The China Miracle: How OECD Country Policies Contributed?*

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May 2004

(Preliminary Draft)

* Paper prepared for the Conference "*The Impact and Coherence of OECD Country Policies on Asian Developing Economies,*" held at Paris on June 10-11, 2004. I would like to acknowledge the capable research assistance of Zhiyun Li for the preparation of this paper.

China's Miracle: What External Factors Contribute?

1、Introduction

At the end of the 1970's, China launched a series of reforms in the rural areas to transit from a planned to a market economy, and after more than two decades, these nationwide rural-to-urban reforms have achieved great accomplishments. From 1979 to 2002, the average annual growth rate of China's real GDP reached 9.4%, and that of the real GDP per capita 8.1%, rivaling the record achieved by the four small East-Asian Dragons in their fastest development period. In particular, China's vivid and rapidly growing economy contrasts sharply with those of the former Soviet Union and Eastern European countries, most of which are still in trouble and have not recovered to their former development levels before their transitions in the early 1990's. The great achievements of China's economic reform over the past two and a half decades has now been recognized as a *Miracle* in the history of human economic development.

As the largest developing country in the world, China's successful economic reform has provided invaluable experiences and lessons for other developing economies to solve the issues in their economic development and reform. What was the motivation for China's Reform and Open-door policy in the end of 1970's? Why did China choose the gradual approach of economic reform, rather than those Big Bang alternatives? What are the major internal and external factors that have contributed to China's Miracle? All these important questions need to be properly and carefully answered.

The great achievements of China's economic reform are the result of the mutual interaction between many internal and external factors. While most of the present literature on China's transition concentrates mainly on the influences of internal factors, little work has been done on the external factors. In this paper, we will systematically review and evaluate the impacts of major external factors on China's transition to a market economy in the past two decades.

The remaining parts of this paper are organized as follow:

In Section 2, we will shortly review the major achievements of China's economic reform, and then provide a consistent logical framework to explain the origin and the gradual approach choice of China's economic reform. Our major point on these questions is that: the ten years of the Cultural Revolution (1966-1976) had greatly destroyed China's economy, and with the rapid economic growth in the neighboring countries and regions in the same period, China's new leaders after the Cultural Revolution felt a heavy pressure for economic reform. In addition, the launch of economic reform and improvement of living standards of the people would also provide the new leaders with legitimacy for their leadership. However, the new leaders of China also participated in the design and implementation of the planning system, and with socialism still being the dominant ideology, it was natural for the leaders to adopt a gradual, tinkering approach of economic reform.

From Section 3 on, we will concentrate on evaluating the influences of major external factors on China's economic reform, which include international aid, international consultation, foreign direct investment (FDI) and China's entry to the World Trade Organization (WTO).

The scale of international aid is quite small when compared to the gross domestic product of China, and the impacts of aid on China's economic reform derive not from aid scales, but from the exemplary effects of the aid projects. China's now more developed coastal regions were once the major beneficiaries of international aid in the 1980's. With the rapid growth of China's economy, the importance of aid in production investment was significantly reduced. And after the middle of 1990's, most aid to China shifted to the field of social development and poverty reduction.

As for international consultation, because under the constraints of socialist ideology and economic and political institutions, Chinese leaders adopted a gradual approach of economic reform and they are generally very cautious and selective in accepting the policy suggestions proposed by western economists and international organizations, which is quite different from that of the former Soviet Union and Eastern European countries. However, international consultation has enhanced the government's capability in economic policy design and implementation, and facilitated the spread of modern economic science in China. In subsection 3.2, we evaluate such contribution to China's economy by reviewing several important international conferences that have had far-reaching influence on China's economic reform.

As capital is extremely scarce but labor is comparatively sufficient in China, the influence of Foreign Direct Investment (FDI) on China's economic development is self-evident. Large amounts of FDI inflows not only make up for the scarcity of China's domestic capital, improve the structure of factor and endowment, and promote the update of the industry's structure, but also bring advanced management as well as technology. It has a positive externality upon the reform of the domestic markets and enterprises. According to the relationship between FDI and the formation of fixed capital, as well as the elasticity of FDI and exportation, the contribution of FDI to the growth of China's GDP is about 0.6 per cent per year in the period 1992-2002 (Xiaolu Wang, 2001).

In Section 5, we analyse the impacts of WTO entry on China's economic development. The ultimate objective of China's economic reform is to establish a sound free market system, which is consistent with the requirement of the WTO Agreement, and the WTO accession will certainly facilitate China's transition from a traditional plan economy to a modern market economy. Under the constraints and pressures resulting from the articles of WTO agreement, the Chinese government has to expedite its steps of market-oriented reform, and clean up the outdated institutional arrangements that are inherited from the former plan economy but not suitable for the market systems. In this section, we will analyses the impacts of WTO entry on China's industry policy, trade policy, regulation of macro economy, reform of taxation system and legal infrastructure.

In the last section of this paper, we give a concluding remark.

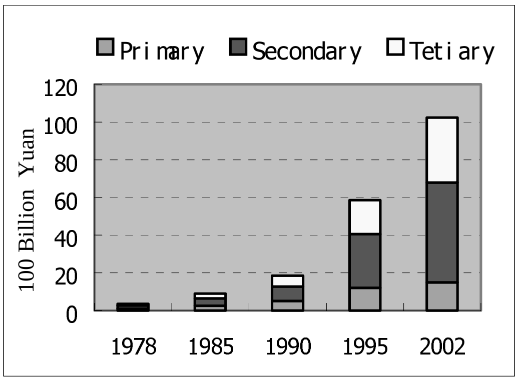
2、Achievement and Logic of China's Economic Reform

2.1 Achievements of China's Economic reform

Through more than 20 years of development, a tremendous change has happened in every aspect of the Chinese economy and society. Firstly, the Chinese economy has achieved rapid growth. From 1979 to 2002, the average growth rate of real GDP reached 9.4% annually, while the per capita real GDP increased 8.1% every year (Fig. 1). Up to the end of 2002, the GDP and per capita GDP of China are respectively 8.6 and 6.4 times of that in 1978 before the reform. The total size of Chinese economy has ranked the sixth in the world when measured by official exchange rate, the second when measured by purchasing power parity.

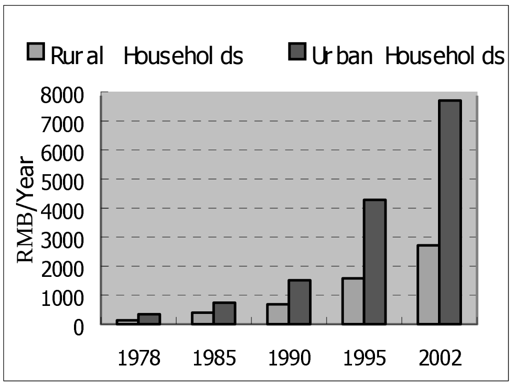
Secondly, the Chinese economy has rapidly developed from an inward-oriented economy before the reform to an open economy of today: in 2002, the total exports and imports of China were US$ 325.61 and 295.31 billion respectively. Compared with US$ 9.75 and US$10.89 billion in 1978, the average annual growth rates were 15.7% and 14.7. Meanwhile, the ratio of total imports and exports in GDP also rapidly increased from 9.7% in 1978 to 50.2% in 2002. Foreign direct investment (FDI) increased to US$ 52.74 billion in 2002 from US$ 57 million in 1978.

Fig. 1 GDP Increase Trend and Structure



Data source: China Statistical Yearbook（2003）

Fig.2 Annual Net Income per Capita

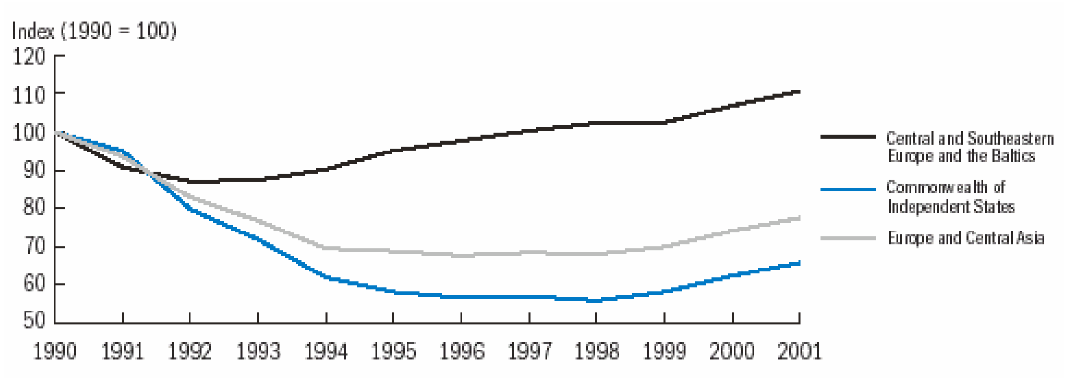


Data source: China Statistical Yearbook（2003）

Thirdly, with the fast development of the economy, the people's living standard has improved greatly at the same time. The net income of rural residents increased from 133.6 Yuan in 1978 to 2713.0 Yuan in 2002 while the per capita disposable income of urban residents increased from 343.4 Yuan in 1978 to 7702.8 Yuan in 2002. The growth rates are 7.6% and 8.1% respectively when calculated according to comparable prices. (Fig. 2) Fourth, with the progress of reform, a market system has emerged from a traditional highly centralized planned economy.

