CHAPTER 5
THE NEW MIGRATION: FEMALE WORKERS IN ELECTRONICS FACTORIES IN FREE TRADE ZONES

5.1 INTRODUCTION

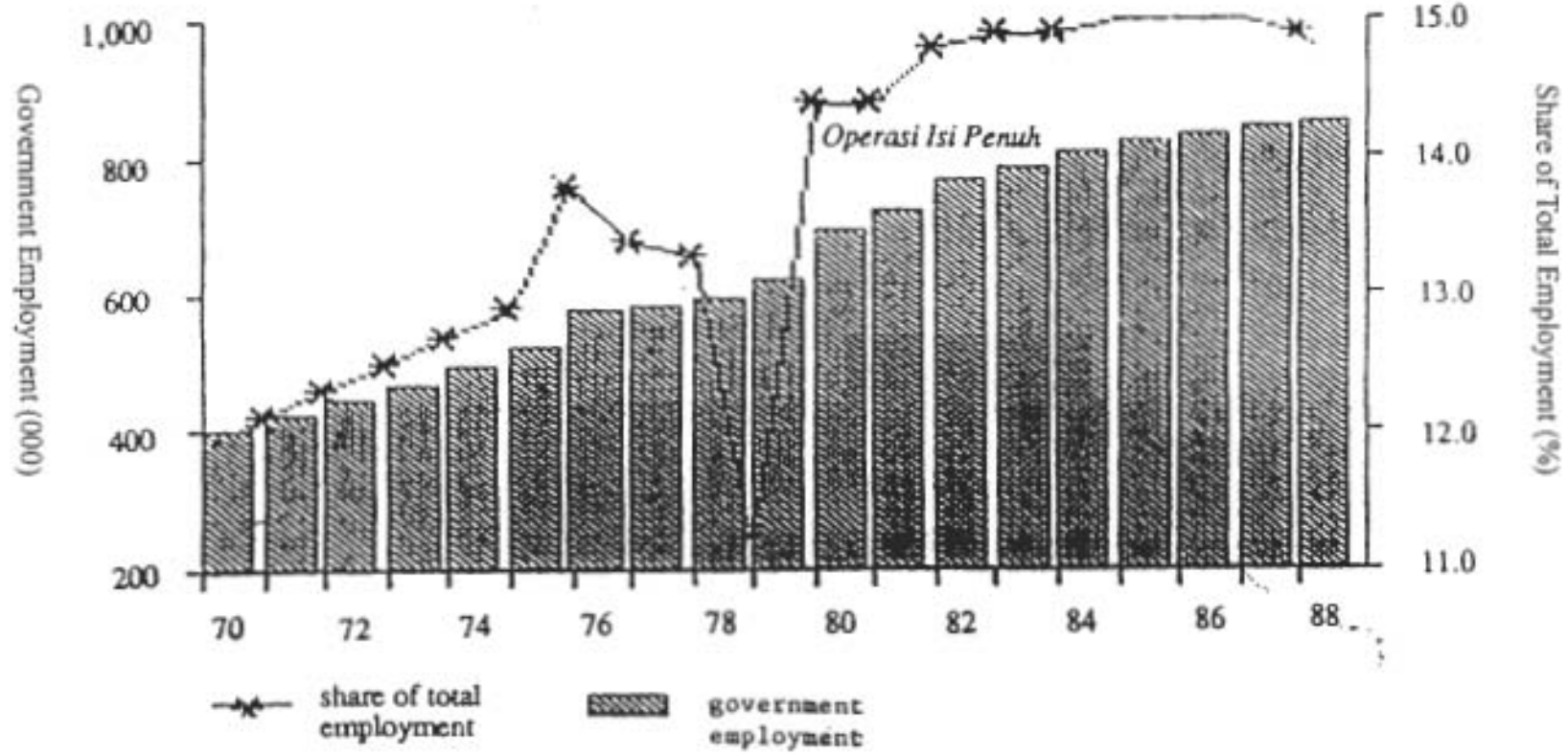
This chapter deals with a new era of migration in Peninsular Malaysia, the third wave of urbanization. Migration from the rural areas really started to increase in the late 1970s, in response to expanding job opportunities in both the public and private sectors in urban areas. This was driven by the policies of the NEP which had to succeed. Not only did the government pour massive amounts of money into rural areas to both *in situ* development and land resettlement schemes, thus producing a new cohort of youths bound for towns, but at the urban end, had to create jobs for these youths. This was done in two ways.

The first was the unprecedented expansion of the government sector, mostly in the mid-1970s and early 1980s, (especially during the *Isi Penuh* Exercise – fill all posts in 1980) to be stopped abruptly by the recession and a consequent job freeze in 1983 (Figure 5.1). The total number of employees in the public sector more than doubled between 1980 to 1986. In terms of total employment, its share had increased from 11.9 per cent in 1970 to 15 per cent in 1986. While total employment grew by 67 per cent, the public sector grew by 110 per cent (Kamal *et al.*, 1987). The second was the development of industrial estates, in particular FTZs for export-oriented, labour-intensive manufacturing industries such as electronics and textiles. The government wooed these companies with generous tax incentives.

This coincided with a redeployment of manufacturing industries from the core to the periphery of the world economy as part of the internationalization of productive activity and the new international division of labour (NIDL) which emerged during the mid-1960s to 1970s. The growth of these off-shore activities of transnational corporations (TNCs) is based on the exploitation of a cheap and docile labour – that of females. Here, we see the conjuncture of two forces, that of the national in the form of the NEP and that of the global, as exemplified in the NIDL for which the TNCs are the principal actors.

