



THE CHINESE ECONOMY SERIES



THE CHINESE ECONOMY AFTER WTO ACCESSION

EDITED BY

**Shuming Bao,
Shuanglin Lin,
Changwen Zhao**

THE CHINESE ECONOMY AFTER WTO ACCESSION

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Introduction

Shuming Bao, Shuanglin Lin and Changwen Zhao

More than a century ago China's door was opened to the world. In 1948 China became one of the twenty-three original signatories of the General Agreement on Tariffs and Trade (GATT). In 1949 the People's Republic of China was established and the Nationalist government retreated to Taiwan. China became un-unified. The government in Taiwan later announced that China would leave the GATT system. The Beijing government never explicitly recognized this withdrawal decision, but had no contact with the GATT. For many years after 1949, China emphasized self-sufficiency and the Chinese economy was essentially closed. In 1978 China started economic reforms and voluntarily opened its door to the entire world. Since then, the Chinese economy has been growing at a rapid rate and international trade and foreign investment has increased steadily. In 1986, China informed the GATT of its wish to resume its status as a GATT member and negotiations soon began. In 1995 the GATT was replaced by the World Trade Organization (WTO). After 15 years of extensive negotiations, China entered the WTO on 11 December 2001. The accession of China to WTO brought many opportunities as well as new challenges to China and the world.

After accession, China would have a lower cost of accessing foreign markets, a more equitable trading mechanism based on WTO rules and multilateral dispute resolution processes, more foreign investment and advanced foreign technology, and a legitimated role in setting and enforcing international trading rules. However, according to the agreement, China must undertake a series of important commitments to open its markets and to offer a more predictable environment for trade and foreign investment. The responsibilities include: providing non-discriminatory treatment to all WTO members, eliminating dual pricing practices as well as differences in treatment accorded to goods produced for sale in China in comparison to those produced for export, preventing price controls to be used for the purpose of protecting domestic industries or services, revising its existing domestic laws and enacting new legislation fully in compliance with the WTO Agreement, eliminating all export subsidies on agricultural products, implementing the Trade-related Aspects of Intellectual Property Rights Agreement, eliminating trade barriers and expanding market access to goods from foreign countries, and lowering average tariff level.

Many believed that the WTO entry would benefit China in the long run, but would hurt the Chinese economy in the short run, particularly in the agriculture and service areas. The results of China's WTO entry are surprising. China's agricultural industry held up after the WTO entry, despite predictions that it would be severely battered by increased competition. In the first year of WTO entry, the value of exported

agricultural goods increased by 11.5 percent, while imports fell by 0.4 percent and the trade surplus rose by 52.3 percent. The Chinese economy grew at a rate of 7.8 percent in 2002, and 9.3 percent in 2003. Apparently, the WTO entry appears to have benefited China even in the short run.

However, it would be a mistake to underestimate the challenges of globalization. China must phase in most of its WTO commitments within the first ten years after WTO entry. In agriculture, China must limit its subsidies for agricultural production to 8.5 percent of the value of farm output. In the telecommunication industry, China must permit foreign companies to establish joint venture enterprises, with foreign investment share being no more than 35 percent within one year of accession, no more than 49 percent within three years, and no geographic restrictions within five years. In the banking industry, foreign financial institutions are permitted to provide local currency services to Chinese enterprises within two years of accession, and to provide services to all Chinese clients within five years. In the insurance industry, foreign non-life insurers have been permitted to establish as a branch or as a joint venture with 51 percent foreign ownership, to establish as a wholly-owned subsidiary within two years; and foreign life insurers should be permitted 50 percent foreign ownership in a joint venture with the partner of their choice. For large scale commercial risks, reinsurance and international marine, aviation and transport insurance and reinsurance, joint ventures with foreign equity of no more than 50 percent are permitted upon accession, increase to 51 percent within three years, and reach 100 percent within five years. China faces serious problems, including low labor productivity in agriculture, growing unemployment, inefficient SOEs (State Owned Enterprises), an inefficient banking system, growing central and local government debt, reluctant consumers and weak domestic demand, inequality, weak social insurance system, and a weak legal system. China is also under increasing pressure to reevaluate its currency.

At a crucial moment when many problems related to China's WTO entry began to surface, the Chinese Economists Society (CES) organized an international conference on 'Chinese Economy after WTO: Opportunities and Challenges of Globalization' at the University of Michigan in Ann Arbor, Michigan on 2-3 August 2003. More than two hundred CES members and other scholars from Europe, Asia, and North America attended the conference, and over sixty papers were presented. These papers evaluate the impact of China's WTO entry on the Chinese as well as on the world economy, analyze the challenges and opportunities faced by China and other countries, discuss China's current economic problems, and provide urgently needed policy recommendations to policy makers.

This volume consists of eighteen selected papers from the conference. All of these papers were reviewed anonymously by scholars in the field. The authors then revised their papers following the comments made by the reviewers. The volume provides a remarkable background of information and ideas about Chinese economy after WTO and analyses of many important issues concerning China's foreign trade, fiscal and financial reforms, privatization, migration, and regional development. The volume 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.

An Overview

This book is organized in four parts. The first part addresses globalization and privatization. The second part deals with fiscal policy reform and financial development. The third part focuses on international trade and industrial development. The fourth part is devoted to the labor market and economic integration.

