1. China's economy after WTO accession: an overview

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China's accession to the World Trade Organization (WTO) in December 2001 is widely regarded as a major milestone in the development of the Chinese economy as well as the multilateral trading system. There is no doubt that the accession has led to deepened integration of the Chinese economy into the global economy and moved China towards a more rules-based economic system. However, at the same time, meeting China's commitments to the WTO under the protocol of its accession raises enormous problems and challenges to China, its trading partners and the WTO itself.

China's full conformity to the WTO is strategically important for China, its trading relations with others and the multilateral trading system. This book provides a remarkable background of information about China's economy after WTO accession and analyses many important issues concerning China's economic growth, international trade, transparency of trade policy, regional trade arrangements, foreign direct investment, banking sector liberalization, exchange rate reform, agricultural trade and energy demand. The book is an indispensable source for scholars and students interested in Chinese economic studies and many chapters should also be of interest to a wide range of readers.

This introductory chapter will first present a brief review of China's fast economic growth after WTO accession and discuss the sources contributing to China's economic growth. Then it will discuss the increasing integration of China's economy with the global economy and analyse the issues associated with the rapid expansion of China's international trade. Subsequently, it will discuss a number of problems in China's economy and the challenges that China faces in future economic and social development. Finally, it will present the outline of the chapters in this book.

SURGING ECONOMIC GROWTH

Since China's entry into the WTO in 2001, China's economy has experienced a new period of high and stable growth, with real GDP growth rate on average in excess of 10 per cent for the period 2002–07. China's fast economic growth has had a significant impact on the world economy. In 2007, China's total GDP reached US$3.43 trillion and it became the world's fourth largest economy[1] after the United States, Japan and Germany, although it is still a lower-middle-income economy based on per capital GDP – China's per capita GDP reached US$2500 in 2007.

The fast economic growth has led to significant structural changes in China's economy. The share of the secondary industry and services sectors as a proportion of China's total GDP has increased from 85.6 per cent in 2001 to 88.3 per cent in 2006, while the share of agriculture has declined from 14.4 per cent to 11.7 per cent in the same period.[2] Undoubtedly, such dynamic expansion in economic growth and structural change reflect the positive effect of WTO entry on China's economy.

The high growth of China's economy after WTO accession is contributed to by a number of factors. On the supply side, for a large and populous country like China with abundant labour supply, one of the main sources of economic growth is the transfer of its surplus labour from the low-productivity agricultural sector to the high-productivity industrial and services sectors. The share of urban population increased from 37.7 per cent in 2001 to 43.9 per cent in 2006.[3] Therefore, rapid development of industrialization and urbanization is one of the major driving forces of China's recent strong economic growth.

Apart from the growth of factor inputs, China's high economic growth is also linked with rapid growth in total factor productivity (TFP). Though economists are still debating the role of TFP in economic growth, most empirical studies show that TFP growth has played an important role in China's recent economic growth (Wu, 2006).

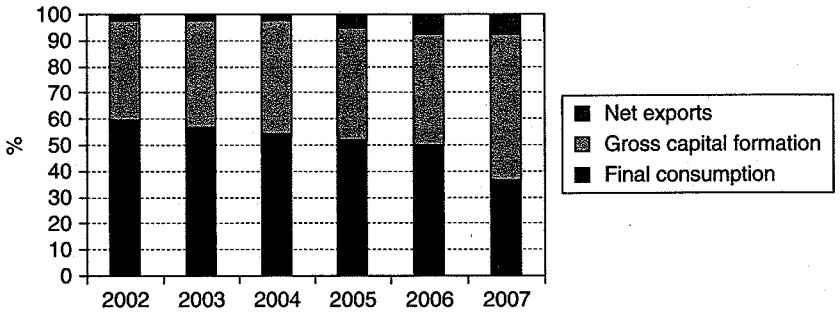
On the demand side, domestic investment is the most important factor in driving the growth of China's economy, followed by domestic final consumption and net exports of goods and services (external demand). During 2002–07, the average annual contribution of domestic capital formation to GDP growth was 48.9 per cent, while the average annual contributions of domestic final consumption and net exports to GDP growth were 38.7 per cent and 12.4 per cent respectively in the same period (Table 1.1).