To return to our earlier argument, a meaningful study of migration must accept that the phenomenon is a product of the socio-economic and political structures, and to

Figure 5.1
Malaysia: Public Sector Employment, 1970-88



Source: Ministry of Finance, Economic Report, 1979/80 to 1985/86.

capture these processes, we have to analyze how the international forces are mediated by the national and regional policies which, in turn affect villages and individuals through the household. This chapter will also discuss why Penang state developed FTZs – thus making the marriage complete. What was left to make this arrangement complete was the necessary workers. Certain demographic conditions in the periphery led to the emergence of a vast number of rural workers entering the labour market. They were the product of the previous decade of high fertility and unprecedented decline in infant mortality caused by the health revolution in Third World countries.

This chapter examines this "new" migration of rural Malay females who make up the third "wave" of urbanization, spurred on by the NEP, as discussed in Chapter 2. The breaking of the two-circuits was hardly evident in the migration streams between 1965-70. In fact the low rural-urban migration and limited penetration by Malays into other industrial sectors, other than services, highlighted the potentially explosive situation which culminated in the racial riots of 1969. During the Simpang Empat Mobility and Migration Surveys of 1976-77, an inadequate dissolution of the circuit was occurring. But the rural case study showed that in the main, the two-circuit system was still entrenched. It was only towards the end of the 1970s and the beginning of the 1980s, that the new migration of female workers to FTZs gave hope to the breaking of the two-circuits. It was certainly an unusual stream. It did not consist of men but of women. It did not only absorb urban workers but mostly rural and, therefore, Malay. For once, the Malays were able to break out of their traditional escape route by leaving the rural areas for urban jobs in the government service. The crucial question then was: is this migration temporary, in view of the reputed footloose nature of the TNCs at that time (see for example, Frobel *et al.*, 1980). Besides, the international demand for electronic products like semiconductors had a boom-and-burst cycle which led to a series of retrenchments of these migrants. If, indeed, the migration is temporary, then the emergence of a Malay working class described by the proletarianization process may well be stifled.

In contrast to the previous chapter which studied migrants at the source-end, tracing a few to urban areas, this chapter is on the urban or destination-end. To understand the whole process, the next chapter will trace urban migrants at the destination back to their source. Another important point to stress here is that an analysis which locates the migration processes in a specific area, i.e. the FTZ, in an urban context, i.e. Penang, is meaningful only if all these processes are related to the whole region and how that in turn is affected by national and international forces. This

"embeddedness" of the FTZ in relation to its surrounding region, in their wider structural contexts, becomes an analysis of "territorial unit" (see Henderson, 1989).

The first section gives a background to Penang's industrial development, followed by the major employment characteristics of the FTZ. This sets the backdrop to the second part which comprise the bulk of this chapter. The advent of female labour migration with the industrialization process began in the 1970s and 1980s and can be divided into three phases. The first phase, in the early 1980s examines the characteristics of these female migrants, such as their family background in the rural villages, their household attributes and their own socio-economic features. They are compared to another group of workers of the same sex and age, those of the urban informal sector in order that we can understand the basic differences between the emerging new labour force, and the old established one (see Appendix C for a discussion of the rationale behind this choice, and the nature and location of the field work). The second phase which was in the first half of the 1980s involves the recession and its impact on these female migrant workers bringing into focus their vulnerability, the narrowness of the Malaysian economy and the importance of the continuing essential rural household links of the girls. The next section, the third phase is marked by the economic recovery after 1985, reflecting the changing conditions of work of the now more experienced and fairly integrated urban female workers.

This chapter traces the importance of this industrialization experience on female migrant labour in the three phases described. Implicit in this discussion are the issues of proletarianization (are these rural-urban migrants permanent and will they constitute the new Malay working class), migrants' links with, and contribution to their rural households, the permanency of such TNC activities, and the experience of this type of industrialization, with limited linkages to the local economy, as an option for economic development. Some of these issues will be introduced in this chapter to be developed further in Chapter 6.

5.2 PENANG'S INDUSTRIAL DEVELOPMENT

Penang had limited choices. From an essentially fishing and *padi* economy, it became a thriving free port under the aegis of the British. It flourished as a free port, until the transfer of the headquarters of the Straits Settlement from Penang to Singapore. This decline was further aggravated by Confrontation with Indonesia in 1963-66, and rising nationalism of neighbouring countries causing a drop in its

trade. The death knell sounded with the withdrawal of free port status by the Federal government and the concomitant development of Port Kelang to serve the conurbation of Kuala Lumpur. The economy was in the doldrums. With hardly any manufacturing industry, a struggling agricultural sector, unemployment was in the region of 15 per cent and outmigration became endemic. The only way out was an aggressive industrialization strategy (see Kamal and Young, 1986).

The impact of the industrialization strategy on Penang was tremendous. The most immediate was the large number of factories operating in the industrial estates and the FTZs (Figure 5.2). The first two of eight FTZs in Malaysia were gazetted in Penang in 1972. The number of factories grew from 36 in 1971 to 503 in 1990, and employment from 4,500 to 115,389 for the same period (Figure 5.3). The impact of the world economy, in the form of recessions is clear from the 1976-77 and 1984-86 low percentage change in number of factories and employment. As is normally the pattern of the sensitivity of the electronics sector, the slump hit this sector before the rest of the economy.

