is any sense of urgent threat. On the military side the one thing that is certain in a confused situation is that extended family planning services could affect resources favourably well within one decade but could not affect military manpower at all within two.

The supply and allocation of different kinds of skilled manpower is also a policy issue of urgent practical importance. Many different branches of policy are being influenced increasingly by the need for more training, particularly at the middle levels of skill, and the various surveys of future needs have also indicated the difficulty of expanding this type of education fast enough. One of the main difficulties is the enormous prestige of foreign degrees, the orientation of Thai universities towards the needs of students going abroad, and the influence of the incidentals of Western culture.

One of the key factors here would appear to be the creation of inducements to enter the various types of technical training, succeed in the practical subjects, and subsequently do scientific and original work. The

possibility of getting scholarships to the universities might be used as an inducement to enter technical training institutions. But these scholarships should be based on success in practical subjects and later application of them in practical work. The present system of letting students in these institutions take ordinary university entrance examinations in their theoretical subjects is a thoroughly bad inducement, warping the technical training itself and not producing good university entrants.

Allocation of scarce manpower is at present undertaken by delaying approval for government projects that would impose an excessive strain on any type of manpower that may be in short supply. Such manpower budgeting has yet to be tried out over a reasonable range of projects. It seems unlikely to be an effective type of allocation of any of the broad ranges of partly substitutable labour which may well become limiting factors.

We may sum up the general assessment as follows. The overall rate of growth seems at present satisfactory, but it is likely to meet obstacles as expansion of the cultivated area is hampered, while population continues to grow. The shift of emphasis towards treating the supply of land as strictly limited and focusing on improved output per acre is a healthy one. This will involve various rural pressures, to cope with which more trained workers will be necessary; there will also be rapidly rising pressure on urban areas, and trained workers for assisting small industries will be needed. The obstacles to effective large-scale industrialization are mainly social—summarized in the difficulty of achieving a clear division between the Thai bureaucracy and a Thai managerial class. So long as the Thai bureaucracy has personal interests in business there will be too little pressure to scrutinize—from the point of view of long-run growth potential—the investment of Thai capital in expensive foreign equipment; discrimination, which can rightly be used in promoting foreign capital investment, will tend to be used in unhelpful ways.

It seems desirable, therefore, that conscientious bureaucrats should divert some of their energy from limiting the picturesque but relatively harmless self-enrichment and patronage of the politicians to improving their own and their colleagues' standards and status. Aid agencies might also usefully distinguish between the power structure of politicians, banks, and Chinese businesses on the one hand and its effects on the bureaucracy on the other. Admittedly, without a private control over the civil service the politicians would have much less to offer their business friends, but there might still be enough for an interaction of wealth and power to retain control of the formal machinery of the state. A stable structure might be possible, particularly if the King provided a link between the power structure and the bureaucracy until more democratic institutions became practicable.

This is not to suggest, however, that all that is necessary for more rapid economic development is that the power and prestige of the bureaucracy should be increased. The military politicians (perhaps with the King's help) have another role to play, in addition to providing a stable power structure. They are in a position to modify the prestige of the bureaucracy so that it comes to depend more on performance for Thailand than on adaptation to Western culture. This could have a considerable

effect on professional organizations and professional training, and on various other developments in research and education.

Moreover, Europeans concerned with aiding Thailand should not regard it as part of their function to teach the adoption of specific European techniques or practices. Indeed it should be part of their function to discourage any such tendency. The more fundamental the training can be, the more likely it is to be applicable to the different cultural conditions and different factor endowment of Thailand. It is hardly an exaggeration to say that the whole of any technical training should be treated as a series of provisional illustrations of professionalism and scientific method.

Appendix A

Structure of Thai Government Enterprises as Shown in the Thai Budget Documents

The structure of government enterprises as shown in the *Budget Documents* for 1964-6 may be summarized as follows (this summary does not include all enterprises owned or wholly or partly controlled by the government; for example the Bank of Thailand is excluded and also all the municipally-controlled organizations which do not appear in the *Budget Documents* but are under the Ministry of the Interior).

Prime Minister's Office

Including the Prime Minister's Office, nine ministries controlled nearly all the government enterprises. The Prime Minister's Office directly controlled five enterprises with a combined capital of 685 million *baht*. Of these the three largest were the Yanhee Electricity Authority, the Lignite Authority, and the Northeast Electricity Authority, all mainly concerned with electricity production; the other two were relatively small—the Tourist Organization and the Zoological Gardens. These are all undertakings in which public control might be regarded as normal. Under the Prime Minister's Office, however, the Public Relations Department controls 60 per cent of the Rediffusion Company and 55 per cent of Thai Television; and these two are both government-controlled companies with a considerable commercial activity, though the government's capital involvement is only about 24 million *baht*.

Ministry of Communications

The Ministry of Communications exercises supervision over its various affiliated organizations directly through its central secretariat. Control over the Thai state railways is relatively light, however, as this organization has its own politically influential controlling body. The Port Authority and the Thai Telephone Organization exercise more or less normal public utility functions and are fully owned subsidiaries of the Ministry, though each has its own board. The Express Transport Organization runs a fleet of trucks and formerly had a monopoly of all the access to railway stations, though this is now attenuated. Much of its replacement seems to be done from public funds. In addition this Ministry owned all, or virtually all, the shares in three major transport concerns, Thai Airways Limited, the Thai Overseas

Navigation Company, and the Transport Company which runs buses. It owns 80 per cent of the shares of Thailand Flight Radio Company—a concern which contrives to balance its budget exactly, without profit or loss to the Ministry. Excluding the railway, which has a capital of over 4,000 million *baht,* the combined capital investment of the Ministry of Communications in these subsidiaries was 975 million *baht.* The Express Transport Organization and Thai Airways also each control a 40 million *baht* subsidiary.

Ministry of Defence

The Ministry of Defence has a complex structure of control. First there are four organizations under the direct control of the Ministry's own secretariat. One of these is the War Veterans' Organization, which combines the roles of a holding company and a welfare organization and finance company for old soldiers. This is not directly an industrial organization, but controls three, namely Wood Industries, Sena Printing Company, and the Engineering Company, and has invested funds in over twenty others of which twelve still existed in 1964. It was claimed that the yield on these investments was just over 4 per cent. The other two directly controlled organizations were the Fuel Oil Organization, which was taken over from the Military Energy Department in 1960, and the Prepared Food Organization, a manufacturing company which in 1966 was planning to enter the export market for lack of a home market for all its capacity.

The combined capital of these three organizations, paid from the Ministry of Defence budget, is just over 250 million *baht.* Four further industrial enterprises are controlled through the Department of Military Industry, namely the Weaving Organization, the Glass Organization, the Tanning Organization, and the Battery Organization. Their combined investment is a little under 220 million *baht.* In addition there are two oil refineries, at Fang and Bangjak, under the Department of Military Energy, with an investment of about 325 million *baht.* Finally there is the Bangkok Dock Company, wholly owned by the Royal Thai Navy, with a capital of 12 million *baht.*

Most of these organizations were set up in the control of the Ministry of Defence under the pretext that they were at least in part supplying military needs. In the main, however, they produce little which is of any military significance, and (except for the oil organizations) bring little return to the government. Their chief function appears to be to provide livelihood and patronage.

Ministry of the Interior

Another ministry with a very complex control structure is the Ministry of the Interior. Like the Ministry of Defence, this Ministry has some relatively large undertakings under the direct control of the central secretariat, and others under some of the different departments. The two most heavily capitalized concerns under the direct control of the Ministry are the Metropolitan Electricity Authority and the Provincial Electricity Authority, with a combined capital of over 600 million *baht.* These presumably come under the Ministry of the Interior's control because of their relation to municipalities and local administration, but are nevertheless controlled

directly. Also controlled directly is the Poultry Organization, a marketing and service organization for the poultry industry, which has received some foreign aid but operates largely as a commercial venture. This organization and the Bangkok Municipality also jointly own the public shares in the Union of Animal Products Traders (Bangkok Pork Monopoly). The central secretariat also controls the Ratphoomi Contracting Company which builds and repairs housing and roads.