The first chapter in Part I by Shijin Liu gives an observation and analysis on a 'turning point' of Chinese economy after WTO accession. After China entered the WTO, the Chinese economy has experienced an accelerated growth. This may be a surprise to some scholars who believed that China might suffer in the short run and raised some concerns about the sustainability of the growth of the Chinese economy. From an insider's viewpoint, Shijin Liu describes the major characteristics of the new round of economic growth under globalization, analyzes the driving forces and mechanisms for the high growth, and discusses the new pattern of economic development in China. The second chapter analyzes the impact of the WTO entry on China after its official accession based on empirical observations. By comparing the industrial structure and expected impact prior to the entry, Aimin Chen finds that while China's agriculture sector has dodged the expected squeeze in the first year, the manufacturing sector has gained from the entry and the service sector calmly allowed unprecedented breaking into many of its industries. The entry has led to institutional and systemic changes that have made China a more open society and an environment more conducive to the development of a private market economy. In the third chapter, Shunfeng Song and Hong Cheng present a case study of a private company that manufactures sewing machines in Zhejiang province. China produces more than half of the world's total sewing machines with an export-production ratio of 0.82 in 2002. With WTO, China will see a large increase in the demand for its sewing machines in the international market as textile exports increase due to lower tariffs and elimination of export quotas. Meanwhile, China will also face more competition as more foreign brands flow into the Chinese market. China's entry into WTO poses challenges and opportunities to Chinese enterprises in the sewing machine industry. Based on his field survey results, Shunfeng provides insights on how private enterprises, export-oriented companies, and traditional producers react to changes resulting from China's accession into WTO. The next chapter, by Yifang Zhang, discusses the impacts of local government reform on heterogeneous development of private sectors in China. Yifang examines the relationship between local government and private sector in China based on the existing theories on economic transition and recent observations. The results suggest that government intervention, law enforcement and government policy all have strong and enduring effects on private sector development while the evidence on the influence of fiscal autonomy is relatively weak. In chapter 5, Jian Su examines the interaction between

globalization and privatization with evidence from China. Jian Su identifies three channels of globalization: the outflow of goods, the inflow of foreign capital (FDI), and the inflow of knowledge. By building some regression models with pooled datasets, Jian Su finds that globalization and privatization are mutually reinforcing. With the WTO entry commitment, China is under increasing pressure to continue its financial system reform.

Part II discusses fiscal sector reform in China. In chapter 6, Shuanglin Lin analyzes the effects of China's upcoming capital tax reform of switching from a dual tax system to a unified system. Shuanglin found that a decrease in the tax rate on domestic capital has no effect on the domestic interest rate, capital-labor ratio, or output-labor ratio, and leads to an increase in domestic capital, a decrease in foreign capital, and an increase in the trade surplus. An increase in the tax rate on foreign capital increases the domestic interest rate and decreases the capital-labor ratio, the output-labor ratio, domestic capital, as well as foreign capital and the trade surplus. In chapter 7, Ying Wu analyzes the fiscal sustainability of China's government debt with the 1979–2001 budgetary data. Applying the present value budget constraint and performing a co-integration analysis for public expenditures and tax revenues, Ying finds that the government expenditures and tax revenues in China are co-integrated and the co-integration vector is significantly close to the theoretical value for fiscal sustainability. The tax revenue plays a key role in sustaining fiscal debt in the sense of the present value budget constraint. The analysis also shows that high GDP growth relative to the interest rate favors the sustainability of China's government debt over the long run in spite of recent growing budget deficits and deflation. Although the importance of China's financial reform has been widely realized, there have been many discussions about the sequence of its financial reform for adaptation of WTO regulation. Before China's financial system is integrated into the global financial market, it has to recapitalize banks and liberate them from the huge burden of non-performing loans (NPL). In chapter 8, Yanqing Yang suggests a radical approach and illustrates several avenues to solve China's NPL problem. A set of preconditions needs to be met before full-fledged capital mobility. In coordination with interest rate liberalization, capital account liberalization is likely to initiate around 2008–2010.

In a comparison of public venture capital and private venture capital, Changwen Zhao, Shuming Bao and Chunfa Chen discuss the different roles and impacts of private and public venture capitals in financing the high-tech businesses in chapter 9. The results show that high-tech development in China suffers from a lack of venture capital, both public and private, and that public venture capital can fill the gap between the demands for and supplies of venture capital and help improve the investment climate for private venture capital, which may be much more important than the financial transfer from government. In chapter 10, Qi Zhang, Mingxing Liu, Yiu-Por Chen, and Ran Tao analyze how financial intermediation development affects urban-rural income disparity in China. Zhang et al. demonstrate that rural financial systems were inefficient in allocating funds for supporting rural economic development during the early period of the market reform (1978–88), which was primarily affected by fiscal policy, and the financial intermediation significantly manifested its effect

during the second period of the reform (1989–98). By introducing endogeneity, the robust results were estimated to show that the urban-rural income disparity does not depend upon the sector structure in the province, which is consistent with traditional urban-bias hypothesis.