This industrial development resulted in rapid urbanization, centred around the main conurbation of George Town-Butterworth, spreading towards the new township among the eastern coast of the island. Industrialization transformed Penang into the second most important metropolitan centre after the Klang Valley (which incorporates the Federal capital, Kuala Lumpur). As a result, other major economic changes were also occurring in Penang. Agriculture (including forestry and fishing) declined dramatically from 14.6 per cent of GDP in 1971 to 5.5 per cent in 1981 and to 4.1 per cent in 1985. In contrast, manufacturing recorded an increase from 21 per cent in 1971 (reflecting a pre-existing industrial work force in the import-substitution and small-scale sector) to 38.2 per cent in 1981.

In demographic terms, these structural changes produced fairly dramatic changes in some of the usual indicators. For over 30 years, Penang had experienced outmigration of its population. By the 1980s, although it was still a net outmigration state it had a high migration turnover. This meant that while female migrants were flocking in, the more educated males were drawn to the more diversified economy of the Klang Valley (Malaysia, Government of, 1986: 176). The labour force participation rate increased from 35 per cent in 1970 to 49.6 per cent in 1980, and unemployment was reduced from 15 per cent to 5.5 per cent.

Figure 5.2
Penang: Number of Factories in PDC Industrial Areas, 1971-90

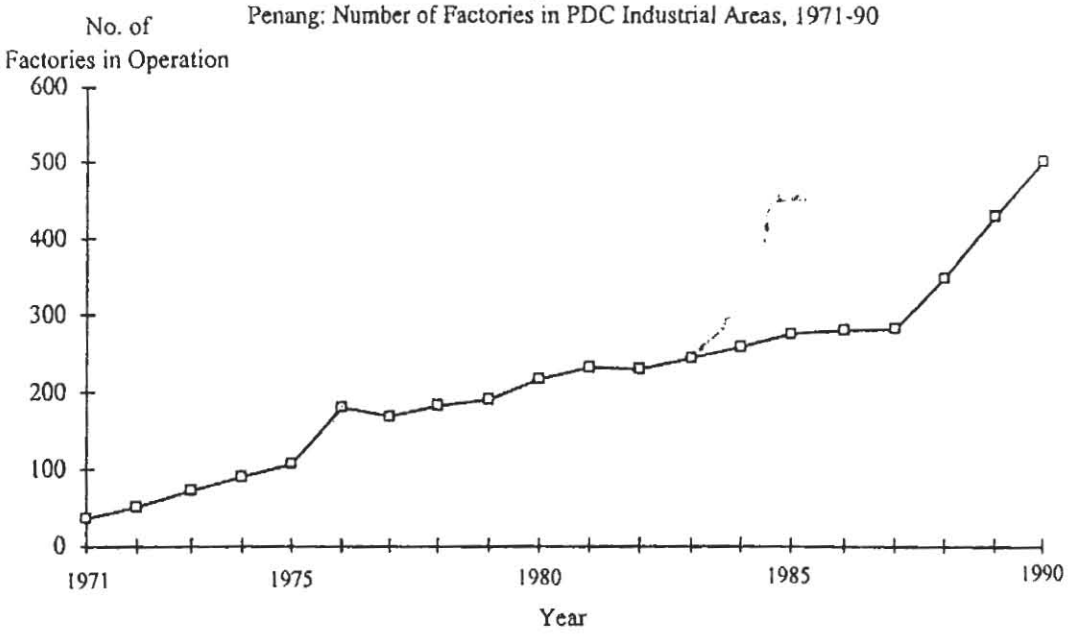


Figure 5.3
Penang: Number Employed in PDC Industrial Areas, 1971-90

Source: Penang Development Corporation, unpublished data, 1971-90.

Table 5.1 shows the employment characteristics in the FTZs from 1981-90. Several points may be highlighted here. In terms of ethnicity, the *Bumiputra* component has increased significantly. The unskilled workers category has risen substantially from 25 per cent in 1985 to 39 per cent in 1990.

Table 5.1
Penang: Employment Characteristics in the Penang Development Corporation Industrial Estates and FTZs, 1981-90

	1981	1985	1986	1987	1988	1989	1990
Total Employees	54,693	59,625	54,854	58,867	74,502	100,953	115,389
Ethnicity (%)							
Expatriate	-	0.4	0.3	0.3	0.3	0.4	0.4
Bumiputra	44.6	45.3	44.3	44.7	47.8	52.2	54.9
Non-*Bumiputra*	55.4	54.3	55.4	54.9	51.9	47.4	44.7
Sex (%)							
Male	n.a.	39.8	39.6	38.7	35.7	34.9	36.8
Female	n.a.	60.2	60.4	61.3	64.3	65.1	63.2
Category of Employment of Factory Workers (%)							
Skilled	n.a.	37.8	37.7	34.0	39.9	37.6	34.8
Semi-skilled	n.a.	5.9	6.3	7.0	-	-	-
Unskilled	n.a.	25.0	26.1	29.3	32.2	36.9	38.9

Source: Penang Development Corporation, unpublished data, 1991.
Note: n.a. - Not Available

Three important features concerning the structure of the labour force should be highlighted. The first is the sex bias towards female workers; the overall female-male ratio was almost 2:1. The predominance of females was due to the fact that electronics/electrical, and textiles/garments industries employed a disproportionately large number of females (78.1 per cent and 65.1 per cent, respectively) compared to males. This pattern is typical of such industries in other Third World countries as well. This is more obvious when only the electronics industry is studied. The growth in the electronics factories, and sex distribution in employment between 1980-87 is displayed in Table 5.2. In the 1970s employment grew steadily but was affected in the mid-1980s by automation, the practice of Just-in-Time (JIT) techniques and work recomposition. The decline in 1982 and 1985-86 was caused by the economic recessions. The high proportion of females is due to the importance of line operations where overwhelmingly females are employed. The percentage is declining owing to the greater displacement of line workers as a

consequence of automation (Kamal and Young, 1989) and labour-saving flexible production techniques (Rajah, 1989: 69).