There are also four departments of this Ministry controlling different enterprises. The Social Welfare Department controls a Building Society and five pawnshops; the Police Department controls the Police Printing Press, a comparatively small undertaking—it is not known whether any other, unofficial, enterprises are still run by the police as they were when General Phao was in control, but the Printing Press is the only one making returns to the Budget Bureau. There is a Municipal Public Works Department which controls the Bangkok and Provincial Waterworks. Finally the Administration Department directly controls the Market Organization, which runs a central fruit and vegetable market in Bangkok, but also provides wharves for boat transport and parking places for road transport, and does agency business on behalf of local governments' development activities. This organization, however, though it is the only direct subsidiary listed, is certainly not the only organization controlled by the Administration Department. Just as the Ministry of Defence is involved in many business activities through the War Veterans' Organization, the Ministry of the Interior is involved through the municipalities which are controlled by the Administration Department. Like the subsidiaries of the War Veterans' Organization, these municipal subsidiaries publish no returns in the Budget Documents, and must therefore be omitted here.

Ministry of Finance

The Ministry of Finance is in a different position from the four ministries so far considered. Its role as the central custodian of the finances generally ensures rather stricter standards, and it is more likely to be involved in the formal power structure, holding a watching brief for the central revenue rather than deriving bonuses and indirect gains for its members. The distinction is not, however, a sharp one, and should not be interpreted in Western terms. The Ministry is itself an important source of patronage, and if its wide representation on the boards of government enterprises (not only its own subsidiaries) did not exist its officials would be deprived of some of the meeting allowances which make it financially possible for them to maintain stricter standards in other respects.

The only direct subsidiaries of the Ministry of Finance are the Tobacco Factory and the Government Lottery Office. Partly owned subsidiaries are the Savings Bank (which controls its own printing press), the recently combined Agricultural and Provincial Banks, and three different business companies. Of these three the Thai Produce Trading Company, founded in 1939, is a survival from the pre-war nationalist attempts to divert Chinese trade into Thai hands, the Thai Gunny Bag Company is a joint venture with the War Veterans' Organization initiated in 1952, while the United Hotels and Tourism Company is jointly owned with Thai Airways. All these companies are government-controlled, but only in the third is the interest of the Ministry of Finance alone more than 50 per cent. Another subsidiary,

virtually wholly owned by the Ministry of Finance, but itself mainly a holding company for other agencies, is the National Economic Development Corporation, taken over by the government in 1957, and itself controlling the Northeast Gunny Bag Company, the Chonburi Sugar Company, and the Marble Company, as well as a substantial interest in three other companies, and a sugar factory and a paper factory of its own.

Apart from these interests of the Ministry of Finance itself, there are two wholly owned subsidiaries of its Excise Department, namely the Spirits Organization and the Playing Card Factory, both operating as monopolies for government revenue, though they give limited opportunities for patronage.

The Ministry of Finance has a small share in each of three banks: about 30 per cent in the Bangkok Bank, 19 per cent in the Siam Commercial Bank and under 1 per cent in the Bank of Asia. It also has a small holding in the Cement Manufacturing Company. The Bank of Thailand is not listed here, since its capital is rather different in character, but it has now begun to appear as a public enterprise in the *Budget Documents.*

Ministry of Economic Affairs

The Ministry of Economic Affairs is the Ministry which controls the largest number of government enterprises, but this is because the many different provincial trading companies are controlled, indirectly, by the Ministry. These are all small, however, and the political importance of the Ministry is to be sought elsewhere. In the immediate post-war period this was the Ministry which housed the Rice Bureau, from which large sums of money were diverted through political channels. After 1955 the allocation of rice quotas was important, and in the early sixties the control over export licences exercised by this Ministry was an essential part of the cartels in the export trade. At present the Ministry's export role has become unimportant, and its subsidiary enterprises, mainly controlled by the Department of Internal Trade, are of minor importance.

The Ministry's own central secretariat controls two partly owned subsidiaries, the Thai Navigation Company and the Thai Jute Company. The former is a coastal shipping and insurance concern, and in turn partly controls a lighterage company and an insurance company; the latter trades in jute and is a joint venture by this Ministry, the Ministry of Industry, and other government enterprises. The Ministry of Economic Affairs also has interests in three semi-private concerns, the Thai National Sugar Industry Company, the Agricultural Crops Company, and the Boonrawd Brewery.

The Ministry's Internal Trade Department directly controls nineteen provincial trading companies. They are not grouped in any particular region, but are merely some of those that survived the post-war pressure to abolish government trading. In addition it controls the Warehouse Organization, a wholesale buying and distributing organization set up, officially, to foster trade by Thais, by acting as a centre for Thai retail traders as well as for different provincial trading companies. This organization controls three more provincial trading companies and has interests in another five. These eight provincial companies, unlike most of the others, were established in the mid-fifties when enterprises within the different ministries were growing up.

Chart III Plan of Thai Government Enterprises

PRIME MINISTER'S OFFICE

8 (700) *

Yanhee Electricity Authority '57†

Northeast Electricity Authority '62

Lignite Organization '60

Sports Promotion Organization '64

Tourist Organization of Thailand '59

Zoo Organization '54

Public Relations Department

Rediffusion Co. Ltd '54

Thai Television Co. Ltd '53

MINISTRY OF COMMUNICATIONS

12 (5,100)

Thai State Railway '51

Port Authority of Thailand '51

Thai Telephone Organization '54

Thai Overseas Navigation Co. Ltd '40

Transport Co. Ltd '31

Thailand Flight Radio Co. Ltd '48

Express Transport Organization '47

E.T.O. Insurance Co. Ltd

E.T.O. Motor Co. Ltd '58

E.T.O. Motors Warehouse Co. Ltd

Thai Airways Co. Ltd '53

Flight Co. Ltd '60

MINISTRY OF DEFENCE

14 (900)

Fuel Oil Organization '60

Prepared Food Organization '55

War Veterans' Organization '48‡

Wool Industries Co. Ltd '50

Sena Printing Co. Ltd '48

Engineering Co. Ltd '48

United Civil Engineering Co. Ltd

Department of Military Industry

Tanning Organization '55

Weaving Organization '55

Glass Organization '55

Battery Organization '55

Army Department of Energy

Fang Oil Refinery '56
Bangpak Oil Refinery '58

Royal Thai Navy

Bangkok Dock Co. Ltd '43

MINISTRY OF THE INTERIOR

15 (1,150)

Metropolitan Electricity Authority '58

Provincial Electricity Authority '60

Poultry Organization '53

Union of Animal Products Trades

Ratphoomi Co. Ltd (Contracting) '53

Administration Department§

Market Organization '53

Social Welfare Department

Building Society Office '51

Five Pawnshops '55(2), '57, '62, '63

Police Department

Police Printing Press

Municipal Public Works Department

Bangkok Water Works '14

Provincial Water Works '53

MINISTRY OF FINANCE

23 (1,200)

Tobacco Factory '41

Government Lottery Office '39

Bangkok Intercontinental Hotels Ltd

Savings Bank '47

S.B. Printing Press

Agricultural Bank '50 } '66
Provincial Bank '42 }

United Hotels & Tourism Ltd '53

Fine Jewels Co. Ltd

Thai Produce Trading Co. Ltd '39

Thai Gunny Bag Co. Ltd '52

Excise Department

Sports Organization '63

Playing Card Factory '55

National Economic Development Co. Ltd '54

Northeast Gunny Bag Co. Ltd '53

Chonburi Sugar Co. Ltd '59

Marble Co. Ltd '56

Laos Thailand Trading Co. Ltd

Thailand Jute Promotion Co. Ltd

Thailand Genuine Supplies Co. Ltd

Cement Manufacturing Co. Ltd '63

Siam Commercial Bank '06

Bank of Asia

Bangkok Bank

MINISTRY OF ECONOMIC AFFAIRS

36 (350)