Moreover, as an important transition economy, the accomplishment of Chinese reform was in sharp contrast to the performances in Former Soviet Union and Eastern European countries, which adopted a radical reform approach. We can see from Fig. 3, which shows the changes in real GDP in the Former Soviet Union and Eastern Europe countries. After 10 years of reform the real GDP of Central and Southeastern Europe and the Baltics (CSB) merely recovered to the level slightly higher than the real GDP before the reform, and the real GDP of the Commonwealth of Independent States in 2001 was less than 70% of that in 1990. Poland, which is the best performing country among Central and Southeastern countries, increased by 44% in GDP while Russia decreased by 36% and the worst performing Georgia decreased by 71% (World Bank 2002, p.5)

Fig. 3 Commonwealth & CSB real GDP trend：1990-2001



remarks：1、CSB countries：Central and Southeastern Europe and the Baltic；2、data of Europe and Central Asia are the average of Commonwealth and SCB；all the averages are weighted average；3、figure source：World Bank（2002）

Up to now, the partial reform of China is much more fruitful than the radical reform of the Former Soviet Union and Eastern Europe, whose reform approaches are heavily influenced by western economists and international organizations and the theories of neoclassical economics. These phenomena illustrate that the existing economic theories lack profound understanding of problems in transition economy.

2.2 The Logic of Piecemeal Approach to Economic Reform in China.

Why did China start the all-round reform that has been proved as having a far-reaching impact later? Why did China choose the partial, piecemeal reform instead of radical reform that the Former Soviet Union and Eastern Europe have chosen? Although seeming to be fortuitous, these choices have their internal logic.

At the beginning, like other socialist countries, China gave priority to the development of heavy industry under the guidance of a “catching up strategy”. The traditional highly centralized planned economy system prevailed at that time. When PRC was founded, China was still an agrarian economy with the features that capital was in short supply and labor was comparatively abundant. The features of heavy industry are capital intensive and require long gestation for its investment. Therefore, the government had to strengthen the control of economic resources and supported heavy industry by driving down the interest rate, the exchange rate and the prices of raw materials. Under this distorted macro policy environment, resources were inevitably distributed by the highly centralized planning method. Consequently, a micro operation mechanism consistent with this highly centralized planned system appeared, such as the nationalization of industry and communization of agriculture. So, once the priority is given to heavy industry, a distorted macro policy environment, a highly centralized planned resource allocation system and a micro-management mechanism without any managerial autonomy were formed accordingly (Lin, Cai, Li, 1999).

Although China had achieved some extensive growth at a certain speed before 1978[1], the above-mentioned comparative-advantage-defying (CAD) strategy also brought about serious problems. The first one was the distortion of industrial structure and employment structure: in terms of output, heavy industry was too heavy, light industry was too light and agriculture was neglected. However, in terms of employment, the agricultural population was still the overwhelming majority while laborers in the countryside were not allowed to migrate to urban areas. The second one is the low incentive mechanism. In the highly centralized planned system, the SOE managers did not have any autonomy, which led to the low incentives for the managers and workers. Third, the improvement of people’s living standard was little. The “Great Cultural Revolution” from 1966 to 1976 did great damage to the society, pushing the national economy to the edge of collapse.

In China, as an authoritarian country, the ruler always established a certain ideology to justify his development strategy, and thus, it was very difficult to change the strategy when the ruler was still in power because the change of strategy would damage the ruler’s legitimacy of leadership. The death of Chairman Mao Zhedong in 1976 made it possible to implement a new economic and social development strategy. What’s more, the old generation of leaders, represented by Deng Xiaoping replaced Mao’s hand-picked leaders Hua Guofeng and the “Gang of Four”, who were loyal to Mao’s strategy. To gain their legitimacy for replacing

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[1] The annual increasing rate of GDP was, 9.1 in the first “five plan”, 2.2% in second, 14.9% between 1963-1965, 6.9% in third, 5.5% in forth, respectively, and the average annual growth rate was 6.0% during 1953-1978.

Mao's designated successors, the best way for Deng Xiaoping and his associates was to improve people's living by altering the existing development strategy.

On the other hand, it was difficult for the new leadership, represented by Deng Xiaoping, to totally reject the planned economy because they were the first generation revolutionaries and had participated in the implementation of the "catching up strategy" and the formation of the traditional planning system. If they did so, their own legitimacy would be in danger. Therefore, the new Chinese leaders after the Cultural Revolution could only choose a tinkering approach to reform the existing planning system.

The traditional planning system with the distorted macro-policy environment, planning-based administrative resource allocation system and autonomy-deprived micro-management system is endogenous to the government's attempt to develop capital-intensive heavy industries when China was a capital-scarce agrarian economy. China's transition in the past 25 years was a procedure starting from the micro-management reform in the traditional planned system.

Micro-management reform started from the rural areas. At the end of 1970s, the collective farming system started to be replaced by the household responsibility system (HRS). The principle of "submitting enough to meet the state quotas, leaving enough to fulfill the collective levy obligations, all of the remaining of the production belonging to peasants themselves" links income with outputs, giving great incentive to peasants. During 1978-1984 when HRS was widely introduced, the average annual growth rate of agricultural output calculated by fixed price increased at 7.7%, compared to 2.9% per year in the previous 26 years in 1952-1978. About half of the output growth in 1978-1984 can be attributed to the introduction of HRS (Lin, 1992). With the success of rural reform, the urban area also started economic reform with the focus on state-owned enterprises, first attempting to improve the incentives by giving autonomy to managers and allowing the firms to share the profits and later to reform property right arrangements by adopting the modern corporate system. However, up to now, the reform hasn't achieved absolute success. Because SOEs still bear policy burdens, the problem of soft budget constraint hasn't been eliminated (Lin and Tang, 1999). Accompanying the gradual progress of economic reform, the government loosened the restriction on the development of non-state-owned enterprises. The development of the non-state owned economy, mostly in the labor-intensive sectors, contributes to the improvement of resource allocation, and the rapid and sustainable growth of the national economy.

China's reform is not designed in accordance with neo-classical economics. State-owned enterprises are not privatized and resources are allocated by dual tracks, both plan and market. Although China's reform had achieved miraculous growth in the 1980s, most economists were pessimistic about the future of China's reform because they believed that market economy should be based on private ownership, but China didn't do that. Most economists believed that countries in the former Soviet Union and Eastern Europe would outperform China, because they adopted the shock therapy, which was designed according to the principles of modern economic theories.

Another ten years have passed and what most economists had expected at the beginning of 1990s failed to come true. The Chinese economy continued to grow rapidly with an annual growth rate of 10.1% per year in the 1990s and foreign trade increased at 15.2% per year in the same period, while the countries in the former Soviet Union and Eastern Europe suffered serious inflation and recession. (World Bank 1996; Dabrowski 2001)[2]. China's gradual, piece-meal, dual-track approach to transition is desirable because most SOEs are in sectors that are inconsistent with China's comparative advantages and are nonviable in open, competitive markets. The government's distortions in the market functions before the transition were endogenous to the needs of protecting the nonviable firms (Lin 2003). China's approach gives the government the ability to support the SOEs continuously and encourages the growth of the non-state sectors that are consistent with China's comparative advantages but were suppressed previously. Therefore, China has achieved stability and dynamic growth simultaneously during the transition process. However, the completion of China's transition to a well-functioning market economy depends on the success of addressing the SOEs' viability issues (Lin and Tan 1999).

3. International Aid and Consultation

In the above section, we have reviewed and summarized the major achievements and the logic of China's gradual approach to reform in the past 25 years. As we have mentioned in Section 1, the achievements of China's reform are the results of interactions between internal and external factors, and the present literature concentrates mostly on the internal factors, with little work having been done on the influence of external factors. In this paper, we will evaluate the impacts of major external factors on China's economy reform. In this section, we will first investigate the effects of international aid and consultation.

3.1 International Aid

There are three forms of international aid: Official Development Assistance (ODA) provided by the governments of the developed countries; international multilateral aid provided by international organizations, such as the World Bank, Asian Development Bank, UNDP, etc.; and the aid provided by Non-Government Organizations (NGOs). In general, international aid help to facilitate the GDP growth of the recipient countries. According to a research on

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[2] The inflation and GDP indices of former-Soviet Union and Eastern Europe countries are included in the book, The Chinese Miracle: Development Strategy and Economic Reform. Lin, Cai, Li, Shanghai: Shanghai People press and Shanghai Sanlian press. 2000. Fig1.1, 1.2

the effects of aid on the economy of 56 countries in the period of 1970-1973 and 1990-1993, international aid may contribute 0.08~0.62% to the GDP growth rates of the recipient countries; the economic policies and the aid scales affect significantly the effects of international aid, and in general small-and-medium-sized aid have better outcomes （World Development Report, 1997，P142）.

For many large developing economies, the scales of international aid are quite small when compared to the gross domestic incomes of the recipient countries, and the influence of international aid on the economies does not result from the scales of the aid, but from the exemplary effects of the aid projects. By concentrating on specific projects and particular issues of economic development, the aid projects introduce advanced production technologies, increase management service and propose new approaches of economy development and poverty reduction. For example, in the 1960's international aid made great contribution to the spread of the Green Revolution in Asia through promoting the investment in wheat and rice production, which greatly enhanced the ability of India and Indonesia to solve the famine crisis. And in 1995, the World Bank launched a large-scale aid program aimed at reducing the poverty levels of China's Southwest and Qing-Ba Mountain areas. By introducing international best practices of sustainable development and providing large-scale aid of US$ 610 million, the program helped 800 million people to get out of the poverty trap.