The second important feature is the ethnicity of the workers in the FTZs where 46 per cent were *Bumiputra*. The significance of this is further emphasized when it is realized that urban Penang is overwhelmingly Chinese. The recruitment of *Bumiputras* is clearly in keeping with the aims of the NEP. In contrast to the Chinese-dominated small-scale establishments in the informal sector, the hiring policy in the TNCs were more easily enforced and monitored. As will be shown in the next section, the major source of the *Bumiputra* workforce in the FTZs was from rural-urban migration, consisting mainly of young female school-leavers from the neighbouring states of Kedah and Perak.

Table 5.2
Penang: Growth of Electronics Factories and Employment by Sex, 1980-86

Year	No. of Firms	Employment	Mean Firm Employment	% of Female
1980	25	24,919	997	80.4
1981	29	24,504	845	79.6
1982	27	24,446	905	78.1
1983	28	26,692	953	78.6
1984	38	30,474	802	80.2
1985	38	26,259	691	76.8
1986	36	25,046	696	75.9
1987	38	23,368	615	76.1

Source: Penang Development Corporation, unpublished data, 1980-87.

A third aspect of the new labour force was that nearly half of the factory workers were in the skilled or semi-skilled labour category. But this was unequally distributed between different industries. For example, the percentage of unskilled labour in the total workforce for rubber-based industries was 54.1 per cent, while for the electronics/electrical it was 20.1 per cent, and for textiles, 15.8 per cent.

5.3 FEMALE LABOUR MIGRATION IN THE 1970s: PENANG'S YOUNG URBAN WORKERS[1]

5.3.1 Survey of Young Workers

The emergence of the new labour force resulted from a massive rural-urban exodus of young female school-leavers or school drop-outs. The impact of this development has led to a contradictory phenomenon: while it has contributed to a radical transformation of the Penang economy over the past 20 years, it had at the same time created a significantly youthful workforce in the formal sector which contrasted with the effect on the labour segment in the traditional informal sector. The identification of these two segments of the youthful labour force reflected the pattern of uneven development in Malaysia, and the basic differentiations produced by the particular urban industrialization process taking place in Penang.

Who are these new migrants? What are the socio-demographic and economic characteristics of this new labour force compared to the more traditional one in this particular phase of industrial development in Malaysia? Already, we know these workers constitute the new era of labour force formation in Malaysia. They are different from the migrants of the earlier waves of urbanization discussed in Chapter 2. They were a small group, comprising the most educated in the villages by virtue of their being trained in specially set-up urban schools and remaining in urban areas in government jobs. Migrants in the other urban stream, the type that McGee (1969) studied in Kampung Bahru, Kuala Lumpur were the opposite, most were less educated, with one to two years of secondary schooling who came to the city with high expectations, only to find they were unable to get formal work, thus, turning to petty trading. This group of young female rural-urban migrants are, therefore, expected to be very different from the urban informal sector workers who, as descendants of the immigrant Chinese, now comprise the bulk of the Chinese urban poor.[2] This group, with minimal schooling, found it difficult to penetrate the formal sector.

---

[1] Some of this section is drawn from the IDRC Participatory Urban Services Project, Final Report on Young Workers and Urban Services: A Case Study of Penang, Malaysia by Kamal *et al.*, 1985. The author was solely responsible for the design of the questionnaire, the analysis and write-up on the socio-demographic and economic characteristics of the female migrants and the history of Penang's economic development.

[2] It is always the "miracle" rags-to-riches success story that is publicized in so many immigrant societies. In fact, the majority of immigrants and their descendants remain in the lowest rung of the economic ladder.

5.3.2 Migration and Mobility Patterns of Young Workers

In this study, migration is defined as lifetime interstate migrants (persons who were born in a state other than Penang) and previous residence interstate migrants (persons whose last state of residence was outside Penang). There are many conceptual and technical problems associated with these two definitions (see Young, 1978: 57-9; Appendix A) but they are commonly used as they are fairly universal, especially from census-derived definitions.

The third wave of urbanization in Malaysia, an impact of the NEP consisted basically of a Malay rural-urban migration stream. Thus, among the young workers in the formal sector 53.6 per cent were Malays. In sharp contrast, the proportion was 0.5 per cent in the traditional sector. In 1970, only 4.8 per cent of Malays lived in urban areas. By 1980, this had increased to 21.3 per cent. The Malays also experienced the fastest rate of urbanization, at 6.7 per cent per annum compared to 3.7 per cent per annum recorded by the Chinese for the same period (Malaysia, Government of, 1981: 79).

Lifetime Interstate Migration

There were great differences between workers in the corporate and non-corporate sectors in migration experiences. In terms of lifetime interstate[3] migration, the formal sector had 45 per cent interstate inmigrants compared to only 7 per cent in the informal sector. Although the majority of workers were Penang-born and this includes those outside Penang Island in Province Wellesley, most of the migrants belonged to the modern sector (Table 5.3). This can be explained by the nature of the two sectors. The TNC manufacturing companies in the corporate sector are a recent phenomenon compared to the traditional informal sector. While the corporate sector draws on migrants, the traditional sector is supplied by workers whose families have always been in this area. Thus, 93 per cent of workers in the informal sector were born in Penang, most of them in George Town (87 per cent) or the immediate vicinity.