Thai Navigation Co. Ltd '42

Thai Economic Insurance Co. Ltd

Lighterage Co. Ltd

Treasury Department

Rice Account Unit '60

Rice Réserve Plan '61

Internal Trade Department

19 Provincial Trading Cos. '40-'41 ||

Warehouse Organization '55

3 Provincial Trading Cos.

Five Provincial Trading Companies

Thai National Sugar Co. Ltd

Agricultural Crops Co. Ltd

Boonrawd Brewery Co. Ltd

MINISTRY OF INDUSTRY

11 (140)

Factory Department

Three Factories of Thai Sugar Organization '48

Gunny Bag Factory '49

Thai Paper Mill Samsen '23

Thai Paper Mill Kanchanaburi '38

Industrial Promotion Department

Wickerwork Factory '52

Glazing Equipment Factory '54

Two Thai Industries Shops

Science Department

Alum Factory '55

MINISTRY OF AGRICULTURE

6 (200)

Cold Storage Industry Organization '58

Fisheries Department

Fish Wharf Organization '53

Fisheries Ice Co. Ltd

Agricultural Department

Rubber Estate Organization '49

Forestry Department

Forest Industry Organization '47

Thai Plywood Co. Ltd '52

MINISTRY OF NATIONAL DEVELOPMENT

7 (25)

Pure Gas Co. Ltd

Thai Rice Co. Ltd

Mineral Resources Department

Ao Kham Tin Co. Ltd '44

Co-operatives Department

Thai Salt Co. Ltd '40

Co-operative Bank '47

Royal Irrigation Department

Irrigation Cement Co. Ltd

MINISTRY OF EDUCATION

1 (20)

Fine Arts Department

Music Organization '54

MINISTRY OF PUBLIC HEALTH

1 (7)

Medical Science Department

Pharmaceutics Factory '41

Entries in boxes are ministries or departments.

Entries in bold are wholly owned and controlled enterprises.

Entries in italic are controlled but not directly or wholly owned.

Other enterprises are partly financed but not controlled by government.

* Figures below the ministries show number of enterprises and (in parentheses) approximate government capital (*baht* m.).

† Dates here and elsewhere show date of establishment in present form.

‡ The W.V.O. has invested in over 20 unlisted enterprises; about 10 are still in business.

§ The Administration Department controls other unlisted enterprises through municipalities.

‖ Nearly all provincial trading companies have investments in other unlisted companies.

Source: Budget Bureau (1956-(1964-6)).

TABLE A.1 Analysis of Financial Results of Twenty Leading Government Enterprises, 1962-5

Government enterprise	Government capital and accumulated profit or loss in m. *baht*, year ending								Net profit or loss in m. *baht* and % Government capital for the year								Average yield on all capital invested and retained %
	1962		1963		1964		1965		1962		1963		1964		1965		
Yanhee Electr. Auth.	370	(52)	1,203	(97)	1,417	(142)	1,336	(164)	34	(9·2)	47	(3·9)	52	(3·6)	21	(1·6)	3·2
Metropolitan Electr. Auth.	327	(97)	368	(127)	382	(175)	382	(201)	19	(5·8)	32	(8·7)	50	(13·1)	28	(7·3)	6·3
Provincial Electr. Auth.	104	(15)	143	(21)	187	(103)	261	(131)	2	(1·9)	6	(4·2)	3·8	(2·0)	4·2	(1·6)	1·7
Lignite Auth.	71	(–4)	118	(–6)	132	(–25)	162	(–61)	–3	(–4·2)	–4	(–3·4)	–19·6	(–14·8)	–35	(–21·6)	–15·9
Express Transport Org.	10	(27)	19	(31)	24	(30)	30	(35)	–8	(–80·0)	4	(21·1)	7	(29·1)	6	(20·0)	4·4
Fuel Oil Org.	84	(99)	84	(118)	84	(145)	84	(169)	18	(21·4)	21	(25·0)	30	(35·7)	24	(28·5)	10·8
Weaving Org.	36	(19)	67	(19)	116	(26)	172	(27)	0·2	(0·6)	0·2	(0·3)	7	(6·0)	1	(0·5)	1·7
Glass Org.	50	(12)	50	(18)	50	(25)	50	(32)	4	(8·0)	6·5	(13·0)	7	(14·0)	9	(18·0)	9·0
Tanning Org.	33	(0)	33	(1)	34	(3)	35	(6)	1·6	(4·8)	1·7	(5·1)	2	(5·9)	3	(8·6)	5·7
Preserved Food Org.	60	(–17)	95	(–33)	121	n.a.	133	n.a.	–7	(–11·7)	–10	(–10·5)	–9	(–7·4)	–7	(–53·0)	–16·0
Forest Industry Org.	20	(345)	20	(364)	20	(380)	20	(405)	95	(475·0)	80	(400·0)	74	(370·0)	81	(405·0)	21·0
Warehouse Org.	70	(8)	70	(11)	70	(16)	70	(18)	5	(7·1)	3·6	(5·1)	5	(7·1)	3	(4·3)	5·0
Gunny Bag Factory	58	(2)	58	(14)	58	(22)	58	(25)	11	(18·9)	16	(27·6)	13	(22·4)	8	(13·8)	16·0
Thai Paper Mill	26	(0)	27	(2)	27	(2)	27	(2)	n.a.	n.a.	1·6	(5·9)	–4	(–14·8)	n.a.	n.a.	(–4·0)
Pharmaceutical Factory	5	(7)	5	(7)	7	(9)	8	(11)	–2·3	(–46·0)	0·3	(6·0)	2	(28·5)	2	(25·0)	3·4
E.T.O. Motors Co.	40	(0)	40	(1)	40	(–4)	40	(–3)	n.a.	n.a.	0·5	(1·2)	–3	(–7·5)	1	(2·5)	(–1·3)
Thai Plywood Co.	80	(13)	80	(19)	80	(34)	80	(50)	10·2	(12·7)	12·8	(16·0)	20	(25·0)	22	(27·5)	15·0
Cholburi Sugar Industry Co.	60	(–1)	60	(–5)	60	(–6)	60	(–11)	0·2	(0·3)	–34	(–55·0)	–1	(–1·6)	–5	(–8·3)	(–4·4)
Northeast Gunny Bag Co.	75	(–14)	75	(2)	75	(24)	75	(38)	11·3	(15·0)	12·9	(17·2)	27	(36·0)	17	(22·6)	19·4
Thai Sugar Industry Co.	30	(–10)	30	(–6)	30	(9)	31	(10)	0·8	(2·6)	4·2	(14·0)	16·7	(55·6)	7	(22·6)	23·1

Source: Budget Bureau (1956-(1963: Vol. 4)).

Ministry of Industry

The remaining three ministries which control enterprises are of considerably less importance than the six already discussed. Paradoxically the Ministry of Industry has a relatively small number of enterprises under its control, with none directly controlled by the central secretariat. Its Factory Department has six factories, three producing sugar (under the Thai Sugar Organization), two producing paper, and one producing gunny bags. In addition to these its Industrial Promotion Department has a wickerwork factory, a glazing equipment factory, and two shops distributing Thai industrial products, while its Science Department has an alum factory. These are all small undertakings.