After China opened her door at the end of 1970's, China began to accept aid from the international organizations and the OECD countries. The official statistics show that China has received about US$ 6 billion of international aid in the period of 1978-2001, most of which was bilateral ODA, and more than 2000 aid projects have been completed or are still going on (Yi, Xiaohuai, 2002). About the bilateral ODAs, Germany and Japan are the largest two donors. China had received US$ 670 million of official aid from Germany before June 2001, and about US$ 1 billion from Japan in the period of 1981-2002 (Data source: website of Ministry of Commerce).

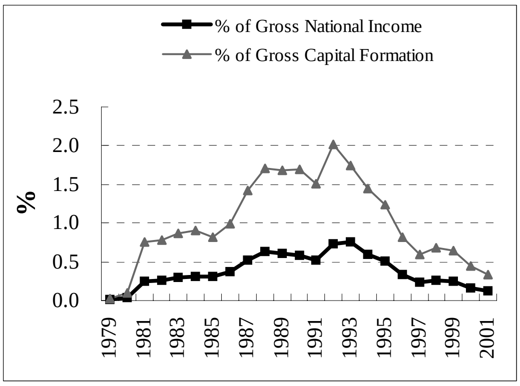
Compared to the gross domestic income of China, the scale of the international aid of US$ 6 billion is very small; however, it also made a contribution to China's economic development in the past 25 years through drawing the Chinese government's attention to key development issues, introducing advanced technologies, improving managerial skills, promoting international best practices, as well as training local staff and workers. And at different stages of China's economic development, international aid plays different roles in facilitating China's economic and social development.

China's now more developed coastal regions were the major beneficiaries of international aid in the 1980's because most aid was used for infrastructure improvements and the coastal region's government had better implementation capacities. And since the middle of 1990's, most of the international aid has been oriented to poor and western regions. In the period of

1998-2002, China has received about US$ 1.15 billions of aid, which is used to carry out over 240 development projects, in which poverty-reduction oriented projects accounted for about 70% of the total aid (Data Source: website of the Ministry of Commerce). This trend becomes especially obvious after China's government launched the Strategy of Developing-the-West in 2001.

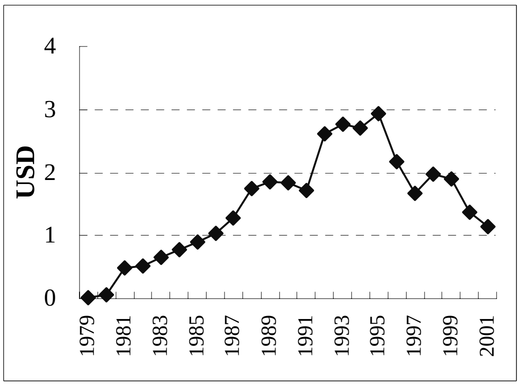
Since the middle of 1990's, the international aid to China has been reduced significantly. Figure 4 and Figure 5 show the trend of international aid in the past two decades: in the period of 1979-1995, the scales of international aid to China have increased rapidly, but after that the per capita aid was reduced significantly from US$ 2.93 in 1995 to US$ 1.15 in 2001.

Fig. 4 Aid to GNI and Gross Capital Formation



Data Source: WDI 2003

Fig. 5 Trend of per-capita Aid to China



Data Source: WDI 2003

Why has the international aid to China been reduced significantly after 1995? Firstly, it was partly influenced by the changes in the global aid environment in 1990s. The United Nations normally required the international aid provided by the developed OECD member countries to be no less than 0.7% of their GNP, but this target has never been reached. The ratio of aid to GNP of the OECD member countries was reduced from 0.35% in 1990 to 0.25% in 1996, and then further down to 0.22% in 2001 (World Development Report, 1997, 2004). Secondly and more importantly, aid reduction after the middle 1990's reflected the subtle changes of political and economy relationship between China and the more developed countries. The governments of many OECD countries have taken it for granted that China no longer needs too much international aid since the rapid economic growth in the past two decades has greatly increased China's economic strength. For example, the government of Japan has continuously reduced the preferential loans to China, which decreased to 100 billion Japanese Yen in 2003, less than half of that in 2000. And many politicians in the OECD countries have suggested their governments to reduce the Official Development Assistance (ODA) to China in recent years.

Although more than two decades' rapid economic growth has greatly increased China's economic strength, China is still a poor developing country. In 1998, there are still more than 231 million people in China whose consumption expenditure per day is less than 1 US$, which accounts for 18.5% of China's total population (World Development Report, 2000/2001). In 2002, China's per capita income reached just US$ 1000, and there exist great economic disparities between China's urban and rural areas. In short, China is still entitled to receive reasonable international aid to complement her limited government budgets to solve the tough development and poverty reduction problems.

3.2 International Consultation

Along with China's "Reform and Opening-door" policy launched at the end of 1970s, China's economists and policy makers resumed their consultation and cooperation with international organizations and experts.

But compared with the former Soviet Union and Eastern European countries, China has shown a quite different pattern in consulting the foreign economists and adopting the proposed policy suggestions. In the former Soviet Union and Eastern European countries, at the end of the 1980s and in the early 1990s, the socialist system was overturned and the newly established governments faced few obstacles in promoting market reforms, due to which it was easier for them to adopt the "Shock Therapy" proposed by the mainstream western economists. The foundations of those schemes are the "Washington Consensus", which emphasizes privatization, price liberalisation and macro-economic stability. But after more than ten years' of reform, the Shock Therapy has not generated satisfactory outcomes (World Bank 2002, Lin and Liu 2003). Quite different from the former Soviet Union and the Eastern European countries, China launched her economic reform under the leadership of the first generation of socialist revolution veterans and the conditions of political stability at the end of the 1970s, and the economic system gradually transited from a former highly centralized plan economy to a free market economy. Under the concern of the legitimacy of the leadership and the constraints of socialist ideology, Chinese political leaders adopted a gradual, tinkering approach to economic reform, and they have generally been very cautious and selective in accepting the policy suggestions proposed by the western economists and international organizations.

Although it is true that international consultation does not play so pervasive a role in China as that in the former Soviet Unions and Easter European countries, it does significantly enhance Chinese government's capabilities of economic policy design and implementation, and at the same time, facilitate the spread of modern economics in China. And in the remaining parts of this section, we will evaluate such contributions to China's economy through reviewing several important international conferences that have had a far-reaching influence on China's economic reform.

In 1985, the Development Research Center of the State Council and the World Bank jointly organized the "International Conference on China's Macro-economic Reform", which was known as the *Bashanlun Conference* in the public media. Several world-renown economists attended the Conference including the Nobel Prize laureate James Tobin, the famous socialistic economist Janos Kornai, Professor Alexander Cairncross from Oxford University, the former president of the central bank of Germany, Otmar Emminger, etc.. The Chinese participants included senior government officials and major economists that participated in the design of China's reform policies.

An important background of *Bashanlun Conference* is that, in the forth quarter of 1984, the excessive expansion of bank credits had resulted in over heating of investment in the economy, and the price levels had increased by 10% in that quarter. China was facing the risk of serious inflation. In this conference, the economists proposed many policy suggestions to Chinese government on how to resolve such serious issues in the economy. Especially, Prof. James Tobin pointed out that the government should implement simultaneously tight fiscal policy, monetary policy and income policy, rather than conventional loose-tight combination policies in western countries in face of inflation risk. The *Conference* participants reached a consensus about the inflationary situation in China and the desirable policy mix for dealing with the overheating in the economy. Besides discussing the inflation issues in the economy, the foreign economists also systematically introduced modern macroeconomics to Chinese officials and economists, covering such topics as classification of economic systems, macro-economic management and monetary policy, which greatly improved the Chinese participants' understanding of modern macroeconomics. The *Conference* provided important theoretical foundations for the Chinese Communist Party (CCP)'s adoption of market-oriented reform objectives in its National Congress in October 1985 and China's later reforms in its macro economy, and also facilitated the spread of modern economics in China.

With the progress of communication and cooperation with international organizations and economists, China's government officials and economists' ability to design proper economic policies was also enhanced. In the November of 1993, the 14th CCP National Congress published the *Resolution of Establishing the Socialist Market Economy*, which was highly appraised by the domestic and overseas economists and international organizations. And based on the *Resolution*, the reform measures taken in 1994 also achieved great success. The international cooperation and consultation among economists in China and abroad had made theoretical contributions to the adoption of the *Resolution*.

Several years before the 14th National CCP Congress, the central government had organized a large research team to investigate various important reform issues in China's economy, covering such topics as the fiscal system, taxation, banking, foreign exchange administration and the social security system. And in July of 1993, the Commission of Economic System Reform of the State Council and the World Bank jointly held the *International Conference on China's Economic Reform and Development*, the major objective of which was to evaluate the primary outcomes of that research program. Many internationally well-known economists attended the *Conference*, known publicly as *Dalian Conference*, such as the Nobel Prize laureate, Franco Modigliani, the famous development economist, Nicholas Stern, Prof. Lawrence Lau from Stanford University, etc. In the *Conference*, the details of the research reports were thoroughly discussed, and the participants also evaluated the soundness and practicability of the policy proposals.

