Yuyan Zhang

Reform, Opening-up and China's Changing Role in Global Governance

中国社会科学出版社
CHINA SOCIAL SCIENCES PRESS

Springer

Reform, Opening-up and China's Changing Role in Global Governance

Yuyan Zhang

Reform, Opening-up and China's Changing Role in Global Governance

中国社会科学出版社
CHINA SOCIAL SCIENCES PRESS

Springer

Yuyan Zhang
Institute of World Economics and Politics
Chinese Academy of Social Sciences
Beijing, China

ISBN 978-981-33-6024-2 ISBN 978-981-33-6025-9 (eBook)
https://doi.org/10.1007/978-981-33-6025-9

Jointly published with China Social Sciences Press
The print edition is not for sale in China Mainland. Customers from China Mainland please order the print book from China Social Sciences Press.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Preface

As I am an author who writes articles in my mother tongue, most of my articles and written works for the past thirty-odd years are published in Chinese version. However, based on the characteristics of my job and work unit, I also wrote several articles in English occasionally, while part of the published essays were translated from Chinese into English for direct communication with foreign fellows. During the process of contact with foreign scholars and experts, I received English edition books sent from them many times, however, I felt pity that there are only a small number of written works in English that I can give them. From 1988 to 2019, there are totally 11 pieces of working papers that I wrote and rendered in English editions, which are suitable to be compiled and published.

In the summer of 1988, the Helsinki-based UNU-WIDER established a research program "Economic Reform of Countries in Transformation", for which the director of economic research institute affiliated with Poland Planning Commission was appointed on the leading position, and its members are from Soviet Union, Poland, Czechoslovakia, Hungary and China, and I was the only member from China among them. Our mission was that every member needs to accomplish a reform report in view of their nationality during roughly two months. Although China has undergone reform and opening-up for about 10 years by then, the systematic descriptions and conclusions of China's reform and opening-up for the past 10 years were not adequate, and to arrange and comprehend the logic and path of China's reform and opening-up was a difficult task with huge pressure for me, as a 28-year-old young Chinese research fellow at that time. After absorbing suggestions and advice of colleagues from Soviet Union and Eastern European countries, the article titled "Economic System Reform in China", as one of the working paper series on developing economic research, was published in 1989.

This research program was a long-term item, and the panelists attended meetings to discuss initial paperwork in Warsaw during spring and summer in 1989. According to the overall requirement of the item team, the second national report should be focused on stable policies of the reform course, which is the second chapter titled "Reform, Development and Stabilization Policies: The Case of China" in this compilation. Despite the paperwork being discussed and reviewed, I was unable to attend the meeting held in Helsinki to arrange working papers for some reasons at that time, due to which this paperwork was not listed in the working paper series of WIDER. As a result, this paperwork has become one of the two articles that have not been published yet. From today's perspective, there are many parts that need to be improved and are not accurate in the paperwork, but it somehow has reflected upon my understanding and thinking of that period in 30 years ago. From a different angle, to understand China's reform and opening-up in the point of view of young Chinese researchers in 30 years ago can provide certain value especially to readers interested in China's reform and opening-up history.

2008 marked the 30th anniversary of China's reform and opening-up, and at the invitation of the editor of *Wenjing* magazine, I completed an article titled "Smith Theorem, Olson Conditionality, and Reform: An Institutional Economics Interpretation of China's Growth Performance During 1978–2008". If the previous two articles emphasize on detail and the implementation process of China's economic system reform, this article that was written in 2008 can be seen as an economic and theoretical explanation of China's reform and opening-up process, in particular, on its huge success. And in 2018 which marked the 40th anniversary of China's reform and opening-up, I wrote another article "China's Opening-Up: Idea, Process and Logic", and this article gave a systematic presentation about the reform sector. Until today, the Chinese economy has scored great achievements, and the per capita GDP has exceeded to ten thousand US dollars in 2019, and the problems China faced and its external relations have changed profoundly. From the article "China's Structural Reforms and Implications for Northeast Asia" written in 2017, readers can understand China's efforts to realize the growth model transformation which is from high speed growth to high quality growth.

The above mentioned five articles consist of the first half of the compilation, namely China's reform and opening-up.

The second half of the compilation put emphasis on the relations between China and the outside world. China and India are the two largest developing countries, and their economic cooperation is not only concerned with their economic growth performance but also will bring immense spillover effect. The article "The Relationship Between China and India Within the Framework of Asian Economic Integration" published in 2008 made a conclusion that the China-India relations are more on functional cooperation rather than comprehensive and close cooperation, which has stood the test of time.

Global governance is one of my key research areas at Institute of World Economics and Politics. To present the Chinese appeal and purpose of participating in and improving the global governance procedure has become my focal point. In this regard, I wrote two theses, which are "How G20 Can Better Support Global Governance?—A Chinese Perspective" from Chinese Perspective, and "Non-neutral International Institution and Catch-Up Strategy of Emerging-Market Economies", respectively. In these two theses, I put the concept of the non-neutral system which set forth 30 years ago into the discussion of global governance, which aims to discover the game in the global governance reform negotiation and to guarantee the maximum of interests by maintaining and building international rules. To clarify the global governance on the basis of the academic theory is another objective that I pursue when thinking over related issues. In the paperwork "Global Governance: A Theoretical Framework", I have tried to summarize global governance combined with the fundamental analysis and logics of neo-system economics, and set up an initial conception system and framework. To some extent, the article Understanding Global Governance can be deemed as a simplified version of the previous one. On the basis of the two paperworks, I have been composing a written work of the same title along with my partners.

Presently, the international landscape has been going through profound changes, which was triggered by radical alternation of major power strength, and consequently has dealt with a heavy blow to the international system established since the end of World War II. With the overall peace prevailing the world for the past 75 years and the economic development especially propelled by the industrialization process, and the alternation of population age and ethnicity structure, humankind faced increasingly severe global challenges. For example, the ravaging COVID-19 pandemic seems to be an alarm to humanity. The essay titled "Perception of 'The Great Transformations Once in a Century'" can be regarded as a type of thinking to the world pattern and human destination by myself.

And the above six articles consist of the second half of the compilation.

With this opportunity of writing the preface, I want to express my gratitude to my four partners, in particualr. They are Dr. Tian Huifang, research fellow Feng Weijiang, Dr. Ren Lin and Dr. Song Jin. It is through their collaboration that the four theses were completed in a smooth way. During the editing course, Dr. Ren Lin, Dr. Song Jin, Dr. Peng Bobo, Ms Li Junwei and Ms Gao Fei made their contribution to the publication of the compilation, and I appreciate their great help. Meanwhile, I also feel grateful to Ms Wang Yin, an assistant of the Editor in Chief of China Social Sciences Press, and her team. Thanks to the publication of this book, our partnership has become more solid. And so long as for any possible mistake in the book, I would be held accountable for that.

Beijing, China
August 2020

Yuyan Zhang

Contents

Part I

Chapter 1
Economic System Reform in China

Yuyan Zhang

Abstract This paper gives a general picture of China's economic system reform, including its background, problems, policies, achievements and prospects. The necessity and urgent need of the reform is reviewed and the Chinese government's decision to adopt policies for reforming its economic system is explained. China's economic reform and stabilization policies are examined from two basic viewpoints: 1. the efforts to find the best way of introducing market mechanism into a centrally planned economy, and 2. the open-door policy that let China play an active part in the international division of labor. The lesson from China shows that an economic system can and should be regarded as an important input for economic growth and development besides labor, capital and technology. Timely and proper economic system reform could greatly increase the efficiency of the economic system utilization.

Keywords Economic system reform · Responsibility system · Economic development in china

1.1 Summary

Ever since 1978, China has been making more and more progress in her economic system reform and gaining popularity around the world. This paper gives a general picture of China's economic system reform: its background, problems, policies, achievements and prospects.

The Stalinist model was almost entirely copied by China as a means of organizing the economic life and industrializing her economy in the early 1950s. By doing so, China had made some achievements before 1978s, but as time passed, China's national economy lost impetus and was soon left far behind by developed countries. Not long after the downfall of the 'Gang of Four' in 1976, Mr. Deng Xiaoping and

This paper has been prepared while I was a visiting researcher at the World Institute for Development Economics Research (WIDER). It is a part of the project on Economic Reforms and Stabilization Policies in Socialist Countries. I world like to express my gratitude to Prof. G. Kolodko, Dr. K. Mizsei, Prof. M. Ostrowski, Dr. D. Rosati, Dr. A. Torok and Dr. A. V. Vernikov for their useful and constructive comments on the first draft of this paper. Also I want to thank WIDER's staff members for their support in preparing the final manuscript of this paper.

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_1

his close associates came to power. They were aware of the fact that there were not a few problems in China's economic system: over-centralization in the economic planning gave rise to widespread unrest and hindered faster economic development.

Being an agricultural country, it is not surprising at all that China started her economic system reform in the countryside, aimed at solving the problem of feeding her huge populating and gaining the farmers' support for this reform. China introduced the Responsibility System (RS) in her rural reform in 1978. In this system, a farming household can sign a contract with the production brigade and become the user of land. Accordingly, the individual household will be obliged to hand over or sell an agreed quota of grain or cotton to the production brigade after harvest. At the same time, farmers may thus have incentives to make full use of the resources which would finally improve the efficiency of production.

Another important aspect of China's rural reform, is the rapid development of "township enterprise" which was highly encouraged by the central government. Township enterprise is a kind of collective enterprise, located mainly in the countryside and run by the production brigade or township government. This may be the special way through which China would continue her industrialization.

RS has been also widely applied to urban reform, which followed China's rural reform. Managers with relative autonomy like farmers can sign a 'contract' with local authorities or ministries concerned. In such contracts, both sides decide how to share the profit and make arrangements about production quotas. Products covered by those quotas will be distributed at officially fixed prices among state-owned enterprises. Products above quotas can be marketed at so-called floating prices (with their bases and ceiling under state regulation).

China's open-door policy is an integral part of her economic system reform. By implementing this policy, China intends to play an active role in the international division of labor and also to take advantage of new forms of management used by joint ventured and of new technology.

Rural reform also had some negative aspects. For example, farmers refused to invest in land, and on the contrary, they have been very much interested in pursuing short-term profits. As a result, the growth rate of grain production declined in 1986. The explanation for this could be that RS's potential has neatly been used up.

The realization of urban reform has not been completely smooth, either. Under RS, the manager has to pay a fine if he or she fails to fulfil the contract. This sanction is, however, not big enough for compensating for the loss caused by bad management. On the other hand, the state is likely to be reluctant to see any enterprise going bankrupt. That is why RS does not seem to be able to eliminate soft budget constraints for managers. Irrational pricing system is another reason for concern. This has been damaging the national economy by misleading resource allocation. Moreover, any changes in the pricing system may give the impression of simple price hikes. Population pressure is still a special problem which the Chinese leaders have to take into account.

China's central government has promised not to change current RS in the rural areas, in at least the next 15 years. The leadership has implemented some flexible policies to encourage co-operation between farmers on a voluntary basis. As an important step in the urban reform, China is introducing a share-holding system. As to the irrational pricing system China's reform architects are trying to work out far-reaching corrections. In addition, a bolder experiment is being undertaken in the newly-formed Hainan province, where market mechanism will play a dominant role. The opening of coastal areas is intended to promote a better integration with the world economy.

It can be expected that many other substantial changes will take place in China in the years to come as economic system reform progresses.

1.2 Introduction

Since the beginning of China's economic system reform, ten years have passed. Everyone who is interested in the Chinese economy and has been to China must have been impressed by the great changes taking place in China. As the biggest developing and socialist (in terms of population) country in the world, what has happened and is happening in China, in particular the economic system reform, is gaining more and more attention in the outside world. Generally speaking, China's economic reform and stabilization policies can be examined from two basic viewpoints. One is the efforts to find the best way of introducing market mechanism into a centrally planned economy. The other is the open-door policy, letting China play an active part in the international division of labor. Certainly, these two aspects are closely related. This paper will briefly review the necessity and urgency of the reform, explaining why China had to choose the way to reform its economic system and the policies for which the Chinese government opted to promote the reform. As often happens, some difficulties and problems, such as inflation, seem inevitable in the process of reform. This paper will also examine the further efforts China has made to solve this sort of problem. Great attention will be paid to the next immediate steps that China is likely to take. It is well known that the past ten years saw a rapid growth of China's economy, which should be mainly attributed to the economic system reform and stabilization policies. This might be of some interest for other countries, especially less developed countries (LDCS) and the same might go for the lessons drawn from China's economic reform. The author eagerly hopes that this paper may provide some constructive and valuable references and information about the experience of China.

1.3 The Background of China's Economic System Reform

Shortly after the founding of the People's Republic of China in 1949, the Stalinist economic model was almost entirely copied by China as the means of organizing economic life, as East European countries did. It has to be said that China had benefited a lot from following the Soviet path during its three decades of construction

Table 1.1 Annual growth rate of national income (based on comparative prices)

Year	Percentage
1953–1957	8.9
1958–1962	−3.1
1963–1965	14.7
1966–1970	8.3
1971–1975	5.5
1976–1980	6.0
1981–1985	9.7

since 1949, but as time passed, this model showed itself more and more inappropriate. Economic system reform thus became the most natural choice for the leadership. This conclusion can be found on the following assessment of the situation China was facing in 1978.

1. **The slow-down of growth rate of National Income**

There were two major setbacks in China's economic development. From Table 1.1 we can see that China's economy suffered a great deal between 1958 and 1962 from its so-called Great Leap Forward, natural disasters and especially the withdrawal of Soviet technicians and the suspension of economic aid. We also see that China's economy growth had kept dropping after 1966. The later situation gave new Chinese leaders an alarming signal.

2. **The disappearance of Chinese enthusiasm**

There are some strict prerequisites for the centralized system to work. One of them is the people's enthusiasm that they are willing to sacrifice their own interests for some holy goals such as state interests. It should be stressed that such kinds of enthusiasm could last for two decades at most. The incentive system based on spiritual or moral encouragement, adopted in China before 1978, had been losing its influences upon the generation growing up in post-revolutionary China. Unfortunately and naturally, this kind of enthusiasm has disappeared, which means China should find a new incentive system in replacement of the old one.

3. **The gap or disparity between China and developed countries had kept widening**

In 1960, China's GNP was nearly the same as Japan's but in 1979 GNP of China only equaled about one-fifth of that of Japan. Moreover, some developing countries and regions enjoyed more rapid economic growth and development. One of the most essential reasons for China's present reform might be that Chinese people have had the sense of identity crisis, i.e., China seemed to face a threat of being a country of the fourth world, even if it has a long history and a splendid culture.

Table 1.2 A comparison of agricultural output growth (based on 1980 constant prices)

	1971–7	1980–82	1982–86
A. *Growth Rates (in percentage Per year)*			
Gross value of agricultural output	4.3	7.5	13.0
Crops of which	2.7	5.6	4.2
Grain	2.9	3.9	2.5
Nongrain	2.1	13.2	9.4
Animal husbandry	2.6	10.1	10.1
Subsidiary out put of which	17.9	13.7	40.0
Township industry*	23.5	14.8	43.1
B. *Share in Tot al Out put Growth (in percentage)*			
Gross value of agricultural out put	100.0	100.0	100.0
Crops of which	45.8	49.2	17.8
Grain	39.6	27.1	7.9
Nongrain	6.3	22.1	9.8
Animal husbandry	9.1	19.7	11.5
Subsidiary of which	34.5	25.5	66.3
Township industry	27.2	19.5	58.7
Forestry and fisheries	10.6	5.6	4.4

4. **Changes in China's political field**

It is well known that at the end of 1970s, Mr. Deng Xiaoping came to power again acting as the designer of the reform's blueprint. In our view, the change of top leaders can be regarded as a turning point for a country, especially a socialist country. To some extent, this hypothesis could be tested and then also supported by some other socialist countries' experience, the USSR, for instance. Doing something different is sometimes a choice in front of the new leaders. If the social-economic situation is far from satisfactory (it is hardly exaggerated to say that China's national economy was on the brink of collapse in 1978) then drastic changes seem to be the only option.

5. **The international setting and introspection**

It is well known that at the end of 1970s, Mr. Deng Xiaoping came to power again acting as the designer of the reform's blueprint. In our view, the change of top leaders can be regarded as a turning point for a country, especially a socialist country. To some extent, this hypothesis could be tested and then also supported by some other socialist countries' experience, the USSR, for instance. Doing something different is sometimes a choice in front of the new leaders. If the social-economic situation is far from satisfactory (it is hardly exaggerated to say that China's national economy was on the brink of collapse in 1978) then drastic changes seem to be the only option.

The fact of the slow-down of national income growth rate and widening disparity between China and some other countries or regions forced Chinese leaders and elite to reconsider the economic system China had been implementing prior to 1978. The natural question emerged why some developed countries (such as Japan and Federal Germany) and developing countries or regions (such as so-called Asia's Four Little Dragons Hong Kong, Taiwan, Singapore and South Korea) could succeed in their economic growth and development. Chinese leaders and elite (being well aware of the fact that China was at a crucial moment in her history) came to recognize that what both brought about such results to China and what should be blamed for most of the problems was the economic system China had chosen. Now that the rigid and out-of-date economic system was perceived as an impediment to economic development, it could also be used as at rigger for a take-off of China's economy, if it could be improved or reformed in a correct way. This judgement was based on the fact that the economic system one chooses is closely reflected in some parameters of the economy of efficiency, growth rate, etc. That is why the Chinese government decided to achieve its modernization by reforming the Stalinist model it had followed. As far as economic policies are concerned, we might regard them as tools or instruments for promoting economic system reform.

6. **The Impact of Reform Waves of Socialist Countries**

In early 1950s, Yugoslavia initiated economic reform after breaking with the Soviet Union; later, economic system reform was launched in Hungary and Czechoslovakia in the mid 60s. This may be regarded as another reason why China decided to reform her economic system in a way which bore some resemblance to the ones introduced earlier in East European countries.

After many years of political struggle and economic stagnation, there was a strong desire for great changes among the Chinese people. At the same time, there was also a powerful and compelling resistance against any kind of man-made disasters from almost the whole Chinese people in all the fields. To meet such a desire and avoid further economic stagnation, the Chinese leaders started the economic system reform and open-door policy in 1978.

1.4 The Evolution of the Reform

Although there are some similarities between China's economic reform and that of East European countries, events in China had many distinguishing features. For example, unlike other socialist countries which usually started economic reform in industry enterprise management and/ or the role of the government and enterprise, China introduced the new system first to the countryside instead of urban zones. The reasons for such distinguishing features need to be discussed here in more detail.

China is the largest developing and agricultural country in the world with four-fifths of the total population living in the countryside. From the viewpoint of Chinese history, it is true that those who can obtain the support of peasants will finally win the game in China. This implies that it is the reform in the agricultural sector that would bring China's economy into motion. So long as Chinese peasants could gain some tangible profits from the reform they would become the most important force supporting overall reform in China.