Ministry of Agriculture

The Ministry of Agriculture has even fewer enterprises, but they are on a rather larger scale. The Ministry itself has one, the Cold Storage Industry Organization, which operates plants for refrigerating meat and fish, with the object of maintaining stable prices, at Bangkok and Chumphorn. Three of the Ministry's departments also have one each: the Fisheries Department has the Fish Wharf Organization, a marketing organization for the fishery industry, with an interest in the Fisheries Ice Company; the Agricultural Department has the Rubber Estate Organization, which took over properties illegally planted by Chinese, and is attempting to build up stocks of budwood for distribution; and the Forestry Department has the Forest Industry Organization (see Chapter 9 Appendix), with its subsidiary, the Thai Plywood Company.

Ministry of National Development

The last of the nine major ministries involved in the running of enterprises is the Ministry of National Development. Being a new ministry established after the policy of establishing new government enterprises had been discontinued, it has no full subsidiaries of the Ministry as such. It has a very small share in the Thai Rice Company, which is mainly owned by co-operative societies; and has subscribed, from government budget funds, about one-quarter of the capital of a new Pure Gas Company to produce carbon dioxide, dry ice, and related products. One of its departments, the Department of Natural Resources, has a subsidiary enterprise called the Mining Organization, mining tin and wolfram on a small scale in the area not leased to foreigners. It also has a minority interest in Ao Kham Tin, a mining company registered in Malaysia to mine in South Thailand. The Co-operative Department controls the Thai Salt Company, which distributes salt produced by salt co-operatives. The Irrigation Department has a minority interest in the Irrigation Cement Company.

Other ministries

Outside these nine ministries the *Budget Documents* list only two government enterprises, of which one, the organization responsible for fostering Thai classical music in the Department of Fine Arts, hardly comes within the classification. The other, however, the Pharmaceutics factory in the Medical Science Department of the Ministry of Public Health, is a genuine public enterprise.

General observations

It may be seen that there is a certain amount of competition in industrial enterprises between different government ministries. Cement is produced by two independent companies, one financed in part by the Ministry of Finance, the other by the Ministry of National Development, as well as by wholly non-government companies. Gunny bags are produced under the Ministry of Finance and the Ministry of Industry, sugar under the same two ministries and the Ministry of Economic Affairs, and wood products under the Ministry of Defence and the Ministry of Agriculture. Some of the trading organizations are also in competition with one another.

Chart III shows the structure of industries as given in the *Budget Documents*. It will be seen that 134 different enterprises are listed with an investment of about 10,000 million *baht*. Table A.1 shows an analysis from 1962 to 1965 of government capital investment and accumulated profits at the end of the year together with current profits or losses, absolutely, and as a percentage of government capital for twenty large government enterprises. It is arguable, of course, that accumulated profits of government enterprises represent additional government investment, but the figures as given will enable the reader to make his own calculations if he wishes to interpret them in this way. An average figure on these lines is given in the last column. It will be apparent from the table that very little of the revenue earned is returned to the budget. Nearly all is carried forward, and further capital supplied in addition. Loans from outside sources or from government sources are not here included in capital, and the interest is deducted as an expense; but naturally loan finance has some influence when government credit is involved. It must also be emphasized that the degree of monopoly which the government confers varies greatly. It is particularly high in the Forest Industry Organization.

On the whole the government enterprises show a low rate of return except in the gunny bag factories. The return in the Thai Sugar Industry Company Limited is largely due to a subsidy on the price of sugar.

Appendix B

Professional Training and Thai Needs

Adapting professional training for less developed countries

In the text of these studies there has been a good deal of emphasis on manpower planning, and in Chapters 4, 11, and 12 the importance of Thai professional associations and an orientation of the professions to Thailand has been emphasized. Actual changes suggested have been relatively minor ones, on the assumption that in the immediate future the social structure will change relatively little. It has, however, been stressed that those elements in the leadership of Thai society which are not oriented to the West—the military, the businessmen of Chinese origin, the royal family—play an important role in limiting the imitativeness of Thai practice.

This appendix is an exercise in thinking out some of the possible changes in professional structure and training that might be demanded, and might need to be assisted by foreign friends of Thailand, if the relatively imitative attitude to the West came to be questioned, and a structure attempted more appropriate to Thai needs. There are two reasons why professional structure and training are usually copied fairly closely from a foreign model, but neither of these really applies closely to Thailand, and revisions might take place there which would set in motion more difficult, if no less important, changes in other less developed countries.

One reason is that most less developed countries have recently been colonies. It has been politically and psychologically necessary to prove that inhabitants of these can pass the identical (though often irrelevant) educational hurdles as were passed by their colonial masters. The other reason is that the initiators of Western scientific ideas have often set a very high value on mobility of professional people from one country to another, as a safeguard of their own standing. A dozen years after Burma became a sovereign state outside the Commonwealth, recognition of particular Burmese medical degrees by the General Medical Council of the United Kingdom could still be an acute political issue.

Neither of these reasons really applies in Thailand. Thais have never had any need to prove to themselves or to anyone else that they are as capable as Americans or Englishmen. Moreover, the position of professionally trained Thais in the social scale does not depend on their power to transfer elsewhere. Their position depends in the first instance on the

patronage of a loved and respected monarchy, and on the social structure which this monarchy initiated. For the most part they have been sent abroad by others who have been in control and have known—in a general way—what changes they were trying to introduce by training. Those who initiated the training have never had much interest in mobility—if they had they would have been against it.

Nevertheless, even if there is no strong reason for imitating a foreign model, the inertia that leads to this being done is apt to be very strong. Foreign teachers will come with a very strong sense of fitness about particular professional institutions and standards. Deep questioning will be needed if these are to be challenged. Yet if Thailand does seek to modify the structure it will need foreign assistance even in introducing a new one. To understand what kind of change might be needed it is as well to analyse the functions of the professional system. In any one system there are certain criteria of selection at the different stages, producing a recognizable set of characteristics for a doctor or engineer or lawyer by the time the selection and training are completed. There are differences between the systems of different Western countries, partly due to historical circumstances now irrelevant, but partly to differences of function. Once we look seriously at the different functions, it becomes obvious that some of the criteria and some of the standards will be different if a system is being adapted to meet the needs of a less developed country.

University structure and values

Probably the key problem is that of university structure. Thailand is at present engaged in trying to make its universities more like Western ones in their levels of entry and exit and in their criteria of selection. The technicalities of academic recognition often seem to impose some standardization here. We must, however, look deeper than the standards actually set elsewhere for professional selection and training. These depend on an interaction between universities and professions in the local environment; they are set in terms of more fundamental objectives which can be summarized under six headings:

1. Basic intelligence. All universities have some method of selection designed to eliminate all but an upper fraction of the youth of the country, when they are arranged in order of intelligence. The degree of selection differs as between systems, being (for example) more *'élitist'* in England than in America.

2. Professional commitment. All universities use selection and training within the university to build up a professional attitude: the capacity to work steadily without supervision, making competence and success in the profession a dominant motive for behaviour. Some universities try to select people with the appropriate type of character on entry also.

3. Originality and method. All universities try to produce people who have made one or more methods of thinking so much their own that they can think about a given set of facts for themselves and draw their own conclusions. Both originality and training in method are usually aimed at, but most universities are content to pass some students who are weak in one but compensate in the other; different subjects and different universities vary in the relative emphasis on these two.

4. Perfectionism. All universities try in some degree to cultivate a desire for the best and a rejection of the second-rate in any form. There is always a tendency for the best to be defined in terms of objective measurements, even though these may in fact only express a capacity to spend more on equipment or on recent journals; but at its best this perfectionism is an incentive to intense effort and self-criticism.