The reform of State-Owned Enterprises (SOEs) and the public sectors have long been a pivotal and extreme difficult issue in China's economic reform during the past two and a half decades. Although the government had invested a lot of resource and energy in resolving the problems in the state sectors, the outcomes were always disappointing. The international consultations have also influenced the reform schemes of the state sectors. In 1987, the Commission of Economic System Reform of the State Council and the World Bank held the *International Conference on China's SOE Reform*, in which the participants systematically reviewed and evaluated the international experiences and lessons for public enterprise reform. And the topics discussed included ownership structure, framework of modern corporations, pension mechanism design, etc.. The Conference provided theoretical preparation for China's later ownership-oriented SOE reforms.

In August of 1994, the State Commission of Economy and Trade, jointed with other organizations, held the *International Conference on the Next Step of China's Economic Reform*. The foreign economists that attended the conference included Prof. Oliver Hart, Paul Milgrom, Ronald Mckinnon, Lawrence Lau and Masahiko Aoki. Several topics in modern microeconomics and firm theories were discussed in this conference, such as corporate governance of the modern corporation, the relationship between banks and enterprises, resolutions to non-performing loans and the process of bankruptcy, and the discussions and outcomes of the *Conference* provided valuable reference to China's economic reform.

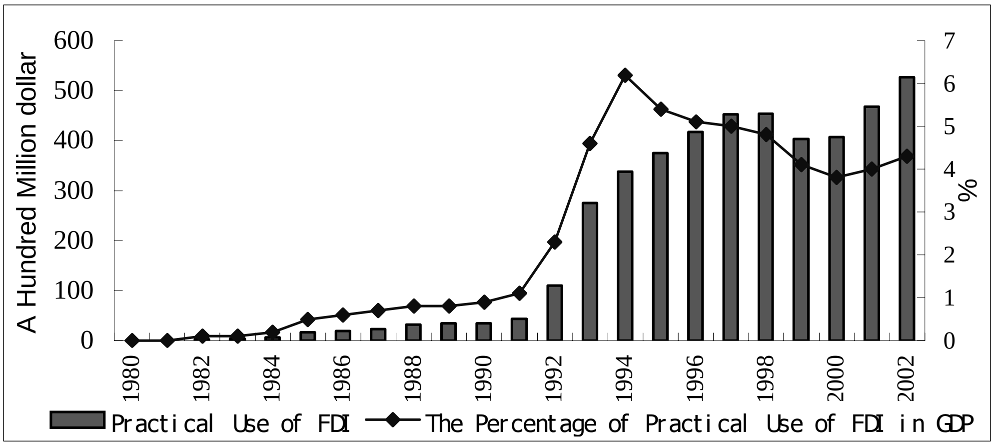
Although the policy suggestions proposed by western economists and international organizations are not always right and cannot be applied to China's particular economic environments without any change, and the Chinese government has always decided and paced the direction and speed of reforms independently, the international consultations since the launch of China's Reform and Open-door policy have played an important role in improving the policy makers' abilities to understand the nature of existing issues, design reasonable economic reform schemes and facilitate the spread of modern economics in China.

4. Impact of FDI on China's Economy

As a capital-scarce country, China has taken measures to attract foreign capital since the reform started in 1970s. Foreign Direct Investment (FDI) is the main form of foreign capital inflow to China, accounting for 95.9% of total inflow in 2002.[3] In the past 25 years, the scale of FDI increased rapidly, from nearly 0 in 1979 to US$ 11.16 billion US% in 1992. Since 1992 China has become the largest recipient of FDI among all developing countries. The FDI increased further to US$ 52.74 billion in 2002, exceeding the U.S. and ranked the second place worldwide.[4] The ratio of FDI to total GDP rose from nearly 0 in 1980 to 4.3% in 2002, peaking at 6.2% in 1994. (Figure 6)

To a capital-scarce and labor-abundant economy like China, the influence of FDI on its economic development is self-evident. A large amount of FDI can not only make up for the scarcity of China's domestic capital, improve the structure of factor endowment, and promote the upgrading of industrial structure, but also bring in advanced management as well as technology. It has a positive externality upon the reform of the domestic market and enterprises. According to the effect of FDI on fixed capital formation and the elasticity of FDI on export, it is estimated that the contribution of FDI to the GDP growth of China is about 0.6 per cent per year in 1990-2000 (Xiaolu Wang, 2001). In the following sections, we will analyze the pattern of FDI in China and its impact on Chinese economy.

Fig. 6 China's Practical Use of FDI and its Ratio to GDP：1980-2002



Data Source：China Statistical Yearbook, every year

form. The average percentage of FDI in total capital inflow during 1992 and 2002 was 76.7%. It reached 95.9% in 2002.

[4] The country which received the most FDI in 2002 is Luxemburg, which received about 125.66 billion dollars. (World Investment Report, 2003) In the statistic of world FDI in UNCTAD, the data of Luxemburg and Belgium was counted together before 2002.

4.1 The pattern of FDI in China

The geographical distribution of FDI in China is very uneven. There is a large gap between the eastern region and the central and western regions. When the reforms started, FDI was concentrated mainly on four special economic zones. Later on, with the changing of the China's policy on attracting foreign investment, FDI gradually spread from the southern coastal region to the southeastern region, eastern region and the inland, but the eastern region is still the main receiver of FDI (Table 1). The vast central and western region's GDP accounted for 38.5% of the national total and its population accounted for 58.7% in 2002, but until 2002, the central and western region's FDI only accounted for 12.7%.

According to the classification of the National Bureau of Statistics, China's FDI can be divided into four types: joint venture, cooperative operation, cooperative development and foreign enterprises[5]. From 1979 to 1985, cooperative operation was the main form of FDI. In 1986, the proportion of joint venture exceeded that of cooperative operation (Fan Zhang, Jingping Zhen, 1998). And in 2000, the share of foreign enterprises exceeded that of joint venture, becoming the main form of FDI. The percentage of sole proprietorship in FDI reached 60.2% in 2002.

Table 1 Distribution of FDI in the eastern, central, and western regions of China（%）

	FDI 1984-1991	FDI 1992-2002	FDI 2002	Population 2002	GDP 2002
Eastern	90.7	87.7	87.3	41.3	61.5
Central	4.7	9.2	10.0	35.6	27.5
Western	4.6	3.1	2.7	23.1	11

Data Source: China Statistical Yearbook, every year, Author's calculations

According to the sector distribution, FDI has mainly concentrated on the manufacturing industries, which were followed by the tertiary industries, including real estate, social service, and hotel [6] (Table 2). With the deepening of reform, the proportion of FDI in the manufacturing industries is increasing. In 2002, the FDI agreement in the manufacturing industries reached US$ 61.13 billion, accounting for 73.9% of total agreement.

Hong Kong has always been the most important source of FDI to China, followed by Japan, the U.S., and Chinese Taipei. During the period of 1985 to 2002, the average proportions of

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[5] A new type named "foreign invested joint-stock enterprises" was added in 1997, and another new type named "others" was added in 1998. However, both occupy little proportion in FDI. In 2002, these two types accounted for 1.1% and 0.1% respectively.

[6] Real estate, social services, hotel, finance and insurance are all included in the tertiary industries in the table 3, among which finance and insurance's share is very small.

actually used FDI from Hong Kong[7], Japan, U.S., and Chinese Taipei were respectively 52.4%, 9.7%, 9.6%, and 5.8% . In 1985, the total FDI from Hong Kong, Japan and U.S. reached 83.2%. In the 1990s, the sources of FDI were gradually diversified. Investments from Chinese Taipei, Korea, Singapore and European countries increased gradually.

Table 2 Sector Distribution of FDI（Agreement）（%）

	Agriculture	Manufacture Industry	Construction Industry	Trade, Transportation and Communication	Tertiary Industries	Others
1993-1998	1.7	60.7	3.5	6.3	24.3	3.6
1999-2002	2.6	72.1	2.0	4.3	15.9	3.1

Data Source: China Statistical Yearbook, every year, and author's calculations.

In general, FDI in China mainly comes from East Asia. The reason why Hong Kong and Chinese Taipei provide large amounts of direct investments in China is that on one hand China has a special policy on attracting FDI, and on the other hand they have a close geographic and cultural affinity with the Mainland. In the later part of 1990s, the increase of FDI from the British Virgin Islands and the Cayman Island revealed the trend of capital's intention to evade taxes.[8]

Because FDI is from different countries and regions that have different factor endowments, these enterprises have different comparative advantages, which makes the purpose of FDI and the technology utilized by the foreign enterprises different. A study of the 3000 biggest FDIs in 1994 by Chunlai Chen (1997) showed that FDI in China from Hong Kong, Chinese Taipei, Singapore, Korea and other Asian countries other than Japan concentrated on labor-intensive industries, and their products were "export-orientated"[9]. The result reflected the stages of development in these source countries and regions. The original comparative advantage of these countries and regions was labor-intensive, export-oriented industries. With the development of these countries and regions, the cost of labor increased, so the labor-intensive industries lost their comparative advantages in the home country and region. Thus the labor-intensive industries were transferred to China through FDI, to take advantage of cheap labor in China. Their products are mainly exported. The other type of FDI, mainly from developed countries such as Japan, U.S. and Western Europe, is for the purpose of penetration into China's domestic markets. This group consists of capital abundant, developed countries. Enterprises from this group of countries are in capital-intensive

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7 Before 1991, FDI from Hong Kong and Macao was calculated together.