In most economies, final consumption takes up more than 70 per cent of their GDP. However, China has an unusually high rate of capital formation. As Figure 1.1 shows, the share of final consumption in total GDP has been declining, from 59.6 per cent in 2002 to 36.7 per cent in 2007, while

Table 1.1 GDP growth rate and contributions to GDP growth by the three-expenditure approach in China (%)

	2002	2003	2004	2005	2006	2007	Average 2002–07
GDP growth rate	9.1	10.0	10.1	10.4	11.1	11.4	10.4
Contribution by:							
Domestic investment	48.8	63.7	55.3	37.7	41.3	46.8	48.9
Domestic final consumption	43.6	35.3	38.7	38.2	39.2	37.2	38.7
Net exports	7.6	1.0	6.0	24.1	19.5	16.0	12.4

Sources: Calculated from various issues of the National Bureau of Statistics of China (NBS), *China Statistical Yearbook*, Beijing: China Statistics Press.

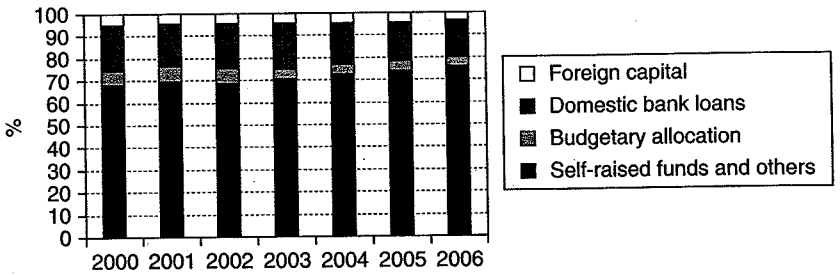


Sources: Calculated from various issues of the National Bureau of Statistics of China (NBS), *China Statistical Yearbook*, Beijing: China Statistics Press.

Figure 1.1 Composition of GDP by expenditure approach in China

the share of capital formation in total GDP has been increasing, from 41.0 per cent to 55.6 per cent in the same period.

With regard to investment financing, China's total investment in fixed assets is predominantly financed by domestic sources. As Figure 1.2 shows, over 95 per cent of total investment in fixed assets were financed by domestic sources. Among the domestic sources of financing, privately self-raised funds and others have taken the dominant position and their share in total investment financing has been increasing in recent years. In 2006, privately self-raised funds and others accounted for 74.2 per cent of the total sources of investment in fixed assets, while government budget



Sources: Calculated from various issues of the National Bureau of Statistics of China (NBS), *China Statistical Yearbook*, Beijing: China Statistics Press.

Figure 1.2 Composition of sources of financing in total investment in China

allocation and bank loans accounted for only 21.6 per cent of the total. Although China attracted large amounts of FDI inflows, the contribution of FDI to China's total investment in fixed assets has been low. During the period 2000–06, foreign investment as a percentage of China's total investment in fixed assets was around 4–5 per cent.

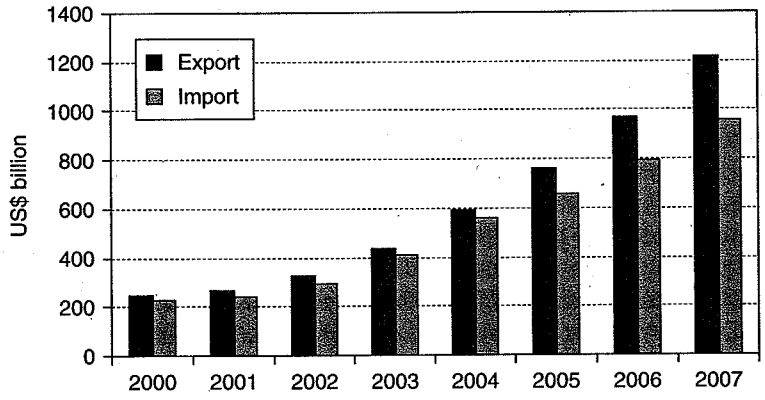
It is clear that China's high economic growth, especially after WTO accession, has been predominantly driven by high levels of investment, especially by domestic financing. This has raised the question of whether China's high levels of domestic investment are sustainable enough to support the high level of economic growth in the long run. Therefore, the Chinese government needs to take measures to expand domestic consumption to provide a more balanced source of economic growth for the future.