5. Range of knowledge. There is a noticeable tendency for universities of any given system to set a more or less uniform range of knowledge as the basis for a degree in any subject. In many subjects this is felt to be set roughly at the level that will enable a person to embark on research with enough background to hope to add something perceptible to world knowledge. (Different university systems vary here; for example, in the United States the first supervised research often begins one year after the first degree awarded, in the United Kingdom immediately after the first, in Germany before it; but the standard of degrees themselves is roughly related to research thresholds of world knowledge. Thailand could develop a system related to knowledge needed in Thailand.)

6. Mobility. Arising out of this comparative uniformity there is a tendency for students and staff to be rather mobile as between different universities, and for some resentment to be felt if special preparation is needed to enable a student to pass from a level in one university to a higher one in another.

Appropriate adaptations

In terms of the needs of most less developed countries, the above requirements have been arranged in order of their relative importance. It will be argued below that 1 and 2 should be accentuated more in such countries than in others, 3 and 4 to roughly the same degree, but with some shift of emphasis, while 5 and 6 can be deliberately reduced (with some precautionary steps to avoid some of the ill effects). The justification for this point of view is given in succeeding paragraphs; its implications for policy and teaching techniques follow later.

The need for high ability in graduates in less developed countries is unlikely to be disputed, since they have usually to bear responsibility much younger than elsewhere, and to carry a disproportionate share of the responsibility for development. The need for emphasis on professional commitment arises from the fact that the particular role-playing approach to life which such commitment implies is often a novelty in the culture of a less developed country, and at the same time is most important for development. The fact that in most such countries the proportion who can be given a higher education is still fairly small gives good possibilities of selection on grounds of intelligence and commitment. This is not an argument for deliberate restriction of numbers, but the inevitable restriction should be used to select both intelligent and committed people.

Originality, method, and perfectionism are as important in less developed countries as elsewhere, but they need to be fostered by different methods. They tend to suffer in the existing universities in such countries, not because they are deliberately neglected, but because if too much is attempted without adequate resources these are the things that suffer.

If it is intended that originality should grow out of wide reading, and if books and language skills are in fact inadequate, originality suffers. If

method depends mainly on exercises, and staff are insufficient for marking them, the techniques will be memorized, not used. Perfectionism may easily be a victim if funds and apparatus are old-fashioned and students identify high standards with modernity. Though originality, method, and perfectionism are all of fundamental importance in less developed countries as elsewhere, the significant thing to remember is that they always have been important, and university techniques have changed, and now require more expensive equipment, books, and periodicals than they once did. With a different emphasis on the content of knowledge, these desirable qualities might be cultivated by less expensive means.

Research frontiers and teaching

Making appreciable sacrifices in 5—the range of knowledge taught—and 6—mobility between universities—may seem very drastic. The argument for this sacrifice is that these qualities are much the most costly to produce, and that in the setting of an underdeveloped economy they are relatively less necessary.

It is emphatically not being suggested here that research is unnecessary in less developed countries. It is precisely because research is possible—and can be genuinely interesting—with a more limited background of technical knowledge, that a narrower range of knowledge is here suggested as a background. There is likely in such countries to be a great range of useful information that could be discovered by techniques already well known and requiring only adaptation to the local environment. Such research in itself is unlikely to excite university teachers or make their name, but it is here suggested that the devising of techniques whereby research of this kind could be used to train scientists might well be an interesting and worthwhile task in which reputations could be made.

The urgent need for simple factual information, the lack of research workers and of technical literature in the Thai language, and the absence of emphasis on mobility suggests that it might be possible to reverse the order of some of the B.A. work and some of the M.A. work of more conventional universities, concentrating at the B.A. level on kinds of supervised research which could be done with relatively limited background (such as could be derived from fairly standard texts translated into Thai) and using this research experience, rather than a wider range of scientific knowledge, as the means of training in originality, method, and a regard for exacting standards. It is at least arguable that the resulting graduate would be more useful than the one with a wider knowledge of techniques but no experience of applying them to the discovery of new information.

It would almost certainly be more economical in terms of staff, books, and apparatus to produce such a graduate. Most universities spend a high proportion of their time and resources on teaching the ideas and techniques of the last decade (earlier knowledge is fairly rapidly condensed into more teachable forms, with standard texts and relatively inexpensive apparatus).

There is a good reason for universities to do this. A university is characterized by the combination of teaching and research, because this is the way to teach that knowledge is more a method than a collection; in most universities this combination can be achieved only by bringing

students fairly near to a frontier where their teachers are working. If the sense of excitement, responsibility, and need to adapt can be taught by the unexplored character of the social and physical environment (as in some of the community development work in India), much of this recent information can be omitted. A person who has learnt to think like a scientist can bring himself up to date later on any matter in which he is interested.

Graduates without this latest information could not only teach science in schools and elsewhere, but use it in most of the positions for which trained men are needed in Thailand.

At the level of studying for the B.A. the students could take part in a good deal of work of the field survey type, learning by first assisting, then administering questionnaires or using other fact-finding techniques, then checking or supervising, then interpreting or designing tests, interspersing this with systematic lectures or instruction. The theoretical level reached would be about that of two and a half years of a four-year course, but with a great deal of research experience added. Promotion would be based at least as much on the development of professional standards in the work done as in academic tests. No attempt would be made to use research techniques that were near the frontiers of world knowledge. There would, however, be considerable emphasis on finding out genuinely new information.

Miscellaneous comments

It should be possible to produce graduates in agriculture, economics, public health, and social work by these techniques, but there would probably be other fields that could also be developed. It would be important that students in these fields should be given a great deal of language work, because many of them would be stimulated to read further in their subjects and learn more up-to-date methods at the M.A. level. This language work could, however, concentrate more on exact understanding and depth, because there would be little need for early fluency. Since wide reading in foreign languages would not be expected at the undergraduate level, it might be desirable to concentrate on practical translation.

How would such students fare if they went for further studies overseas? The first point to make is that they would probably flounder a little initially if taking a conventional B.A. degree, but would probably do very well later; on the other hand, their research experience would give them a good start in foreign research degrees, but their theoretical basis would be rather inadequate. It would nevertheless be desirable for them, whether in Thailand or overseas, to take something like an ordinary B.A. honours degree as their M.A. equivalent, after a first degree of this special type, and not to go on to foreign higher degrees at once.

It would, of course, be necessary to ensure that the system of recognition was such that students would have an adequate inducement to take the new type of degree and in some cases to follow it up with something more like a standard honours degree; recognition for the two together would have to be equivalent to a conventional M.A. It is because the Thai Civil Service Commission would have the power to do this if it chose, whereas most less developed countries would encounter far greater pressure from overseas degrees, that Thailand would be a favourable environment for

trying out such a scheme. It would, however, be possible only if there were some reaction against the present high prestige of Western cultural values.

The main reason for suggesting a rearrangement of the system of recruitment and training along these lines is that it would achieve the following results: it would bring in a contact with scientific method as a tool for winning relevant new knowledge at a relatively younger age; it would give relatively more emphasis to professional commitment and relatively less to range of up-to-date knowledge—this would help to correct the tendency to make 'modernity' the only significant value; and it would make those who had to leave university at the B.A. level—the vast majority at present—a great deal more valuable to the ordinary people of Thailand, while not significantly changing the characteristics of those at the higher professional levels.

List of References Cited

Abbott, G. C. (1963). Estimates of the Growth of the West Indies to 1975 (Two Projections). *Social and Economic Studies* **12**(3): 236-45.

Abraham, W. I. (1963). *Report to the Government of Thailand by the National Income Adviser*. Bangkok.

Agriculture, Ministry of (1953). *Thailand Economic Farm Survey*. Bangkok.

—— (1955-). *Agricultural Statistics of Thailand*. Bangkok.

—— (1962). *Summary of the Operations of the Department of Agriculture* (in Thai). Bangkok.

—— (1963). Double Cropping of Rice. Mimeograph. Bangkok.