On the other hand, the previous system failed to realize its potential in agriculture. By comparing communes' crops per cultivated land with that of private plots', you will find striking differences between them, which exactly shows the significant losses of efficiency. Thus, the rigid system failed to stimulate peasants to work hard and efficiently on the communes' land. Farmers were told or ordered by cadres of the bureaucratic hierarchy what and how to grow and, to make matters worse, how much farmers earned did not depend on their work but on the so-called 'big pot'—a Chinese common saying describing equalitarianism. No wonder China's agriculture remained backward for a long time, which resulted in the problem of feeding the huge Chinese population remaining unsolved. It is believed that total increase of grain production could hardly meet the demand of the newly-born babies in the years prior to 1978.

At the time of introduction of economic reform in China, the East European Countries, perhaps with exception of Romania and Bulgaria, had been already more advanced in their industrialization than China. The gap of economic development between them seemed to play an important part in initiating their economic reform in different sectors—agricultural or industrial sector.

By the way, the responsibility system (RS), which characterized the China's economic reform in rural areas and will be analyzed later, had been introduced in some provinces during the period of readjustment (1963-1965) with quite satisfactory consequences.

1. **Rural (Agricultural) Reform via Responsibility System (RS)**

The first essential step of China' s economic system reform was the reform of the agricultural management system. It was introduced in several poorest provinces (such as AnHui and SiChuan provinces) together with the so-called "responsibility system" (RS) in 1978. During the first three years, there existed various RS models according to the contracting parties involved which meant that different parties (individual families, smaller responsibility groups and production team) signed contracts with production brigades—the agents of local government. The contents of contracts were also different (contracts linked to special tasks or to general output or delivery quotas) as well as methods used for accounting and establishing wages (systems based on distribution of production). However, the essential features of various RS models were almost the same: farmers signed contracts with the production brigade and then became the managers or users of the land they were responsible for, with the obligation of handing over or selling an agreed quota of grain and cotton to the production brigade after reaping. Step by step, in particular in 1984, the liberal form of RS, “output contract with the family”, was spreading all over the country. This implied that farm land was divided and distributed (only as far as utilization rights are concerned) equally among the individual households, and more significantly, on the basis of the number of active members per family. Meanwhile, the distribution of farmland was adjusted according to quality. Initially, contracts were signed for about 3 to 5 years and later, in 1984, enlarged to 15 years, with the aim of attracting peasants to invest in land.

Along with the establishment of RS (accounting for 94% of peasant households in 1984), mandatory quotas for sown area and output were eliminated and purchase (compulsory procurement) quotas were reduced, with the sale of above-quota output on the free markets. Up to present state purchase quotas (mainly for grain and cotton) depend on different regions and counties, and there are no exact data concerning them. Quotas contracted are sold at contracting prices which were increased in 1979 at a level of 203 over that of a year before and, once more in 1980, the purchase of procurement price of agricultural goods jumped 7.18 above the previous year. Since 1979, Chinese peasants have begun to have rights to decide what, how and how many to plant or grow as long as they were bound by the contract.

Under such conditions, farmers’ productive potential had been nearly fully used because they knew they could earn more than before if they tried their best to work both efficiently and on a scientific basis. At present they explicitly understand that they work not only for the state but also for themselves. It is clear that RS and increase in foodstuff prices exerted a good impact upon the performance of peasants who had benefited much from first two years’ rural reform- the total income of Chinese PROTOTS was raised by 30 billion yuan (equaling 9.8% of 1978 national income). This is the reason why Chinese peasants have become unflinching supporters of the economic system reform.

Furthermore, the state relaxed control over all of the prices of agricultural products except for that part of rationing grain and edible oil in 1985. Meanwhile, agricultural tax also was collected in cash instead of in products (grain and cotton). By doing so, the role of market mechanism has been enhanced in rural areas.

The picture would be incomplete if we neglected the other side of Chinese rural reform. That is, in general, the rapid development of township enterprises which were highly encouraged by the state. Here, township enterprise we discuss is one kind of collective enterprise run and funded by the production brigade or township government—the lowest grade in China’s government system. Township enterprises are scattered in the countryside or small cities and their value of production is included in the total value of agricultural products. Thus, we refer to the development of township enterprise as a part of China’s rural reform. The following points summarize the most important reasons which lead to the rapid development of these enterprise.

There was a large number of excessive labor force in the countryside who farmed their land but were underemployed. Therefore, the conditions for development of labor-intensive industries in China’s countryside have been favorable.

Besides some township enterprises set up during the past three decades and inherited by their successors, the leaders of production brigades and officials of township government showed much interest in expanding these enterprises and establishing new ones, because they explicitly recognized that a chance of becoming rich could be found in managing township enterprises.

The most important impetus to the township enterprises' development was that the way in which government controlled or coordinated them has deeply changed. They were almost independent from the state mandatory plan, and had decision-making rights about what, how and how much should be produced. Both because of their large number and scattered location around the whole country, China's central government had to make full use of so-called economic levers of tax, price and credit policies rather than administrative direction to achieve the macro-economic targets in rural areas. Here we can come to the conclusion that this deliberate choice is a very important step in the process of introducing market mechanism in China.

The flourishing development of township enterprises shows that China intends to industrialize her economy in a specific way, i.e., the excessive rural labor force might be employed by those enterprises. As a consequence, the problems which are caused by the over-flow of peasants into big cities in some developing countries, to a great degree, have been solved properly by China.

As a result of the reform in rural areas, the gross value of agricultural output increased rapidly (see Table 1.1), indicating a clear success of agricultural reform in China. Moreover, a rapid rise in crops was achieved in spite of the decrease of the share of agriculture in new investment and of the overall diminution of disposable land.

What should be stressed here is that the introduction of RS might mean nothing to farmers in other countries, but it is something to Chinese farmers who had lost the autonomy and "eaten the meal from the big pot" for decades. This denotes that any improvements in the previous rigid economic system is likely to generate sometimes unexpectedly good effects.

Now let us briefly sum up Chinese rural reform experiences. First, gaining support from the nation's basic group or class is a precondition to the success of reform. As a corollary, how far the reform can go and at what level the reform will be successful mainly depend on their attitudes towards the changes surrounding them. Second, it seems very dangerous to persist in any specific doctrine or text. The success of Chinese rural reform in part should be attributed to the change in the way of thinking. As for China, this change brought the term "socialism with Chinese characteristics" into common parlance.

Third, more theoretically, the success of China's rural reform should contribute to the elimination of the "big pot" philosophy—equalitarianism of distribution—that would naturally undermine any incentive system. In order to achieve this goal, we have to let participants of economic activities clearly see the losses and benefits stemming from their behavior: working hard or not. This requires granting autonomy to them (decentralization) and letting them know their obligations and rights explicitly (the right of using land for example), which is prerequisite for autonomy. Correspondingly, the market mechanism should play a great part in allocating resources and deciding who ought to earn more (or less). All of the three aspects including autonomy (or transition from centralized economy to the decentralized), clear right of utilization or even owning the means of production, and market mechanism are overlapping and/or tied to each other and form the economic system. However, they can and should influence the incentive system. It is the new incentive system introduced by economic reform that motivates the peasants to work efficiently, for households naturally are profit or income maximisers and have little chance to get additional support from the state when they run at a loss.

2. **Urban (Industrial) Reform**

The success of rural reform paved the road for urban reform. At the same time when rural reform was under way, China had already readjusted the relationship between government and enterprises. For example, the state adopted a policy to share profits with some enterprises. A part of profits retained were allowed to be used as bonus or welfare funds. Managers enjoyed a limited autonomy in the sense that they could decide who deserved more (or less) and how to fulfil state plan targets. The urban reform carried out before 1983 had only an experimental character.

It is the success of rural reform that had created the preconditions for accelerating urban reform. On the basis of these preconditions, the Chinese communist party adopted a document entitled "A Decision of the Central Communist Party of China on Reform of Economic Structure" in October, 1984. That document focused on urban economic reform and listed the major defects of the previous economic system:

- the lack of a distinction between the functions of government and enterprises;
- bureaucratic and geographical barriers to the functioning of the market;
- excessive and rigid state control of enterprises;
- failure to attach adequate importance to the law of value and the regulatory role of the market;
- –egalitarianism in distribution which has sapped the initiative and creativity of enterprises and workers.

In the terminology of modern economy, there existed both allocative inefficiency and X-inefficiency on a grand scale.

The fundamental and essential objectives of urban reform are to eliminate the defects or shortcomings inherent in the traditional Stalinist model. Being encouraged by the successful agricultural reform, several measures or policies were worked out to solve these problems.

(1) **Responsibility System: A Lesson from Rural Reform**

Like the situation of rural reform at its beginning, there existed a few substantial differences between various models of responsibility system (RS) introduced in urban areas, and the most basic meaning of RS of urban reform was almost the same as that of rural reform. It is impossible for us to analyze various models of RS in detail in this paper, so we will concentrate on discussing one of them which embodies the essence or core of RS -Asset Management Responsibility System (AMRS).

Prior to 1978, what the managers or directors of enterprises could and should do was to fulfill the state mandatory plan, with the absence of (or with strictly limited) material incentives. The failure to work out the mandatory plan in such way that it could practically and properly reflect the social demand was the basic obstacle to gain allocative efficiency. In fact, attempts at increasing allocative efficiency are no more than an illusion even if we can take advantage of modern technology large scale computer facilities. On the other hand, the X inefficiency should be imputed to excessive control from the center, together with restrictions on the utility of material incentives of any kind, because they strongly dampened the energies and enthusiasm of workers and managers. The principal purpose of applying RS to urban reform, especially to the state-owned big and medium-sized enterprises,was to provide a solution to the problems above.

RS adopted in urban reform can be presented in the following way: The managers of enterprises, to some extent, with relatively large autonomy just like peasants, sign a contract with local authorities or ministries to which the enterprises belong. The contract stipulates how much profits or tax the specific enterprise must deliver to the state and, at the same time, government departments at various levels should not manage or operate any enterprise directly. Like individual families, enterprises are independent entities of commodity producers, responsible for their own profits and losses, acting as a "legal person" with specified rights and obligations. The obligations not only require the enterprises to guarantee a fix share in profits to the state, but also stimulate the enterprises to ensure specific products quotas sold to the state at the fixed prices fixed in the contract. This part of fixed products-contract quotas, which is very similar to the state order, would be distributed at the same prices among different enterprises. Products above the quotas could be marketed by each enterprise at so-called floating prices which are usually much higher than the fixed ones. How much the enterprises can earn, in terms of bonus which can be flexible, mainly depends on whether they fulfil the profit as well as product quotas. In general, the more goods enterprises produce above the quotas, the more money they can earn. The money they earn should be used as bonus, collective welfare funds for workers, and funds for updating equipment and for investment. The rights of using depreciation fund had been transferred from the state to enterprises and, according to the state statistical bureau (China Statistical Yearbook 1987), the depreciation rate for state-owned enterprises was raised from 3.7% in 1978 to 4.7% in 1985.

Under such conditions, however, the managers probably will misuse the capital or assets of their enterprises for short-run purposes, such as refusing to use retaining profit for investment and embezzling the depreciation for workers' bonus or welfare during the contract period. This kind of unhealthy phenomenon undoubtedly is against what the reform's architects expect, and it is especially harmful to improve the allocative and x efficiency.

It is in this set of conditions that China' s reform designers introduced AMRS in 1985. Its features are as follows:

- In addition to the obligations or duties as mentioned above, managers have to take the fixed asset increment stipulated in contract seriously, on account of that the fixed asset increment is closely related to the profits he or she will earn when their contracts approach expiry.
- The way in which the managers are chosen or selected have deeply changed from being appointed by government departments at various levels to public bidding. The group of tender-inviters is often composed of the representatives from ministries, local government departments, the workers' committee, bank, notary bureau and layers. Those who offer the most favorable bidding will finally defeat their opponents.
- Certainly, there exist some kinds of sanctions for failing to fulfil the contract for two successive years during the contract period usually between four and six years. For instance, such managers would receive no bonus and have half of salaries deducted. The workers' wages would also be reduced by a certain degree.

It is necessary to briefly describe the other two models of RS, which have been adopted in China widely. One is Contracts Based on Losses, the other is Contracts Based on Progressive Increases in Profits Paid to the State. The contract term of the former one is usually for one year. Central and provincial authorities initiate this RS for annual losses and issue financial subsidies accordingly for each enterprise. At the end of the year, if the losses incurred exceed these limits, no more subsidies will be granted. If the losses fall below the limits, any remaining subsidies will be retained by the enterprise. The later one applies to enterprises experiencing stable growth in production, marketing and profits. The term of the contract is often two to four years. The government and enterprises discuss and decide on a base sum to be handed over to the state treasury in profits, and an annual growth rate. Any amount exceeding the progressive growth rate may either be retained by the enterprise or shared by the state and the enterprise. By controlling excessive enterprise expenditure and encouraging production expansion, the authorities usually stipulate that a certain percent (e.g. 60%) of profits retained by enterprises should go towards enterprise construction.

(2) **Reforming centrally planned economy in accordance with RS**

Now let us look at RS from a different angle. For those who are interested in China's economic reform, one of the most important literature is that "Decision" we have mentioned (see page 12 above). This made clear that the Chinese economy would remain a planned economy, but planning does not necessarily mean the predominance of mandatory planning. In addition, the scope of mandatory planning should be reduced in favor of guidance planning and regulation by free-market forces. This is the key step for China to incorporate market forces into the planning process. Practically, as referred to above, under RS the state mandatory planning has been replaced with the contract quotas which are tantamount to the state order. In other words, the state mandatory planning has taken another form. Even though a number of big and medium-sized state-owned enterprises still receive mandatory production plans from the state planning commission, their managers' obligations and rights are almost the same as those under RS.

There has now been a relatively large change in the willingness of the state to over-manage and overcontrol enterprises. For example, the state Planning Commission's mandatory production plans now cover only 60 types of products making up 20% of total production value, down from 123 types and 40% in 1980. This indicates that a relatively large part of the mandatory plans has been taken over by contract quotas even though there are not accurate data about it. The number of materials allocated by the state plan has decreased from 256 in1980 to 23 types by 1987. Among these 23 types, the proportion distributed by the state mandatory plan has also been reduced to a great degree. For example, for steel materials decreasing from60% to 55.4%, for lumber decreasing from 80% to 35.2%, for coal decreasing from 53.7%to 47.3%, for cement decreasing from 33.9% to 19%, and deliveries of mechanical and electrical products (other than motor vehicles) semiconductors, and industrial boilers, have been completely transferred to the market. The number of products administered by the Commercial Department has already decreased from 188 types in1978 to 23 types in 1987.

As to the way of distributing raw materials and semi-finished products two aspects may be discussed here. First, the State Planning Commission, whose rights have been largely shared by a newly-established ministry of materials and products, still plays an important part in it even if its rights have been greatly reduced as shown above. Its limited rights of allocation focus on products of vital importance to the national economy, steel, energy and the like. The state Planning Commission allocates those materials and products among various regions, sectors and big state-owned enterprises at fixed prices in order to guarantee the fulfilment of the contracts and mandatory plans. In general, the raw materials and products distributed by the state cannot meet the needs of their productive capacity. For the sake of making more profits, these enterprises have to enter the market searching for sellers, the latter also have to do so because only a part of their products—raw materials and semi-finished goods—can be "bought" by the state. Consequently, enterprises have been "forced" into entering market and encountering competition.

As far as the so-called guidance planning is concerned, its real meaning is, to some degree, easy to be understood. We have learnt that the state mandatory planning has been giving way to RS and the mandatory quotas have been greatly reduced in order to gradually introduce market mechanism to centrally planned economy as a means of improving allocating efficiency as well as X efficiency. For the sake of avoiding economic chaos, e.g. wrong or irrational investment and blind expansion of production, the state planning commission also gives guidance plans to enterprises, hinting to managers what kind of products or investment and their quantities can or probably satisfy both the state and market demand. Meanwhile, the state tries to utilize the macroeconomic policies (or so-called economic levers)—pricing, credit (differentiated interest rate) and fiscal policies to affect enterprises' decisions. These levers, as means of influencing managers' decision-makingplay an increasingly important role to fulfil the state' s wishes—featured by guidance plan, or more vividly, indicative plan—to be achieved. Guidance plan exerts stronger impacts upon both collective (including township enterprises) and private individual enterprises than that of big and medium-sized state-owned ones.

As for small state-owned enterprises (including mini-commercial service enterprises), a new measure is being taken in China: leasing them to individuals (leasing system). Managers under this leasing system enjoy more autonomy than those under RS. They receive no mandatory plans, nor any quotas except for the obligations of paying rent and tax to the state. By the way, some well-known Chinese economists are suggesting that it would be convenient and beneficial to sell some of them, which are losing money, to citizens even though the state earns only one yuan (Li Yining, World Economic Herald, May 23, 1988).

(3) **Dual pricing system: another look at RS**

In fact we have already touched on the pricing system when we described the RS, e.g., enterprises can sell their above-quota (or contract quota) products at so-called floating prices on the market, while the products within the contract quota must be "bought" by the state at the fixed prices. So far, we have two kinds of prices. Generally speaking, floating price is the price that can be altered in accordance with demand and supply in the market place between ceiling and base levels set by the state planning commission.

In addition, there exist a great deal of collective and private enterprises, including township enterprises discussed above and collective enterprises in urban areas, as well as a new one related to foreign investment. Even though some of collective enterprises more or less sign contracts with local governments at various levels, their production and marketing activities are far from being controlled by the state. This suggests that in China there is a large number of goods (see Tables 1.3 and 1.4) that are being marketed at free market prices. Here, with a moreprice categories, we can come to a

Table 1.3 The Structure of Retail trade (in gross value) According to Price Forms, 1986

Marketed at	Percentage
State-fixed price	50
Floating price	20
Free market price	30

Source Gao Shangquan, china's Economic System Reform (1978–1987), p. 49, Beijing, 1987

Table 1.4 Major Raw and Semi-finished Products Marketed At State-fixed prices (percentage)

Prior to	1979	1986
Cement	100	33.3
Steel	100	60
Coal	100	50

Source Gao Shangquan. China's Economic System Reform (1978–1987), p. 49, Beijing, 1987

Table 1.5 The Proportion of Funds for Fixed Assets Investment and Circulating Capital loans (percentage)

1978	1988	
Government budget	76.6	31.6
Bank loans	23.4	68.4

Source Gao Shangquan: China's Economic System Reform (1978–1987), p. 44, Beijing, 1987

conclusion that, to a great extent, China's present economic system can be deemed a tripartite mixed economy combining contract quotas (and some mandatory ones) and fixed prices for certain commodities, guidance planning via economic levers with floating prices for a wide range of industrial products and consumer goods, and free market production of non-staple foodstuffs and other items.

Of those three kinds of prices mentioned above, it is easy to understand both fixed and free-market prices. Thus, we are going to look at floating prices. Theoretically, floating prices should and can change between ceiling and base, but practically they would usually be divided into two sub-categories. One is equal to fixed prices because they are always at the ceiling instead of floating or being flexible; the other is so-called bargaining prices which are not under state control and hardly differ from free-market prices. We call this distinctive pricing in fact only two kinds of prices, which characterize RS as far as pricing system is concerned.