Another source of economic growth is external demand. China's fast-growing exports have been its major external demand and have contributed to its economic growth. After the entry into the WTO, net exports as a share of GDP have increased rapidly, increasing from 2.6 per cent in 2002 to 7.7 per cent in 2007. Consequently, the contribution of net exports to China's GDP growth has also increased significantly. As Table 1.1 shows, the contribution of net exports to China's GDP growth on average was around 5 per cent during 2002–04. However, it increased to around 20 per cent during 2005–07 as exports have been growing much faster than imports. Apart from the direct contribution of exports to China's economic growth, there are also a lot of indirect economic activities generated by the export sector. For example, large portions of local services and local investment are connected with the export industries whose employees also generate multiplier effects on the economy.

INCREASING INTEGRATION WITH GLOBAL ECONOMY

China's economy after WTO accession has become much more closely integrated with the global economy, leading to a large inflow of foreign direct investment (FDI) and the rapid expansion of the export-oriented manufacturing activities. FDI inflows into China reached US$74.8 billion in 2007, an increase of 60 per cent on those in 2001. The manufacturing sector has been the most attractive sector to FDI. After WTO accession, average annual FDI inflows into the manufacturing sector surged to US$36.44 billion during 2002–06, an increase of 34.86 per cent on those during 1997–2001, and accounting for 68.74 per cent of the total FDI inflows into China. Furthermore, the WTO accession has led to the opening up of many domestic sectors, especially the services sectors, to greater foreign competition. This in turn has led to a sharp rise in domestic investment for economic expansion.

Since the entry into the WTO in 2001, China's international trade has been increasing rapidly. Total international trade (export plus import) reached US$2.18 trillion in 2007, 3.27 times that of 2001 (Figure 1.3). China has now become the world's third largest trading country only after the United States and Germany. In particular, export growth has been much faster than import growth. In 2007, China's exports reached US$1.22 trillion, contributing to a record high level trade surplus of US$262.2 billion.



Sources: Calculated from various issues of the National Bureau of Statistics of China (NBS), *China Statistical Yearbook*, Beijing: China Statistics Press.

Figure 1.3 China's international trade (at current prices)

Table 1.2 Shares of China's exports by destination and imports by source in 2007

Region/Country	Export Destination (%)	Import Source (%)
Japan	8.38	14.01
Asian NIEs	24.11	24.59
ASEAN-4	4.09	9.09
The United States	19.14	7.27
The European Union	18.19	11.09
Rest of the world	26.10	33.94

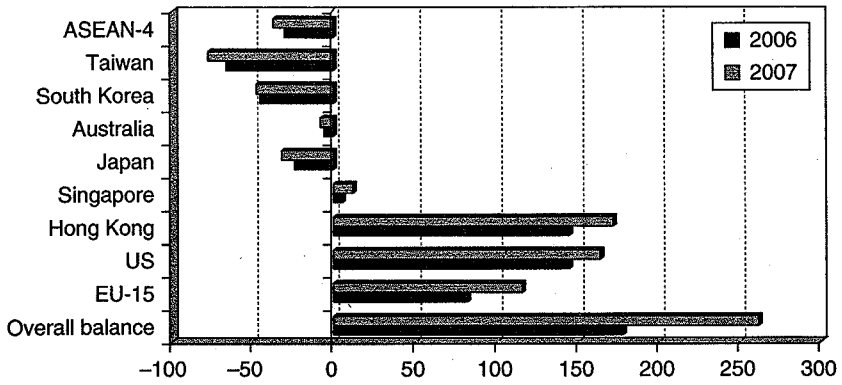
Source: Calculated from the United Nations Statistics Division, Commodity Trade Statistics Database, COMTRADE.