Anon. (1961). Rice: Thai Export System. *Far Eastern Economic Review* **34**(1): 73-4.

Anthonisz, J. O. (*c.* 1906). *Currency Reform in the Straits Settlements*. London.

Aromin, B. B. (1965). Population and Labour Force Growth in Selected Countries of Asia and the Far East. Paper presented to the U.N. World Population Conference. Belgrade.

Ayal, E. B. (1962). Thailand's Six Year National Economic Development Plan. *Asian Survey* **1**(2): 33-43.

Bank of Thailand (1943-). *Annual Economic Reports*. Bangkok.

—— (1958-). *Monthly Reports*. Bangkok.

—— (1961). *Wiwatanachai Anusorn (Viwat Memorial)*. Bangkok.

—— (1962). *Thi Raluk Wan Khrob Rawb Pi ti Yisib (Twenty-year Memorial)*. Bangkok.

—— (1965a). Commercial Banks in Thailand. Form C.B.1.1. (23 December). Bangkok.

—— (1965b). *Kasem Sri Phayak, Memorial Volume*. Bangkok.

Barbour, E. J. (1964). The Needs of the Thai Civil Service System. USOM Public Administration Division mimeograph. Bangkok.

Bauer, P. T. (1948). *Report on a Visit to the Rubber Growing Smallholdings of Malaya*. Colonial Research Publication No. 1. London.

—— (1957). *Economic Analysis and Policy in Underdeveloped Countries*. Durham.

Benedict, R. (1952). *Thai Culture and Behaviour*. Data Paper No. 4, Cornell South east Asia Program. New York.

Berelson, B. *et al.* (eds.) (1966). *Family Planning and Population Programs: A Review of World Developments*. Chicago.

Blanchard, W. *et al.* (1958). *Thailand: Its People, its Society, its Culture*. New Haven.

Boesch, E. E. (1962). Autoritaet und Leistungsverhalten in Thailand, in *Thailand Studien. Vol XV. Der Schriften des Instituts für Asienkunde in Hamburg*. Frankfurt am Main and Berlin.

Bourgeois-Pichat, J. (1959). An Attempt to Appraise the Accuracy of Demographic Statistics for an Under-developed Country: Thailand. Paper presented to the United Nations Seminar on Evaluation and Utilization of Population Census Data in Latin America. Santiago.

Brown, L. R. (1963). *Agricultural Diversification and Economic Development in Thailand*. U.S.D.A. Foreign Agricultural Report No. 8. Washington D.C.

Budget Bureau (1956-). *Thai Budget Documents* (in Thai). Bangkok.

Caldwell, J. C. (1962). The Population of Malaya. Ph.D. thesis, Australian National University. Canberra.

—— (1963). Fertility Decline and Female Chances of Marriage in Malaya. *Population Studies* **17**(1): 20-32.

Central Statistical Office, *see* National Statistical Office.

Chalie Sindusophon (1965). The Role of the Investment Board in Industrialization. Mimeographed address to the Economists' Luncheon Club. Bangkok.
Chapman, E. C. and Allen, A. C. B. (1965). Internal Migration in Thailand. Paper presented to ANZAAS Conference. Hobart.
Chinnawoot Soonthornsima (1961). The Relation of College Education and Pay Levels in Thai Civil Service. M.A. thesis, Thammasat University. Bangkok.
—— (1964). *A Macroeconomic Model for Economic Development of Thailand.* Ph.D. thesis, University of Michigan, published by Thammasat University. Bangkok.
—— (1965). A Trial Application of a Macroeconomic Model for Sectoral Projection and Planning: A Case of Thailand. Mimeograph. Bangkok.
Chira Phanupongse (1964). Report of the Study of Conditions in the Irrigation Tanks in the Northeast (in Thai). Ministry of National Development mimeograph. Bangkok.
Chula Chakrabongse (1960). *Lords of Life.* New York.
Chulalongkorn University (1960). *Chulalongkorn University Economic Development Plan, 1961-66* (in Thai). Bangkok.
Collins, C. (1951). *Public Administration in Ceylon.* London.
Colombo Plan Consultative Committee (1964). *Thirteenth Annual Report.* London.
Comber, L. F. (1959). *Chinese Secret Societies in Malaya.* New York.
Commonwealth Economic Committee (1952-). *Grain Crops.* London.
Das Gupta, A. and Sen Gupta, S. (1965). Population Projections for Thailand and a Study of the Elements and Criteria. Paper presented to the U.N. World Population Conference. Belgrade.
—— *et al.* (1965). Population perspective of Thailand. *Sankhya: The Indian Journal of Statistics* (Ser. B) **27** (Pts 1 & 2): 1-46.
ECAFE (1959). Population Trends and Related Problems of Economic Development. *Economic Bulletin for Asia and the Far East* **10**(1): 1-45.
—— (1964a). Review of Long-Term Macro-Economic Projections for Selected Countries in the ECAFE Region. Conference of Asian Economic Planners, E/CN.CAEP. 2/L. 4/Add. 1. Bangkok.
—— (1964b). Trends and Patterns of Trade of the Developing Countries in the ECAFE Region, 1950-1961. *Economic Bulletin for Asia and the Far East* **15**(1): 1-15.
Embree, J. F. (1950). Thailand—A Loosely Structured Social System. *American Anthropologist* **52**: 181-93.
Evers, H. D. (1964). Higher Civil Servants in Thailand: Social Mobility, Overseas Education, and Attitudes towards their own Cultural Tradition. Mimeograph. Freiburg.
FAO (1948). *Report of the Rice Meeting, Baguio, Philippines.* Washington D.C.
—— (1950). *Production Yearbook.* Rome.
—— (1950-). *Monthly Bulletins of Agricultural Economics and Statistics.* Rome.
—— (1951). *Yearbook of FAO Statistics 1950.* Vol. 4, Pts 1 and 2. Washington D.C.
—— (1952). *Commodity Reports: Rice.* FAO/52/12.8353. Rome.
—— (1962). *Report of the Sixth Session of the Consultative Sub-Committee on the Economic Aspects of Rice.* CCP/Rice/62/15. Rome.
Finance, Ministry of (1965). *Customs Schedule.* Department of Customs. Bangkok.
Fisher, J. F. (1965a). Observations Concerning a Classification System of the Civil Service of Thailand. USOM mimeograph. Bangkok.
—— (1965b). The Thai Civil Service. USOM mimeograph. Bangkok.
FitzGerald, C. P. (1965). *The Third China: The Chinese Communities of South-East Asia.* Melbourne.
Freeman, H. (1964). *The Role of Agricultural Education in the Economic Development of Thailand.* Stanford.
Gajewski. P. (1965a). The 1963 Census of Agriculture and the National Income Accounts. Mimeograph. Bangkok.
—— (1965b). Preliminary Report and Recommendations: Current Consumption Expenditure. Mimeograph. Bangkok.
—— (1965c). Preliminary Report and Recommendations: National Product by Industry. Mimeograph. Bangkok.
Gille, H. (1964). National Seminar on Population Problems of Thailand: Conclusions of the Seminar, pp. 1-4 in The Population Council, *Studies in Family Planning* No. 4. New York.

—— and Thip Chalothorn (1963). The Demographic Outlook of Thailand and Some Implications. Paper presented to the National Seminar on the Population of Thailand (revised). Bangkok.

Gould, J. S. (1952). Preliminary Estimates of the Gross Geographical Product and Domestic National Income of Thailand 1938/39, 1946-1950. Mimeograph, as presented to National Economic Council. Bangkok.

Govt of Thailand (1949-). *Royal Thai Government Gazettes* (English version). Bangkok.

—— (1956). Budgetary Method Act, 27th November. *Royal Thai Government Gazette* (English version). Bangkok.