Now let us focus on the analysis of the economic levers which naturally elicits the changes in fiscal and financial policies in China. This paper has already mentioned some issues concerning them. Taking the profit-sharing between the state and enterprise as an example, it typically comes out that great changes have taken place in China's fiscal system. What is more, China has started to use tax differentials to influence the decision-making of economic participants. For instance, enterprises began to pay a highly progressive bonus tax in 1984instead of abiding by the authorities' arbitrary control over it. In order to encourage the development of primary products' industries (mining and energy), this kind of fiscal policies also have been put into practice. Perhaps the most significant change in the fiscal and financial field is that China has been making efforts to convert government budget for assets investment into bank loans, e.g., when an enterprise wishes to invest it could ask for funds from government budget, which called for no compensation before 1980, and since then the investment funds backed up by government budget has been gradually replaced by bank loans which require compensation for both principal and interest (Table 1.5). Certainly, differentials in loans' interest has been viewed as an effective instrument to influence managers' decisions. What should not be neglected is the establishment of a new structure of China's banking system in which People's Bank of China acted as China's Central Bank (see Fig. 1.1). This seems to be the first step to make the so-called specialized bank act as an enterprise rather than an executive organ of the Ministry of Finance.

State Council					
People' s Bank of china					
Industrial and Commercial Bank of China	Agricultural Bank of China	Bank of China	People's of Construction Insurance	People's Insurance Company of China	China International Trust and Investment Company (CITIC)
Urban Credit Cooperatives	Rural Credit Cooperatives		Investment Bank of China	Insurance Company of China	
				Pacific Insurance Company	
Note: Bank of China especially engages in the credit of foreign currencies.					

Fig. 1.1 The structure of China's Banking system

(4) **China's open-door policy**

Owing to some political, economic, and especially ideological reasons, China had isolated herself from the outside world for a long time prior to 1978.Needless to say, this self-reliance (or close-door) policy played a part in the widening of the development gap between China and other countries, and had to be stopped in favor of the opposite one—open-door policy.

The first step on the road to opening towards the outside world, besides expanding foreign trade, was the establishment of four Special Economic Zones that is commonly regarded as China's first step towards attracting massive foreign investment in 1979. By the end of 1986, the number of various contracts of foreign-economic cooperation signed in the four SEZs reached more than4.700 and the total foreign investment jumped to US$ 2.2 billion. On the basis of successful experience from SEZs, China speeded up her pace to stimulate cooperation with foreign countries. Along with foreign capital's introduction, a lot of new types of enterprises appeared, for instance, joint ventures, joint operation firms and completely foreign-funded (owned) companies. Foreign investors invested around US $ 8.3 billion in China in total from 1979 to 1986. What China did in this field aimed at learning advanced managerial skills from the industrialized countries, up-grading productive capabilities and products with modern technology, and providing additional employment opportunities for populous China. These enterprises can take advantage of preferential policies, which are not applicable to the other three kinds of enterprises.

Here we need to keep in view the concrete form of preferential treatment offered by China for promoting joint ventures, which may be of interest for those countries that are going to implement similar policies to spur their further economic development. As of 1985, joint ventures with expiration terms over 10 years enjoyed a tax holiday during the first two years after they began to realize a profit and a 50% tax relief in the following three years. Joint ventures with relatively low profit expectation located in the inner-remote areas enjoyed a tax holiday during the first five years after they became profitable, and also possibly in the following 20 years with the approval of the ministries concerned. Joint ventures located in special economic zones were subject to a special income tax rate of 15%. Most joint ventures operating in the 14 coastal cities and Hainan island enjoyed a 20% deduction on the present tax rate, while joint ventures in energy, transport and harbor construction sectors enjoyed a low tax rate of 15%. Other projects which were technology-intensive or involve over 30 million US dollars in foreign investment may also enjoy a low tax rate of15% when they applied for and received approval from the Ministry of Finance. Imported equipment for production and management as initial foreign investment, construction materials, imported raw materials and components for manufacturing export production self-employed vehicles and office facilities were free from customs duties and the Consolidated Tax for Industry and Commerce. Export products (excluding those subject to state quotas and/or restriction) were free from customs duties and the Consolidated Tax for Industry and Commerce as well. In addition to all these sorts of favorable tax treatment, if foreign partners transferred advanced technology and equipment, a certain part of products made by the joint venture can be sold on China's domestic market (Zhou Rongji: China's Policy in International Cooperation, 1985).

In this respect, removing tight restrictions on private business has been one task of China's economic system reform and stabilization policies. In early 1988, there were about 225.000 private enterprises in China with employment levels higher than seven. The total amount of hired labor was estimated at more than3.6 million, with an average number of 16 in each enterprise (the biggest one works with about two thousand employees. China Daily, July 1988). Private firms have enjoyed a sharp expansion in the past nine years from zero to today's figure (refer to Table 1.6), and their futures certainly look bright. To promote private economy is a part of China's policy of developing a diversified economic system with the publicly-owned economy maintaining a predominant position.

Now we have finished the brief summary of what has been achieved by China's economic system reform before 1987. They mainly comprise implementation of RS

Table 1.6 Total Industrial Output by Enterprise Forms (calculated on comparative prices)

Proportion (in percentage)	Value of output in 1986 (billion yuan)		
1978	1980		
Total value of industrial output	100	100	1119.40
State-owned enterprise	80	68.7	620.14
Collective enterprise	20	29.2	263.68
Private enterprise and others	0	2.1	18.98

Source State Statistical Bureau, China Statistical Yearbook 1987 in both rural and urban areas, reform of central planning system, introduction of dual-pricing system and open-door policy as well as development of a diversified economy.

1.5 Performances and Problems

1. **An Overview of Economic Development (1978–1987)**

Great social and economic changes have taken place in China since economic system reform was undertaken in 1979. The annual growth rate of national income during the period of 1979 to 1986 was higher than that of 1953 to 1986 (Table 1.7 and also see Table 1.1), with a relatively more abundant market. Table 1.7 shows a definite improvement with the general tendency of industrialization of the macroeconomic structure.

Although many factors such as increase in capital and labor can contribute to economic development and growth, it goes without saying that a big part of China's economic prosperity is due to a result of her economic system reform. Here we list the reasons why such a conclusion seems warranted. First of all, the new economic system has brought about an improvement in allocating efficiency. Central planners undoubtedly have improved their skills of planning, but with the increasing significance they have attached to the feedbacks from the market, the state-owned

Table 1.7 Comparison of Increase of NI and GNP

a. *Increase in GNP and NT(calculated on comparative prices)*				
1982	1984	1986	1987	
GNP	503.8	676.1	946.4	1092.0
NI	426.1	565.0	789.4	915.3
b. *Growth rate of_NI (an percentage per year)*				
1979–1986	1953–1986			
NI	8.7%	6.6%		

Source a. Beijing Review, June 1988. b. China Statistical Bureau: China Statistical Yearbook 1987

Table 1.8 Structure of NI (%)

1982	1987	
Agriculture	34.9	27.5*
Industry	45.1	46.9
Tertiary	20.0	25.6

* of which more than 50 s are attributed to township enterprises' production value

Source Beijing Review, June 1988

enterprises' autonomy makes at least some of the managers produce and invest what is required by the market. Consumers needs have become decisive for collective and private enterprises. In other words, the market mechanism has started to influence resource allocation, which undeniably is accompanied by a higher allocating efficiency than the ambitious and overall centralized planning in the past.

Secondly, the new system encourages market-oriented production. State-owned enterprises, which formerly had to obey mandatory production plans, are given leeway to produce for themselves as well. This part of their production can be sold at prices set by the enterprises themselves. They are interested in maximizing profits. Enterprise behavior is redirected toward tapping their potential resources, organizing technical innovation, increasing production, and applying high-quality management. As a result, much progress has been made in improving X-efficiency.

Thirdly, an economic system is something like a set of rules which governs its participants' behavior and provides incentives for them. In general, everyone is a profit or self-interest maximizer. But under different economic systems, or with different restraints of rules, people's maximizing behaviors take different forms. We can take China's old economic system as an example: how much a worker could get did not depend on his or her work, because of the equality principle in distribution or "big pot", and doing what had been ordered to do was workers' and manager's only practical choice. Therefore, economic system reform is tantamount to rationalizing the "rules" so as to invigorate each system participant's enthusiasm. Experiences of China's new system show that what China has done is in the correct direction to rationalize her economic system step by step.

2. **Problems and Unstable Factors**

As usual, however, every coin has two sides. China's tremendous achievements are also accompanied by undesirable consequences or by-effects, most of which stemmed from the legacy of the long existence of the traditional system. In spite of this, those by-effects or problems still may undermine the reform and the modernization drive if ignored. Now we are going to enumerate the principal problems confronting China's reform.

(1) **Problems accompanying rural reform**

Although RS based on contract linking remuneration with output has yielded some good results, it obviously has several side effects. First and foremost, a large number of irrigation facilities built before the latest reform have almost broken down because of management by individual families. A lot of big and medium-sized tractors have been standing idle due to difficulties in distributing them among individual households. Furthermore, drastic changes in management methods also have given rise to some undesired effects beyond the expectations of experts speaking for the extension of rural reform into industry. This was most evident in the field of tractor production which used to concentrate on manufacturing big and medium-sized tractors. Under

RS, in particular with the smaller pot management and plantation, what farmers need most were small tractors (two-wheel tractors, for instance), and this undoubtedly required readjustment of the former industrial structure which was under way in China. Such phenomena inevitably resulted in losses at some enterprises. It has to be stressed that economic reform or stabilization policy is closely associated with sometimes dramatic changes in industrial structure. Certainly, it probably is a good trend from a long-run viewpoint.

As mentioned above, under RS, in rural areas, the cultivated land, that was responsible by individual households, was distributed among peasant families on the basis of the number of active members per family and of the quality of land. To obtain the goal of equality, farm land was usually divided into several pieces for one household. This policy measure, together with the scarcity of land suitable for agricultural purposes (which gives an average of 0.1 hectare per capita in China), seemed inevitable to bring about the losses of efficiency caused by a lack of economy of scale.

In addition to the above problems, there is another problem making things worse. Farmers refused to invest into land, and on the contrary, they were much more interested in pursuing short-term profits. This was because the ownership of the land still belonged to the state and RS was only a preliminary measure to separate management from ownership. Most peasants were wondering if they can retrieve or take back the investment from the State's land. That's why they had preferred investing their money into house-building and buying sprees. Putting the case another way, since the state was the only owner of the land, nobody had a right to buy or sell plots. Such a system inevitably blocked the road to increasing scale economy which would be more efficient than the prevailing one, and did not help raise the agricultural productivity which was also a result of shortage of investment. As a consequence, the growth rate of crops dropped from about 6% during the period of 1979–1985 to 2–3% in 1986 (also see Table 1.2).

An explanation we can give of the situation is that RS's potential has been nearly used up. In fact, the rapid growth rate of grain production during the period 1979–1985 for the most part should be attributed to RS that gave big incentives to farmers under special conditions. The situation now, however, is different. The present RS lacks further incentives for farmers to invest in land. Therefore, China has to change its manner, or carryout a new policy if she wants to maintain a high growth rate of crop production. Here, two steps are likely to be made: one is to complete or perfect present RS. In particular, much efforts might be made to let peasants know that they are both the real owner and manager of the plot they are cultivating, even though buying and selling land is not permitted. This may "kill two birds with one stone", that means, on one hand, it can tempt peasants to invest capital into land they cultivate, on the other hand it helps put the ball under control of the best players and avoid the waste of land. Certainly, China will need other auxiliary measures if effective results are to be expected. That suggests the state has to raise stimulated purchasing prices of cereals again, because farmers would continue to refuse to invest unless they think they can really profit from investment.

(2) **Half-way urban reform: RS**

Since China's urban reform is a copy of rural reform to a great extent, it is not surprising that they have some similar by-effects. Here we pay attention to AMRS which is regarded as the best choice or form among all kinks of RS within the limits of current China's social and economic conditions. Although RS has some functions of preventing managers from abusing their power, for instance, in pursuit of short-term profit at the expense of State's and long-term interests, some shortcomings remain as follows. The manager has to pay attentions if he or she fails to honor the contract. The punishment or sanction, however, is never big enough to compensate fully the loss caused by poor or inappropriate management; moreover, the State remains reluctant to see any enterprise going bankrupt. That's why we say RS does not eliminate soft budget constraint for managers. Thus, AMRS also has hindered mobility of resources (manpower, capital) from the most profitable sectors because managers had to concentrate on increasing assets. It stands to reason that they prefer investing in their own enterprises to other ones if they have to invest. Thus, we can draw a conclusion that one basic goal of China's reform, i.e., establishing a market mechanism which can be used as an efficient tool for allocating scarce resources, has not been entirely achieved so far, even though AMRS has performed better than the old system. In fact, this goal cannot be attained unless there is a real capital market.

This conclusion will be supported by the following facts:

- As matters stand, AMRS, to some extent, is only a substitute for mandatory planning and leaves ample room to the state to interfere with enterprise management, for officials are not willing to lose the influence and power they have had. At enterprises implementing the contract system, 85% of successful bidders for managerial seats are chosen by bid-inviters closely linked to authorities.
- In addition to the above, problems facing the contract-enterprises remain. Admittedly, it is complicated and difficult for both State representatives and workers' committee to evaluate the assets or capital value, especially in the absence of a well-developed and full-fledged capital market. Undoubtedly, these facts constitute a threat to AMRS.
- Along with implementing RS, conflicts between managers and workers can be observed in some enterprises caused mainly by big income gaps and new relationships between them slightly reminiscent of relationships between employer and employee. Some workers have been complaining about the uselessness of worker's committees or trade unions.

Generally speaking, China's reform is marked with all kinds of RS carried out as a fundamental measure to reorganizing the national economy. However, whether RS belongs to the final set of reform objectives or not is still a pending question. According to the author's estimation, RS will keep changing. As for the direction of movement, we shall discuss it later as part of reform perspectives in China.

Moreover, urban reform has up to now failed to solve the long-lived problems caused by egalitarianism. It is estimated that there are about 30 million employees who have nothing to do but nobody can fire them. In China, state-owned enterprises and departments have to spend 60 billion yuan (about 16 billion dollars) annually on supporting them.

Let us observe RS in urban areas from a different angle. We may be impressed very much by the flourishing development of township enterprise. Admittedly, township enterprises have some advantages in the aspects of location and resource available. But several disadvantages they have are also obvious. Considering technology- equipment and experience of both blue- and white-collar worker, state-owned enterprises are undoubtedly superior to township enterprises. A very significant and thought-provoking phenomenon is that a large number of township enterprises not only have survived the competition with state-owned ones, but they have been exerting great pressure upon them too. This fact exactly shows that, to a great extent, state-owned enterprises implementing RS still have to face some obstacles to realize their production potentials. By keeping this in mind, it seems not surprising that Zhao Ziyang (General Secretary of China' s Communist Party) said that China is trying to deepen the urban reform by learning from the successful experiences of township enterprises' management (People's Daily, June 23, 1988). Those experiences consist of the relative hard budget constrains for and more management autonomy given to the managers.

There is another fact showing great losses of efficiency caused mainly by the half-way urban reform (RS and distortion of pricing system) as well as the disproportional industrial structure. China's total amount of fixed assets is estimated to be around 700 billion yuan by the end of 1987 and the lack of funds is one of the biggest problems faced by China's economic development. But at the same time, the fixed assets lying idle and enterprises' business losses amounted to about one third of the total in 1987 of which large amount of assets lying idle belonged to machine building industry.

(3) **The irrational pricing system**

We have mentioned the so-called dual-pricing system. It is mainly aimed at relatively expanding the enterprises' autonomy and letting the market mechanism play a positive role, while the state is still capable of controlling the basic structural features of national economy via mandatory planning and contract quotas within RS. Dual-pricing system was the only acceptable choice, and it was a necessary step hardly skipped over at that time. Unfortunately but naturally, it has brought about some unhealthy effects undermining China' s economic reform. It is easy to imagine that if one person has access to some raw and semi-finished materials at state fixed prices which are much lower than free-market ones, he or she will gain a lot from selling them on the "free market". Inevitably, people have incentives to try their best to get such materials, distributed by state officials. In the process of getting them, corruption and bribery prevail and some government officials as well as the state institutions are getting more and more interested in engaging in business by using their power of distributing the materials. Such rampant corruption not only has damaged the national economy by misleading resources allocation and providing wrong incentives for economic participants, it also deeply hurt the feeling and enthusiasm of common Chinese people. It is not exaggerated to say that the reform will be ruined by corruption if China fails to effectively fight against it. From this point of view, the dual-pricing system should and must be replaced by a more rational solution.

On the enterprise side, dual-pricing system stimulates hypocritical behavior by managers. That means, on the one hand, that state-owned enterprises managers try to conceal their real production capacity when they "negotiate" the conditions of material-supply or contract quotas stipulated in contracts with the state or mandatory plans, so that they will get lower production quotas from the state; while, on the other hand, they strive to claim as large an amount of allocation of material as possible from the state. The materials distributed at lower price by the state tend to leak to the free market for profits. what is especially worrisome is that the situation is getting worse.

In China, the contract or state mandatory production quotas are usually based on enterprise performance during the past few years. Then a well-managed enterprise will receive or sign a contract with a bigger production quota from or with the State than a less efficient one, which will put this well-managed enterprise in a better position to produce extra commodities for its own profit through market. Chinese people vividly describe this phenomenon as "whipping the ox that goes fast". Enterprises, competing under these confused norms or criteria which cannot reflect their practical profitability performance, are experiencing unfairness.

Besides the unexpected consequences caused by the dual-pricing system, i.e., as it is pointed out by the "Decision", China's present pricing system is still irrational in the following respects:

- price differentials between products of varying quality are inadequate;
- price ratios among different commodities are out of line, particularly the relatively low prices for mineral products and raw or semi-finished materials compared to manufactured goods;
- retail prices of major farm products are lower than prices paid to producers;
- the present price control system is over-centralized.

It is well known that one basic purpose or logic of China's reform is to create an environment in which prices can reflect actual values of commodities, taking account of production cost, relative quality and market-determined factors of supply and demand. But under the present system, fixed prices are still a more influential factor in enterprises' profitability than any other considerations of efficiency or quality, and it fails to play its due role as a set of signals for resources allocation. This implies that RS is built on sand, in theory at least, as there are no means to assess or evaluate the performances of contracted enterprises and, in other words, urban reform would be meaningless without reasonably adjusting the present pricing system.

The cost of holding retail prices low has reached a crippling level of subsidies for the state. The subsidies covering differences in purchase and retail prices of grain, cooking oil, coal for domestic use and foodstuffs were 3.2 billion yuan in 1984 (accounting for more than 203 of state revenue in 1984). This figure were 50 billion yuan in 1987. It obviously imposed an unbearable burden on government and has become a source of budget deficits. What is worse, this sort of subsidies has been given rise to waste.

Table 1.9 Currency issued by China's Central Bank

Increase in percentage over the previous year	
1984	49.7
1985	24.7
1986	23.4
1987	19.8

(4) Inflation: A challenge facing China's reform

Not differently from some other socialist countries, China now is also facing a monster of inflation. It should be admitted that we can partly impute inflation to the irrational price system established simultaneously with a highly centralized economy in the 1950s. A broad range of retail prices have remained artificially low since then in a way of rationing some basic consumer goods, such as meat, cotton cloth, cooking oil etc. Rationing here, a usual way of holding prices low, is no more than inflation. That's why the index of retail prices increased as soon as rationing was eliminated.