Because of fast economic growth, large amounts of FDI inflows and rapid expansion in international trade after WTO accession, China has become not just a leading engine of economic growth for Asian economies, but also one of the major drivers of world economic growth. Because of its size and scale, China's levels of production, consumption, imports and exports carry significant global implications. Apart from being an important source of global economic growth, China has also operated as one of the world's most significant integrating forces, as it is a crucial link in the world's many production networks.

Table 1.2 shows the pattern of China's direction of trade in 2007. For exports, the Asian newly industrializing economies (NIEs)[4] were China's top market, accounting for 24.11 per cent, followed by the United States (19.14 per cent), the EU (18.19 per cent) and Japan (8.38 per cent). ASEAN-4[5] took up 4.09 per cent of China's exports.

On the import side, Asian NIEs again captured the largest share of the Chinese markets (24.59 per cent), followed by Japan (14.01 per cent), the EU (11.09 per cent) and ASEAN-4 (9.09 per cent). The United States captured 7.27 per cent of the Chinese market.

Figure 1.4 shows the pattern of China's trade balance with its major trading partners. In 2006 and 2007 China continued to run substantial trade deficits with its neighbouring economies, from Taiwan, South Korea, ASEAN-4 and Japan to Australia. However, China had a large trade surplus with the United States and the EU.[6] As a result, China still had an overall trade surplus. China's trade deficits with its neighbours means that China has opened up its vast domestic market for their exports (both manufactured products and primary commodities),[7] thereby, operating as an engine for their economic growth. This will further add to China's rising geo-political and geo-economic influence in the region.



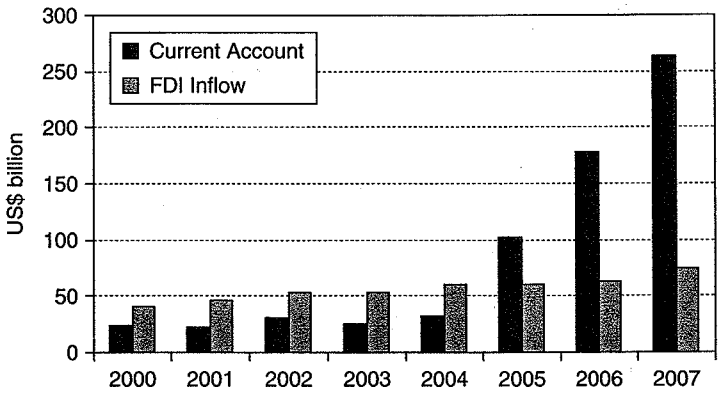
Source: Calculated from the United Nations Statistics Division, Commodity Trade Statistics Database, COMTRADE.

Figure 1.4 China's trade balance with selected economies (US$ billions)

China's trade pattern and trade balance with its trading partners have important economic implications in China's integration with the global economy, particularly with East and Southeast Asian economies. Since most of China's exports are processing trade (53 per cent of total exports in 2006)[8] or final products (57 per cent of total exports in 2005)[9] generally with low domestic value-added and low domestic content, China must import raw materials, semi-finished products, parts and components in order to export. Also, since over half of China's foreign trade is handled by foreign-invested enterprises (59 per cent in 2006),[10] particularly those from Japan, South Korea, Taiwan, Hong Kong and the ASEAN economies, China's foreign trade has become a critical link in the East and Southeast Asian supply chains. It can further be argued that China is becoming an important 'integrator' of global production networks. China's exports embody raw materials, semi-finished products, parts and components, technology and financial services from different Asian economies to serve the world markets.

However, China's huge trade surplus has led to increasing pressures from its major trading partners to revaluate its currency. As a result, China revaluated the RMB (renminbi) by 2.1 per cent in July 2005. Since then the RMB has appreciated, with an accumulated rate of 12.1 per cent by 2007, even though the Chinese government has announced that the RMB exchange rate adjustment would follow a slow and gradual process.