—— (1965). *Thailand: Official Yearbook, 1964.* Bangkok.

Graham, W. A. (1924). *Siam: A Handbook of Practical, Commercial, and Political Information.* 2 volumes. London.

Greaves, I. C. (1954). *Colonial Monetary Conditions.* H.M.S.O. Colonial Research Studies No. 10. London.

Gullick, J. M. (1957-8). The Malay Administrative Service. *Merdeka Outlook* (later known as *The New Malayan*). Singapore.

Hamburger, L. (1965). Fragmentierte Gesellschaft, die Struktur der Thai-Familie. *Kölner Zeitschrift für Soziologie und Sozial-psychologie* **17**: 49-72.

Hanks, J. R. (1963). *Maternity and its Rituals in Bang Chan.* Data Paper No. 51, Cornell Southeast Asia Program. New York.

Hanks, L. M., jr (1962). Merit and Power in the Thai Social Order. *American Anthropologist* **64**: 1247-61.

—— and Hanks, J. R. (1964). Siamese Thai, in Lebar, F.M., Hickey, G. C., and Musgrave, J. K., *Ethnic Groups of Mainland Southeast Asia.* New Haven.

Harrison, B. (1954). *South-East Asia: A Short History.* London.

Hunter, G. (*c.* 1963). Thailand Manpower Survey for Thai Government. Mimeographed report for UNESCO. Paris.

I.B.R.D. (1946-). *Annual Reports.* Washington D.C.

—— (1959). *A Public Development Program for Thailand.* Baltimore.

—— (1965). Report for the October 1965 Meeting in Washington D.C. Consultative Group on Thailand (Thai delegation) mimeograph. Bangkok.

I.F.C.T. (Industries Finance Corporation of Thailand) (1964). *Annual Report.* Bangkok.

I.M.F. (1948-). *International Financial Statistics.* Washington D.C.

—— (1952-). *Balance of Payments Yearbooks.* Washington D.C.

Industrial Promotion, Dept of (1959). *Annual Report* (in Thai). Bangkok.

Industry, Ministry of (1949). *Annual Report* (in Thai). Bangkok.

Ingram, J. C. (1955). *Economic Change in Thailand since 1850.* Stanford.

Investment Board (1959a). *Brief Information Concerning Investment in Thailand.* Bangkok.

—— (1959b). *Expanding Private Investment for Thailand's Economic Growth.* U.S. Investment Survey Team to Thailand. Bangkok.

—— (1959c). *Investment in Thailand.* Bangkok.

—— (1966). *Promotion of Industrial Investment Act (1962) as amended 1965 and Ministerial Regulations and Announcements.* Bangkok.

Irrigation, Dept of (n.d.). Mae Faek Project. Leaflet. Bangkok.

—— (1957). *Memorial Volume on the Occasion of the Opening of the Chao Phaya Dam.* Bangkok.

Janlekha, Kamol Odd (1955). A study of the Economy of a Rice Growing Village in Central Thailand. Ph.D. thesis, Cornell University. Ithaca.

Jefferson, M. (1939). The Law of the Primate City. *The Geographical Review* **29**(2): 226-32.

Kasem Suwanagul (1962). The Civil Service of Thailand. Ph.D. thesis, New York University. New York.

Kasem Udyanin and Smith, R. D. (1954). *The Public Service in Thailand.* International Institute of Administrative Sciences. Brussels.

Kaufman, H. K. (1960). *Bangkhuad: A Community Study in Thailand.* New York.

Keyes, C. F. (1964). Status and Rank in a Thai-Lao Village. Cornell University. New York.

Kingshill, K. (1960). *Ku Daeng, the Red Tomb: A Village Study in Northern Thailand.* Bangkok.

Kohls, R. L. (1961). *Marketing of Agricultural Products.* 2nd ed. New York.
Krit Samapuddhi (1957). *The Forests of Thailand and Forestry Programs.* Forestry Department. Bangkok.
Landon, K. P. (1939). *Siam in Transition.* Chicago.
—— (1949). Siam, pp. 246-72 in Mills, L. A. and associates, *The New World of Southeast Asia.* Minneapolis.
Lee, S. Y. (1963). Recent Developments in Thailand's Maize Trade. *Bangkok Bank Monthly Review,* October: 120-33.
—— (1966). The Development of Commercial Banking in Singapore and the States of Malaya. *Malayan Economic Review* **11**(1): 84-100.
Lipset, S. M. and Bendix, R. (1959). Social Mobility in Industrial Society. Berkeley.
Long, J. F. *et al.* (1963). *Economic and Social Conditions Among Farmers in Changwat Khonkaen.* Bangkok.
McCusker, H. F. (1965). Relationship between Population and Economic and Social Development. Mimeograph, private communication. Bangkok.
Marsh, H. W. and Barbour, E. J. (1961). Public Personnel Management in Thailand. International Co-operation Administration mimeograph. Bangkok.
Meek, P. (1961). Malaya: A Study of Governmental Response to the Korean War Boom, in Silcock, T. H., *Readings in Malayan Economics.* Pt 2. Singapore.
Michaely, M. (1962). *Concentration in International Trade.* Amsterdam.
Mosel, J. N. (1957). Thai Administrative Behavior, in Siffin, W. J. (ed.), *Toward the Comparative Study of Public Administration.* Bloomington.
Mousny, A. (1964). *The Economy of Thailand.* Bangkok.
Muni Mahasandona Vejyant Rangsarit (1965). Small Industries Promotion in Thailand. Ministry of Industry mimeograph. Bangkok.
National Development, Ministry of (1964a). *The Co-operative Movement in Thailand.* Bangkok.
—— (1964b). *History and Structure of the Ministry of National Development* (in Thai). Bangkok.
National Statistical Office (n.d.a). *Household Expenditure Surveys, 1962-63.* Bangkok.
—— (n.d.b). *Thailand Population Census, 1960 (Whole Kingdom).* Bangkok.
—— (1956-). *Statistical Yearbooks of Thailand.* Bangkok.
—— (1957a). *1954 Demographic and Economic Survey.* Bangkok.
—— (1957b). *Final Report of the Demographic and Economic Survey, 1954.* Vol. 1. *General Information and Tables.* Pt 2. Bangkok.
—— (1961-2). *Thailand Population Census, 1960* (Changwat series, 71 volumes). Bangkok.
—— (1964). *Advance Report, Household Expenditure Survey, B.E. 2505, Northeast Region.* Bangkok.
—— (1965). *Census of Agriculture 1963* (in Thai and English). Bangkok.
N.E.D.B. (n.d.). *Southern Region Development Plan* (in Thai). Bangkok.
—— (1962). *The Government of Thailand, The Northeast Development Plan 1962-1966.* Bangkok.
—— (1963). *National Expenditure, 1961.* Bangkok.
—— (1964a). *The National Economic Development Plan, 1961-1966. Second Phase: 1964-1966.* Bangkok.
—— (1964b). *National Income Statistics of Thailand.* Bangkok.
—— (1964c). Review of Progress During Fiscal Year 1964. Mimeograph. Bangkok.
—— (1965a). *Monthly Bulletin* (August). Bangkok.
—— (1965b). Performance and Results of Development During Financial Year (1964-65). Mimeograph. Bangkok.
—— (1965c). *Regional Gross Domestic Product, 1960-63.* National Income Office. Bangkok.
—— (1966a). *National Income of Thailand 1957-65.* Bangkok.
—— (1966b). *Performance Evaluation of Development in Thailand for 1965.* Bangkok.
—— (1966c). Preliminary Estimates, National Income of Thailand. Mimeograph. Bangkok.
Pantum Thisyamondol, Virach Arromdee, and Long, M. F. (1963). *Agricultural Credit in Thailand.* Bangkok.
Pendleton, R. L. *et al.* (1962). *Thailand: Aspects of Landscape and Life.* New York.