8 The statistics of China's FDI is based on the geographic location where the source enterprise is registered, which may be different from the country that the enterprise actually belongs to.

9 Because the capital intensity of large enterprises in general is higher than that of middle and small enterprises, the result of capital intensity in Chen's study which is based on the 3000 biggest foreign invested companies may be higher than the actual capital intensity of all foreign invested enterprises.

industries. Their FDI in China also focuses on capital-intensive industries, which are not China's comparative advantage. The main purpose of this type of FDI is not to take advantage of China's cheap labors but to get access to the markets in China. Therefore, the purpose of such type of FDI is "market penetration". For example, among the five manufacturing industries which received the most FDI from Chinese Taipei and Singapore four are in labor-intensive industries; from Hong Kong, three are labor-intensive industries; from Japan, the first two are capital-intensive industries; and from the U.S., the first three are capital–intensive.

4.2 Impact and Function of FDI on China's Economy

The level of development in a country's industrial structure is endogenously determined by its factor endowment structure. Therefore, an important task of a country's economic development is to upgrade its factor endowment structure, that is, increasing the proportion of capital in the endowments (Lin 2003). The accumulation of capital in a country depends on the scale of its economic surplus as well as its saving propensity. FDI contributes positively to both aspects. First, the inflow of FDI increases the scale of China's capital stock and investment. Next, the flow of FDI is for the purpose of pursuing profits. The accompanied comparatively advanced technology and management help FDI to make full use of the opportunities in China's economy, and create large amounts of economic surplus. In addition, the competition and the spillover effect of technology and knowledge brought by FDI also enhance the economic performance of Chinese domestically owned enterprises. The remaining discussions in this section explore the above two effects.

FDI and the formation of China's capital: Investment is a crucial determinant of economic growth. Most empirical studies of cross-countries show that a high growth rate is significantly related to a high rate of investment. The pattern of Chinese factor endowment indicates that China is scarce in capital at the current stage of development. Compared with other kinds of capital flows, FDI has a high stability (Klein et al, 2001). Large amounts of FDI inflows provide China with a comparatively stable source of capital, making a positive contribution to solving the limitation of scarcity in capital, and increase the rate of investment as well as economic growth.

With the further implementation of the reform, FDI plays an increasingly important role in the formation of China's capital. From 1992 to 2002, the average ratio of FDI in China's fixed asset investment and net capital formation is, respectively, 12.5% and 18.2%. The latter is far above the average, which is below 10%, achieved by most OECD and developing countries (Herr, Priewe, 1999). Fan Zhang and Jingpin Zhen (1998) estimated that with a one-percent increase in the utilization of FDI, China's GDP growth increased by about 0.02%. From 1992 to 2002, the average annual growth rate of the total utilization of FDI was 33.9%.

Therefore, the contribution of FDI to China's average annual GDP growth rate was about 0.68% per year in this period.

FDI and Foreign Trade: Since the reform started in the late 1970s, China's foreign trade has expanded rapidly. The total imports and exports increased from 20.64 billion dollars in 1978 to 620.92 billion dollars in 2002. The average annual growth rate of imports and exports is 15.7% and 14.7% respectively.

The increase in China's exports largely benefits from the rapid increase of exports from foreign invested enterprises, because foreign invested enterprises have good access to foreign markets. In addition, most FDI in China is "export-orientated", so foreign invested enterprises have a higher propensity to export than that of domestic enterprises (Xiaojuan Jiang, 2002). From 1992 to 2002, the ratio of export from foreign invested enterprises in China's total export showed an increasing trend, reaching 52.2% in 2002, while the average in this period was 39%.

According to the study by Lin and Li (2001), the elasticity of GDP growth to the change in export in the 1990s was 0.105, i.e. a ten-percent increase in export will result in a one percent increase in the GDP growth. Therefore, FDI can contribute to China's GDP growth by promoting exports. The average annual growth of exports in China was 15.2% from 1992 to 2002. According to the calculation above, the contribution of FDI to the GDP growth was 0.62%, similar to the magnitude estimated according to the effect of FDI on growth through the FDI's impact on fixed capital formation by Fan Zhang and Jingpin Zhen.

In addition, FDI improves China's structure of exports, and enhances the international competitiveness of China's exports. As a capital-scarce economy, China's exports are mainly primary and labor-intensive products. However, with the accumulation of capital and the rise of wages, the capital intensity of exports has to be upgraded. According to the international experience, the growth of exports of technology-intense products is usually faster than that of others (World Investment Report, 1999). Large amounts of FDI have improved the pattern of China's exports. In 1980, the proportion of China's primary and industrial products exports were, respectively, 50.3% and 49.7%. In 2002, the proportion of industrial products export was already 91.2%. FDI played a crucial role in the upgrading of exports. For example, the proportion of electronic and mechanical products in China's total exports rose from 23.0% in 1992 to 48.2% in 2002, and in the exports of electronic and mechanical products the foreign invested enterprises' export ratio and their rate of export growth were much higher than the national averages, with the ratio increased from 31.2% in 1992 to 66.9% in 2002.

Spillover Effect of Knowledge and Technology: The advancement of technology can enhance the productivity of different kinds of production factors, and hence, improve the performance of enterprises and the efficiency of the industry. The FDI brings in an obvious spillover effect of knowledge and technology to the development of China's economy. First, the foreign invested enterprises, especially those large multinational enterprises, possess a higher technology and management level than domestic enterprises. Accompanying the FDI, those advanced technology and management are introduced. Second, foreign invested enterprises will attune their technology to the level, which is consistent with China's comparative advantages, because only by doing so, can they minimize their production costs and maximize their profits. Such kind of technology is easy for domestic enterprises to imitate. As such the spillover effect is large.

Many empirical studies showed that the spillover effect of foreign invested enterprises on China is significant. Studies by Graham and Wada (2001), Zhang (2001), and Liu (2002) all suggested that when other factors were controlled, the total factor Productivity (TFP) in the regions and sectors where FDI was concentrated was above that of other regions and sectors; the TFP growth rate of sectors where FDI is concentrated was also above that of sectors where domestic capital was concentrated. In addition, Liu's study showed that in the manufacture industry, the increase of foreign –owned stock not only benefits the receiving industry, but also increases the TFP of related industries.

Improving the quality of China's capital stock: In addition to providing capital and introducing technology, the other important function of FDI is to improve the competitiveness of industries and, therefore, to improve the quality of existing capital stock. [10]

It is a secular problem that the efficiency of China's enterprises is comparatively low. Under the distorted factor prices in Chinese economy, many investments are not sound. Some new enterprises are not competitive in the market and incur losses immediately after their investments are completed. New enterprises invested directly by foreign capital generally are more competitive and have higher ratio of output to investment. For example, in 2002, the assets of foreign invested enterprises in China accounted for 21.6% of total industrial assets. The foreign invested enterprises contributed 27.2% of the gross value of industrial outputs, 23.7% of the total value-added of industries, 26.6% of industrial sales, and 30.8% of the total profits (Jiang and Li, 2002). It could be inferred from the above figures that the efficiency of foreign invested enterprises is higher than the average level of domestic enterprises. Therefore, the establishment of foreign invested enterprises in China improves the overall competitiveness of Chinese industries.

There are lots of low-quality assets in the existing capital stock in China. The foreign investments bring in competitive pressure on domestic enterprises, especially the state-owned

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[10] This section draws on Xiaojuan Jiang, "Contribution of Foreign Economy of China to Growth, Updating of Structure and Competence", 2001

enterprises, motivating the reform of domestic enterprises, and facilitating low quality capital to transform into high quality capital. Meanwhile, foreign invested enterprises could also restructure domestic enterprises through the changes in production and management. Some case studies show that foreign investors can transform loss-making enterprises simply by changing the "software" such as management, marketing, and income distribution.

Furthermore, the entry of foreign directly invested enterprises, especially multinational enterprises, will bring with them their international partners in the related industries and thus improve the quality of related industries in China. For example, since the establishment of Shanghai Volkswagen Co., ltd., over 100 related enterprises of Volkswagen Germany have invested in China. After General Motors of the U.S. began to invest in Shanghai, 44 related projects of auto parts have invested. The total investment reached 2.23 billion dollars (Xiaojuan Jiang, 2002). Moreover, FDI can also improve the production of related domestic enterprises. According to the research on 127 multinational enterprises, which invested in China (Xiaojuan Jiang etc. 2001), enterprises which procured more than 50% from China account for 64%, among which the procurement of Japan enterprises rose from 20% in 1992 to 57.3% in 2000. Foreign invested enterprises more and more often procure raw materials and parts in China. The foreign invested enterprises are more demanding in quality than the domestic enterprises. When more and more foreign invested enterprises make their procurement from domestic enterprises, domestic enterprises will be pushed to improve their quality of products and production efficiency in order to meet the high demand. At the same time, foreign invested enterprises will provide technological assistance to related domestic enterprises so as to improve the quality of related industries.

Other Impacts: Other than the impacts discussed above, FDI can also put pressures on the price formation mechanism in China, by connecting domestic markets to international markets, facilitating the reforms of distorted domestic factor prices, and forming a factor price structure which reflects the relative factor scarcities and promoting the exploitation of comparative advantages.

Meanwhile, the entry of FDI creates job opportunities and this has a Multiplier Effect just like other investments. In order to maintain its advantage in the competition, foreign invested enterprises will give training to their employees to enhance the labor quality. Due to the existence of externalities, this training will contribute to the improvement of overall labor quality in China and to the increase of average income.