In addition to the high level of hidden inflation, there exist several other causes leading to price hikes. Since 1979, more attention was paid to rapid development growth rate demanding a large amount of fixed assets investment. Thus, investment waves and budget deficits occurred. To meet demands of them, the state began to issue more money, and in 1983, the state over-issued 26.2 billion yuan (about US $7 billion) which was nearly 50% higher than in 1984. The following years' figure remained relatively high (see Table 1.9).

This, to a great degree, resulted in price hikes of 6% in 1986 and 7.3% in 1987 according to official statistics. The key to explain the difference between the high growth rate of money issuing and the relatively low inflation rate lies in the huge shortage of consumer goods equaling 7.4 billion yuan (making up about 8% of NI) in 1987. As a result, common Chinese people were keeping a large sum of cash in their purses, waiting for their favorite goods. During the first quarter of 1988, the retail price index grew rapidly and fiercely, 14.3% higher than the same period of last year in China's main 32 big and medium-sized cities.

Let us here consider one of the most crucial things: the tolerance of ordinary Chinese people. Because of the high inflation rate, according to a survey conducted by Shenzhen Special Economic Zone Daily (May 19, 1988), 54% of households' living standard dropped in 1987 as compared with 1986. As a result, low-paid families started withdrawing savings from banks for daily use. Bank runs in Guangdong Province (South of China), sparked off by rumors of large price rises starting from July 1st of 1988, denoted the extent to which people were sensitive to price hikes. Some influential Chinese economists held that the tolerance of the majority of Chinese people was much lower than that of developed and industrialized socialist as well as some developing countries. GNP per head of China was only around US$300. The dropping of living standard means different things to different people of different countries. As for West Europeans, when such a thing appears, they can reduce expenditures by travelling domestically rather than internationally. Under the same circumstances, what choice can common Chinese make? At present, any changes in the pricing system are no more than price hikes in the opinion of common Chinese. Inflation is likely to be the root cause of losing the people's support for China's economic system reform.

Although scrapping the state subsidies and letting the prices of major farm products and industrial raw materials reflect what they are really worth would create a good climate for economic development, resentment and complaints will still accompany the price hikes. These disgruntled feelings could be bitter and contagious, posing seemingly insurmountable barriers to reform. This seems to be, at present at least, a bottle-neck the reform has to overcome.

(5) **Population pressure and deficiency in natural resources**

Since the founding of the People's Republic of China, we have been seeking the way out to provide more employment opportunities for the gradually increasing workforce and, during the disastrous period of the Cultural Revolution, China was forced to settle urban youth down in the countryside.

Today, the so-called rate of job-waiting—a Chinese expression for unemployment in cities on the average is around 2%. Most of urban youth reaching the age of employment might find working posts as industries develop, such as a tertiary industry and private business. In the countryside, however, unemployment—to be more exact, underemployment—remains a severe problem.

Up to now, people may give the explanation why China eagerly encouraged the development of township enterprises: these are aimed not only to fill the vacancy left or neglected by urban industries, but also to enlarge rural employment opportunities in order to lighten the burden of latent unemployment. From 1978 to 1986, township enterprises have absorbed a net number of 50 million farmers derived from agricultural sector, with the total number of 80 million (accounting for 10% of total agricultural population).

Although this strategy is a successful one, population pressure still is a problem because of China's huge absolute population base. According to some experts' calculation, about 16 million people will join the large contingent of workforce annually in the coming eight years, accompanying by a high fertility rate. Apparently, this burden is so heavy that it is nearly impossible to rely merely on both the development of urban and rural industries. Therefore, China needs an additional strategy or solution to solve this problem.

China is usually considered as a resource-rich country. Undoubtedly, she has ample and various types of resources, such as coal andiron ore, although most of them are located in remote areas (or far away from the industrial centers), and sometimes they are of low quality and generally difficult to exploit. By calculating known mineral resources on a per capita basis, China is far below the world average for most raw materials. This fact, together with the population pressure, calls for great attention of China's economic system designers when they prepare policies.

It is impossible for China to transfer or reform its economic system from a centralized to a decentralized one with the market mechanism playing an active role at one stroke. The principal reason for this is that it must make Chinese people—plan-makers, managers, workers and farmers—get accustomed to the new environment so as to minimize the risks of economic reform. Therefore, we have to say that RS, even though it brought about several undesirable consequences mentioned above, is the best acceptable choice for China.

1.6 Solutions to Problems

It should be admitted that the problems or difficulties China is confronting are tough, and, in fact, only a few of them can be imputed to reform itself. China's top leaders, of course, have attached great importance to the ways of solving them. The measures they have taken are observed as follows.

1. **Consolidation of the Progress Made in Rural Reform**

It is hardly too much to say that China has benefited a lot from RS started in rural areas and, for the most part, China has attained its elementary objectives—raising grain output and gaining the populous peasants' support. But as we mentioned above, there are still some problems briefly characterized by farmers' refusal to invest in the land as a result of implicit ownership, and by the comparatively low contract procurement price which made grain-cultivating seldom lucrative in the environment of today's scattered or decentralized family management.

With respect to implicit ownership of land, some economists suggested that the state take action to make property rights explicit—a new land reform letting the farmer be the owner of the land he or she is cultivating or responsible for. These experts believed that such a substantial action would attract investment by peasants and be conducive to increasing agricultural productivity by amassing land in the hands of the best farmers. Probably owing to the fear of widening the distribution gap between farmers in the way of land annexing, which may be source of unrest, this somewhat radical suggestion has been given up. As a substitute, China's administration decided to promise to make current RS last for fifteen to fifty years. This implies that China wants to have these problems, caused by farmers' nearsightedness, resolved by time. This measure, in fact, is tantamount to acknowledging or acquiescing in individual households as owners of the land, even though it is the state that nominally owns it.

The state has thus initiated some flexible policies to encourage cooperation on a voluntary basis among farmers' families, and they are allowed to hire some people or lease the land to others if they have something more lucrative to be engaged in. The flexible policies comprise making it easier for those households that intend to conduct cooperation to get loans (sometimes with a lower interest rate) from the bank and to obtain a supply of agricultural inputs such as chemical fertilizers, pesticides and seeds. Meanwhile, authorities at various levels have applied flexible policies in an attempt to promote the development of the so-called specialized household that is a kind of farm enterprise (run by a single family) of above-average size, deriving most of their income from one agricultural product, e.g., the professional grain-cultivator or pig-raiser. They expect that these policy measures can generate new sources for both increasing rural income and improving incentives by specializing agricultural production.

As we see, China' s government is put into an awkward position when it intends to cope with the problem of procurement price for agricultural products, especially for grain, oil seeds and the like. The state has to spend a large sum of money every year to subsidize urban consumers by holding foodstuff prices low. In this case, if the state decides to raise procurement prices further, a move to be certainly welcomed by peasants, more subsidies must be paid in order to silence the snowballing complaints of urban consumers about price hikes; if the state refuses to do so, farmers may lose interest in agricultural production. In order to get out of this dilemma, China's central government undertook an experiment in abolishing foodstuff rationing in Guangdong province and, at the same time, freeing control on the price which lets market forces (supply and demand) determine the retail prices of foodstuffs. Consequently, in Guangdong retail prices were three or four times as high as in the rest of mainland China, with ordinary consumers receiving limited subsidies from local government. The principle purposes of doing this were to both get rid of the state' s heavy burden of subsidizing and to introduce the market mechanism on a larger scale. Perhaps this experiment can generate two more profound changes: farmers may become real commodity producers, the only rule they must abide by is market price, the conflicts caused by inflation between consumers and the state may be changed to that between consumers and producers (or traders).

As for township enterprises, they are enjoying more and more autonomy than before, for instance, they can cooperate directly with foreign companies in the form of joint venture and the like, export their products and receive a part of foreign currencies from selling their products abroad, raise money by issuing stocks to workers within the factory or to society openly. The most' significant achievement is that China's central government is trying to force the township government or production brigade to stop interfering with affairs of enterprises so as to make these collective enterprises worthy of their name.

2. **Introduction of a Share-Holding System**

The urban reform, especially the model of RS, must go forward in spite of its accompanying problems or difficulties. But the question is where to go. Perhaps China is unique among socialist countries in respect of theoretical preparation for economic reform. The notion which may embody the Chinese philosophy of reform most is "crossing the river by feeling stones beneath your feet", which means that you may try any way you like as long as you can obtain the goal. Knowing that, we can better understand why formal limited companies could appear without many difficulties in January, 1985. A stock exchange was also established in Shanghai—the biggest city in China—in September 1986, the first one among the socialist countries.

The appearance of this stock exchange might be viewed as a tentative and bold step to establish a real capital market in China although its business was far from booming today.

It should be stressed that the only policy China's government has taken for introducing the share-holding system was that of a completely neutral attitude (doing nothing). The state does not want to get involved in this politically subtle affair, but it has adopted a watching position. Under the present socio-political circumstances, this neutral approach seems to be the strongest policy measure favoring or promoting the introduction of share-holding system in China.

In fact, early in 1984, some Chinese firms (most of them are collective ones) started to issue stock to raise funds, both from their own staff and workers, and from society at large, when they were faced with a shortage of funds coupled with the tightening of bank credit. According to some Chinese economists' calculations (Xu Jing'an 1987), by the end of 1985 these enterprises had raised approximately 10 billion yuan (accounting for about 6.6% of GNP of 1984 and 1985) by means of stocks and bonds. At first, the stocks issued were limited to the staff and workers of the given firm, later one part of the stocks, not higher than 30%, could be bought by individuals and other enterprises. As we see, the majority of shareholders was composed of staff and workers within each enterprise, and at the end of a year, they could get dividends which were much bigger (at least twice) than the return from saving deposits, loan after deduction of enterprise income tax. Here, it is necessary to say that the assets of the enterprise implementing the share-holding system were often divided into three parts: private stocks—mainly for raising working funds; collectively-owned stocks whose dividend usually is used as accumulation funds and collective welfare funds (house-building or medical care, for instance); and publicly-owned stocks whose dividend belongs to the local government and is usually used to increase the publicly-owned stocks by means of the enterprise's fixed asset investment. As for the proportion of these three parts, collectively-owned stocks always accounted for 80% or more because of the property form of the enterprises in question.

In June 1988, Chinese economists and managers held a conference concerning the share-holding system. They unanimously agreed that share-holding enterprises had proved to be superior in promoting growth of productivity to those combined of collective and RS enterprises.

As far as big and medium-sized state-owned enterprises are concerned, the introduction of a share-holding system is at present at an experimental stage, e.g. only a few enterprises have started to issue stocks and bonds, for the greater part limited to their own staff and workers, in an attempt to provide improved incentives by making them truly feel that they are the real owners of public property.

The share-holding system has some tangible advantages. Firstly, it seems to increase the mobility of capital flowing into the enterprises with a high profitability as measured by market prices. In other words, it becomes a new way for investment which is more flexible and can improve allocative efficiency.

Secondly, the share-holding system makes the staff and workers risk-takers. Although the stocks bought by them may seem negligible compared to the whole assets of the enterprise, they can prove decisive to the staff and workers. Under

RS, the differentials in income distribution can be featured by the quantity of bonus according to his or her work or contribution, by the indirect risk to staff and workers, they cannot feel they are the masters of public property. That is why we say that the share-holding system has and can create further incentives for workers which may be another effective source of improving X-efficiency.

Thirdly, the conflict between managers and workers caused by RS may be alleviated by introducing a share-holding system. On the one hand, as share-holders, managers and workers enjoy the same rights and obligations, on the other hand, as the owners of the enterprise workers can and are willing to get involved in the affairs of the enterprise.

Recently in China, more and more enterprises have joined the group of those carrying out or introducing share-holding systems. This tendency undoubtedly will generate some profound changes in China's economic system.

3. **Business Merger or Annexation**

China's government has made some policies allowing the business merger of ailing enterprises with successful ones, known as "the annexation of enterprises" or "selling of enterprises". Economist Ma Hong pointed out that not only private enterprises, but also collective and state-owned firm could be bought or sold (China Daily July 15, 1988). China's annexation of enterprises originated in 1984 in Baoding City, Hebei Province, where 18 industrial enterprises have been sold. Between 1986 and 1987, 31 state-owned mini-commercial service enterprises were annexed in Beijing. Many other cities have also practiced this annexation. Some economists predict that this annexation is likely to form a new tide of China's economic system reform.

The biggest advantage of such annexations lies in the fact that it brings the loss-making enterprises back to life by centralizing the essential production elements in the hands of those enterprises that are superior in management and business. Some Chinese enterprises are so heavily in debt that they cannot even afford to pay their staff and workers, while others are booming and eager to expand. So, the combination of these two types of enterprises may effectively solve the problem of both. After merger, the inferior enterprises lost their product. As for AMRS enterprises, the assets added (increment) coming from merging other one(s) may be regarded as part of the total assets increment. This policy will naturally stimulate capital mobility which may bring about a fact that fixed assets are expected to be used more fully. It is easy to imagine that business merger may be the best solution to the problem of waste of production potentials caused by the assets lying idle. It also might lead fixed assets to flow on to the market, which may help establish a capital market.

4. **Response to Irrational Pricing System and Inflation**

Today in China, there are two controversial viewpoints for the next step of China's reform among Chinese economists. Some of them are in favor of carrying out pricing reforms firstly so as to create a favorable environment for each independent commodity producer, and otherwise, urban reform will be meaningless. On the contrary, others point out that it will inevitably give rise to high inflation which may strangle the reform, when there exists a severe shortage of goods. Therefore, they agree to perfect or deepen enterprise reform immediately in order to increase the goods supply by making full use of productivity potentials. Only in this way can price reform be successful, according to their arguments. The approach to increase supply should be paved by two measures: first, implementing so-called full RS which means that everyone in contracted enterprises must be responsible for his or her own loss and reward instead of the manager himself or herself. Second, widely introducing the share-holding system which has shown some impressive advantages.

Actually, China's top decision-makers have had a sober assessment about the situation China is facing; in particular, they clearly understand the mutual interdependence of price and enterprises reform. Recently, they have made up their minds to take pricing reform as a breakthrough point with the help of flexible policies for enterprise reform—enterprises can choose the management and distribution form they think best. In June1988, a meeting of the Party Central Committee Political Bureau decided on a new direction towards deepening the ongoing economic system reform: to take the initiative to rationalize pricing system and tackle the wage system. Now a comprehensive and systematic plan for the reform is being formulated by the government. The new strategy is based on the following understanding, i.e., pricing system reform is seen as the key to success in economic system reform as a whole, and it cannot be by-passed although it involves certain risks. It would therefore be wise to tackle the problem as soon as possible and put up with the short-term sufferings rather than long-term ones later.

The current task of the pricing system reform is to readjust unreasonable commodity prices by raising prices of the agricultural and sideline products, mineral products, fuel and other raw materials which have till now remained low, and narrowing the price differences between them and processed goods, so as to enhance the enthusiasm of farmers and mining workers. At the same time, price controls on certain goods are expected to be lifted gradually. It may take us three to five years to finally eliminate the dual-pricing system and wholesale trade will be the first choice in the process of it.

As far as the problem of price-hikes is concerned, a certain rise in prices seems inevitable and indispensable during the process of pricing system reform. we are inclined to think that in order to prevent common Chinese people from chronically tasting the bitterness of inflation, China is on the way to make the subsidy system wholly transparent by linking the retail price index with the growth rate of income (the principal part of wage system reform). That is letting the population know the retail price index and mainly subsidizing the urban dwellers whose expenditure on food products makes up 60% of their income on average—on a monthly basis. Meanwhile, as a necessary and supplementary measure, China may raise interest rate of saving in an attempt to make savers feel safe when they put their money into the bank. Up to date total savings deposits in China have reached about 400 billion yuan (accounting for about 368 of GNP in 1987, and undeniably some of them belonging to category of compulsory savings). Everyone can easily imagine the extent of an economic panic if bank runs would eventually begin.

Needless to say, some Chinese economists warn that this solution might bring about a wage-price spiral which may considerably hurt the national economy. On the other hand, for the sake of avoiding the emergence of this harmful consequence, China will probably take action to eliminate budget deficit by cutting the state's expenditure which is equal to about 25% of the total fixed assets investment in 1986, by tightening credit along with making the so-called specialized banks gradually become economic entities (responsible for their own losses and benefits), and by controlling the quantity of currency issued by the central bank. Economist Liu Guoguang holds that the basic source of inflation lies in the fact that the growth rate of money issuing and bank loans surpassed greatly the growth rate of GNP. It is completely possible in the near future that a law will be passed by National People's Congress of China, which would pertain to supervising the amount of money issuing by the administration in an attempt to keep inflation or aggregate level of price within limits (People's Daily, July 8, 1988).

As a part of price and wage reform, pay differentials are expected to be increased to reflect differences between white-collar and blue-collar work, skilled and unskilled work. It should be stressed that the actions which are being and might betaken by China in the near future would merely remain in the framework of the stabilization policies and must be accompanied or preconditioned by enterprise reform—deepening RS and widely introducing share-holding system which is the key cure for increasing supply of products.

5. **A Bolder Experiment in the Newly Formed Province Hainan**

In April 1988, the National People's Congress of China ratified Hainan Island, in southern China and formerly being a part of Guangdong province, to become a new province of china. What we are going to emphasize is that this newly formed province is promoting a bolder and more profound action which China may take in the foreseeable future rather than changes in geography. As mentioned earlier, China's economic system reform has met with some problems and unstable factors which require further reforms and, practically, there exists a lively dispute about where to go. As a result, to some extent, a compromise has been made: making Hainan province an experimental area where we can and shall try to take advantage of market mechanisms for coordinating or organizing economic activities. Firstly, Hainan province will have all kinds of autonomy that have been enjoyed by any other city, province or SEZs. Moreover, to a great degree, economic activities in Hainan will be independent of controls or mandatory plans from the central government. This denotes that the local authority can use more elastic policies according to the law of value.

Secondly, one of the most significant things pertaining to introducing market mechanisms on a large scale in Hainan, even though it has not yet been put into practice, is the intensive discussion about establishing a wholly new regional monetary system which contains issuance of a convertible currency in an attempt to create a more favorable climate for foreign investment in Hainan.

Thirdly, the role of government in Hainan is unique amongst China's provinces: it is only a policy or economic rules-maker and supervisor and does not run business or interfere with the enterprises' decisions directly. Enterprises linked to foreign investment, such as joint venture and foreign-owned ones, will dominate there.

What will happen in the following two or three years in Hainan, to some extent, may strongly influence the direction and momentum of China's economic reform. Certainly, China's policy measures applied to Hainan are also a part of its open-door policy.

6. **The Strategy for Development of Coastal Areas**

An action, the strategy for development of coastal areas, is under way nowadays in China. It stemmed from the changes in the international economic environment and the determination to make full use of China's comparative advantages. It is now often stressed by some Chinese economists and policy makers that a new round of readjustment in industrial structures is under way in the world, especially in Southeast Asia. As China's neighboring countries and regions—Japan and the so-called Asian Four Little Dragons—upgrade their technological level of products, coupled with the increase in labor force costs, some markets for relatively labor-intensive products will appear. If China fails to catch this chance, other Asian countries, Malaysia, Philippines, Thailand, Sri Lanka and the like, will occupy these markets as soon as possible. This means that the changes in external environment are both a chance and a challenge for China. At the same time, a large amount of capital, in Japan and Taiwan etc., is looking for suitable opportunities of investment.