Part III discusses the challenges for some industrial sectors in China. In chapter 11, Jason Z. Yin addresses the antidumping war against China. He conducted a survey of the WTO antidumping data, analyzes the structure and characteristics of all antidumping cases against Chinese enterprises, and offers some strategic and policy recommendations for the Chinese government and its enterprises to better prepare for the discriminatory provisions in China's WTO accession protocol and for the escalating antidumping trade disputes in protection for its economic and trade interests. In chapter 12, Y. Richard Wang studies the international competition in the pharmaceutical market between global products and local products in China. Wang finds that the price of global products is less responsive to local generic competition than the price of local products, and his results suggest a highly competitive local generic market while the evidence on therapeutic competition is not conclusive. The agriculture future market is new in China, which can have an important impact on the future development of the agriculture sector in China. In chapter 13, Wen Du and H. Holly Wang compare the wheat market in the US and China in an analysis of the performance of commodity futures markets in China. The China Zhengzhou Commodity Exchange (CZCE) has been in stable development since its establishment and was expected to be integrated in the world market after China joined WTO. Du and Wang compare the price behavior of CZCE with that of the Chicago Board of Trade (CBOT) in the US by using univariate and multivariate time series methods in their price models. Their results show both markets can be modeled by an ARCH or a GARCH model and the models have a better fit when conditional error variance is t distributed. The interrelations between the two markets are significant but asymmetric. CBOT holds a dominant position in the interactions while CZCE is more like a follower. In chapter 14, Fan Zhang and Zuohong Pan analyze the border effect of WTO on China's trade. China's entry into WTO will significantly reduce its trade barriers to the outside world. Using a theoretical gravity equation developed by Anderson and Van Wincoop, Zhang and Pan estimate the trade barriers between non-WTO member countries and WTO member countries. Their results suggest that trade barriers reduced trade by an average of 35 percent before a country like China enters into WTO, and entry into WTO will remove this barrier in a few years and increase trade by about 54 percent.

Part IV is devoted to the issues on international economy and labor market in China. In chapter 15, Peter E. Koveos and Yimin Zhang compare several selected aspects of economic performance between China and India, which are experiencing similar transitions in their development. China and India have made significant changes to their economies, as they are making the transition to a market-based economic framework. Meanwhile, China and India are attaining considerable stature within the global economy. In a comparative analysis, Peter and Yimin construct two performance indices by proposing a per capita production index for measuring a

country's output and a per capita living standard index for measuring a country's consumption activities. They find that China outperforms India by using both indices and the country ranking provided by the World Economic Forum. In chapter 16, Sheng Li investigates the determinants of low wage and labor standard in China by analyzing the segmented labor markets and immigration from rural to urban. The special market structure shows by itself that the low wage and labor standard are endogenous and naturally determined by the agricultural sector. Wages may continue to drop once no entry barrier exists between rural and urban areas. The low labor cost in China is decided by its enormous labor supply instead of any external measure. In the analysis of the 2000 population Census data, Shuming Bao, Anqing Shi and Jack W. Hou conducted a comprehensive study on migration in China, which is presented in chapter 17. They analyze the changing patterns of migration in the last 30 years, and compare changes in spatial tendency of migration by different regions, such as changes in migration distance, places of origination and destination, and regional variations. By applying Roberto Bachi's Migration Preference Index for inter-provincial migration, They investigate the changes in the migration patterns in western regions and other regions, built a migration model based on some selected factors and discuss the policy implications for regional development of China.

The WTO could have a significant impact on the relationship between mainland China and Taiwan. The final chapter, by Yongjun Chen, discusses the major factors that may affect economic relations between the two sides of the Taiwan Strait in the new era of economic globalization. The chapter examines the trend of development of cross-strait economic relations, the structural changes in the two sides of the Taiwan Strait, and gives suggestions on how to enhance economic cooperation and development between them.

Acknowledgments

We thank all the participants of the Chinese Economists Society conference, 'Chinese Economy after WTO: Opportunities and Challenges of Globalization,' for their contributions and involvement. We appreciate the help from those who have offered their research assistance and editorial assistance in preparing the book for publication. We are grateful to Sichuan University Business School, the University of Michigan International Institute, the Office of Vice President for Research, the Center for Chinese Studies, China Data Center, Business School, the Department of Economics, and the Williams Davidson Institute for their financial support. Finally, we would like to express our special thanks to Terre Fisher, Angela Kuhlmann, Jackie Lynch, Miao Wang, Tingting Song, Yan Guan and Li Zheng for their editorial assistance.

PART I

Globalization and Privatization

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Chapter 1

A New Round of Economic Growth: Causes, Mechanisms and Characteristics

Shijin Liu

The Chinese economy has picked up speed once again since 2002, the year after China acceded to WTO. In the first half of 2003, the growth rate exceeded 8 percent despite the adverse impact of the SARS rampage. After several years of low growth, especially after China's accession to WTO, a 'turning point' occurred in the economic growth. This situation has caught some people by surprise, and raised doubts about the sustainability of this relatively fast growth rate. It is, therefore, necessary to clearly explain the causes, mechanisms and salient features of the current new round of quick economic growth.

New Pattern for Industrial Growth: The Rise of High-Growth Industries

According to the results of the 'Follow-Up Study of the Development of the Chinese Industry' conducted by the Department of Industrial Economics of the State Council Research Centre, China's industrial growth has assumed some new salient features beginning from 2002.

Firstly, a striking gap has occurred in the growth of different industries. A number of new high-growth industries have emerged and are going strong. Figure 1.1 sheds some light on the trend of the diffusion index of the growth of the Chinese industry.

Figure 1.1 shows that in the period from 1998 to the first half of 2001, the industrial growth's diffusion index was fluctuating basically between 110 and 90, and growth was by and large balanced and stable, with none of the industrial branches standing out in performance. With the average level of the industrial growth's diffusion index recovering steadily since the year-end of 2001, the gap between high-growth industries and low-growth industries has been widening. Table 1.1 gives some idea about changes in the average boom level and income level of 18 major industrial branches as well as in their contributions to industrial growth as a whole.