Apart from the political pressures from the United States and the EU, China's monetary authorities have been confronted with not only an



Sources: Calculated from various issues of the National Bureau of Statistics of China (NBS), *China Statistical Yearbook*, Beijing: China Statistics Press.

Figure 1.5 China's current account and FDI inflow (at current prices)

enormous problem of how to sterilize the large increase in foreign reserve to prevent the higher growth of money supply in the domestic economy, but also a big problem of recycling profitably its huge foreign reserves back to the international monetary system. The problem has been worsening since 2005, because of China's huge 'twin surpluses' on both capital and current accounts (Figure 1.5).

The structural factor for the accumulation of the twin surpluses include China's underdeveloped financial market, which cannot smoothly channel China's huge domestic saving into the needed areas of investment (Riedel, Jin and Gao, 2007). But the main causes of China's 'twin surpluses' come from policy biases such as preferential policies towards FDI, and excessive export promotion such as export tax rebates and an undervalued exchange rate.

The persistence of such twin surpluses is not desirable. On the financial side, apart from being a clear case of misallocation of valuable financial resources, the existence of large twin surpluses hampers China's effective participation in the global economy. As has already happened, China's persistent twin surpluses have resulted in the rapid growth of China's foreign exchange reserves, which now stand as the world's largest, reaching US$1.7 trillion by April 2008. This in turn adds pressure on the RMB to appreciate further. On the trade side, the twin surpluses have led to rising protectionism in the developed countries against China's exports, and have given rise to numerous trade frictions for China with the United States and the EU.

However, China has recently taken concrete measures to slow down the growth and even to reduce the twin surpluses. China started to cut or eliminate export tax rebates for 2831 commodities representing 37 per cent of the total number of items listed on customs tax regulations on 1 July 2007 (*People's Daily* Online, 2007). China has taken measures to encourage outward FDI. China's overseas investment increased rapidly, with an annual average growth rate of 60 per cent during 2002–06 (*China Daily*, 2007). In the first half of 2008, China's non-financial outward FDI reached US$25.7 billion, 2.3 times the level recorded in the same period in 2007 (AFP, 2008). Therefore, China has increased efforts to channel its huge financial surpluses into the international financial system.

PROBLEMS AND CHALLENGES

After accession to the WTO, despite China's rapid economic growth and increasing importance in the global economy, it still faces a number of important social and economic challenges.

First, the high economic growth has sparked fears of overheating, which materialized in 2007. The inflation rate, the consumer price index (CPI), increased from 1.5 per cent in 2006 to 4.8 per cent in 2007, exceeding the government's target of 3 per cent. Food prices, which accounted for a third of the index, were up 12.3 per cent during 2007. As a result, the predominant task for the Chinese government in 2008 was to take measures to fight against inflation and to start rebalancing and reorienting development policies.

The IMF cut China's economic growth forecasts to about 9 per cent in 2008 (*China Daily*, 2008) owing to decelerating exports and a weakening global outlook. The slowdown in economic growth could reduce inflationary pressure and contribute to China's rebalancing. However, there remains the immediate issue concerning the ability of monetary policy to combat rising inflation. In this regard, a more flexible exchange rate regime could enable China to operate a more independent monetary policy, which would be better suited to ensuring a low and stable rate of inflation, and therefore contribute to a macroeconomic environment more conducive to sustained strong economic growth.

Second, China's economy is characterized by a number of imbalances. In particular, there is the imbalance in sources of growth in the economy, which has been driven much more by investment and exports than by consumption, as reflected in China's growing current account surplus. Moreover, the efficient allocation of the vast amount of investment

within the economy has been hampered by an underdeveloped capital market.