On the other hand, China is very rich in labor force whose cost is much lower compared even to a lot of developing countries. That is why we deem it as a great advantage to play an active part in the international division of labor. Again, it seems almost impossible to solve the problem of hidden unemployment by China herself and what China lacks most lies in managerial skill, technology, funds as well as some natural resources. Taking account of the successful experience of the Four Little Dragons, China's government put forth the strategy for Development of Coastal Areas, aiming at establishing an export-oriented economy in China's coastal areas instead of limiting open-door policy to a few cities such as SEZs. As a part of the strategy, some preferential policies and regulations are being promulgated.

With respect to the effects of the solutions referred above, we have to say it will take us a period of time before an overall assessment or a valuation of them is made. But here, we are optimistic about their good performances.

1.7 Prospects and Conclusion

In the coming three to five years, there will be no acute changes in rural areas. As time goes on, household farming, as the basic production unit, may gradually give way to cooperation between families. In addition, township enterprises are likely to have a bright future. Numerous farmers will enter would-be mushrooming township enterprises where they could earn more. This tendency will promote concentration of land in the use of the people who are competent for cultivating—professional grain producers. Everything will keep on quietly changing little by little in the vast countryside. The populous peasants will continue to be an important force of social stability.

Although there are several obstacles to the spread of the share-holding system in China, with some of them belonging to technical and experiencing categories (for example the difficulties in valuing the enterprise's assets and deciding the stock price) while others belonging to ideological ones, we nevertheless agree that the share-holding system will be gradually popularized as a result of natural selection the survival of the fittest.

In today's China, there is an intensive discussion on the reform of the pricing system among economists. Some of them worry greatly about its possible results, the way to which is paved with risks, even though they regard it as essential. Economist Li Yining, who speaks highly of the share-holding system, says that China's economic system reform may fail due to the failure of pricing system reform and its success is preconditioned by the successful ownership reform (World Economic Herald, May 23,1988). Ownership reform here refers to the policy measures to make state-owned and collective enterprises real entities of commodity production. In our opinion, the probability of social unrest will be very little as long as price increases do not exceed the wages' increase of the majority of Chinese people.

Protectionism, strong competition among the developing countries whose exporting structure are similar with each other, and sluggish growth of international trade may be the major obstacles to our strategy for development of coastal areas. Nonetheless, China's open-door policy will certainly remain unchanged and China will be involved deeper and deeper in the international division of labor.

According to Mr. Zheng Tuobin, Minister of Foreign Economic Relations and Trade, China has at present a foreign debt of US$29.5 billion, most of which will be repaid in the early 1990' sand accounts for about 4% of gross value of imports and exports in 1987 (People's Daily, August 24, 1988). It is said, either at home or abroad, that there might be a debt crisis if China could not make full use of all these foreign loans and expand its exports at a higher rate. Being aware of such a situation and lessons from some developing countries (Mexico and Brazil) and East European countries (Hungary, Poland and Yugoslavia),the Chinese government is now prepared to prevent such a latent crisis from coming true with a series of effective measures, such as giving more autonomy to enterprises where export goods are produced. In our opinion, China will be able to avoid this kind of dilemma facing other countries.

As far as the target model of China's economic system is concerned, a lot of economists and China's leaders come to have a common understanding: the state regulates the market and the market guides enterprises (Zhao Ziyang, *People's Daily,* July 5, 1988). This means that market mechanism will play an increasingly important part in China. Here, what should be stressed is that China is now in a transition planned economy to the so-called planned commodity economy (market-oriented economy) and has a long way to go before this target model finally established.

As it is well-know, everything is changing rapidly in China as her economic system reform is getting deeper and deeper. It would be premature for the author to arrive at any clear and definite conclusion given all the ongoing problem and their future. It would be more beneficial if you can keep a close eye on what is happening in China from now on. In the final analysis, an economic system can and should be regarded as an important input for economic growth and development besides labor, capital and technology. Economic system reform is the way to utilize the economic system more efficiently. Furthermore, the success of China's economic system reform lies in the determination of the leadership, the correctness of policy measures, and the support of the Chinese people. It is almost impossible for China to go back to the former position of her economic system because there exists no alternative but moving forward.

References

Balassa, Bela. 1987. China's economic reforms in a comparative perspective. *Journal of Comparative Economics.*

Chen, Yizi and Xiaojian Wang. 1987. Reform: results and lessons from the 1985 CESRRI survey. *Journal of Comparative Economic.*

Ellman, M. 1986. Economic Reform in China. *International Affairs*, No.3, Summer.

Fenchtuang, Stephan, and Athar Hussuin (eds.). 1983. *The Chinese Economic Reform.* UK: Croom Helm.

Gao, Shangquan. 1987. China's Economic System Reform (1978–1987), Ren Min Chu Ban She (People's Press), Beijing.

Jin, Qi. 1988. Price Reform: Opportunity with Risks. *Beijing Review*, June 20–26, 1988.

Kolodko, Grzegorz W. 1988. *Reform, Stabilization Policies, and Economic Adjustment In Poland*, paper prepared for WIDER, Helsinki, August 1988.

Kornai, J. 1986. *Economic of Shortage (in Chinese)*, Beijing, 1986.

Lin, Yifu. 1988. On Pricing System Reform. *People's Daily*, June 29,1988.

Liu, Guoguang. 1988. On Pricing System Reform. *People's Daily*, July 8, 1988.

Lou, Hanxian. 1984. *Economic Change in Rural China.* Beijing: New World Press.

Pan, Zengyue. 1988. Business Mergers Invigorate Economy, China Daily, July 15, 1988.

Perkins, Dwight H. 1988. Reforming China's Economic System. *Journal of Economic Literature*, June 1988.

Research Group of Beijing University headed by Professor Li Yining. 1988. Outline of China's Economic System Reform: 1988–1995. *World Economic Herald*, May 23, 1988.

Research Group of China People's University. 1988. Outline of China's Economic System Reform: 1988–1995. *World Economic Herald*, June 27, 1988.

Research Group of Chinese Academy of Social Sciences. 1988. Outline of China's Economic System Reform: 1988–1995. *World Economic Herald*, June 27, 1988.

Rosati, Dariusz and Kalman Mizsei. 1988. Adjustment Through Openness of Socialist Economic, paper prepared for WIDER, Helsinki, August 1988.

Shi, Min. 1988. Taking an Active part in the International Economic Exchange and Competition, Speeding up Our Construction of Modernization. *World Economy*, No. 6, 1988.

State Statistical Bureau of China. China Statistical Yearbook (1985,1986,1987).

Su, Wenming (ed.). 1985. *Open Policy at Work.* Beijing: Beijing Review Publications.

Török, Adam. 1988. Stabilization and Reform in the Hungarian Economy of the late 80's, paper prepared for WIDER, Helsinki, August 1988.

Vernikov, Andrei V. 1988. Reforming Process and Consolidation in the Soviet Economy, paper prepared for WIDER, Helsinki, August 1988.

Wu, Jinglian and Renwei Zhao. 1987. The Dual Pricing System in China's Industry. *Journal of Comparative Economics*, Sept. 1987.

Xu, Jing'an. 1987. The Stock-share System: A New Avenue for China's Economic Reform. *Journal of Comparative Economics*, September 1987.

Xue, Muqiao. 1988. Price Hikes and Inflation. *Guang Ming Daily*, June 30, 1988.

Yang, Peixin. 1988. The Current Price Situation and Pricing System Reform. *World Economic Herald*, June 27, 1988.

Yu, Guangyuan (ed.). 1987. Socialist Construction of Modernization in China: 1981–1985, Beijing 1987.

Zhang, Yuyan and Chunze Jiang. 1987. On Comparative Economic Systems. *World Economy*, No.12, 1987.

Zhou, Qiren and Others. 1986. *The Subject of Development*, Cheng Du, 1986.

Zhou, Xiaochuan. 1988. Contract system in China's enterprises, *Beijing Review*, April 4–10.

Zhu, Rongji. 1985. *China's Policy in International Cooperation.* Paper for the 48th World Trade Conference.

Chapter 2
Reform, Development and Stabilization Policies: The Case of China

Yuyan Zhang

Abstract China's reform is aimed at achieving economic development and realization of industrialization drive by means of reforming economic system and adjusting economic policy. China's economic system is characterized by responsibility system, dual pricing system and coexistence of various ownership forms. This economic system is an inevitable outcome of the long-pursuit reform, and the four major problems—inflation, imbalanced structure, ubiquitous rent-seeking behavior (synonym for corruption) and lower efficiency—that are also inescapable because of the lack of theoretical preparation, the inconsistence between various reform measures and economic policies, and the underestimation of many latent crisis. Thus, the countermeasures adopted by Chinese government in the process of reform can be viewed as a kind of readjustment mostly suitable to China's pattern of development based on the actual conditions. China's reform marks that the economic system and policy, namely institutional factors, is seen as a two-edged sword which might be either beneficial or detrimental to the economic development. Finally, the paper tries to foretell the economic future of China based on the present policy of stabilization and adjustment and long-term reform measures.

Keywords Economic system reform · Stabilization policies · Economic participants

2.1 Introduction

During the last decade, China has experienced a grand transformation evidenced in general by the economic reform and opening to the outside world. In a sense, China's reform can be seen as a rather radical one, that is, the transition from a

This paper is a part of the Project on Economic Reform and Medium—term Development in Socialist Countries. The first draft of it was discussed at Institute of National Economy (Warsaw) in May and revised in Beijing afterwards. I am greatly indebted to Dr. V. Dlouhy, Prof. G. Kolodko, Dr. K. Mizsei, Prof. M. Ostrowski, Dr. A. Torok and Dr. A. V. Vernikov for their constructive and valuable comments on the first draft of this paper. Also I would Like to express my gratitude to my colleagues Zheng Jienong and Zhang Zhinan for their support in preparing the final manuscript of this paper.

Views expressed in the paper are personal.

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_2

centrally planned economy to a kind of system combined with planning and market—the Chinese call it the planned commodity economy. To some extent, the Chinese authority utilizes this reform for fulfilling its industrialization drive and for gaining a foothold in the world. China has achieved undoubtedly an unprecedented success in the process of reform. However,we must confess that China's reform has now encountered a series of unmet troubles and difficulties—inflation, imbalanced structure, ubiquitous rent-seeking behavior (synonym for corruption) and lower efficiency—along with furtherance of the market-oriented reform especially in a country where central planning used to play a leading role. These problems and difficulties have seriously obstructed or impeded China's industrialization drive. China, under this circumstance, is rectifying its economic order and deepening its reform. This paper attempts, from different angle such as planning, capital market, responsibility system and special economic zones, to retrospect China's decade-long reform so as to have a better understanding of contents and implications of China's reform, and also to perceive the problems appeared recently and provide advices to government in scrutinizing the cause of these problems. The paper also tries to foretell the future of China based on the present policy of stabilization and adjustment and long-term reform measures. I would draw, in this process, a special attention to the analysis on the policies and measures, on the essence of system reform as well as its implication of economics. In order to make it clear, I would like, of course, to illustrate the framework of analysis upon which the paper is based.

2.2 A Framework of Analysis

The pressing problem that socialist countries especially the developing socialist countries like China are facing is economic development. Though the development usually involves political, social, cultural and economic variables, to push up production and to increase income—economic growth—is the core of the development in a long-run. There are multiple factors which may give rise to the economic growth. In classical works of comparative economics, Koopmans and Montias put forward a function:

$$\mathrm{O} = \mathrm{f(E, S, Ps)}$$

Among which, O indicates the economic outcome, Ps, S and E refer to policies, economic system and environment, separately (Koopmans and Montias 1971). In a relatively stable environment, it is quite evident that the economic outcome depends on policies and economic system. We admit, in a certain sense, that the environment (including technical level, quality and quantity of labor force, existing capital stock and natural resource endowment, etc.) has some impact on the system and policy as well as on economic outcome. Besides, many non-economic factors like social, political and random events can also influence the economic outcome. However, I do not consider these non-economic factors as having the same weight as system reform measures and policies. The change of environment, in a broad sense, is the aftermath of the system and policy. Therefore, in line with Koopmans and Montais, the following empirical and theoretical investigation will be carried out under the assumption that it is the economic system and policy themselves (and their changes) that first determine the outcomes.

The economic outcome has dual implications on China, namely the aforementioned two core problems of development—to push up production and to increase income. It is apparent that the allocative efficiency and enterprise management (X-efficiency) are closely related to the economic outcome, which, we can say, is the goal of China's supreme policy-makers at any time. The realization of any goal is far and away the result of human action, which depends on the restraints and incentives one has. These restraints and incentives stem from or are determined by the institution the participants are in, presuming that the given institution determines the human behavior, even though the former is also created by man. The institution is generally composed of series of rules and explanation of these rules (Neale 1987). Concretely, the institution consists of system and policy.

The core of economic system has the following two parts, that are, ownership and method of resource allocation—planning versus market. It is evident that there exists strong consistency between the two parts, for example, public ownership is usually lined up with central planning. However, this kind of consistency is not absolute. Concretely, public ownership and market are not necessarily incompatible as fire and water. To admit this point is, so to speak, equivalent to having found the theoretical base for introducing the market in socialist planning economy. In these two parts, the ownership occupies the predominant position. In this context, the ownership not only refers to that the means of production are owned by the state, collectives and individuals, but also includes the proportion and changes between them. The rights of ownership represent the following three kinds: ownership-utilization, ownership-disposition, ownership-over-an-assets'-products (Montias 1976). Among which, the most important is ownership-disposition, namely, the right of transferability of property according to law. Its key lies in the fact that whether or not the right is exclusive, it exerts impact on human behavior by providing incentives.

There are two kinds of policies. One is economic policy in general sense, such as industrial, financial, monetary, exchange rate and pricing (adjustment) policy, etc. (of course, accumulation policy is included). The purpose of these policies is to ensure the stable economic growth and improve economic structure. The other is the policy which, in my opinion, appertains to the system, that is to say, assumes the function of establishing and transforming the system, like loosening the control over individual economy and price.

Needless to say, the assumption of the relation of cause and effect between the economic system and policy and economic outcome is important, but not sufficient. The most important is to illustrate theoretically the linkage between them. That is why I attach special emphasis on the media between them, namely, the preference and behavior of the participants in economic system. The economic participants here are mainly referred to enterprise and individual, who are all maximizers of self-interest. Just as mentioned before, the preference and behavior of participants are influenced and determined by the given economic system and policy, and so is

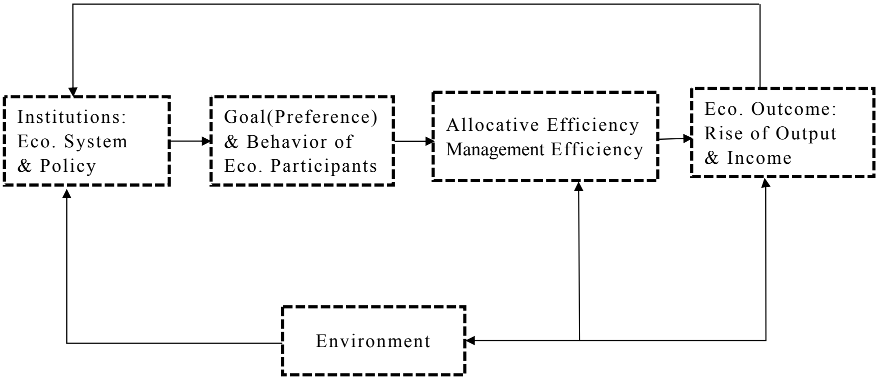

Fig. 2.1 The relations between institutions and economic outcome

the efficiency—including allocative efficiency, management efficiency and economic outcome.

The relations between institutions and economic outcome can be illustrated by the following chart (Fig. 2.1).

Generally speaking, there are two ways to stimulate the economic development. One is to increase input, which entails a large amount of capital and abundance of resources. It is quite impossible for a developing socialist country like China to achieve this target in a short term. The other is to transform its institution,namely,to restructure the economic system so as to affect the participants' goal setting and behavior and to procure agreeable economic outcome. Therefore, it is quite comprehensible to rely on this method for achieving the industrialization and economic growth. This is the basic logic of China's reform.

2.3 Main Features of Reform Concept (1979–1988)

1. Alternatives of Reform

In terms of overall economic reform, Deng Xiaoping, the architect of China's reform and his main colleagues have confronted two kinds of alternatives. First, to work out thoroughly and systematically the procedures of reform and its target model, so as to coordinate various measures with relevant departments, and to substantiate and perfect each other. It is clear that this is an ideal approach. Second, to adopt the approach of proceeding in an orderly way and step by step, that is to say, to promote the reform relying on the trial-and-error method or solution to problems, since the general direction of the reform has been set. China adopted the second alternative which is vividly described as "Cross the river by feeling stones beneath your feet."

China's alternatives have also met with some criticism—the insufficient preparatory work for the reform. It can be fully understood that China's alternatives, in

Table 2.1 Total industrial output by enterprise forms (calculated on comparable prices)

	Proportion (in percentage)			Value of output (billion Yuan*)	
	1987	1986	1987	1986	1987
Total value of industrial output	100	100.0	100.0	1119.40	1381.3
State-owned enterprise	80	68.7	59.7	620.14	825.0
Collective enterprise	20	29.2	34.6	263.68	478.2
Private enterprise and others	0	2.1	5.6	18.98	78.1

Source State Statistical Bureau, China Statistical Yearbook, 1987, p. 14, 1988, p. 24
* Others include joint ventures, enterprises run by overseas Chinese and businessmen from Hang Kong and Macro, enterprises run by foreign investment and joint state-private or collective-private enterprises
*Zhang is the basic unit of Chinese Money Ren Min Bi. The official exchange rate between yuan and US dollar in 1988 and first half of 1989 is around 3.71:1

current perspective, be the second best. One reason is that during the ten-year turmoil of China's cultural revolution (1966–1976), the understanding of the then economic situation was merely blank, and the statistical data were not sufficient and of lower reliability. It was quite different from East European Countries and the Soviet. The Adoption of trial-error approach has also some political elements, namely, to avert the criticism of opponents. Besides, this method is much consistent at the technological level—egalitarianism, which, in the terminology of economics, is viewed as exclusiveness or vagueness of ownership-over-an-assets'-products.

2. **Changes in Ownership**

Prior to 1978, with an exception of private property (mainly refers to means of livelihood), means of production and land were totally owned by the state and the collectives (see Table 2.1).