FDI, especially those from multinational enterprises, makes the distribution of intra-industry and inter-industry income more unequal (Zhang and Zhen, 1998). The entry of large amounts of FDI may monopolize some industries, or squeeze out some domestic enterprises, which are the reasons for opposing large-scale use of foreign investments. Nevertheless, in fact, in many industries, for example, in the car industry, although foreign investments have a monopoly position, the whole industry is competitive and prosperous, because of the competition among the foreign invested enterprises.

5. The Impact of China's Accession to WTO

According to the agreements, China has to make tremendous adjustments after WTO accession. The Chinese government's authority on guiding the economy, which has existed for a long time, will be challenged. In this regard, we can treat the rules of WTO as the legal document, which will redefine the Chinese government's power. Overall the WTO accession is consistent with China's goal of setting up a socialist market economy. Hence the accession will accelerate China's economic reform process, expedite the cleaning up of inappropriate institutional arrangements in the traditional system inherited from plan economy. Those changes are the necessary result of China's economic reform.

5.1 The Economic Reform Background of China's WTO Accession.

Since 1978, China has carried out a series of market-oriented reforms. Although the reforms experienced back and forth frequently, the overall direction of reforms is very clear, that is to realize the transformation from the traditional plan economy to a modern market economy. The reforms started from the improvement of micro management, and proceeded to the resource allocation mechanism and macro policy environment. However, due to the following two reasons, the reform of the macro policy environment has encountered a number of difficulties.

Firstly，the administration system reform lags behind the economic system reform, making it difficult to eliminate the impacts of the traditional development strategy. In the case that the government has not completely abandoned the strategy of accelerating the development of capital-intensive industries, the government still needs to protect the existing SOEs and set up new ones to implement its development goals. The macro policy reform, especially the reform of factor prices, cannot be completed due to the needs of protecting these capital-intensive industries. Furthermore, because the government controls too many resources, it results in many rent-seeking activities. In the second half of 1990's, it was estimated that the losses arising from corruption and inefficiency reached 98.8-125.7 billion Yuan every year, about 13.2%-16.8% of China's GDP [11].

Secondly, the vested interest groups formed under the traditional planned economy may

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[11] Yong Guo and Angang Hu, "the losses caused by administrative monopoly can not be overlook," *Chinese Economy Times* July 15,2002

impede the transition to a market economy, the administrative decentralization gives local governments powers to influence local economic performance. The local economic growth becomes one of the main indicators of local government officials' achievements. On one hand, the competition among local governments contributes to the development of the market. But as a result of the depression of raw materials' prices, the poor western provinces, which supply most of the raw materials, are in fact subsidizing the rich, industrialized eastern provinces. Under such a situation it is no surprise to see the prevalence of regional protectionism. Sandra Poncet showed that the tariff rate among provinces in China was about 46% in 1997, while it was about 35% ten years ago. The domestic trade barrier was approximately the same level among EU countries, or between Canada and the U.S.. The situation is even worse than it appears because, when the import tariff declines, the barrier among provinces in China has been increasing since the 1980s'. Undoubtedly, the reform will affect the interests of the vested groups, which formed under the traditional planned economy. In China, the state owned sectors, especially the state owned big enterprises, which have benefited much from the lower factor prices, are the potential opponents of price reform. The big state owned enterprises employ large quantities of workers, and their managers have an intimate relationship with the officials. Therefore, they have substantial bargaining power in influencing the government's reform policies.

5.2 The Influence of WTO Accession on Chinese Economy

WTO accession will have a large, positive effect on China's final resolution of solving macro policy environment problems. Theoretically, the first best development path is to observe the comparative advantages of an economy. To make the whole society respond correctly to the economy's comparative advantages, it requires a relative factor-price framework, which can reflect the relative scarcities of factors in the endowments. To achieve this, it is required to have a transparent macro policy environment and efficient markets. If the factor prices can reflect the relative scarcities of all factors, the enterprises will make their product and technology decisions accordingly. That is, to use cheap factors more in their production in order to exploit the economy's comparative advantages. It is worthwhile to point out that the relative prices' correct reflection of factors' relative scarcities cannot be the result of any man-made intervention but the market competition. The institutions for forming a correct relative price are consistent with the institutions that are promoted by the WTO principles. Therefore, the WTO accession can help China overcome many problems in the macro policy environment reform, directly or indirectly.

Firstly, the WTO accession will play a key role in facilitating China's change of development strategy. The WTO accession stipulates many compulsory provisions on the relationship between the government and the SOEs so as to prevent the government from giving the SOEs favorable positions in market competition through discrimination policies. If the government cannot create unequal competition by public power, the traditional planned economy which finances capital-intensive industries through distorted macro policy environment will not be held on to. With impartial, efficient market competition, the industries, which are consistent with China's comparative advantages, will develop faster and the upgrading of the factor endowment structure will be accelerated.

Secondly, the WTO accession obliges China to carry out an administration reform. The transparency principle, one of the main principles of WTO, requires member countries' governments to make their economic management and policies stable and predictable. The external pressure from WTO will encourage the Chinese government to study and solve the problem of the "administrative black box," and reduce the opportunities of corruption, bureaucratism, administrative inefficiency etc. Besides, WTO accession integrates the Chinese economy with the global economy. The WTO agreements and the pressure from market competition will urge the Chinese government to optimize its policies and improve its decision-making mechanism. Any policy must conform to the principles of market competition, the rules of WTO, and the characteristics of economic agents. In making policies the government also needs to estimate the possible outcomes brought by the policies and making decisions on this basis. In sum, the Chinese government needs to improve the efficiency and transparency of decision-making according to WTO principles in order to adapt the Chinese economy to the new circumstances under the WTO framework.

Thirdly, local protectionism violates the WTO's principle of market entry and free trade. The free trade requires an impartial, competitive environment and unified market regulations. Clause 12 of article 34 in *The General Agreement of Commodity Trade* stipulates that every member should adopt all possible, proper measures to assure the local government and the authorities in its territory to obverse all the regulations in this *Agreement*. The requirement of implementing the *Agreement* uniformly will call the Chinese government's attention to the division of economic power between central and local government. Local protectionism, which violates the free trade principle of WTO, impedes the formation of unified national market and China's access to international markets as well. In brief, the Chinese government must rectify the local protectionism because it conflicts with the WTO's principles of impartial competition, indiscrimination, and transparency.

Lastly, WTO accession offers a favorable opportunity for reforming big SOEs. The ultimate problem of SOEs does not arise from their state ownership but from their policy burdens, including the strategic burden and social burden.[12] After the Chinese government changes its development strategy and started the administrative reform, the labor-intensive industries

[12] The strategic burden refers to the fact that many SOEs are in sectors which are not consistent with China's comparative advantages and the social burdens refers to the fact that SOEs need to employ many redundant workers and cover many old-age pensions for retired workers (Lin, Cai, and Li 1994).

which are consistent with China's comparative advantages will boom, providing more job opportunities and creating opportunities for laying off SOEs' redundant workers and for resolving the social burdens. The SOEs' strategic burden arises from the government's pursuit of comparative-advantage defying development strategy, causing the SOEs to be nonviable in open, competitive markets. After the WTO accession, SOEs can be classified into four different groups and different approaches can be adopted to solve their viability problem. The first group includes mainly the defense-related SOEs whose production, intensive in capital and technology, runs against China's comparative advantages, but their outputs are essential for national security. For this group of SOEs, direct fiscal appropriation is necessary for their survival and the government should directly monitor their production and operations. It is reasonable to expect that there are only a few SOEs in this category. The second group of SOEs also requires intensive capital and technological inputs for their production, but their outputs are not sensitive to national security and their outputs have large domestic markets. Examples of this category are the telecommunications and automobile industries. For this category of SOEs, the government can adopt a "market for capital" approach to get access to capital from international markets and remove the adverse impact of the domestic endowment structure on these firms' viability. There are two ways to achieve this goal: one is to encourage SOEs to go public on international equity markets; the second is to set up joint ventures with foreign companies and get direct access to foreign technologies and capital. China Mobile, China Telecom, and China Petroleum follow the first approach and many automobile makers in China follow the joint-venture approach. The third category of SOEs has limited domestic markets for their outputs products and thus this group of SOEs cannot adopt the "market for capital" approach. The way for them to solve the viability issue is to make use of their engineering and managerial capacities and to shift their production to labor-intensive products, which have large domestic markets and at the same time are consistent with China's comparative advantages. The most famous example of a firm following this approach is the color TV maker, Changhong. This firm used to produce old-style military radar. After switching to the production of color TVs, the firm has dominated the Chinese market and is very competitive in the international market. Most SOEs have advantages in engineering and managerial personnel. If they are given the opportunity to shift their production lines to labor-intensive products, many of them can become viable. The fourth group consists of non-viable firms that lack engineering capacity and are thus unable to shift their production to new markets. These SOEs should be allowed to go bankrupt.

After eliminating SOEs' policy burdens, the profits of an SOE in a competitive market will reflect the performance of the SOE's management. The government will no longer be obliged to subsidize and protect SOEs. Thereby, the government can eliminate the remaining distortions in the economy and complete the transition from the planned economy to a market economy.