As Table 1.1 indicates, 16 of the 18 industrial branches did better than the previous year while the automobile, coal-mining, food-processing and machine-building industries posted the best records. The boom levels of these four industries went up by more than 10 percentage points as compared with 2001. They accounted for 27.6 percent of the total industrial sales revenue but their rate of contribution

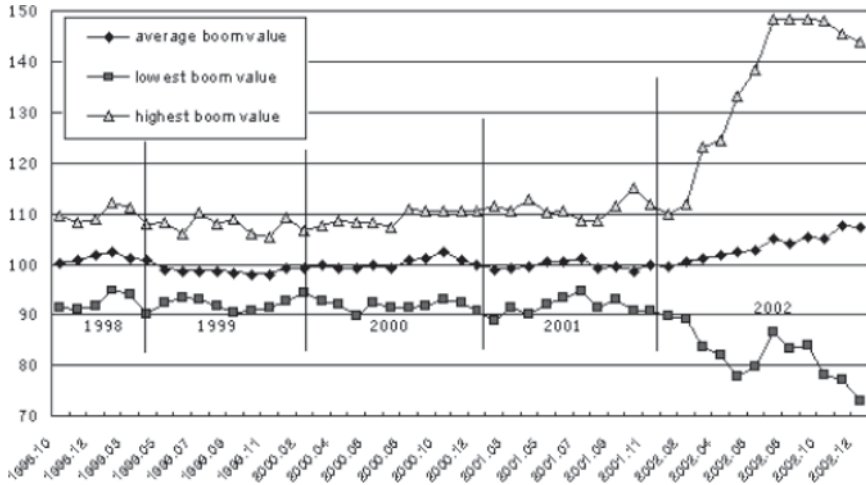


Figure 1.1 Changes in the Diffusion Index of the Growth of Chinese Industry

to the total industrial sales revenue went as high as 34.6 percent, indicating that they were the most important factors in boosting the industrial growth of 2002. The boom level for the pharmaceutical, building materials, power, textile and apparels, iron and steel, chemical and electronics industries was good, while gas and tap water supplies, papermaking, tobacco, household electric appliance and drinks and beverages industries were at an average boom level and remained more or less the same as the previous year.

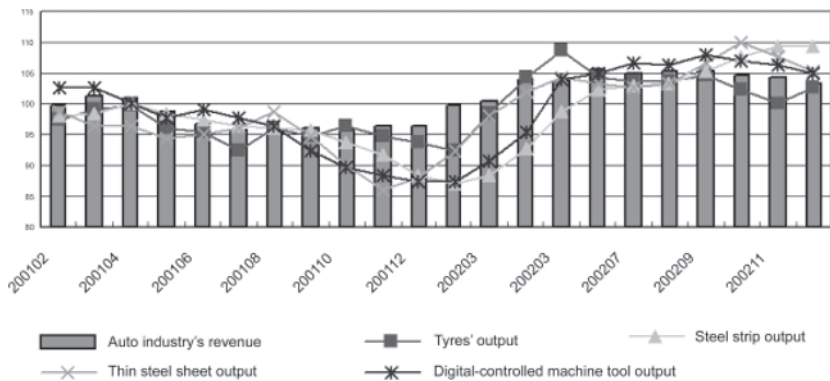
Secondly, the industrial growth has shown a striking relevance effect and group characteristics. A relevance effect with a well-defined logic relationship has been observed among the high-growth industries. On this basis, a number of major high-growth industrial clusters have emerged. One such cluster is headed by the automobile industry and includes the synthetic materials industry, the tire manufacturing industry, the iron and steel industry (devoted mainly to the production of thin steel plates and steel strips for the making of automobiles), and a branch of the machine-building industry devoted to the building of machine tools in general and digital-controlled ones in particular. Figure 1.2 is an indication of the relevance of the automobile industry to the above-mentioned industrial branches.

Moreover, there is also a high-growth industrial cluster headed by the real estate industry, a high-growth industrial cluster headed by the machine-building industry, and a high-growth industrial cluster for the manufacturing of consumer goods that do not include housing and automobiles.

The macroeconomic growth rate will go up with the strength of these high-growth industrial clusters. This gives rise to another question: How did this pattern of economic growth occur and can this economic growth be sustained? To answer this question it is necessary to analyze and interpret the causes and mechanisms for this new round of economic growth.

Table 1.1 2002 Diffusion Indexes for 18 Major Industrial Branches and Their Contributions to Industrial Growth

Industrial Sector	Average diffusion index in 2002	Difference from 2001	Portion in industrial sales revenue	Rate of contribution to industrial growth %
Automobile industry	137.858	36.163	0.057	11.26
Coal-mining industry	118.547	16.514	0.019	2.98
Food-processing industry	116.613	16.167	0.063	6.51
Machine-building industry	110.049	11.161	0.137	13.87
Pharmaceutical industry	109.274	6.755	0.023	2.21
Building materials industry	108.413	9.857	0.042	3.62
Power industry	108.020	7.147	0.090	9.75
Textile & apparels industry	106.194	7.705	0.088	7.93
Chemical industry	105.947	4.596	0.114	10.51
Iron & steel industry	105.339	4.440	0.065	6.22
Electronics industry	104.263	2.725	0.091	13.00
Gas and tap water supplies	103.839	4.569	0.007	0.74
Papermaking and printing industry	102.945	2.732	0.027	2.53
Tobacco industry	102.755	3.230	0.020	1.78
Household electric appliance industry	102.461	2.540	0.039	3.92
Drinks and beverage industry	101.732	0.394	0.019	0.85
Nonferrous metal industry	97.979	-0.967	0.025	1.72
Oil and petrochemical industry	88.429	-10.147	0.074	0.62