The so-called collective enterprises had almost no difference from the state-owned enterprises virtually, because the collective enterprises were merely in the transition stage to the state enterprises. At the same time, the products of collective enterprises were brought into the state plan or into plans of local governments at various levels. This kind of ownership structure is similar to unitary ownership that made the enterprises and workers' income irrelevant to its performance and met much criticism for making the nominal master of the social property extricated from the public property, which is vividly described as the "nobody-owned". The users had no or less incentives to effectively utilize the means of production. Therefore, the reform of ownership is inevitable. Considering that the public ownership is one of the cornerstones of socialism (another is distribution in accordance with one's workload), China has adopted the prudent policy regarding the reform of ownership. China's ownership reform has generally two approaches. One is to loosen the state control over three parts of ownership at different levels in state sectors, namely, the responsibility system. The other is to transform the unitary state ownership into pluralism of ownership, namely, the co-development of the state, collective and individual economy, so

Table 2.2 Share of agriculture, light and heavy industries. Total = 100

	1952	1978	1987
Agriculture	56.9	24.8	25.3
Light industry	27.8	32.4	36.0
Heavy industry	15.3	42.8	38.7

Source Statistical Yearbook of China 1988, p. 32

as to provide prerequisites and to lay foundation for establishing a complete-set of new economic system—the model of socialism with Chinese characteristics.

(1) **Responsibility System**

The principle difference between china and other socialist countries is that China is still on the route of industrialization. The agricultural population has made up around four-fifths (eight hundred million) of the total population. From 1949 to 1978, though the share of agriculture in gross value of industrial and agricultural production kept declining, its percentage was still high. From Table 2.2, we can see the importance of agriculture. Grain production has remained a big problem in China, which has a large population. It is quite easy to understand that China initiated its reform in rural area, if we also consider the negative growth in 1977 and in 1978.

To understand the original mechanism in China's agriculture is very conducive to comprehend the implications of reform. Prior to 1978, China's agricultural production was on the basis of production brigades, with peasants as their members. Under the guidance of brigade leaders, the peasants engaged in collective production, e.g. to cultivate and build irrigation systems. Apart from the products for peasants' own consumption and compulsory purchase by the state, if there were any surplus, they would be distributed equally according to one's labor time (calculated on date) instead of quality of work at the end of the year.

The so-called family-based responsibility system refers to that the primary property—land, which is legally owned by the cooperatives or by the state, had been contracted equally to the peasants on basis of family. The contract term was enlarged from three or five years at first to above fifteen years later. Except for the procurement quota of cereals and cotton set by the contract, the peasants enjoyed ownership-utilization and ownership-over-an-assets'-products. In other words, the peasants could decide what and how much to produce and to benefit from selling their surplus on market at market price that was much higher than the contract price. In order to avoid the polarization, the transferability of property was restrained at the elementary stage. Along with the process of the reform, there had been showing that the restraints of transferability of land would be alleviated especially for the purpose of enhancing scale economy and labor productivity. Taking policy for example, the state has thus initiated some flexible measures to encourage cooperation on a voluntary basis among farmers' families, and they are allowed to hire some people or lease the land to others if they have something more lucrative to be engaged in. The flexible polices comprise making it easier for those households to conduct cooperation to get loans from the bank and to obtain a supply of agricultural inputs such as chemical fertilizers, pesticides and seeds. Meanwhile, authorities at various levels have done something to put flexible policy in force in an attempt to promote the development of the so-called specialized household, a kind of farm enterprise (run by a single family) that benefits from producing one agricultural product, e.g. the professional grain-calculator or pig-raiser, as well as from the rise of purchasing price of agricultural products, if the total index of purchasing price of agricultural products was 100 in 1979, 177.5 would be in 1986. Agricultural output had yielded a tremendous achievement, for instance, the average growth rate of crops was 2.7% between 1971 and 78, 5.6% between 1980 and 82, and 4.2% between 1983 and 86. Prior to the reform, the state enterprises, under the Stalinist model, were strictly controlled by the state planning in reference to three parts of ownership. They were merely the "tools" for pursuing the mandatory plan of central government. They had almost no right to transfer the property (means of production) and to make decision on income distribution (the managers' salary and workers' wages were determined by the state in a unified way). Although the enterprises were the users of means of production, their right was limited in terms of the way of using them (what and for whom to produce). As a result, a great loss of incentives and efficiency appeared, when the planning itself was far from perfect and the people were losing their enthusiasm.

The reform of urban enterprises run by the state is, in a sense, no more than the copy of rural reform. The basic idea is to follow the road of alleviating the restraints of ownership rights, with an expectation of giving new incentives to the enterprises and the individuals. This practice is easy to be understood since great achievements have been made in agriculture. This also reflects, from one aspect, the adoption of "trial-error" approach in China's reform. Because the means of production inform of capital is different from the land, it cannot be expected to achieve the clear definition of property right by equally distributing the means of production in form of capital just as easy as what the land has been distributed according to family members. Therefore, the state sectors have introduced the similar responsibility system based on enterprise level, that is to say, the enterprises "sign contracts" with government (to fulfill a part of mandatory planning targets: physical or pecuniary quota), and the above-quota can be freely handled by themselves. As of 1985, the rights of using depreciation fund had been transferred from the state to enterprises as a part of their reinvestment fund. The depreciation rate for state enterprises was raised from 3.7% in 1978 to 4.7% in 1985.

The responsibility system has, in general, the following models: (a) the so-called "Asset Management Responsibility System (AMRS)", (b) Contracts Based on Losses, and (c) Contracts Based on Progressive Increase in Profits paid to the state. China introduced AMRS in 1985. Its features are as follows:

In addition to the obligations or duties as mentioned above, managers have to take the fixed assets increment stipulated in contract seriously, on account of that the fixed asset increment is closely related to the profits he or she will earn when their contracts approach expiry.

The way in which the managers chosen or selected has deeply changes from being appointed by government departments at various levels to public bidding. The group of tender-inviters is often composed of the representatives from ministries, local government departments, the worker's committee, bank, notary bureau and lawyers. Those who offer the most favorable bidding will finally defeat their opponents.

Certainly, there exist some kinds of sanctions against the failure of fulfilling the contract for two successive years during the contract period between four and six years. For instance, such managers would receive no bonus and have half of salaries deducted. The workers' wages would also be reduced by a certain degree.

It is necessary to briefly describe the other two model of RS, which have been adopted in China widely. One is Contracts Based on Losses, the other is Contracts Based on Progressive Increases in Profits Paid to the State. The contract term of the former one is usually for one year. Central and provincial authorities initiated this RS for annual losses and issue financial subsidies accordingly for each enterprise. At the end of the year, if the losses incurred exceed these limits, no more subsidies will be granted. If the losses fall below the limits, any remaining subsidies will be retained by the enterprise. The latter one applies to enterprises that have experienced stable growth in production, marketing and profits. The term of the contract often lasts from two to four years. The government and enterprises discuss and decide on a base sum to be handed over to the state treasury in profits, and an annual growth rate. Any amount exceeding the progressive growth rate may either be retained by the enterprise or shared by the state and the enterprise. To control excessive enterprise expenditure and encourage production expansion, the authorities usually stipulate that a certain percent (e.g. 9.60%) of profits retained by enterprises should be reinvested in enterprise construction (Zhang 1989).

By the end of 1987, the state enterprises had introduced different responsibility system accounted for 87% of the total. By the end of 1980s, the figure reached more than 90%, with one-third of enterprises being contracted by public bidding. Consequently, a number of entrepreneurs have emerged. More than half of contracted enterprises have adopted the practice that the total volume of wages is articulated with economic efficient indicators, such as growth of productivity, stipulated by the contract.

The essence of ownership reform evidenced by the responsibility system is to redefine the rights of center and small economic units (enterprise and family-based agriculture) so as to clarify the contents of various parts of ownership rights, to make them exclusive as much as possible, and consequently to touch upon one's preference and behavior that determine the efficiency finally.

(2) **Pluralism of Ownership Structure**

The main content of China's ownership reform is to make China's ownership shift from monism to pluralism of ownership structure—coexistence of state, collective and private sectors. Having mentioned before the changes of the ownership of the state enterprises, evidenced by the responsibility system (see Tables 2.1 and 2.3), I would like to elaborate the following two points. One is the development of individual or private economy in China, and the other is denationalization of collective enterprises.

In 1953, China fell to transform the capitalist industry and commerce that were out of existence up to 1958. The State Council promulgated three regulations separately in

Table 2.3 Absolute and proportion of retail sales by ownership

	1980		1982		1987	
	Absolute figure	Proportion (%)	Absolute figure	Proportion (%)	Absolute figure	Proportion (%)
Total value of retail sales (rmb 100 million)	2140.0	100.0	2350.0	100.0	5820.0	100.0
State-owned	1801.9	84.2	1880.6	80.0	2249.0	38.8
Collective	254.9	11.9	341.5	14.5	2079.6	35.7
Joint ownership	0.4	–	1.1	0.1	18.8	0.3
Individual	14.7	0.7	37.4	1.6	1011.6	17.4
Sales by peasants	89.4	3.8	69.0	3.2	461.0	7.9

Source Statistical Yearbook of China 1981, p. 331, 1988, p. 24

1981, 1984 and 1988. The purpose of these regulations was to protect and encourage industry and commerce of the none socialist development, and to bring them under the state guidance at the same time. As a result, the domestic individual economy had developed apace, and most of their business were located in commercial area. Starting from scratch, the private enterprises can hire eight or more workers. Although the development of private enterprises was relatively speedy, its percentage of gross industrial value of output was not high. In accordance with sample investigation of 50 private enterprises in Hebei province, more than 60% of fund was self-financed by themselves. In terms of employment, by the end of 1987, there were more than 13 million household dealers (referred to who had registered for the business licenses), among them, 225 thousand had employed at least 8 persons. The employment reached 3.6 million, accounting for about 0.7% of total labor force employed in 1987 (Liang 1988).

The development of private sectors has its inevitability in the process of China's reform. First, after the rural reform, the peasants had a portion of surplus for their own use except a part handed over to the state according to the contracts. This made them enter into the market to make more profits. Therefore, the household dealers have emerged. Second, much surplus labors exist in both rural areas and urban cities. Third, the shortage caused by the centrally planned economy for quite a long time provides many profit-making chances. Once the door is open, they will spring up like mushrooms. In view of the government, the loosening of the control over individual economy is, on the one hand, a part of existing policy, at the same time, the individual economy in rural area has become a reality, and on the other hand, to assuage the pressure of unemployment, and to push up production, especially to make it play a complementary role for invigorating the market.

In the process of loosening the control over individual economy, the development of socialist theory, ideology or the break of antiquate concept have also played a certain role. For instance, the attitude towards the exploitation, especially in the so-called theory of preliminary stage of socialism, (which had been spelt out in passed document of 13th Congress of CPC 1988), suggests an appropriate reason for the existence of the exploitation. Being at the preliminary stage of socialism, China is not a qualified socialist country. It is quite apprehensible and bearable or probably even beneficial that non-socialist factors be in existence. In line with this point, China has started to abandon inefficient equity in distribution and put forth the slogan which allows a number of people to become rich first.

At present, the individual economy, owing to the short time and very small proportion, cannot shake off its dependence on the state economy. This finds expressions in the strong interference of the state policy on its performance. The most important thing is that the raw material, financial fund, equipment, and technology they need are derived from the state or collective economy.

To encourage the foreign direct investment, as a part of China's open-door policy, can also be regarded as an effort of loosening the control over the private sector. As for the content of foreign direct investment, I would like to detail it later. All in all, the loosening of the control over individual economy, judging from different angle, is essentially an impetus to the complete reform of clear definition of ownership.

According to general rule, the property of collective enterprises should be owned by the workers, in other words, the right of use and allocation and right of earning by using and allocating the property should also belong to the workers of collectives. However, it is very hard for us to see any difference between collective and state enterprises regarding the problem of ownership prior to 1978. Both of them were strictly controlled by the government at different levels. Since the reform, there have been great changes evidenced by the expansion of autonomy in collective enterprises, for example, some managers have been chosen by election in the enterprises. The enterprises have been on the way to extricate from the state planning and entered into the market. Only the state fiscal and monetary policies have impact on the collective enterprises. The former refers to the differential taxation and the latter refers to the interest rate and state's credit plan (it decides, under a given interest rate, whether or how much to launch a credit loan). The possibility of collective enterprises to receive subsidy from the state is much less than that of the state enterprises. These enterprises are likely to be truly responsible for their own profits and losses. What they are facing is market. It is noteworthy to talk about the fast development of so-called township enterprises that is a kind of collective enterprises run or funded by the production brigade in rural areas or by township government—China's government at the lowest level (see Table 2.4).

At present, these enterprises are mainly scattered in rural areas and in small towns. The development of township enterprises may contribute to the following reasons: A. The price rise of agricultural products has made the industrial sectors to allocate more funds to the agricultural sectors, reaching 167.9 billion yuan according to 1978 constant price) during 1978–1986 period. B. The introduction of responsibility system has raised the agricultural productivity and created surplus of labors. C. The enterprises have won the support from the government, for example, the government has stipulated the policy of exemption of taxes and policy of loans, and has abandoned

Table 2.4 Indicators of the development of township enterprises

	1978	1984	1987
Gross Value*	493.07	1709.89	4743.10
% of gross value of industrial output	11.6	22.4	34.3
Employment**	2826.56	7617.00	8776.40

Source Statistical Yearbook of China 1988, pp. 44, 293, 294
*Hundred million RMB yuan
**Ten thousand

the decree that limited the peasants to engage in non-agricultural production. D. The management of township enterprises is of efficiency which is the decisive factor of their survival. E. The pursuance of responsibility system by the state enterprises has provided the possibility of obtaining the raw materials and industrial equipment.

The development of township enterprises has for-reaching significance for China—a developing socialist country. It has paved a new way for the industrialization with Chinese characteristics. As a socialist country, China cannot follow the road of industrialization on which the peasants are allowed to go bankrupt or to swarm into cities. The development of township enterprises has addressed, to a great extent, the problem of unemployment of agricultural surplus labors (0.7 billion people were employed by township enterprises in 1987). At the same time, the development of township enterprises has played a major role in encouraging the transition of China's agricultural economy from autarky to commodity economy. It has also accelerated the popularization of urban technology in rural areas, and has promoted the construction of small cities and towns in the countryside, with 2,600 cities and towns in 1990, and 11,000 in 1986.

The reform of and experiment on China's ownership have shown the reform architects' will and efforts for restructuring the ownership based on China's actual conditions. The changes of ownership have shown that China has abandoned the concept that the state ownership is sole and supreme form of public ownership, and has accepted the idea that various ownerships may exist simultaneously, and has confessed that the state ownership also differ. The change of ideological thinking and practice has provided conditions for creating an economic system at the preliminary stage of socialism in China. It is worth mentioning that China's ownership reform does not mean to eradicate the public ownership—the rudimentary feature of socialism, but intends to find out the most suitable form of ownership in China. Under the condition that the public ownership takes the dominant position, the state and collective enterprises are required to cover the production value by two-thirds.

3. Planning versus Market and Centralization versus Decentralization

(1) Dual-Pricing (or Double-Track) System

I have in fact already touched upon the so-called dual-pricing system, while discussing the responsibility system. The contents of contracts, as we know, have usually two major quotas. One is concerned with the pecuniary quota, such as profits (or tax) delivered to the state or increment of the contracted assets: the other is physical ones requiring the enterprises to ensure specific products quotas similar to the state order) to be sold to the state. This part of products of some enterprises will be brought at the fixed or contracted price by the state. The purpose of this is that the central government is likely to guarantee the fulfilment of the contracts and mandatory plans by distributing and transferring among various regions as well as state enterprises at the fixed price. As for an enterprise, it can "buy" some products (raw materials and semi-finished products) at the fixed price while honoring the obligations committed in the contracts. Considering the fact that the contracted enterprises can enjoy the rights of marketing the above-quota products in the marketplace at so-called indicative or guidance prices that are always much higher than that of fixed ones and whose ceiling and base level of floating price is set by the state. In China, there are two kinds of prices, notably-known as "dual pricing system", which, of course, also exert influence on industrial products. While recalling the responsibility system initiated in the rural area, we can also find the dual pricing system in crops selling. In this way, pricing mechanism has been introduced in China's economy, which is expected to play a role in improving allocative and management efficiency, and in making the plan.

Theoretically speaking, there are a tripartite pricing system in China:the compulsory fixed price, guidance price and free market price. But actually, what really exists is the dual pricing system because its ceiling price is always higher than or tantamount to the free market price.

China has adopted prudent polices in process of price readjustment due to its both economic and political sensitivity. Besides raising the procurement price of agricultural products mentioned above, the central government has also increased gradually the fixed prices of raw materials, energy, transportation and communication, and removed step by step the price control over several commodities, for instance, cigarette, alcoholic drinks, and vegetables, etc. Meanwhile, urban residents are subsided directly or indirectly in the way of rationing on some major foodstuffs, which is the typical case of "shortage". Comparatively, the dual pricing system embodies the fundamental changes in restructuring the pricing system rather than the price readjustment.

China's reform is essentially an attempt to integrate organically the planning with market, with much emphasis on taking the advantage of merits of both and avoiding shortcomings of each. It is quite apparent that this kind of thinking is clearly expressed in the introduction of system. The mandatory plan and compulsory fixed price will secure a well-coordinated and stable development of economy. Under the mandatory plan and guidance price, the market mechanism will be introduced to a great extent. Along with passage of time, the share of mandatory plan has been gradually declining. This can be indirectly elaborated by Table 2.5.

Table 2.5 Means of production allocated by planning and market (percentage)

1979	1986	1987	1988
Planning	50	44.1	32.3
Market	50	55.9	67.7

Source Gao, China's Economic system Reform (1978–1987), Beijing, 1987: State Council, Document No. 24 (1989a, b)

Table 2.6 Major raw and semi-finished products marketed at state-fixed prices (percentage)

	Prior to 1979	1986	1987
Cement	100	33.3	15.6
Steel	100	60	47.1
Coal	100	50	47.1

Source Gao, "China's Economic System Reform (1978–1987)," p. 49, Beijing, 1987: Yang, "Review of Planning System Reform in China," Ji Hua Jing Ji Yan Jiu (Planning Economy studies), Supplement I, 1988, p. 39

(2) **Primary Stage of Capital Market**

The introduction of dual pricing system and responsibility system in the state enterprises, and family-base agriculture, the policy of denationalization of collective enterprises (especially the development of a large number of newly rising township enterprises) and rising of private sector have shown that China has been changed from a centrally planned economy into a trinitarian mixed economy with publicly-owned enterprises at the dominant position. One of the inevitable results is the advent of a certain kind of "capital market", more accurately speaking, the market of means of production. The large scale of development of China's capital market and decline of the role of mandatory plan can be demonstrated by Table 2.6 (also see Table 2.5).