5.3 How China Meets the Challenges of WTO Accession

WTO accession brings more challenges to the Chinese government than to enterprises. Any regulation of WTO does not deal directly the behavior of enterprise, but of the government. In China it is the government that retains the most measures of planned economy, rendering the reforms ineffective. Perhaps the most significant influence of WTO accession is the transformation of the government's roles—from a system that is highly monopolized by the government to a new system that allows enterprises to compete freely. Just in this sense, we can say that China's WTO accession ought to be the government's WTO accession firstly.

In the third year after WTO accession, China has been implementing various accession agreements. The government's policies have changed substantially to accommodate the requirements of WTO accession. In 2003, China has carried out new reforms on the government functions in order to meet the challenges of WTO accession. Major changes have taken place in many areas, such as industrial policy, macroeconomic control, trade policy, the taxation system and legal system.

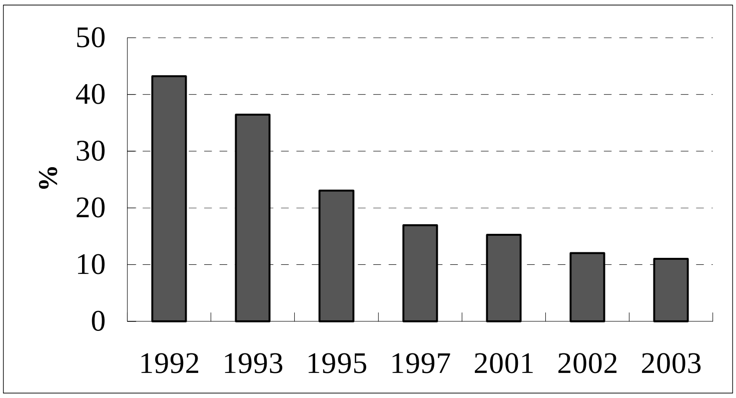
Industrial policy: The WTO accession will change greatly China's industrial structure. The labor-intensive industries and the labor-intensive sections in capital-intensive industries, which are consistent with China's comparative advantages, will grow rapidly after the WTO accession, while the industries which are inconsistent with China's comparative advantage will confront strong pressures from the same industries in foreign countries. China's industrial structure will adjust according to the principle of comparative advantages. It requires the government's industrial policy to reflect the changes in China's comparative advantages, facilitating the enterprises' optimal choices of technologies and industries. The industrial policy should be indicative instead of instructive.

After the WTO accession, the government can no longer rely on direct controls and administrative measures, rather the government should use indirect measures under the market mechanism in order to realize its development and macroeconomic goals. After the start of reform, the Chinese economy has experienced several cyclic fluctuations. In the past, the government often relied directly on administrative measures to maintain the economic growth within a certain band or to utilize its status as the enterprises' owner to intervene in the enterprises' behaviors. These direct controls with strong planning flavors were reasonable under the special circumstance in the past. However, if the government does not abandon them, not only will China be subject to easy accusation from other countries, but also will the economy encounter unnecessary chaos. Furthermore, these measures will not have the same effects as before. For meeting the challenges from WTO, the Chinese government launched a new administrative reform in 2003 after the reforms in 1998. The method of macroeconomic control changed greatly: the State Planning Commission is replaced by the National Development and Reform Commission, getting rid of the word “planning” from the title of government organization in charge of macroeconomic management. The new National Development and Reform Commission reduces its requirements for administrative approvals and its functions on micro-managements so as to improve the functions of market on adjusting economic activities. China has also separated the supervision function from the People’s Bank of China, making it concentrate on the monetary policies. The government’s targets of macroeconomic management have changed to the promotion of economic growth, increasing employment, stabilizing price levels and balancing international payments.

Trade policy: After the WTO accession, the adjustment on trade policy occurs in four aspects as follows: In the first place, the government should make the trade policy more transparent, and assure that policies are uniformly implemented. All the trade policies must be open to the public. According to the *Progress Report* of China’s Working Group, China has followed the WTO’s requirements and published its related trade policies in time and guaranteed their transparency. At the same time, China established a new Ministry of Commerce in 2003, uniting the management of domestic and foreign trade to deepen the trade system reform.

In the second place, China has reduced its tariff greatly, together with the cancellation of quantity limitation on imports of industrial goods and the adoption of quota-tariff system on staple agricultural products. In 2002, China reduced its average tariff from 15.3% to 12%, sequentially from 12% to 11% in 2003 (Figure 7). Obviously, China has fulfilled its commitments of tariff reduction ahead of schedule.

Fig. 7: Trend of China’s Average Tariff



Data source: summarized according to the statistic data from commercial ministry of China

In the third place, China has been deregulating the rights of import and export. This reform will be finished in 3 years. At that time, China’s foreign trade will change from the existing system which is dominated by state-owned companies to a system that includes companies with all kinds of ownership structure, including state, joint venture, foreign capital, public, collective, and private ownership.

Finally, trade disputes will be settled within the WTO framework. This change provides China a favorable mechanism to deal with anti-dumping accusations. The OECD countries can no longer view China as a non-market economy and apply unfair alternative standards to China. Moreover, China can enjoy the favorable treatments for developing member countries in WTO and improve its position in anti-dumping negotiations by using updated market information collected by WTO.

Taxation System Reform: The WTO accession will bring various challenges to China's taxation system: in the era of globalization, the ways to evade taxes become diversified, covert, and broadened, so it becomes more difficult to fight against –tax –evasions. For the sake of regulating tax management, China enacted *the Outlines for Tax Collection Management Strategy: 2002 to 2006* [13]which laid out 13 reform items, including tax collection institution, tax collection laws, tax source inspection and so on. This is a main achievement on settling China's taxation problems by combining international experiences, opinions from foreign experts and the constraints of China's realities. Reforms on tax laws are embodied in several aspects related to foreign enterprises: First, to unify the income tax of domestic and foreign enterprises. According to the principle of national treatment the income tax will be unified. The unification will reduce domestic enterprises' tax burdens and abolish the tax preference to foreign enterprises. While the tax rate is reduced, the taxation base will be widened. Second, the export drawback system will be completed. Together with the reform of value-added tax, China will adopt a system of zero tariff for export and gradually abolish the quota management of export drawback. Third, China will set up certain custom protection measures. For the goods whose imports China must limit, the government can protect related domestic enterprises by specific duties, adjustment taxes, and so on. For the imports that China has to sanction, China can use the anti-dumping rules of WTO.

Legal System Reform: For the purpose of developing the economy according to China's comparative advantages and satisfying the requirements of WTO, China needs to carry out major changes in its legal system, making it harmonize with international practices and providing economic activities with a stable and transparent legal system and policy environment. Undoubtedly, China should meet its WTO accession commitments. This requires China to clean up the existing laws and regulations, amend or even abolish some of them which are inconsistent with WTO framework, and adopt other new laws and regulations. The Chinese government has been carrying out the amendments of related laws and

[13] *The Outlines for Tax Collection Management Strategy: 2002 to 2006* was a part of UNDP's grant for China tax system reform. The research was implemented by IMF.

regulations[14]. But due to the influence of the previous system, this part of the reform is the most difficult. These unsuitable laws and regulations have much to do with the old planned system. The WTO accession provides a positive impetus for cleaning up these remaining laws and regulations, inherited from the planned system. It is predictable that as long as the distortions in the macro policy environment are eliminated, the reconstruction of the legal system will be carried out successfully.

Impacts of WTO accession on Chinese economy: While the final goal of China's economic reform is to set up a mature market system, which is consistent with what WTO requires, the WTO accession will become a catalyst in the market-oriented reform. Under the restriction of WTO's rules and the pressure from the schedule of liberalization, the Chinese government must speed up the market-oriented reforms and eliminate all obstacles for the development of market economy. The WTO accession will require the Chinese government to accelerate reforms on industrial policy, macroeconomic management, trade policy, taxation system, and legal system. In brief, while the WTO accession brings serious challenges to the Chinese government, the accession also brings huge development opportunities to Chinese economy.

6、Concluding Remarks

China's economic reform has resulted in great achievements in the past 25 years. Many researchers have attempted to analyze various aspects of China's successes. So far most research focuses on the internal factors in China's economy. In addition to the origins and logic of China's reform, this paper reviews the impacts of major external factors on China's reform in the past 25 years.

We first argue that the passing away of Chairman Mao provided an opportunity of major policy change. The reform as a means to improve people's living standards was also required for the new leaders, who returned to power after the Cultural Revolution, to gain legitimacy. However, the new leaders were the veterans of socialist revolution. They participated in the design and implementation of the traditional planned economy. Therefore it was natural for them to adopt a piecemeal, tinkering, gradual approach in the reform.

We then evaluate the influences of major external factors on China's economic reform, including international aid, international consultation, FDI and WTO accession. The impacts of international aid on the reform do not come from the quantity of funds but from

[14] According to the WTO rules and China's own benefits, about 40 laws and regulations needed to be amended and established. China has excellently fulfilled its obligations in the laws and regulations, which have been amended. For instance, according to the WTO's prohibition of using foreign exchange balance to restrict imports, the 3rd clause of the 18th item in China's *Law of Foreign Investment*, which required foreign invested companies to resolve foreign exchange problem by themselves, was deleted. According to the principle of indiscrimination, the 15th item in *Law of Foreign Investment*, which required companies to give priority to goods produced in China in their procurement under the same conditions, was also deleted.

the exemplary effects of aid projects, and aid plays different roles in different stages of China's reform. International consultation has enhanced the Chinese government's capability in economic policy design and implementation, and facilitated the spread of modern economics in China, though China's policy makers are generally very cautious and selective in accepting the policy suggestions proposed by foreign economists and international organization.