A breakdown of the birth state by ethnicity showed that Malay workers were drawn from a larger number of states than the Chinese. Malays, while coming mainly from Perak (45.6 per cent) and Kedah (44.4 per cent), also came from as far away

[3] A major criticism of the concept of a lifetime interstate migrant is that it merely compares birthplace and current residence without taking into account any movement that may have occurred n between.

as Johor and Selangor. Of the Chinese, only 13 per cent were from the adjacent states of Perak and Kedah.

Table 5.3
Young Workers: Lifetime Interstate Migration by Sector, 1982
(in percentage)

State	Formal Sector	Informal Sector
Penang	54.7	92.9
Perak	21.3	4.3
Kedah	18.7	1.4
Perlis	1.9	0.5
Negeri Sembilan	0.7	-
Selangor	0.7	-
Pahang	0.4	0.5
Johor	0.4	-
Kelantan	0.2	-
Others	0.7	-
Total No.	422	210
%	100.0	100.0

Source: Formal and Informal Sector Workers Survey, 1982.

Fifty-three per cent of the formal sector workers, being Malay inmigrants, were from rural areas compared to 5.4 per cent among the informal sector. As anticipated, 82 per cent of the Malays were from rural areas compared to seven per cent recorded by the Chinese. This shows that most of the new Malay urban workforce originate from the rural areas. These patterns illustrate the totally different workforces drawn by the formal and informal sectors.

Place of Previous Residence

An analysis of their state of previous residence showed a different picture from that of birth state. Among formal sector workers nearly 66 per cent named Penang as their state of previous residence (11 per cent more than birth state), followed by Perak and Kedah. This shows that where the girls are now staying is not their first location on arrival. In contrast, nearly 96 per cent of the informal sector workers moved to their present location from another place in Penang. A lower proportion of formal sector workers recorded their place of previous residence as rural (48.5 per cent) compared to their birthplace. Similarly, for the urban informal sector migrants, only four per cent lived in a rural area prior to their present residence. The findings show that the workers in the Bayan Baru area are very mobile, often

shifting between relatives and rented rooms. This is elucidated in the next section on living arrangements.

5.3.3 Socio-Demographic Characteristics

Some of the major characteristics of these young workers are summarized in Table 5.4.

Table 5.4
Young Workers : Socio-Demographic Characteristics by Sector, 1982
(in percentage)

Socio-Demographic Characteristics		Formal Sector		Informal Sector	
Ethnicity	Malay	53.6		0.5	
	Chinese	32.7		97.6	
	Others	13.7		1.9	
Sex	Female	90.5		55.7	
Age	13-15	1.7		9.5	
	16-19	23.9		33.8	
	20-23	38.1	83.4	20.0	66.7
	24-27	21.4		12.9	
	28-31	10.6		11.4	
	32-36	4.3		12.4	
Schooling	No Schooling	1.7		7.1	
	Std. 1-6 (6 yrs)	28.4		49.1	
	Form 1-3 (7-9 yrs)	40.3	69.9	37.1	43.8
	Form 4+ (10+ yrs)	29.6		6.7	

Source: Formal and Informal Sector Workers Surveys, 1982.

Sex

This Malay rural-urban migration was basically female. As high as 90.5 per cent of the workers in the formal sector were females compared to the more heterogeneous informal sector where 55.7 per cent were females. The increase in the female labour force participation was reflected in the country as a whole. In 1970, female employment in the manufacturing sector was 8.3 per cent. This figure doubled to 15.7 per cent in 1980, and subsequently to 20.8 per cent in 1983 (Kamal and Young, 1989: 14).

The fact that the workforce of these multinational electronics/electrical companies were overwhelmingly female was no surprise. It reflects the international pattern of females as semi-skilled operatives[4] working within a highly segmented and diversified assembly line on a global scale. This phenomenon may be viewed from both the demand and the supply sides. On the demand side, expanding capitalism took new forms such as the internationalization of capital resulting in the redeployment of certain types of activities from advanced countries to Third World countries producing a new international division of labour. To remain competitive in such a rapidly changing industry which is at the same time very sensitive to economic cycles, the industry had to exploit cheap and docile labour (Eisold, 1982). On the supply side, in many Third World countries, there was a cohort of young workers flooding an already labour-surplus economy.

But why is the workforce mainly women? The reason lies in the personnel policies of these companies. Women (and children) have historically made up the pool of reserve labour who are, at the same time, easy to exploit for numerous reasons including their economic weakness and social subordination. Often they lack the commitment and organization to form unions to fight for a better deal owing to their own precarious position and ethnic diversity (c.f. Herzog, 1980). The TNCs tend to isolate the workers so that they are unable to understand how the entire production system works, a death knell for possible unification of the various segments in a multinational labour movement to confront multinational capital (Grossman, 1979). Women are also preferred because they are tractable, submissive and used to following orders from males in the traditional setting. They are more accustomed to tedious and painstaking work, socialized to be more passive – all these features are moulded into a factory culture which imitates the family *(kekeluargaan)*, relegates the role of the male family members to those of the supervisory and management staff, and propagates all the attributes associated with feminity and a female stereotype (cookery and make-up classes, beauty contests, etc. organized by the factory). In this way, the attention of the female workers are diverted from the more important issues of work conditions and better pay (Chan *et al.*, 1983).

Age

Workers were young, the average age being 22.6 years in the formal sector and 22.3 years in the informal sector. However, the age distribution was dissimilar in the

[4] This term is usually given to workers who perform specific tasks in the semiconductor production process that are highly repetitive and quickly learned (Eisold, 1982: 2).

two sectors. (The formal sector had no worker below the age of 16 (the minimum legal working age) and the majority were 16-27 years (83 per cent) compared to 67 per cent in the informal sector. The informal sector had a wide range, from child labour (9.5 per cent) to older workers where 12.4 per cent were aged 32-36 years compared to 4.3 per cent in the formal sector.