In general, the well-functioned capital markets, based mainly on share-holding system, enjoys high efficiency either in the adjustment of capital stock or in investment of fixed assets with relatively lower transaction cost. That is probably one of the basic points of many theoreticians who advocate the implementation of share-holding system in China, compared with the rigid and exhausting central planning. At present, it is much prevailing that the collective especially the private enterprises amass funds by issuing the stocks, since the government does not impose much interference on them. However, the share-holding system practiced in the state enterprises is just at the experimental stage. The main reason is that China has no such prerequisite to introduce the share-holding system throughout the country. That is not only because of the ideological impediment, e.g. for fear that the income disparity will be widened or long-pursuing socialism will be abandoned, but also because of the actual difficulties—people are reluctant to take risk of buying the stocks, and some even think that since the public property is owned by the people, it should be returned to the people, but why ask people to buy. Another reason is that some people are not willing to lose their benefit brought by the existing system. From the technological point of view, there are also some obstacles ahead: in which way and by what criteria to "privatize" the public property while silencing this process. Judging from the ongoing experiment, a small number of state enterprises have issued the stocks only within their enterprises, and the stock buyers are workers and staff, with the purpose of accumulating circulating funds. Facing with the austere financial policy, it is natural that these enterprises have an urgent need to issue the stocks. Moreover, it is deemed as a convenient way by some enterprises to erase taxes—imposed on bonus funds in an attempt to control consumer demand: dividend differs from bonus. The efforts of reformers to expand gradually the market of means of production, to adjust the investment of fixed assets and its orientation, and consequently to improve its resource allocative performance in light of efficiency standard expressed in China's "Bankruptcy Law" in terms of trial implementation and a series of other regulations concerning the annexations among enterprises of different forms. In 1988 alone, more than 2000 enterprises suffered from poor performance—meager profit-making and loss-making—were annexed. Although the annexation is in its trial period, with only 0.4% of total number of enterprises in China in 1988, this practice can be viewed as somehow a decisive step in the reform with an attempt to adjust capital stock by depending on market. Besides, the government also expects to heighten the management level of the enterprises through bankruptcy and annexation, to diminish the subsidy, to adjust the industrial structure, to foster the supremacy of enterprises, and to erase the shortage of financial resource for the industries whose output is badly needed. More often than not annexations are compensative. The asset appraisal of the enterprises involved in merger is evaluated by and large according to the current ones. There are two main concrete ways. One is the merger accomplishes the purchase with capital, the other is the merger bears the obligation of repayment of debts of bankrupt enterprise. The merger and the annexed include either the collective enterprises or private and state enterprises. Because the annexations mostly occur between the three sectors (the government does not take care about annexation among the private enterprises), the government at all levels play a major role in the process of annexation.

The most significant thing of the establishment of "capital market", even though at its elementary stage, nowadays lies in the fact that the enterprises have started to enjoy within some limitation the rights of ownership-disposition. This has, to a great degree, led to efficiency both in the field of resource allocation and inter-enterprise management.

(3) **Changes of Decision-making Structure**

We can see clearly from the foregoing discussion that China's structure of decision-making has changed greatly, for example, it has been promoting the transition from centralization evidenced by mandatory plan to decentralization characterized by responsibility system, co-existence of enterprises with multiple ownership forms and dual-pricing system and emergence of capital market. Through this transition, the enterprise had possessed relatively larger decision-making power.

In this process, the decentralization between central government and local government ensued, which has far more significance in China's reform. In other words, the local government in this process, has far more decision-making power than before. First, prior to the reform, the investment project exceeding 10 million yuan must be approved by the State Planning Commission, but today the figure has risen to 30 million yuan. That is to say, the provincial government and municipal government have now the autonomy to approve the investment project involving less than 30 million yuan. Second, the local governments have the right to reduce or exempt the taxes of collective and state enterprises. Third, last but not least, the financial revenue and expenditure of the local government are not controlled by the central government as they used to be. After the reform, the tax income came to be shared by between the central government and local government. The relation between local government and central government is tantamount to the contractual relations between enterprises and their upper bodies—ministries of central government or local governments at myriad levels. So long as they hand over the obligatory quotas of the tax income (it increases annually at a certain rate which is often negotiable) to the central government as financial revenue, the rest can be retained by the local governments in a bid to stimulate the regional economic development and to give them more opportunities to take their own comparative advantages. The state financial revenue made up 31.9% of national income in 1979, dropped to 25% in 1986. The centrally controlled proportion of the state revenue is now only half of total fiscal revenue. As a result, China's budgetary management system has been changed from vertical management via commissions under the central government to a horizontal management via local governments.

The reform in this respect has seemingly some contractual flavors in terms of the responsibility system being expanded from house-hold and enterprise level to government level. The merit of the reform is to make local governments—instead of limiting the enterprise or family in countryside level—engage in management based on actual local conditions and be more energetic, so as to combine the controllable financial revenue for national economic development with regional economic development and heighten the government managerial level.

4. **Economic Policy**

We should say that it is very hard to separate the change of economic system and change of policy. This is not only because that two things aim at the same target—to raise the efficiency and ensure the economic development and growth, but also because of the interaction and overlapping between them. Hence, it is necessary to discuss the policy in particular. Since I have mentioned so many times that the government coordinated the economic development by exploiting various economic levels, here, I would like to detail the adjustment of China's economic development target and policy of opening to the outside world.

(1) **Adjustment of Economic Development Target**

The implementation of China's strategy of quadrupling the gross value of industrial and agricultural production can be divided into two stages. One is the rudimentary stage (1981–1990), in which the speed of development slowed, focusing on the adjustment of industrial structure and economic system reform. The other is fast development stage (1991–2000).

The main content of the adjustment of industrial structure is to stimulate the development of light industry and agriculture, and to relatively slow the development of heavy industry. Judging from the changes of proportion of agriculture, light and heavy industries (see Table 2.2), the development of heavy industry is faster than that of light industry and agriculture. It is necessary for a country like China who is on the road to industrialize her economy. But if this situation continues, it will be dangerous if the living standard of people cannot be improved. In the process of reform, to stimulate relatively fast development of light industry and agriculture through various economic policies, on the one hand, is to enable people to benefit from the fruits brought about by the reform so as to gain the support from the people; on the other hand, perhaps regarding the long-term significance, the ever-growing market consumption demands, along with the proceeding of the economic system reform, will affect the output structure of light industry and agriculture on account of its close linkage with people's life, and eventually affect the heavy industry structure in a proper way. This is at least our expectation.

Here, it is necessary to brief the changes of China's military expenditure and policy of military industry. In order to make the limited resource use for economic purposes, the proportion of China's military expenditure, in total budgetary expenditure, during a decade-long reform, was kept on decreasing (see Table 2.7), and China declared in

Table 2.7 Expenditure of national defense & expenditure on agriculture. RMB100 million yuan

Year	National defense	National defense (as percentage of total budgetary expenditure)	Total expenditure on Agriculture	Proportion of financial Expenditure (%)
1978	167.84	15.1	150.66	13.6
1979	222.66	17.5	174.19	13.7
1980	193.84	16.0	149.95	12.4
1981	167.97	15.1	110.21	9.9
1982	176.35	15.3	120.48	10.4
1983	177.13	13.7	132.83	10.3
1984	180.76	11.7	141.30	9.1
1985	191.53	10.3	153.62	8.3
1986	200.75	8.6	–	–
1987	209.77	8.6	–	–

Source "Statistical Yearbook of China." 1988, p. 756, pp. 758–759

1985 the disarmament by one million. Perhaps, the most significant thing is China's strategy of shifting the military industry into civilian industry. In 1987, the national fixed assets amounted to around 800 billion yuan, 300 billion yuan was evolved in military industry (Ma Hons 1988). Nonetheless, the accurate statistical data are not available, a majority of durable consumer goods are produced by the enterprises that used to encase in production for military purpose. Judging from this viewpoint, it is very beneficial for China to seek a peaceful international environment for economic development.

(2) **Policy of Opening to the Outside world**

The change from the policy of "close door" to the policy of "open door" is the main component of China's reform. Apart from the expansion of foreign trade, which had reached a new height in 1988, showing the magnitude of China's open policy, another major step of the "open door" policy is to establish four special economic zones (SEZs, Chinese name of free trade zone) along China's southeastern part of coastal areas, and consequently to set up the Hainan province (the second largest island in China) as the fifth special economic zone. To establish SEZs is subject to the following considerations. First, to absorb foreign direct investment so as to make up the shortage of capital in China. As for the foreign investors, China is a huge market with its potentials remaining unknown after the long-term policy of "close door", or full of risk. It is of symbolic significance to set up SEZs and artificially create a favorable investment environment so as to bring along a large scale of investment. Second, to implement China's import substitution strategy. A large majority of products made by the Sino-foreign Joint ventures are marketed inside China. One of the main reasons is that it is more profitable to do so for its official exchange rate being overestimated even though RMB was depreciated for many times. In the past few years, exchange rate between USD and RMB was 1:1.98 in 1983, and then consistently depreciated from 1:2.33 in 1984, to 1:2.94 in 1985, to 1:3.7 in 1986, to 1:3.72 in 1988, and to 1:4.72 in 1990. We have to admit that China has not done a good job in strictly controlling the import, which is one part of import substitution strategy. For example, between 1980 and 1985, China had spent $5.2 billion on automobile import, higher than the China's total investment in automobile industry during 1949–1985 period. Third, to introduce advanced foreign technology and managerial skill. Though the economic development in SEZs is fast, there are still some criticism saying that it would have been more profitable and efficient, if the investment in building up SEZs (small cities and towns) had been used in Shanghai and Tianjin with more infrastructure and human capital.

In view of the policy of introducing the foreign capital, I would like to discuss the problem of equity share, apart from the preferential policy stipulated by the government. Differing from other socialist and developing countries, in order to effectively coordinate the joint ventures, China does not require that the equity share of Chinese side should be up to 51%, but insist that the post of chairman of the board of directors be held by the Chinese side. At the same time, China also stipulated that the foreign investment should not be less than 25%. There is another point to add

Table 2.8 China's introduction of foreign capital (Million U.S.$)

	Total	Foreign loans	Foreign direct investments	Other investments
Amounts contracted				
1979–87	62,509	36,736	22,868	2,905
1979–82	20,548	13,549	6,010	989
1983	3,430	1,513	1,732	185
1984	4,791	1,916	2,651	224
1985	9,867	3,534	5,932	401
1986	11,737	8,407	2,834	496
1987	12,136	7,817	3,709	610
1988		10,200	5,238	
Amounts disbursed				
1979–87	37,500	26,548	8,909	2,043
1979–82	12,457	10,690	1,166	601
1983	1,981	1,065	636	280
1984	2,705	1,286	1,258	161
1985	4,647	2,688	1,661	298
1986	7,258	5,014	1,874	370
1987	8,452	5,805	2,314	333
1988	9,840	6,500	2,620	

Source Statistical Yearbook of China 1988; Statistical Bulletin, February 28, 1989; Beijing Review, March 6–12, 1989

that in order to encourage the foreign private capital investment, China, under the condition of inconvertibility of RMB, has purchased some of joint ventures' products by means of hard currency (see Table 2.8). The issue of convertibility of currency will be discussed later.

The birth of Coast Development Strategy in 1987 is the symbol of China's larger scale of opening to the outside world. To change from extensive to intensive development and to strengthen the infrastructure and capital-technology-intensive processing industries is the next target of China's industrialization drive. A large amount of capital is required for reaching this target. Along with the development of rural reform, many surplus labors, who used to be underemployed or be organized to engage in production, such as constructing irrigation system, have emerged. According to the evolution of industrial structure in general, the agricultural labor force should be adapted to relatively capital-intensive industries. (This has been witnessed in the development of township enterprises). To absorb this part of labor force, it also requires a large amount of capital. As a result, the competition for capital and resource has become more acute. In this aspect, the contradictions between township enterprises and state enterprises have been snowballing. Apparently, it is quite impossible for such a big country like China to solve the problem of shortage of capital by contracting foreign loans. It is also impossible that China only rely on self-accumulation of capital and involvement in international division of labor by exploiting its comparative advantage. Therefore, China should find out the way for the healthy development of its industrialization.

China's comparative advantage has been mainly manifested by the cheaper labor force. China should greatly expand the labor-intensive industries and sell its products at the international market, and support the development of infrastructure and capital-technology-intensive industries by using the foreign exchange earnings, and virtually to push China's High-tech products into international market. This is the basic logic of coastal development strategy. Coastal industries are comparatively well-developed in southeastern China where is densely populated and transport and communication facilities are much available. Therefore, China has rested the focus on the coastal area for fulfilling this strategy, aiming at establishing an export-oriented economy in China's coastal areas instead of limiting open-door policy to a few cities such as SEZs, in order to overcome the latent difficulties in balance of international payment which might stem from the enforcement of China's Import Substitution Strategy. As a part of the strategy, some preferential policies and regulations have been promulgated.

2.4 Difficulties in China's Reform and the "Diagnosis"

1. Major Existing Problems Facing China

To be frank, China has made remarkable achievements in the process of its industrialization since 1949, especially the recent decade-long reform has made China soar up to a higher tier. The gross value of industrial and agricultural production in 1987 was doubled than that in 1980, and average per capital income has increased by a big margin, from 227 yuan in 1980 to 510 yuan in 1987 (according to then prices). The industrial structure has also been transformed, which, to some extent, could be reflected by Table 2.9.

Because a large number of people in many state enterprises have engaged in tertiary industries such as clinic and nurseries run by the enterprises, the actual employment in tertiary industry is relatively higher. Like many countries and regions, China has also met some problems and difficulties in its development. It is a lie that these problems are of no importance. Generally speaking, these problems can be classified into four categories: imbalanced industrial structure, high inflation rate, X-inefficiency and rent-seeking behavior. Besides, along with China's opening to the outside world and utilization of foreign capital, a hidden debt crisis will probably occur. We should say that these difficulties and problems are closely interrelated and interacted.

Table 2.9 Labor force employed by three sectors of economic activities (end of Year)

Year	Total 10 thousand	Absolute figure			Total = 100		
		Primary sector	Secondary sector	Tertiary sector*	Primary sector	Secondary sector	Tertiary sector
1952	20,729	17,317	1,531	1,881	83.5	7.4	9.1
1965	28,670	23,396	2,408	2,866	81.6	8.4	10.0
1978	40,152	28,373	6,970	4,809	70.7	17.4	11.9
1985	49,873	31,178	10,418	8,268	62.5	20.9	16.6
1987	52,783	31,720	11,762	9,301	60.1	22.3	17.6

Source Statistical Yearbook of China, 1988, p. 157
*Because a large number of people in many state enterprises have engaged in tertiary industries such as clinic and nurseries run by the enterprises, the actual employment in tertiary industry is relatively higher

(1) **Imbalanced Industrial Structure**

The imbalance of industrial structure can be expressed by a series of phenomena. The typical one is the imbalance between supply and demand. For instance, China is now suffering from some bottle-neck problems. In 1987 alone, 25% of production capacity could not be in normal operation because of lack of electricity. It was estimated that the loss was at least 150 billion yuan, making up about 13% of GNP (Li et al. 1988). Apart from the lack of electricity, the development of China's infrastructure lagged far behind the development of processing or manufacturing industries. This point can be witnessed clearly from the Table 2.10 of outpacing coefficient of basic industries during the period of "Sixth Five-Year-Plan"(1981–1985). In general, outpacing coefficient of the country, which is on the way forwards industrialization or modernization, ought to be at least greater than zero. The backwardness of infrastructure resulted in many unhealthy phenomena. Besides the losses made by the lack of electricity, there was also a problem in import. The outpacing processing or manufacturing industries required to import raw materials in order to keep the operation, e.g. China's import of steel was high, making up one-third of total demands, and the same was true of the import of component parts, mostly for the production of color TV sets and refrigerators.

Table 2.10 Outpacing coefficient* of basic industries' development (1981–1985)

Coal	Crude oil	Electricity	Steel products	Water supply	Railway building	Highway building
−0.36	−0.7	−0.42	−0.43	−0.02	−0.45	−0.04

Source "Collection of Industrial Policy studies"(Vol. I), edited by State Planning Commission of China, p. 71
*Outpacing Coefficient = (growth rate of some basic industries/growth rate of processing industries) –1

The industrial structure of every province and municipality is now suffering from the problem of convergence that reflects, from another angle, the imbalance of industrial structure. China has a vast territory, however, there is a sharp difference between the development of productivity and resource endowment. For instance, 61.5% of China's total coal reserve is concentrated in Shanxi province and Inner-Mongolian Autonomous Region (in China's energy consumption, coal makes up two-thirds). In Shanghai, the per capita of GNP reached $1600 in 1987, but the poorest, only $30. The division of labor between resource-rich provinces and provinces based on processing and manufacturing is becoming more and more confusing. The former developed desperately its processing industry in order to make more profits, and the latter could not obtain their raw materials they need and have to leave many equipment idling. Consequently, neither the advantage of processing capacity nor the advantage of rich resource has played its due role. In another aspect, all the provinces are competing to introduce blindly the equipment from foreign countries. These industries do not necessarily have their advantages, but just for meeting the needs of "outpacing" consumption. By the end of 1985, China's various provinces and municipalities had introduced 116 assembly lines for producing refrigerators and 117 assembly lines for producing color television sets. This had intensified the momentum of convergence of the industrial structure of at the provinces (Ma 1988).

The lower technical level is another phenomenon of industrial structure crisis. 95$ of China's machine tools are the replica of 1950s, and the labor productivity of China's automobile industry is one-twentieth, compared with that of the US (Hu and He 1988). All these have almost made China's cheap labor force lose their competitiveness. Because of the lower technical level, China's material and energy consumption is considerably higher. The most worrisome is that this trend is still deteriorating (see Table 2.11).

Table 2.11 Energy and steel consumption per US$ 1 of GDP (kilogramme standard coal equivalent)

Country	Energy consumption	Steel consumption (kilo)
France	0.39	0.133
Japan	0.37	0.213
Brazil	0.33	0.203
Federal		
Germany	0.51	0.116
U.S.A	0.80	0.197
India	0.80	0.435
China	2.31	0.451

Source World Economics Herald, Oct. 3, 1998

Table 2.12 General index of prices and change of interest rate (annual rate %)

	Growth rate of retail price	Nominal interest rate	Real interest rate
1980	6.0	5.40	−0.60
1981	2.4	5.40	3.00
1982	1.9	5.76	3.86
1983	1.5	5.76	4.26
1984	2.8	5.76	2.96
1985	8.8	7.20	−1.60
1986	6.0	7.20	1.20
1987	7.3	7.20	−0.10
1988	18.5	–	–

Source State Statistical Bureau, "Statistical Yearbook of China," 1988: Jia Ge Li Lun Yu Shi Jian (Price Theory and Practice), No. 10, Oct. 1988

(2) **Inflation**

All the socialist countries embarking on the reform have met the inflation problem, China is not an exception (see Table 2.12).[1] Inflation, especially the inflation rate of 1988 (18.5%), touched off widespread social discontent. From July to August 1988, there appeared panic spree and bank run owing to the people's worrisome about the inflation. According to the report of the State Statistical Bureau, the sample survey conducted in 13 major cities shows that the living standard of around 39% people has decreased (State Statistical Bureau 1989).

In order to have a deep understanding of China's inflation, we should examine the changes of means of production, apart from dealing with the general index of increasing prices. The result of sample survey in 40 state enterprises, which might be deemed as a general situation, manifests that a majority of enterprises considered that increasing price of means of production before 1987 as quite acceptable. But, in 1988, the price was so high that it became intolerable (see Table 2.13). For this, all the enterprises felt panic (Du et al. 1989).

The evil consequence of the price hike of the means of production finds expressions mainly in imposing the unhealthy impact on China's economy after the reform. Specifically speaking, it may probably ruin the responsibility system. Because of the gloomy future of paying the taxes according to the contract under the condition of price hike of means of production, nobody would dare to make contract. On account of the excessive instability of the market, the enterprises have lost their confidence in market. They are even willing to give up their autonomy they already have and ask to be brought back to the state planning again, in an attempt to secure the supply of raw material and energy. Under the condition of high inflation rate, the newly

[1]Statistical Yearbook of China only gives the general index of prices, which can generally reflect the level of inflation in China.