Large amounts of FDI inflows not only supplement China's domestic capital, but also bring in advanced management and technology. FDI has a positive externality upon the reform of the domestic market and enterprises. According to empirical studies on the effects of FDI on the formation of fixed assets and export elasticity of FDI, it is estimated that FDI contributed 0.6 percent annually to China's GDP growth in the period of 1992-2002. Finally the WTO accession facilitates China's transition from a traditional planned economy to a modern market economy. Under the WTO agreements, the Chinese government has to expedite its market-oriented reform, and clean up those institutional arrangements that are inherited from the planned economy and are not suitable for the market system.

Reference:

[English References]

1. Bach, C., Martin, W., and Stevens, J., 1996, 'China and the WTO: Tariff Offers, Exemptions and Welfare Implications', *Weltwirtschaftliches Archiv* 132(3), 409-31.
2. Blanchard, O., Dornbusch, R., Krugaman, P., Layard, R., and Summers, 1991, L. *Reform in Eastern Europe*. Cambridge, MA: MIT Press, 1991.
3. Boycko, Maxim, Andrei Shleifer and Robert Vishny. 1995, *Privatizing Russia*, Cambridge, MA: MIT Press, 1995.
4. Brada, Josef C., and King, Arthur E., 1991, "Sequencing Measures for the Transformation of Socialist Economies to Capitalism: Is There a J-Curve for Economic Reform?", Research Paper Series # 13, (Washington, D.C.: Socialist Economies Reform Unit, World Bank, 1991).
5. Chen Chunlai, 1997, "Comparison of Investment Behaviour of Source Countries in China", Working Paper n°97/14, December, Chinese Economies Research Centre, University of Adelaide, Australia，1997.
6. Dabrowski, Marek, 2001, "Ten Years of Polish Economic Transition, 1989-1999" in Mario I. Blejer and Marko Skreb eds. *Transition: The First Decade*. Cambridge, MA: MIT Press, 2001, pp. 121-152.
7. Djankov, Simeon and Peter Murrell, 2002, "Enterprise Restructuring in Transition: A Quantitative Survey," NBER Discussion Paper Series, No. 3319.
8. Edward M. Graham and Erika Wada, 2001, Foreign Direct Investment in China: Effects on Growth and Economic Performance，in *Achieving High Growth: Experience of Transitional Economies in East Asia*, Peter Drysdale, editor, Oxford University Press, forthcoming 2001.
9. Elena Ianchovichina and William Martin, 2003, "Economic Impacts of China's Accessionto the

World Trade Organization", World Bank Policy Research Working Paper, No. 3053

10. Gregory, Paul and Robert Stuart, 2001, *Russian and Soviet Economy: Performance and Structure*, 7th edition, New York: Addison Wesley, 2001.
11. Hai, Wen, 2000, "China's WTO Membership: Significance and Implication", Peking University, CCER Working paper NO. E2000007
12. Hansjorg，Herr and Jan Priewe, 1999, High growth in China—Transition without a Transition Crisis，http://www.macropolicies-berlin.de/download/HighGrowthinChina.pdf
13. Herr, Hansjörg and Priewe, Jan. 1999. "High Growth in China – Transition without a Transi-tion Crisis?" *Intereconomics* 34 (6): 303-316.
14. Ianchovichina, E. and Martin, W. (2001), 'Trade liberalization in China's accession toWTO', Journal of Economic Integration 16(4), pp. 421-445.
15. Klein, Michael, Carl Aaron, and Bita Hadjimichael, 2001, "Foreign Direct Investment and Poverty Reduction," World Bank Policy Research Working Paper 2613
16. Kornai, Janos, *The Road to a Free Economy* (New York: Norton, 1990).
17. Lemoine, Francoise，"FDI and Opening up the Chinese Economy." CEPII Working Paper 2000-11,Paris: Centre d'Etudes Prospectives et d'Information Internationale，2000.
18. Lin, Justin Yifu, 2003, "Development Strategy, Viability, and Economic Convergence", *Economic Development and Cultural Change*, Vol 51, No. 2, 277-308
19. Lin, Justin Yifu, 1992, "Rural Reforms and Agricultural Growth in China", *American Economic Review*, Vol.82, No.1, pp, 422-427
20. Lin, Justin Yifu, Fang Cai, and Zhou Li, 1996, "The Lessons of China's Transition to a Market Economy," *Cato Journal*, Vol. 16, no. 2 (fall, 1996): 201-31.
21. Lin，Justin Yifu，and Tan，Guofu，1999, “Policy Burdens，Accountability and Soft Budget Constraint”， *American Economic Review*，89(2), pp. 426-31.
22. Lipton, David, and Sachs, Jeffrey, "Privatization in Eastern Europe: The Case of Poland," *Brookings Papers on Economic Activities*, No. 2 (1990), pp. 293-341.
23. Liu, Zhiqiang，Foreign Direct Investment and Technology Spillover: Evidence from China，2002.(Journal or workng paper?)
24. Michael Klein, Carl Aaron, and Bita Hadjimichael ，Foreign Direct Investment and Poverty Reduction，World Bank，2001 (journal or working paper?)
25. Murrell, P. "The Transition According to Cambridge, Mass." *Jouranl of Economic Literature*, Vol. 33, No. 1 (March 1995), pp. 164-178.
26. Qian, Yingyi and Barry.R.Weigast, “China's Transition to Markets: Market-Preserving Federalism, Chinese style” ,*Journal of Policy Reform*, 1: 149-85, 1996.
27. Wiles, Peter. "Capitalist Triumphalism in the Eastern European Transition," in Ha-Joon Chang and Peter Nolan, eds. *The Transformation of the Communist Economies*, London: Macmillan Press, 1995, pp. 46-77.
28. World Bank, 1996, World Development Report 1996: From Plan to Market, New York, Oxford University Press

29. World Bank, 2002, *Transition: The First Ten Years-Analysis and Lessons for Eastern Europe and the Former Soviet Union*. Washington, D.C.: the World Bank.

30. World Bank, World Development Report:1997, 2000/2001,2004, Oxford and New York: Oxford University Press.

31. United Nation, *World Investment Report，FDI Policies for Development: National and International Perspectives*，New York: United Nations，2003。

32. Zhang, Kevin Honglin，2001, How does foreign direct investment affect economic growth in China? *Economics of Transition*, 9 (3), pp. 679-693.

[Chinese References]

33. Zhang, Fan, and Zheng, Jingping, 1998, "Impacts of Multinational Corporations on China's Economic Structure and Efficiency ", Peking Univ., CCER Working Paper Series，No.C1998018

34. Jiang, Xiaojuan, 2002, *Foreign Capital in China*, China People University Press

35. Jiang, Xiaojuan and Li, Rui, 2002, "Contribution of FDI to China's Industry and Technology Progress", *China Industrial Economics 2002* (7), pp. 5-16

36. Jiang Xiaojuan, 2002, Growth and Structural Change of China's Exportation, Nankai Economic Review 2002(2), pp. 30-34

37. Lin, Justin Yifu, 2002, "Viability, Economic Transition and Reflection of the Neoclassical Economics", Peking University, CCER Working Paper Series No. C2002012

38. Lin, Justin Yifu, Cai, Fang and Li, Zhou, 1994, *China's Miracle: Development Strategy and Economic Growth*, Shanghai: Shanghai People Press (2nd version, 1999)

39. Lin, Justin Yifu and Hu, Shudong, 2000, "China's WTO entry: Challenge and Opportunity", Peking University, CCER Working Paper Series, NO.C2000004

40. Lin, Justin Yifu and Li, Yongjun, 2001，"A Second Review of the Relationship between International Trade and Economic Growth"， Peking University, CCER Working Paper Series, No.C2001008

41. Lin, Justin Yifu and Li, Zhiyun, 2004，"Policy Burden, Moral Hazard and Soft Budget Constraint", *Journal of Economic Research*, 2004 (2), pp. 12-24

42. Lin, Justin Yifu and Liu, Peilin, 2003，"Resolving Problem of Viability and Facilitating Economic Growth"，Peking University, CCER Working Paper Series, No. C2003019

43. Ministry of Commerce, 2003, "China's Poverty Reduction Program Financed by Aid, 1998-2002", News Letter, http://www.mofcom.gov.cn/

44. *Report of World Investment*, China Finance and Economic Press, 1999

45. Wang, Xiaolu, 2001, "Past and Future: Contribution of Investment to Growth", *Academic Journal of National Institute of Political Administration, 2001 (4)*, pp. 56-61

46. Wu, Jinglian, 2002, "Modern Economics and China's Reform", *Comparative Studies*, 2002 (4), 1-5

47. Yang Bai, 2001, "Several Important Conferences in the Process of Reform", *Cafe Bar for Economist*, Vol. 1, pp. 13-17, Shandong People Press

48. Yi, Xiaohuai，" International Grant Aid and China"，News Letter, Ministry of Commerce. http://www.mofcom.gov.cn/

49. Zhang, Fan, and Zheng, Jingping, 1998, “Impacts of Multinational Corporations on the Structure and Efficiency of China’s Economy”, Peking University, CCER Working Paper No. C1998018
50. *China’s Yearbook of International Trade,* China International Trade Press, each year
51. *China Statistical Yearbook*，China Statistical Press, each year