Why does the formal sector draw from the age-group of 16-24? First, they are plentiful in a broad-based age-sex structure typical of Third World Countries. Young school-leavers taking their first job are preferred by these companies because they are inexperienced and malleable. Second, girls in this age-group are single and on the threshold of marriage which provides an excellent excuse for labour-shedding (Lim, 1978). Married women represent a lack of productivity – they are liable to get pregnant and therefore, entitled to maternity benefits. Labour-shedding provides a way of dealing with cyclical recession experienced by the companies. These companies do not want to keep these workers after a few years because their wages would have risen relative to productivity. A new and cheaper worker can easily replace the older worker because the tasks can be easily learnt. Older workers having more experience and maturity are potential troublemakers. Finally, a more disturbing reason which is emerging is that the productivity of these girls decline with increasing years, usually due to declining stamina, eyesight and other health complaints (Lim, 1978; Herzog, 1980; UNIDO, 1982; Eisold, 1982: 12). This was the status of thinking in the early 1980s.

Most of the younger workers in the formal sector were Chinese. Whereas 36 per cent of the Chinese were aged 15-19, the proportion for Malays was 21 per cent; over half the Malays were aged 20-24 years. Interestingly, this pattern was similar to the age distribution of the female labour force on a national level (Malaysia, Government of, 1984: 118-20). In contrast to Malay girls, more Chinese girls entered the labour market before they were 20 years old.

Marital Status

As expected, over 80 per cent of the workers in the formal and informal sectors were single due to the youthfulness of the sample population.

5.3.4 Educational Level and Schooling of Young Workers

Education is perhaps the single most important socio-demographic factor influencing occupations. It is certainly a pre-requisite for most corporate sector

jobs unlike the situation in the traditional sector. Thus, the educational level was higher in the formal sector. Workers there had higher mean years at school (8 years) compared to 6.2 years of the informal sector. While 70 per cent of the formal sector workers had been to secondary school, the comparative proportion for the informal sector was 44 per cent.

Education, especially at primary level, was still communally-based; the ethnic groups tending to be sent to schools where their own language was the medium of instruction. Most Malays in the formal sector went to Malay schools (91 per cent) and Chinese to Chinese schools (71 per cent) at primary level. This pattern shifted during secondary school to 60.8 per cent and 26.8 per cent, respectively. The major change occurred among the Chinese who transferred to English and Malay-medium secondary schools. For the young Malay workers from rural areas, Malay education was the only choice. Because most of the Chinese were urban-based, the range of schools was greater, especially the English-medium Christian schools. Also, the Chinese tended to feel that while Chinese primary education is desirable, English secondary schooling enabled the child to have a better chance of obtaining a modern sector job.

What was interesting in these findings was that with the conversion of government-aided vernacular schools to the Malay medium and the stimulation by the NEP in the 1970s, individuals with Malay-medium schooling could obtain jobs in foreign companies. This certainly would not have been so easy during the colonial and immediate post-Independence periods.

Among formal sector workers, there was no relationship between the number of years at school and father's occupation. Similarly, there was no relationship between the number of years at school and the state from which the worker came from. However, workers whose father were in government service were likely to have an English primary and secondary education.

5.3.5 Parent's Occupation and Household Characteristics

Earlier we had discussed the lack of occupational diversity among rural Malays in contrast to the Chinese (Chapter 3 and Chapter 4). The same patterns emerge in this study.

Parental Background

Most of the parents of the workers from the formal sector were in agriculture, mainly in rubber and *padi*. They had little to no land which partly explained their need to seek work outside the farm. They themselves did not want to remain in agriculture because they had at least two to three years of secondary schooling which they thought would give them a better livelihood in urban areas. The second major category was government service (16 per cent) mostly in the lower echelons, children of soldiers, policemen and other petty government officials. The workers from the traditional sector came from a typical Chinese working class background. Their fathers were hawkers, carpenters, trishaw riders, fishermen, sampan-rowers and a variety of other labouring work. Unlike the formal sector, there was great diversity. Even the mothers had a wide variety of jobs as servants, hawkers and as processing workers in the food industry.

From this we can conclude that the new labour force in urban areas is predominantly from an agricultural and services background, the former constituting a dissolution in the circuit. As migrants in the new urban context, they had severed their links with agriculture but not their households in the rural areas. In times of recession they will return to the villages. In the traditional sector, the young workers were mostly from the same type of background as their parents. They were almost exclusively Chinese. Those who had broken away from the occupations of their parents had more education and now had jobs in the factories.

Living Arrangements

Who the worker lives with is of interest as it indicates household support. As most formal sector workers were migrants, 62 per cent lived with their family or relatives (mostly with relatives) compared to 93 per cent for informal sector workers who tended to live with their family. Similarly, 28 per cent of the young workers in the modern sector lived in rented accommodation compared to merely three per cent among the informal sector workers. Sex and age bore no relationship with living with the family among the formal sector workers – explained by their being migrants. On the other hand, in a non-migrant environment such as those in the informal sector, more girls and workers aged 16-19 lived with their family. Again, as more Malays were migrants, only 38 per cent of them lived with their family compared to 90 per cent of the Chinese. As expected, the migrants had little family support compared to the Chinese of the urban Weld Quay area.

Current Household Size

Young workers lived in very large households, averaging 11.4 persons per household in the formal sector and 16.7 persons in the informal sector. The national average was only 5.2 persons (Malaysia, Department of Statistics, 1983: 138). This is explained by the particular context of the study, of basically inmigrants on the one hand, and urban Chinese within a densely populated area on the other. Although both sectors had high averages, the informal sector had the highest proportion in the largest household size – 38.6 per cent of above 16 persons per household compared to 19.2 per cent in the formal sector.