China needs to increase government spending on social services, such as health and education, and thus human capital, as well as basic pensions, thereby possibly reducing the need for precautionary saving and thus raising consumption. These and other measures to increase consumption would not only reduce China's reliance on exports for growth, and hence its vulnerability to economic slowdowns abroad, but would also narrow the gap between national saving and gross domestic investment and therefore help to reduce China's large current account surplus. Another way of reducing China's high propensity to save would be by channelling savings into the most profitable investments, thus improving the productivity of capital in the economy as a whole. Therefore, China needs to accelerate ongoing reform of the banking system and the capital market.

Third, income inequality has widened among regions and between urban and rural residents. One of the primary causes of widening income inequality is wage differentials reflecting differences in labour productivity. Therefore, the challenge is to accelerate the movement of surplus labour from relatively low-productivity agriculture into other activities, especially services. Moreover, as growth in the labour force slows, technological progress will assume much greater importance as a source of economic growth and productivity improvement, so that China needs to continue to pursue its goal of substantially raising expenditure on R&D.

Fourth, the pace of China's growth and industrialization has exacerbated environmental problems. That more and more environmental accidents have happened recently should be a signal that the time has come for China to act urgently on its environmental problems. Impediments to the efficient allocation of land, energy, water and other natural resources, such as price controls, need to be gradually dismantled; this would help protect the environment, especially if supplemented by market-based tax and non-tax instruments, for example based on the 'polluter pays' principle, to correct market failure.

Overall, China's economy after WTO accession has achieved remarkable progress; however, it also faces many problems and challenges for future economic development. Fortunately, the Chinese government has realized the urgent need to rebalance and reorient economic and social development policies, which is reflected in the Eleventh Five-year Plan 2006–10. It has broadly embraced the need to change and launched some new development policies, like green GDP, balanced development and harmonized society. However, it still has a long way to go to implement these policies and to achieve desired results.

OUTLINE OF THE CHAPTERS

The ten core chapters of the book are grouped into three parts, with each focusing on a specific topic, namely, economic growth and globalization (Part I), foreign direct investment and exchange rate (Part II), and agricultural trade and energy demand (Part III).

In Part I, Chapter 2 examines the trend of China's international trade growth, the changes in trade pattern and the implication of trade expansion for the world economy after China's WTO accession. Kunwang Li and Xiaosong Wang show that the rapid growth of China's international trade since 2001 has relied mainly on the exports of labour-intensive products based on its underlying comparative advantages. They argue that the continued and large amount of FDI inflows have helped China upgrade its trade structure rapidly. Their analysis also shows that China has taken advantage of globalization and played a very important role in the international segmentation of production. However, they point out that China still deeply depends on developed economies' markets for its final products. The increasing trade imbalance between China and developed economies raises the question of the sustainability of China's export growth strategy.

Yanrui Wu in Chapter 3 conducts valuable research on measuring China's capital stock. The lack of capital stock statistics for empirical research on the Chinese economy has for a long time been one of the major impediments. Though many authors have attempted to derive their own data series, most authors have focused on investigations at the national level and their findings are not without controversies. Few studies have provided estimates of capital stock for China's regional economies. This chapter adds to the literature in several ways. First, it presents a critical review of the methods and findings in the existing literature. Second, it proposes an alternative approach to estimate China's regional capital stock values. And most importantly, the author applies the derived capital stock series to examine growth, disparity and convergence in China's regional economies.

Vivienne Bath in Chapter 4 examines the WTO and China's transparency requirements. The aim of this chapter is to look at the way in which the Chinese government has dealt with the obligation of transparency in terms of its approach to regulation and the law, to assess the degree of compliance and to consider to what extent the changes have made or could make a substantial difference to the experience of businesses (both local and foreign) in trading in and with China. An important obligation of signatories to the WTO is the requirement to engage in transparency in decision-making and in regulation. For China, what this has meant

is a commitment to publish laws and regulations, administer them in a uniform, impartial and reasonable way and to provide impartial and independent tribunals to review administrative decisions on WTO-related legislation. The author argues that since accession, the Chinese government has made major changes in reforming its regulatory and legislative system to comply with these requirements. The period since 2001 has seen improved publication and availability of legislative and regulatory information, the initiation of public discussion on important legal issues, and major changes in the administrative approval and licensing system, which plays such a major role in business in China. In particular, the Administrative Licensing Law, which came into effect in 2004, represents an ambitious effort to reform the way in which members of the public and organizations deal with government. Although international satisfaction with the result is not universal, China has undoubtedly made considerable progress in relation to its commitments on transparency.