**Figure 1.2 Monthly Growth Indices of Major Industrial Output (2001–2002)**

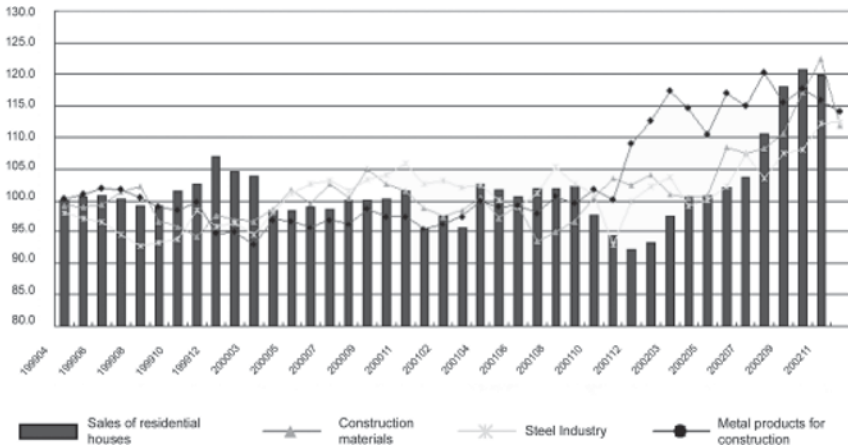


Figure 1.3 Monthly Outputs of Some Major Industries (1999–2002)

How Did the New Round of High Growth Occur?

High-speed Economic Growth Depends on New Fast-growing Industries

A salient feature of high-speed economic growth lies in the fact that this type of growth is not an outcome of balanced growth of various industrial branches. In each stage of such growth, a particular group of high-growth industrial clusters, or leading industrial clusters, occurs. The industries in these clusters grow much faster than the other industrial branches, thereby boosting the growth of the national economy as a whole. This phenomenon has been borne out more than once by the international experience.

The robust growth of the Chinese economy since the adoption of the policy of reform and opening up to the outside world has also been fueled by these fast-growing industries. In the past two decades and more, the Chinese economy has experienced two rounds of fast growth catalyzed exactly by fast-growing industries. The first round, which took place during the early and middle 1980s, drew its impetus from the light and textile industries. The second round of fast growth, revved up by the remarks made by Deng Xiaoping during a south China tour in the early 1990s, was guided by a series of fast-growing industries, including the infrastructure and the basic industries (the construction of highways and harbours, and the power and iron and steel industries), the manufacturing of new-generation household electrical products (color television sets, refrigerators, washing machines and air-conditioners), and the real estate business.

The slowdown of the Chinese national economy after 1997 may well be interpreted this way: the wind was taken out of the sails of those high-growth industries that rose in the early 1990s, while no new high-growth industries emerged to take over their position. In other words, the void thus created was not filled in a timely fashion.

*Major Causes for the Emergence of New High-Growth Industrial Clusters:
Collapse of the Bottleneck in the Economic Cycle*

The void created by the lack of high-growth industries and the economic slowdown indicated that major problems had appeared in certain links in the economic cycle. Because of the interaction of numerous links in the economic cycle, people may have many reasons to account for the economic slowdown. However, it is necessary and possible to pinpoint the links and problems that were responsible for it. Observations of the process of the economic cycle in recent years indicate that the upgrading of the consumption mix of urban dwellers was mainly to blame for the economic slowdown. The difficulties confronting the upgrading of the consumption mix of urban dwellers stemmed neither from a potential lack of demand nor from a lack of supply of production elements, but rather, they stemmed from obstacles in the Chinese system and government policies, obstacles that manifest themselves in housing and transportation.

The national economy has entered another round of relatively fast growth since the beginning of last year. The most important of all the factors behind this change is that the bottleneck in the effort to upgrade the urban dweller's consumption structure is being broken through, and that major progress has been achieved in readjusting the relevant systems and policies. Free distribution of housing funded by the government has been abolished while a multiple-level housing market is burgeoning. China's accession to WTO and the subsequent reduction of tariff on auto imports played only a marginal role in the major development of the Chinese automobile industry in 2002 – the major reason being that the government's conscious or unconscious decontrol of access to this industry has boosted the number of automakers, facilitated and intensified competition, increased the variety of products, reduced the prices, thereby enabling consumers to readjust their anticipations and release their purchasing power, and putting automobile consumption and production on a fine cycle of interaction. It is no exaggeration to say that the auto industry's explosive 2002 growth was a typical case of industrial and economic growth precipitated by government decontrol of the access to the industry. If we bring this chain of events into focus, we can clearly see a logical process in which the bottleneck in upgrading the consumption structure was broken by restructuring the Chinese system and readjusting the government policies, and the upgraded consumption structure catalyzed the emergence of a group of high-growth industries and ushered the national economy into a new round of fast growth. On this basis, we can come nearer to understanding the real cause behind this new round of fast economic growth.

Major Characteristics of the New Round of Economic Growth

The new round of economic growth is still in its initial stage. The following are our initial observations of some of its major characters and our judgments on it.