5.3.6 Economic Characteristics

Occupation

It was nearly impossible to compare the occupations of the formal and informal sectors. Although both were in manufacturing, their work were quite different, again a reiteration of the inherent dissimilarities between the two sectors. In the formal sector, 71 per cent were in electronics/electrical and 24.4 per cent in textiles/garments. Females constituted 96 per cent and 89 per cent, respectively, of the total number of workers in these two manufacturing industries. While the Malay girls were engaged mainly in electronics (70 per cent), the Chinese were in textiles (53 per cent).

The heterogeneity of jobs is typical of the informal sector as presented in Table 5.5. The major types of work were associated with the manufacturing of food, beverage and tobacco, tin and steel products, paper and cardboard box products, and charcoal and wood products. These major headings disguise the variety of work involved.

The work was basically unskilled and easily transferable. Women were found in the lighter jobs such as grading prawns, cleaning fish, making paper bags, sticking plastic flowers to branches, etc., while the men were in heavier work related to metal industries (89 per cent), and wood and charcoal (71 per cent) – the latter being a traditional industry of Weld Quay. Child labour was found in least demanding work, such as paper products (a quarter were folding paper bags), textiles (20 per cent sewing labels onto shirts), and the rest were in food processing (grading onions, prawns, etc.).

Table 5.5
Informal Sector: Occupational Groups, 1982

Occupational Group	No.	Percentage
Food, Beverage, Tobacco	38	18.1
Tin, Steel	38	18.1
Manufacturing, Paper, Others	35	16.7
Charcoal Wood	31	14.8
Agriculture, Animal Husbandry	22	10.5
Textile, Garment	20	9.5
Footwear, Plastics	13	6.2
Sales, Advertising	5	2.4
Storage, Transport, Construction	4	1.9
Vehicle Parts	2	1.0
Electronics, Electrical	2	1.0
Total No.	210	100

Source: Formal and Informal Sector Workers Surveys, 1982.

Job Placement

Another distinguishing factor between the formal and informal sectors is the way the person is placed in a job. The formal sector sets barriers in the form of certain qualifications, such as minimum schooling, minimum age, formal application, etc. in contrast to the informal sector characterized by the "ease of entry". While 77 per cent of those in the formal sector got their jobs through written personal application, the comparative proportion for the informal sector was 22 per cent. Instead, 33.3 per cent of the workers in the informal sector obtained their job through family and relatives compared to seven per cent in the formal sector.

Within this sector, the way Malays and Chinese got their jobs varied. While 78 per cent of the Malays obtained their jobs through personal application (especially in the electronics companies), only 31 per cent of the Chinese got their jobs in this way. Family and relatives as contacts played an important role in getting jobs for the Chinese.

Monthly Income

Income and expenditure figures must be interpreted with caution in any survey. The data presented here only suggest a pattern. One would expect the formal sector workers to be far better paid. Surprisingly, there was only a small difference in

mean monthly incomes between them (RM225.20 and RM254.40, respectively). However, the distribution varied, especially for the lower income group. Nearly 30 per cent of those in the informal sector earned between RM50-RM150 per month compared to 14 per cent in the formal sector. Those workers in the informal sector with the lowest earnings were mainly the younger female and child workers. The proportion in the higher income groups of the informal sector was comparable to the formal, which tended to cluster around RM151-RM250 per month.

Expenditure Patterns

The average expenditure pattern between the formal and informal sectors was similar. This was probably due to their being workers of the same income level, at a similar stage of the life cycle, etc. One noticeable difference in spending pattern was that workers in the formal sector tended to spend much more on clothes (14.7 per cent against 4.6 per cent) and hire purchase (2.4 per cent against 1.5 per cent). This may be explained by the need to dress better in the electronics factories compared to the informal sector backyard type industries and to rising consumerism among the young inmigrants. Transport expenditures were also lower for informal sector workers owing to their proximity to their workplace.

What this section has shown is the patterns and characteristics of the new migrants in their urban milieu of Penang in the early 1980s, during the height of the electronics industry. As a migrant stream these workers signify the breaking of the two-circuit, moving from a rural background to urban wage labour as contrasted to the circuit-preserving urban informal sector. If these workers had migrated to manufacturing industries in urban areas and remained there, a definite break would have occurred. But, being absorbed mostly into the electronics sector has meant a certain amount of insecurity, due to the cycles which the electronics industry experience and the TNC nature of their employment. To show this effect better, the next section examines the impact of the 1985 recession on these new industrial workers.