The final chapter in Part I (Chapter 5) examines the impact of the proposed Free Trade Area of the Asia-Pacific (FTAAP) on China and its regional economies. The authors, Tingsong Jiang and Warwick McKibbin, applied a suite of general equilibrium models: APG-Cubed, a dynamic global model; GTAP, a static global model; and CERD, a static China model with regional dimension. The impact on the Chinese economy of the FTAAP is also compared with those of other forms of FTAs such as the ASEAN+1 and ASEAN+3. The authors find that China benefits from all three FTAs, and the Eastern region gains the most. They also find that China's benefit increases along with the increase in coverage of the FTAs, that is, the FTAAP has the biggest positive impact on the Chinese economy among the three FTAs considered in the study. In terms of sectors, the textile, clothing and footwear sector gains the most from the FTAAP, while the motor vehicle and parts sector loses the most.

Part II has three chapters, addressing foreign direct investment (FDI), foreign banks in China and the impact of RMB revaluation. Chunlai Chen in Chapter 6 examines the characteristics and changes of FDI in China since WTO accession. The author shows that FDI inflows into China have increased rapidly after China's WTO accession. Over 70 per cent of FDI inflows were in the manufacturing sector and FDI firms have become a major part of China's manufacturing sector. The author reveals that after China's accession to the WTO, FDI firms in the manufacturing sector have undergone both rapid expansion and structural changes. FDI inflows into the manufacturing sector have shifted from concentrating in labour-intensive industries toward increasing investment in technology-intensive and capital-intensive industries. FDI firms on average are more advanced and superior than domestic firms in terms of firm size, physical

capital intensity and labour productivity. However, the relative superiority of FDI firms over domestic firms in physical capital intensity and labour productivity has been lessening. In labour-intensive industries, both physical capital intensity and labour productivity of FDI firms have fallen below those of domestic firms, though FDI firms still have relatively higher physical capital intensity and labour productivity in capital-intensive and technology-intensive industries than do domestic firms. The author argues that these changes indicate that through enterprise reform and competition, China's domestic firms have been catching up with FDI firms, especially in labour-intensive industries.

Lilai Xu in Chapter 7, using Shanghai as a case study, explores the implications on, and opportunities in, China's banking sector from greater foreign competition. China's financial services industry is experiencing profound changes and continues to undergo a steady transformation to a more open and competitive environment as a result of its membership of the WTO. It is evidenced that foreign banks in China initially try to exploit market niches where they have competitive success in other countries; eventually they may attempt to compete more broadly as they gain experience in the domestic market. In assessing the ensuing regulatory and structural changes, the author strives to characterize and extrapolate the impact of such foreign participation on competition and performance in the sector. It is suggested that as long as an adequate supervisory and regulatory system is in place, there is a need to speed up the reform in the area of foreign exchange control and further facilitate financial innovations if China wants to benefit more from the presence of foreign banks in its domestic market.

James Xiaohe Zhang in Chapter 8 applied a multicountry computable general equilibrium model (the GTAP model) to analyse the impact of the RMB revaluation on China and the world economy. The author found that the revaluation of the RMB would not be appealing to the Chinese. To some extent it would further reduce the competitiveness of China's exports and the growth of GDP. Furthermore, the impact of RMB revaluation will be different for different industries and for different regions. While the capital-intensive industries in China and labour-intensive industries in the rest of the world benefit, labour-intensive industries in China and the rural sector in particular are more likely to suffer. As a result, some additional policies may need to be implemented to remove the adverse impact.