The Growth of the Housing, Automobile, Electronic Telecommunications and Other Consumer Goods Industries is Highly Sustainable because Their Goal is to Satisfy Consumer Demand

The products of these industries not only meet the demand of a specific group of consumers; more importantly they are catered to the snowballing demand of the vast populace. In a given year, only a small high-income portion of the population can afford to buy houses and cars. However, because of the colossal size of the Chinese population, this portion of people is large enough in number to make substantial contributions to economic increments, and, what is more, their numbers are growing. Only by entering the stage of popular consumption can the housing and auto industries truly become mainstays for the growth of the national economy as a whole; only thus can their growth be really sustained. The characteristic of this new industrial cluster to meet the consumer demand of the vast populace can put economic growth on a solid basis and effectively prevent overall and continuous 'bubbles' from occurring.

The Housing and Automobile Industries that are Leading this New Round of Economic Growth are in a Considerably Long Cycle of Fast Growth

According to the experiences of the world's major industrialized powers, the automobile industry maintains a period of fast growth for 20 to 30 years after it enters the stage of popular consumption. Urbanization is accelerating in this country. Studies indicate that improved housing conditions for urban dwellers and the entry of rural dwellers into cities can precipitate fast growth of the housing industry for at least two decades. Although industries have different cycles of growth, although the factors affecting economic growth are complicated and changeable, and although short-term or accidental factors may cause large or small economic fluctuations, the rise of the housing and automobile industries will keep the Chinese economy in a considerably long period of relatively fast growth.

An Extraordinary, Large Economic Scale Commensurate with the Capacity of the Chinese Market is Emerging

China has a population of nearly 1.3 billion people, nearly 500 million of whom are urban dwellers. For a population this size to enter the middle stage of industrialization is something never experienced in human history. The nation's urban population alone is already larger than the population of any industrialized nation. China is leading the world in the output of many traditional industrial and agricultural products. China is also among the world's largest producers and sellers of some high-tech products, cell phones included. In conjunction with the new round of economic growth, some Chinese industrial products and services will, with their extraordinarily large market capacities, enter the front ranks of the world and become major economic phenomenon. For instance, in the next 10 or 20 years, it will be possible for China to

become one of the countries in the world to possess and produce the largest numbers of automobiles. There are at least two strengths about this super-large market scale: firstly, large enterprises can emerge by relying on the domestic market alone; and secondly, several large enterprises that have measured up to the requirements for sizeable economic scales can coexist and form effective competition in the home market.

In the New Round of Economic Growth, the Competitiveness of the Chinese Industry will be More Closely Associated with the Industrial Clusters

The clustering of industries is nothing new in the process of industrialization. It has been growing robustly in China during the last few years, and particularly so in the developed southeastern coastal regions. This has enabled many industries to vastly cut their costs, thereby considerably raising their competitiveness. Take the Pearl River Delta for instance. In this area with a circumference of 100 kilometres, the purchasing prices for colour television sets, computers and some other products are 30 percent lower than in other regions; as a result, most of the leading enterprises in these industries have set up manufacturing bases in the Pearl River Delta. The new round of economic growth entails a stage in which industrial competitiveness is closely linked with the degree of industrial clustering. That is to say a relatively competitive industry will make its presence felt in a certain region where certain industries are thickly clustered.

Interaction between Industry and Urban Industry in the New Round of Economic Growth will Catalyze the Formation and Expansion of a Number of Major Urban Belt Regions

Urban development has been a highly controversial issue for many years. It is, however, becoming increasingly clear that the basic trend is not to emphasize the development of a certain type of city, but rather to form and expand several belts or circles each containing a number of cities of different sizes and types, to which the majority of the population and most of the resources will be gravitated. In an experience similar to that of the entire world, several city circles are emerging in the Chinese coastal regions, and so are a number of urban belts coming into being along the trunk transportation lines of the hinterland. The immense demand of the rising high-growth industries for the services industry in general, and the modern productive service industry in particular, will provide a major impetus for urban development. That is why quite a few typical cases have occurred in recent years, in which industries were born along with new cities. Among these cases are the growth of the urban functions of Hong Kong and Shenzhen alongside the development of the electronic telecommunications industry in Dongguan, Guangdong Province, and the development of the urban function of Shanghai in sync with the rise of the electronic telecommunications industry in Kunshan, Jiangsu Province. To seek the 'industrial backing' is increasingly becoming a common issue for various localities

in pursuing urban development. The fast growth of new high-growth industries will provide more opportunities for tackling this issue.

Chapter 2

China One Year After Its WTO Entry

Aimin Chen

Introduction

China formally became a WTO member on December 11, 2001. One year after its entry into the WTO, one is compelled to ask these questions: Has China become a more open society? Has China complied with the WTO rules? How have China's sectors of agriculture, industry, as well as service, endured the entry impacts? Have there been systemic changes beyond economic growth and foreign trade? As the largest developing country of the world that has scored unprecedented economic growth in the past two decades, China's WTO entry as well as its performance as a new member further integrated into the global economic system are of importance and concern to most.

This study attempts to answer these questions. Addressing both aspects of the effects on China's sectors of agriculture, industry, and services, and on systemic structure and institutional changes, the impact of entry one year after is analyzed in comparison with the industrial structure and expected impact prior to the entry. Collecting and organizing most recently released data by Chinese news media in the impact analysis, the author hopes to make a timely contribution to the literature on China's WTO accession as official statistical volumes containing economic data after China's WTO entry are yet to become available.