5.4 IMPACT OF THE 1985 RECESSION ON WOMEN WORKERS

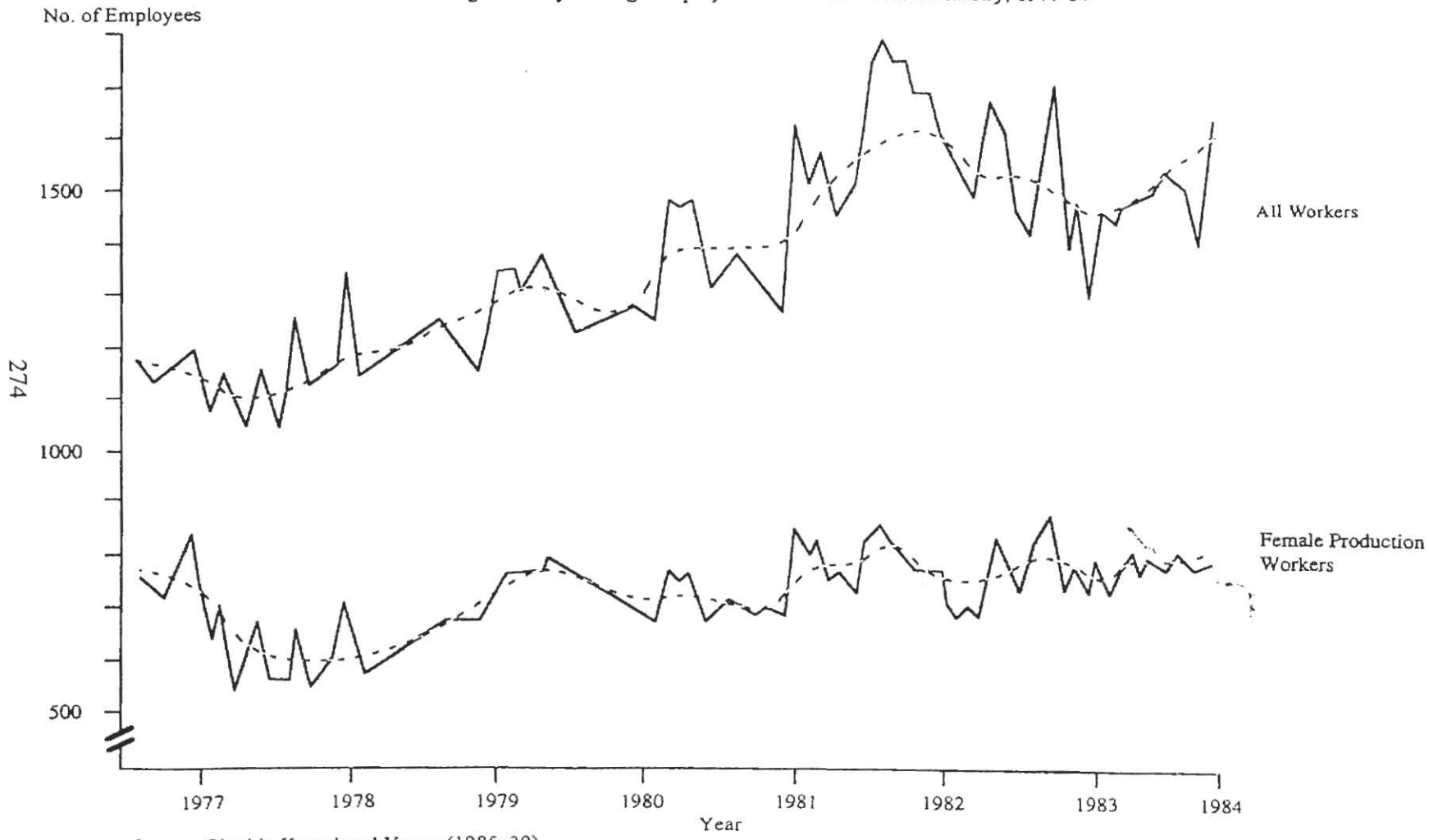
One of the most important features of Malaysia's industrial development in the 1970s and 1980s is the growth of the electronics and textiles sector. These factories are located mainly in the FTZs. In 1973, over half of the jobs created in

manufacturing were in electronics (Malaysia, Ministry of Finance, 1973: 49). Such a development led to two problems in the economy. It made Malaysian manufacturing susceptible to the trade cycle, and therefore, led to the recessions followed by retrenchments of workers in the mid-1970s and mid-1980s. Rapid growth of employment in electronics also made the Malaysian economy, already vulnerable owing to its dependence on commodities, even more vulnerable to internationally-transmitted recessions. For example, while the export-oriented electronics industry became sluggish in 1975 and 1977, local industries such as cement, rubber products and agricultural processing increased employment (refer to Kamal and Young, 1986a).

The kind of fluctuations in the unemployment situation we are discussing about may be seen in Figure 5.4 which shows the monthly employment figures (for production workers and for all workers) in the electronics industry in Penang for the years 1977-83. These fluctuations reflect the assembly-nature of the production process and the immediate employment requirements in response to changing market demands (Kamal and Young, 1985a). Those electronic workers who were retrenched during the downslide of the market situation were either absorbed into other industries in the area, or returned to their villages. But when the slump is very bad then it affects all industries as was the experience of the 1980s. Under such circumstances, the retrenched worker has little recourse but to return to the village. Over the long cycle, some restructuring of the workforce at the factory level had taken place, as in the case of the electronics factories between 1974-75, and in 1984-85. Penang is a major world producer of semiconductor which is subject to a roughly ten-year cycle of economic activity. However, the electronics industry continued to expand in the late 1970s and early 1980s. By 1981, it accounted for 12.2 per cent of manufacturing employment (about 80,000 in 1983), 12.68 per cent of manufacturing value added and 35.5 per cent of manufactured exports (Malaysia, Government of, 1986: 1). In recent years, the share in employment, value added and exports of electronic goods have increased.

This section examines how recessions have affected workers, especially women migrants. The numbers retrenched, as in the case of the unemployed, are closely allied to the fluctuations of the world economy. Some manufacturing industries, such as electronics, textiles, rubber products, and plywood are more prone to the changes owing to both the nature of the industry (as in the case of electronics, which is particularly sensitive to changing technology and market conditions) and to the extent of its export-orientedness (for example, electronics and textiles). Thus, an examination of the pattern of reported retrenchments in the Economic

Figure 5.4
Penang: Monthly Average Employment in the Electronics Industry, 1977-84



Source: Cited in Kamal and Young (1985: 39).