Part III of the book presents three topics, covering China's agricultural trade, the impact of regional trade arrangement on China's agricultural development and the relationship between economic development and energy demand. Zhangyue Zhou and Xia Kang in Chapter 9 examine China's implementation and management of grain TRQs (tariff-rate

quotas) since its accession to the WTO in late 2001. The authors show that since 2001 China's total grain trade volume has increased significantly and net grain imports have also increased. They argue that while China has done well to fulfil its WTO entry commitments, its trade policies have been generally in favour of encouraging domestic grain production. Mainly influenced by domestic supply–demand situations coupled with policies promoting domestic supply, China's grain imports and exports in the past five years fluctuated and the utilization of the grain TRQs has been low. Whether China's grain TRQ usage will increase and how its grain trade policy will evolve will continue to be affected by domestic grain supply and demand, and also by the outcomes of bilateral and multilateral free trade negotiations.

Jun Yang, Huanguang Qiu and Chunlai Chen in Chapter 10 examine the impact of ASEAN-China Free Trade Area (ACFTA) on China's economy and its regional agricultural development by using the Global Trade Analysis Project model (GTAP) and the China Agricultural Decision Support System (CHINAGRO). Their analysis shows that, first, ACFTA will improve resource allocation efficiencies for both China and ASEAN and will promote bilateral agricultural trade, hence having positive effects on economic development of both sides. Second, ACFTA will accelerate China's export of agricultural commodities in which it has comparative advantages, such as vegetables, wheat and horticultural products, but at the same time bring about a large increase in imports of commodities such as vegetable oil and sugar. Third, ACFTA will have different impacts on China's regional agricultural development due to the large disparity in agricultural production structure in each region. Their results indicate that agriculture in the North, Northeast and East regions of China will benefit from ACFTA, whereas agriculture in South China will suffer. The regional specific impacts caused by ACFTA are quite different from the effects brought by multilateral trade liberalization such as the WTO, which have positive effects on the Southern region of China but negative impacts on the Northern and Western regions of China.

Finally, Chapter 11 by Ligang Song and Yu Sheng examines the linkage between economic development and energy demand in the world and China. The authors use the difference and system general method of moment (GMM) to estimate an energy demand function with a dataset covering a 65-country and over 40-year period of 1965–2005. Their estimated results for the cross-country income and price elasticities of energy usage show that countries in different stages of economic development would demonstrate different levels of demand for energy consumption. The authors argue that, combined with the long-term pattern of energy supply, this finding can be used to explain how the wave-by-wave

economic development across countries may lead to a cyclical fluctuation of energy price, to predict the changing trade pattern of energy products in the world market, and also can be used to explain the recent booms in energy products demand in India and China.

NOTES

1. According to the WTO (2008), China was the world's third largest economy only after the United States and Japan in 2007.
2. Calculated from *China Statistical Yearbook* (2007).
3. Calculated from *China Statistical Yearbook* (2007).
4. Asian NIEs include Hong Kong, Taiwan, South Korea and Singapore.
5. ASEAN-4 include Malaysia, Indonesia, the Philippines and Thailand.
6. China also ran a substantial trade surplus with Hong Kong. But most of China's exports to Hong Kong are re-exported to the United States and the EU.
7. China and ASEAN signed the Framework Agreement on Comprehensive Economic Cooperation in November 2002 to establish the ASEAN-China Free Trade Area (ACFTA) for goods trade by 2010 for China and the older ASEAN members, including Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand, and by 2015 for China and the newer ASEAN member states, Vietnam, Laos, Cambodia and Myanmar. The Early Harvest Program (EHP), implemented on 1 January 2004, specifies that China and all older member countries of ASEAN should phase out mutual import tariffs on almost all agricultural goods; newer ASEAN members have until 2015 to eliminate tariffs on these commodities. The enforcement of the Agreement on Trade in Goods of July 2005 signals the operational phase of the ACFTA.
8. Calculated from *China Statistical Yearbook* (2007).
9. See Table 2.6 in Chapter 2 of this book.
10. Calculated from *China Statistical Yearbook* (2007).

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