The remainder of the chapter is organized as the follows. In Section II, we present an analytical summary of China's pre-entry systemic and sectoral structure of the Chinese industry and expected impact of China's WTO entry based on such structure. Section III, the focal section of this study, provides post-entry impact analysis structured into three parts. The first part addresses the changes in openness of China to the world; the second, sectoral changes in the three sectors of agriculture, industry, and services; and the third, institutional and systemic changes to the Chinese society. In Section IV, the author presents a brief analysis of what is awaiting China after the first year, which will suggest that the impact of WTO entry is yet to be seen, especially in agriculture and service sectors. The last section makes concluding remarks.

Pre-entry Structure and Anticipated Impacts

To better understand what WTO entry has brought to China one year after its membership and to predict further impact in the years ahead, a good knowledge of the background under which China entered the WTO and the anticipated impact prior to the entry is helpful. We, therefore, in this section review, from both perspectives of systemic and scale characteristics, the structure of Chinese industry prior to the entry and the analysis of the anticipated impact, based primarily on the author's previous research (Chen, 2002) on the impact of China's WTO entry. To guide our analysis, a review of the classification of China's economic sectors is provided in Table 2.1.

The Pre-entry Structure of the Chinese Industry

Systemically, Chinese industry prior to WTO entry featured a significantly weakened state sector. The state sector's share of urban employment declined from 76.2 percent in 1980 to 31.9 percent in 2001 (Chen, 2002, and *China Statistical Yearbook 2002*, p. 120), while its share of the gross value of industrial output (GVIO) declined from 64.86 percent in 1985 to 28.1 percent in 1999 (Chen, 2002, and *China Statistical Yearbook 2000*, pp. 407–409).¹

Moreover, the state had declined significantly in the industrial sector as a whole, but its dominance within the sector existed in the productions that were considered to be vital to national interests, such as in petroleum and natural gas extraction, coal mining and dressing, logging and transport of timber and bamboo, tobacco manufacturing, petroleum processing and coking, smelting and pressing of ferrous metals, production and supply of electrical power, gas, and tap water. Beyond the industrial sector, the state remained its dominance or monopoly position in the sectors of education, culture and arts, radio, film, and television (97.07 percent of urban employment); in scientific research and polytechnic services (92.04 percent of urban employment); in services for farming, forestry, animal husbandry, and fishery (89.06 percent); in health care, sports, and social welfare (87.2 percent); in productions and supply of electricity, gas, and water (85.9 percent); in mining and quarrying (83.26 percent); in real estate trade (70.58 percent); in banking and insurance (69.13 percent); and in transport, storage, post, and telecommunications (65.54 percent). The state sector had even expanded in absolute size in the public utilities sector, the banking and insurance sector, the education, culture and arts, radio, film and television sector, the real estate sector, and the scientific research and polytechnic services sector (Chen, 2002).

From the engineering and market concentrations perspective, China's industrial sector prior to WTO entry characterized low concentrations and too small firms.

1 The measure of gross value of industrial output (GVIO) by state owned enterprises (SOEs) discontinued after 1999. Starting in 2000, the closest substitute measure is GVIO produced by state-owned and state-holding enterprises, which includes a large amount of non-state elements and, therefore, is not comparable with the previous measure.

Table 2.1 Foreign Direct Investment and Foreign Trade in China

Year	FDI (bil. USD)	% of FDI Growth	Export (bil. USD)	% of Export Growth	Import (bil. USD)	% of Import Growth
1990	3.487	—	62.09	—	53.35	—
1991	4.366	25.20	71.84	15.70	63.79	19.60
1992	11.007	152.10	84.94	18.20	80.59	26.30
1993	27.515	150.00	91.74	8.00	103.96	29.00
1994	33.767	22.70	121.01	31.90	115.61	11.20
1995	37.521	11.10	148.78	22.90	132.08	14.20
1996	41.725	11.20	151.05	1.530	138.83	5.11
1997	45.257	8.46	182.79	21.00	142.37	2.55
1998	45.463	0.45	183.71	0.50	140.24	-1.45
1999	40.319	-11.30	194.93	6.11	165.70	18.15
2000	40.715	0.98	249.20	27.80	225.09	35.80
2001	46.878	15.14	266.15	6.80	243.61	8.22
2002	55.000	17.33	323.64	21.60	293.55	20.50

Note: The calculations of import and export figures of 2002 are based on the estimated growth rates of export of 21.6 percent and of import of 20.5 percent (CCTV, 12/12/02), the sum of which (617.19 billion) is slightly lower than the figure of 620.8 billion given by the deputy director of China State Statistical Bureau, Mr. Qiu Xiaohua (CCTV, 3/1/03).

Sources: 1. Figures before 2002 are from *China Statistical Yearbook 2002*, pp. 612, 629 and the author's calculations. 2002 FDI figure is from *Financial and Economic News Briefing*, CCTV, 3/3/03 and the author's calculations. The 2002 trade figures are from *China Report*, CCTV, 12/2/2002 and the author's calculations.

China in 1997, for example, had 17,831 firms in plastic products, 58,662 in nonmetal mineral products, 28,283 in metal products, 27,837 in ordinary machinery, 18,332 in transport equipment, etc. The highest per firm sales revenues among these groups were 21.51 million yuan. The smallness of the firms was further evidenced by the auto industry in which 47 percent of firms in the auto industry in 1996 produced less than 1000 vehicles (Chen, 2002).