Phaisan Chaimongkhon (1963). Panha lae Nayobai Kan-ha-ngoen ma chai jai tam Phaen Phatana Kancharoen Sethakid khawng Prathet Thai (Problems and Policies of Financing the Development Plan for the Progress of the Economy of Thailand). M.A. thesis, Chulalongkorn University. Bangkok.

Pla Thawng (1964). Sarakhadi, a series of articles on political parties in Thailand in *Siam Rath,* beginning 1 August (in Thai). Subsequently re-issued as a book. Bangkok.

Platenius, H. (1963). The Northeast of Thailand, Its Problems and Potentialities. N.E.D.B. mimeograph. Bangkok.

Population Index (1964). **30**(4): 552.

Pote Sarasin, H. E. (1966). An Afterthought on Investment Promotion in Thailand. Mimeographed address to Rotary Club of Bangkok. Bangkok.

Prayad Buranasiri and Snoh Unakul (1965). Obstacles to Effective Planning Encountered in the Thai Experience. Mimeograph. Bangkok.

Pridi Phanomyong (1947). *Khao Khrawng Sethakid* (The Economic Plan). Yellow Book edition. Bangkok.

Puey Ungphakorn (1964). *Speeches, Articles and Addresses.* Bangkok.

—— (1965). Address at the Annual Dinner of the Thai Bankers' Association. Mimeograph. Bangkok.

—— and Suparb Yossundara (1955). *Sethakid Haeng Prathet Thai* (The Economy of Thailand). Bangkok.

Purcell, V. (1951). *The Chinese in Southeast Asia.* London.

Raksa Charoenaksorn (1965). Kan-khuab-khum Thanakhan Phanit nai Prathet Thai (The Control of Commercial Banks in Thailand). M.A. thesis, Chulalongkorn University. Bangkok.

Riggs, F. W. (1962). Interest and Clientele Groups, in Sutton, J. L. (ed.), *Problems of Politics and Administration in Thailand.* Bloomington.

—— (1963). Bureaucrats and Political Development, in La Palombara, J. (ed.), *Bureaucracy and Political Development.* Princeton.

—— (1964). A Model for the Study of Thai Society. *Thai Journal of Public Administration,* April: 116-19.

Seni Pramoj, M. R. (1964). Notes for Seminar Discussion on Political Development. Thammasat University mimeograph. Bangkok.

Sharp, L. *et al.* (1953). *Siamese Rice Village: A Preliminary Study of Bang Chan 1948-1949.* Bangkok.

Sherwood, P. W. (1956). Export Duties and the National Income Accounts. *Economic Journal* **66**: 73-83.

Silcock, T. H. and Fisk, E. K. (eds.) (1963). *Political Economy of Independent Malaya.* Canberra.

Sithi-Amnuai, P. (1964). *Finance and Banking in Thailand.* Bangkok.

Skinner, G. W. (1957). *Chinese Society in Thailand.* New York.

—— (1958). *Leadership and Power in the Chinese Community of Thailand.* New York.

Snoh Unakul (1965). Thai Economic Planning (in Thai). Mimeographed paper prepared for Thammasat University Seminar on National Development. Bangkok.

Sommai Huntrakun (ed.) (1963). *Kasem Lamsam Memorial Volume,* section on Banking Within the Nation (in Thai). Privately published by the Lamsam family. Bangkok.

Sternstein, L. (1965). A Critique of Thai Population Data. *Pacific Viewpoint* **6**(1): 15-38.

Sundrum, R. M. and Daroesman, R. (1960). *Education and Employment in Thailand.* Kuala Lumpur.

Tan, E. L. (1961). The Chinese Banks Incorporated in Singapore and the Federation of Malaya, in Silcock, T. H., *Readings in Malayan Economics.* Singapore.

Textor, R. B. (1961). *From Peasant to Pedicab Driver.* New Haven.

Thawat Mokarapong (1962). The June Revolution in 1932 in Thailand: A Study in Political Behaviour. Ph.D. thesis, Indiana University. Bloomington.

Thio, E. (1956). British Policy in the Malay Peninsula 1880-1909. Ph.D. thesis, London University. London.

Thompson, V. (1947). *Labor Problems in Southeast Asia.* London.

T'ien, J-K. (1957). *The Chinese of Sarawak.* New York.

Tilman, R. O. (1964). *Bureaucratic Transition in Malaya.* Durham.
Tongkum Phoosub (1964). An Artist Returns. *Bangkok World Sunday Supplement* (1 November). Bangkok.
U.N. (1948-). *Demographic Yearbooks.* New York.
—— (1955). *Manuals on Methods of Estimating Population. Manual II: Methods of Appraisal of Quality of Basic Data for Population Estimates.* Population Study No. 23. New York.
—— (1958). *Future Population Estimates by Sex and Age. Report III: The Population of South-East Asia (including Ceylon and China: Taiwan) 1950-1980.* Department of Economic and Social Affairs. New York.
—— (1961). *Economic Survey of Asia and the Far East, 1960.* Bangkok.
—— (1962). Economic and Social Council. *Survey of National Accounting Practice.* E/CN.3/291. New York.
—— (1963). *Country Statement for Thailand.* Asian Population Conference, Delhi.
—— (1964). A System of National Accounts and Supporting Tables, in *Studies in Methods* (Ser. F), 2nd ed. (rev.). New York.
—— (1965). *Economic Survey of Asia and the Far East, 1964.* Bangkok.
Udhis Narkswasdi (1963). *Agricultural Credit Systems in Certain Countries.* Bangkhaen.
Uexkuell, H. R. von (1964). Obstacles to Using Fertilisers for Rice in S.E. Asia. Memorandum to the Rice Department, taken from articles in *World Crops,* March: 70-5.
Unger, L. (1944) The Chinese in Southeast Asia. *The Geographical Review* **34**(2): 196-217.
Usher, D. (1963). The Transport Bias in Comparisons of National Income. *Economica* **30**: 140-58.
—— (1965). The Economics of the Rice Premium. Mimeograph. Bangkok.
—— (1966). Income as a Measure of Productivity: Alternative Comparisons of Agricultural and Non-Agricultural Productivity in Thailand. *Economica* **33**: 430-41.
—— (in press). Thai Interest Rates. *Journal of Development Studies.*
USOM/Thailand (1962). *Thai-American Economic and Technical Co-operation.* Bangkok.
—— (1963). *Preliminary Assessment of Education and Human Resources in Thailand.* Vol. 1, *Report of the Joint Task Force.* Bangkok.
Vella, W. F. (1955). *The Impact of the West on Government in Thailand.* Berkeley and Los Angeles.
Wales, H. G. Q. (1965). *Ancient Siamese Government and Administration.* New York.
Wells, K. E. (1960). *Thai Buddhism, Its Rites and Activities.* 2nd ed. Bangkok.
Wilson, D. A. (1962). *Politics in Thailand.* New York.
Winich Asavasena *et al.* (1965). Family Planning in Thailand: Its Development and the Achievement. Paper presented to the International Conference on Family Planning Programs. Geneva. Later published in Berelson, B., *et al.* (eds.), *Family Planning and Population Programs.* Chicago.
'Winyachon' (1965). *Aphiprai Rang Ratthamanun.* Bangkok.
Wong, L-K. (1965). *The Malayan Tin Industry to 1914.* Tucson.
Wynne, M. L. (1940). *Triad and Tabut.* Singapore.
Yang, S. C. (1957). *A Multiple Exchange Rate System.* Madison.
Young, J. E. de (1955). *Village Life in Modern Thailand.* Berkeley and Los Angeles.
Zimmerman, C. C. (1931). *Siam Rural Economic Survey, 1930-31.* Bangkok.

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