Chinese industries also featured severe overcapacities. In the textile industry, for example, the state textile enterprises by October 1998 had idled 4.32 million spindles under a state 'Aide' project in order to eliminate overcapacities. Moreover, the author had developed a measure of R ratio, the ratio of total industrial output to the production capacity of key firms in the industry, as a criterion to see whether an industry has too many firms. When the ratio was greater than one, the industry allowed fringe firms to produce alongside of the key firms, but if the ratio was smaller than one, the key firms' capacities alone exceeded the total industry's output. It turned out that at the end of 1997, 28 industries out of the 33 listed had smaller than one R ratio, evidencing strongly the existence of overcapacities and too many firms (Chen, 2002).

Three factors had been identified to have contributed to Chinese industry's low concentration and the existence of too many firms. First, China lacked multi-plant

firms. Unlike in developed market economies where the number of firms (N_f) can be significantly smaller than the number of factories or plants (N_p) because many firms have multi-plants, N_f in China was roughly the same as N_p because of its early market development. While largely statistical when counting the number of production units, such structure could result in real economic effects because of differences in coordination between plants within a firm and between firms. Second, local protectionism prevailed through which local governments protected inefficient firms from bankruptcy by restricting trade of non-local firms in the local markets. Third, Chinese state enterprises had faced exit barriers because they must obtain their quota to exit their businesses for social stability and other considerations. Many small firms also suffered from being unable to 'die' (Chen, 2002).

Accompanying the structural problems of the Chinese industry was rapid consolidations of Chinese firms through regrouping, bankruptcy, and growing more mature. As a result, the number of SOEs had declined from 118,000 in 1995 to 46,800 in 2001, while the size of SOE employment per firm has grown from 954 persons in 1995 to 1632 in 2001.² Many industries, such as electronics, textile, toys, shipbuilding, have become increasingly competitive in the world market.

Meanwhile, China's agriculture sector, where production had been private family based, had been most closed to foreign competition. The sector also characterized low per capita land, low level of mechanization, and the existence of massive surplus labor. China's service sector, on the other hand, had been heavily monopolized by the state except in retail sales as aforementioned.

Expected Impact of the Accession

The severity of the impact of WTO entry depends, in general, on the openness and the extent of monopolization. The more closed a sector is to foreign competition, the greater shock it will bear after the accession; the more monopolized an industry, the more dramatic the decline in the market shares of the monopolistic firms.

Based on the pre-entry conditions, China's three sectors were predicted to bear a diverse impact of its WTO entry. The agriculture sector would be impacted heavily as the sector has had a low degree of openness despite the low degree of monopolization. Resource reallocation, primarily rural labor, was expected to flow toward other sectors.

The manufacturing sector, on the other hand, was predicted to have unclear overall impact. Some sub-sectors were to benefit from expanded foreign markets and would further extend their comparative advantage; some would contract in the effort to consolidate and become competitive; and yet others would shift resources to other industries. Thus, reallocation of resources in this sector would occur primarily among its own industries.

China's service sector was to experience a strong overall effect from the accession. Retail sales excepted, this sector characterized the most pronounced state

2 Calculated from *China Statistical Yearbook 2002*, pp. 406, and 121–22.

dominance prior to the accession, such as in banking, insurance, telecommunications, and wholesale distribution. WTO entry marked the sharing of the market for the first time with any non-state enterprises in these industries. While state monopolies were ending in this sector, resources were also expected to flow into the sector as the economy became more advanced and privatized.

Systemically, WTO entry would change the ratio of $SOE/(SOE+NSOE+FE)$ in the sectors, where NSOE symbolizes non-state enterprises and FE, foreign enterprises. In the agriculture sector, this ratio would decline, reflecting primarily the sharing of trading rights and distribution that had long been monopolized by the state. The same effect would take place in the service sector as a result of unprecedented breaking of entry barriers by FEs and NSOEs. But such an effect was unclear in the manufacturing sector where most exporting firms were state firms and were becoming still more competitive, while many small and private firms were unable to survive foreign competition especially when domestic conditions were not conducive to their development. The most striking systemic effect would be the creation of an entirely new growth environment for China's private enterprises as state monopolies were to end in many services and public utilities where entry barriers had long lasted. Moreover, the negative impact on NSOEs would be transitory whereas the impact on SOEs would be permanent (Chen, 2002).

An Analysis of the Impact

What has happened to China one year after its long-sought entry into the WTO? Based on available data, we carry out our impact analysis *ex post* by attempting to answer the questions of whether China has become more open, what has happened to each of the sectors, and what institutional and/or systemic changes in a broader perspective have taken place following the entry. Our earlier analysis of the basic structure of the Chinese industry continues to serve as a useful background and the predicted effects *ex ante* provides a basis of comparison.

A More Open Economy

We use the extent of international involvement of the Chinese economy to measure its openness. Available data on FDI, exports and imports, tariff changes, breaking of entry barriers, as well as interaction of Chinese firms in the international markets afford us to take a glance at the issue.

In 2002, China's FDI had achieved a growth rate of 17.33 percent, the highest rate since 1995 (Table 2.1). With an accumulated value of 530 billion US dollars, China had surpassed the US to become the world's number one country in attracting FDI. Its imports and exports had also grown briskly at the rates of 21.6 percent and 20.5 percent. Import tariffs have on average decreased by 35 percent and on some products by 45 percent (CCTV, 12/12/02).