Table 2.13 Price hike of means of production* (1988)

Item	Unit	Price in January (yuan)	Price in September (yuan)
Steel products	ton	2200	5,800
Copper products	ton	7000	15,300
Aluminum	ton	4000	13,000
Lead	ton	2650	7,000
Imported paper pulp	ton	3000	5,500
Coal	ton	135	250

Source Du et al., "The Behavior of State-owned Enterprise under the Inflation," Jing Ji Yan Jiu (Economic Research) No. 2, Feb. 1989, p. 41
*Sample of 40 State-owned enterprises in Jiangsu Province

established contractual linkage between the enterprises has begun to disintegrate. And even worse, the state mandatory plan frequently falls to be fulfilled. Because of the attractiveness of the high price on the market, the enterprises are not willing to market their goods (compulsory quota) at the state fixed price. That is why those enterprises are being accessed to the raw materials under the state planning make the pretext for their unfulfillment of the state mandatory plan.

(3) **X-inefficiency or Imperfect Micro-management**

The losses caused by the micro inefficiency in China's economy can be evidenced by the following two aspects: overstaffing of enterprises (especially state-owned ones) and slowdown of total factor productivity growth. According to the sample survey conducted by the Beijing municipality, in the first half of 1988, there was no enterprise whose average efficacious labor time reached 50% (namely, half of 8 h, the highest was 3.2 h). Joint ventured enterprises were much better, around 70%. Throughout China, hidden unemployment within the enterprises was amounted to 15 million, which accounted for 10% of then state enterprises, even if the same number of skilled workers were scare (Yang 1989).

Total factor productivity is a main indicator which reflects the management efficiency (especially including the entrepreneurship and enthusiasm of the staff) at enterprise level, and the intensively expanded reproduction of the enterprises. Its calculated formula is as follows:

$$Z = r + aL + bK$$

Among which, "z" refers to national income or growth rate of GDP, "r" indicates growth rate of total factor productivity or the residue derived from subtracting the contribution of labor and capital imputes. "L" and "K" stand for the growth rate of labor force and capital stock input, "a" and "b" represent the elasticity of output

Table 2.14 Sources for growth of industrial net value of state enterprises (at 1952 constant price)

Period	Growth of industrial net value	Total factor productivity	Contribution of increase in labor force	Contribution of increase in capital stock
	(Z)	(r)	(aL)	(bK)
1952–1960	23.5	0.82	9.48	13.2
1961–1969	8.8	3.36	1.12	4.32
1969–1977	10.4	0.36	3.68	6.36
1978	17.1	7.60	3.08	6.42
1979	7.4	−2.62	5.40	4.62
1980	10.1	−1.46	7.48	4.08
1981	11.0	5.56	2.32	3.12
1982	5.7	−0.58	2.32	3.96
1983	8.8	2.80	1.68	4.32
1984	13.6	8.94	1.72	2.94
1985	17.5	2.22	11.56	3.72
1986	10.1	−3.58	6.12	7.56

Source Zheng, "The Analysis of Factors' contribution to Industrial Economic Growth," Gong Ye Jing Ji Guan Li Cong Kan (*Journal of Industrial Economic Management*), No. 12, 1988, p. 9

respectively with respect to labor and capital. On account of the China's actual conditions, the labor and capital output elasticity are assumed to be 0.6 and 0.4. The total factor productivity growth in industry, during the period of 1978–1986, can be illustrated by Table 2.14. We can see that, from 1978 to 1984, the reform bore much better results, so that the growth of total factor productivity was fast. But till 1985, the situation became deteriorating, and in 1986, there was a negative growth. It might give a hint that the economic system reform has probably "diminishing returns", or the economic system reform was imperfect.

(4) **Corruption Stemming from Rent-seeking Behavior**

The so-called rent-seeking behavior refers to the behavior of economic participants who are desirous of gaining direct unproductive profits to maximize their own profits, or who seek profits rather than create wealth. The rent here refers to cost of all kinds of factor of production in general. Under this circumstance, the rent stems from the price difference when the demand for a certain production factor rises and its supply can hardly increase due to specific reasons. Once the rent occurs, rent-seeking activity is inevitable. The rent-seekers try to set the privilege of rent-possession by every legal or illegal means, such as lobbing, seeking powerful man for support and offering bribes, etc. Corruptions also occur due to this cause. These activities may result in the scare social resource waste, unfair income distribution and impossibility of efficient resource allocation (Wu 1988; Colander 1984).

Rent-seeking behavior is much prevailing, probably due to the massive rent generated since China's institution reform. According to a well-known economist's estimate, in 1987, owing to the difference of exchange rate and price, etc., 200 billion-yuan worth of rent was generated, accounting for about 18% of GDP (Su 1989). Though there is no accurate figure at present to illustrate the evil consequence brought about by the rent-seeking behavior, there are two negative implications. First, rent-seeking behavior seriously hurt the hearts of a majority of people. Though the majority of people have obtained some profits from the decade-long reform, the income gap, judging from the welfare level, has been widened along with the rise of the level of welfare as a whole. Therefore, it is natural that people feel discontent and political turmoil seem to become unavoidable. Second, the new profit takers of the rent-seeking behavior together with the vested interest under the existing system might become the hinderance in furtherance of the reform.

(5) **Potential "debt crisis" and undesirable exp/imp**

With the peak of repayment of external debt approaching, a potential debt crisis' in China has become a hot topic among the Chinese economists.

The irrationality of import and export structure, and other major aspects of the imbalance of industrial structure, are naturally regarded as top considerations. Because of lower technical level, China's earning of "hard currency" relies mainly on the export of primary products. The export of manufactured goods, especially the high value-add electric and mechanic products, is hardly to increase steadily, but the percentage of export of light industry and textile products is ever increasing. The improvement of this situation in recent ten years has been far from satisfactory. (see Table 2.15) In order to make full use of the advantage of China's cheaper labor force,

Table 2.15 Commodity composition of exports in selected years (by SITC system) value unit: U.S.$100 million

Year	Total products	Primary products		Manufactured goods		Of which, light industrial and textile products	
		Value	% of total	Value	% of total	Value	% of total
1979	136.58	73.15	53.6	63.43	46.4	48.45	35.5
1980	182.72	97.62	53.4	85.10	46.6	61.53	33.7
1981	208.93	103.60	49.6	105.33	50.4	67.35	32.2
1982	218.19	104.63	48.0	113.56	52.0	64.45	29.5
1983	221.97	102.65	46.2	119.32	53.8	70.61	31.8
1984	224.16	121.79	49.9	122.37	50.1	75.38	30.9
1985	159.15	140.34	54.2	118.81	45.8	82.76	31.9
1986	270.14	117.92	43.7	152.22	56.3	96.93	35.9
1987	347.11	134.52	38.8	212.59	61.2	140.00	40.3

Source "Almanac of China's Foreign Economic Relations and Trade" 1988, pp. 359–360

Table 2.16 Imports of raw and intermediate materials value unit: US$ 100 million

Year	Value	% of total	For industrial use		For agricultural use	
			Value	% of total	Value	% of total
1979	87.90	56.1	78.67	50.2	9.23	5.9
1980	100.45	51.4	86.20	44.1	14.25	7.3
1981	90.78	46.6	76.69	39.4	14.09	7.2
1982	89.78	51.4	75.96	43.5	13.82	7.9
1983	113.21	61.1	95.37	51.5	17.84	9.6
1984	153.48	60.5	132.61	52.3	20.87	8.2
1985	174.74	50.9	159.83	46.6	14.91	4.3
1986	161.83	48.9	152.74	46.2	9.09	2.7
1987	158.50	47.5	142.66	42.7	15.84	4.8

Source "Almanac of China's Foreign Economic Relations and Trade" 1988, p. 361

China has put forward the Coastal Development Strategy—to push the enterprises located in coastal areas into world market so as to solve the problem of shortage of raw materials and alleviate the pressure of unemployment. Judging from this point of view, the dependence on exporting the primary products cannot be drastically changed in a short term. Moreover, China's import structure and policy, as shown in the case of export of steel and automobile, is the most worrisome (see Table 2.16). It is not superb or normal international division of labor for the developing countries to develop their economy by depending on import of semi-finished products and spare parts to keep the operation. At the same time, it will be detrimental to China's strategy of substitution import. In order to deal with the problem of external debt, the Chinese government had worked out the plan to repay about US$7 billion worth of principal and interest in 1990 and 10 billion in the next successive three or four years.

2. **Some Analysis of the Troubles**

The achievement of China's reform is enormous. This is agreed upon by almost all the Chinese people. All the measures taken in the reform conform to the historic trend of the time and have transformed China from a centrally planned economy into a planned commodity economy mixed economy. As far as problems and difficulties are concerned, it is quite inevitable that these problems and difficulties appear in the process of reform. The following paragraphs attempt to discuss these problems from the perspective of policy and economic system.

(1) **Localism**

The localism, as a result of the reform, could be divided into two categories. One is the over-decentralization of power, and the other is the failure of forming a unified economy in China.

Table 2.17 Extra-budgetary expenditure as percentage of budgetary one (1982–1987)

1981	1982	1983	1984	1985	1986	1987
59.1	74.1	79.9	81.0	83.3	79.5	90.4

Source Li et al. "An Analysis and Counter-measure of Developing Bottle-neck Industry," Jing Ji Yan Jiu (Economic Research), No. 12, Dec. 1988, p. 5

Under the traditional system, it was the state who enjoyed the right to invest. The taxes collected by the local governments at different levels were, subtracting the part handed over to the central budget, generally used for local expenditure, such as culture, education, health care and security, etc. Taxes used for large scale investment are comparatively less, and the local governments must obtain the approval from the state Planning Commission. But, along with the reform of fiscal system, the tax income, we may say, can be shared by the central and local governments and the financial resource for investment at local government's (mainly, provincial level) disposal has drastically augmented. That is also the main reason the extra-budgetary funds have soared sharply. This point can be reflected by the changes of proportion between the budgetary investment determined by central planning and extra-budgetary investment including the funds accumulated by the enterprises apart from the local governments' investment (see Table 2.17). The main target of the local government is the growth rate of gross value of industrial and agricultural production, upon which the performance of the local leaders will be evaluated. Therefore, it is quite natural that the local governments do their best to put the limited capital into the production (of color television sets, refrigerators and tin beverage for example) which can make profits in a short term, but not into the basic industries with low profits and a long period. In addition, the local governments also back the enterprises by using their power, for instance, abating and exempting these enterprises from taxation. It is undoubtedly one of the most direct reasons that resulted in the irrationality of China's industrial structure at present.

Local government is the growth rate of gross value of Industrial and agricultural production, upon which the performance of the local leaders will be evaluated. Therefore, it is quite natural that the local governments do their best to put the limited capital into, or to back the enterprises by using their power such abating and exempting them from taxation, the production which can make profits in a short term, the production of color television sets, refrigerators and tin beverage for example, but not into the basic industries with low profits and in a long time. It is undoubtedly one of the most direct reasons of irrationality of China's industrial structure at present.

Judging from another angle, the phenomenon of centrifugal local regime in China is serious. In China's territory, there has been neither rational division of labor between the provinces nor a unified market on the principle of allocation and management efficiency. In pursuit of doubling the gross value of industrial and agricultural production, some provincial governments have intimate knowledge that it will be a great loss to them if they provide other provinces with production resources which are relatively cheaper. But China has a vast territory and the scattered distribution of resources. Therefore, many provinces abundant in resources are active in investing in processing industry construction so as to avoid letting the profits flow into others' hands. As a result, on the one hand, the basic industries cannot be developed, on the other hand, the production capacity of other provinces are made idle. It is also the reason that resulted in drastic price hike of raw materials outside the state planning. In China, the protectionism between the provinces and cities has thwarted or impaired the internal rational division of labor. It can be deemed as one of the important reasons of irrationality of industrial structure and distribution and division of labor of China today.

Here, it is worth noting that the irrational price system does also exert an impact upon the direction of investment.

In China, the comparative price of raw materials, energy products and traffic transportation has been relatively low, though the price has been raised for many times during the reform. It is undoubtedly a reason that these industries, compared with the processing ones, are not flourishing. All the enterprises and local governments would not like to invest in these industries because of long maturity, in particular, more inputs and less expected revenue. On the other hand, they would like to become "free-riders", and incline the central government not to solve these problems, so that they may sit idle and enjoy the fruits' of others' work. Consequently, almost all the money for the industrial investment covered by the central government financial expenditure is used for the infrastructure, raw materials and energy, but the demands have not yet been met. Here, I would like to point it out, though the price signal, in the process of market-oriented reform, does not play a larger role than that in the industrialized countries, it has after all given considerable incentives to the main bodies of various behavior—individual, enterprise, local government—who pursue maximum profits. It is just in this sense that irrationality of price system is not conducive to the adjustment of industrial structure.

(2) **Imperfection of Capital Market**

As we know, there are now two backbones in China's capital market. One is the market of means of production, the other is annexation of enterprise. Both of them have encountered a great hinderance in the development. This finds expression in the slow development of so-called annexation of enterprise with efficiency as the criterion. The main reason is the ownership of enterprise (in other words, ownership-disposition) does not have enough exclusiveness. The annexation among the private enterprises, between private and collective enterprises and among the collective enterprises is relatively easier, but the annexation among the state enterprises and the annexation of state enterprises by other enterprises with different ownership form or the auction of mini-sized state enterprises is difficult. Apart from the vagueness of the ownership and because the enterprises with different ownership forms enjoy different levels of welfare, the working staff of the state enterprises are not willing to see their enterprises to be annexed or auctioned. This is also an obstacle in the development of capital market. In early 1990, in Beijing municipality, while two small-sized state enterprises were auctioning (50 enterprises were planned to be auctioned), the auction was suspended due to workers' reluctance of loss of welfare enjoyed in the state enterprise (such as free medical treatment, higher pension and employment security), if their enterprises were auctioned to the private or collective ones. Under these circumstances, some of the annexations are much like the administrative adjustment, but not a volunteer grouping. While facing the restraints of soft budget, the enterprises have undoubtedly less stimulation to annex other enterprise according to the efficiency criterion. The annexation means the loss of power of the annexed. All this has probably made it impossible for China, with state economy being at the predominant position, to improve the allocative efficiency by depending on the adjustment of capital stock.

As for the market of means of production, it has been influenced by high inflation rate and by unhealthy phenomenon of rent-seeking behavior. Therefore, it is far beyond the expectation of the reform architects who wish that the market of means of production could adjust the investment structure depending on market mechanism. All in all, the premature capital market, especially under the condition that the central planning has been weakened to a large extent, has not played its full role of guiding the resource allocation.

(3) **Lack of Entrepreneurship**

Provided that the innovation of an enterprise manager is driven by greed and fear, the manager, under the restraints of soft budget, has far less probability of making innovations than those who run enterprises under hard budget restraints. Though the economic man's assumption is very popular and useful, the greed-driven and fear-driven stimulations are not great in China because the "big pot" (synonym for China's equalitarianism and paternalism) has not been thoroughly broken. These have undoubtedly impeded the innovation activities. Though China as well as some other socialist countries have spent an abundance of man power and materials on the research and development of scientific technology, and have achieved remarkable results, they can hardly apply them to production. I am afraid that it is because of lack of innovative mechanism (Schaffer 1987).

Judging from another angle, though there are some entrepreneurs in some state, collective and private enterprise, they are far from forming a stratum in China. The important external environment in which the entrepreneurs exist and develop, despite the pressure of competition and profit-making motive—fear-driven and greed-driven, is "entrepreneur market", that is, the value of entrepreneur is determined by his performance, achievement and potential capability. In other words, the entrepreneurs have their own interest and rules—the fittest survives. It is evident that there have been no such conditions in China, e.g. many managers of the contracted state enterprises must be appointed by the upper bodies. As a result, a majority of managers are those who used to be. Furthermore, the performance of enterprises is sometimes determined, to a large extent, by the manager's interpersonal relations and his capability of bargaining with their upper bodies. Besides, innovation in general, introducing new techniques, exploring new products and new markets, engaging in innovation of management and introduction of technology, can be hardly achieved by the enterprises' self-accumulation. In addition, the existence of a financial market full of flexibility, risk and opportunity is the prerequisite of the existence of entrepreneurs. However, this kind of financial market has not been in existence in China, though the role of bank has been increasing, e.g. the fiscal budgetary allocations without compensation have been changed to bank loans.

Undoubtedly, innovation is not only the business of "entrepreneurs", but also a matter of every working staff. During the present reform, it is quite imaginable that the working staff, in the economic system, be lack of entrepreneurship.

All in all, the lack of entrepreneurship is the essential reason of X-inefficiency. At the same time, it will inevitably have unhealthy impact on the resource allocation efficiency as a whole. Many economists hold that progress of technology plays a decisive role in economic growth. But I think that progress of technology is only a reason on the surface. The real role is the attitude of entrepreneur and every producer towards the progress of technology or towards the opportunity for innovation. The latter is decided by the existing policy and economic system. In this sense, the level of total factor productivity is virtually the function of the specific institution.

(4) **Corruption and Dual Pricing System**

Dual pricing system is one of the main characteristics of China's reform. We should say that it is China's creation, and the only and inexorable alternative. Dual pricing system, together with responsibility system, is the product of eclecticism—to arouse the enthusiasm and creativeness of the enterprise by clearly defining the ownership relations and maintaining the advantage of the state planning. But, in view of present situation, the introduction of dual pricing system has accompanied by a couple of problems. Many leading officials have abused their rights to allocate and transfer the means of production and raw materials inside the state planning so as to gain exorbitant profits. These people directly engaged in speculations or accepted bribes, and those who offered bribes would resell the quick-selling materials they procured at the state-set price. Meanwhile, many enterprises and officially-run trading companies, by lobbing, claiming kinship and offering bribes, obtain the products at a price set by the state mandatory plan and resell them in the market in order to profiteer. All this is one of the component parts of corruption in China, and the widening of income distribution gap due to this cause has given rise to a strong social discontent. It can be argued that dual pricing system is the direct reason of the occurrence of a many rent-seeking behavior relevant to corruption.

Here, I must point it out, under the assumption of the economic man, all the human behavior is to maximize the self-interest. In other words, everyone is maximizer of self-interests under the restraints of a given system. If the irrationality exists, we can say, it is the system which is irrational but not human behavior. We can build up a society not on the basis of moral and virtue of human beings, but on the basis of system in which the efficiency can be improved.

Therefore, someone may hold that the abandonment of the dual pricing system can eliminate the phenomenon of rent-seeking behavior, which is one of the orientations of the reform. Here, there are two alternatives to replace the dual pricing system. One is to return to the centrally planned economy, and the other is to completely eradicate the control of mandatory planning over the products of contracted quota and to market these products at floating price, but not at the state-set price. In terms of current situation, these two alternatives are not realistic. One reason is that they are not consistent with basic idea of China's reform. Furthermore, more realistic difficulties in eliminating the dual pricing system are observed as the facts that the products of contracted quota distributed and transferred by the planning commission and marketed at the fixed prices among the state enterprises. The contracted quota and the fixed prices are regarded as two key factors to avoid a latent overall inflation. Hence, we have to explore new ways of fighting against the corruption by strengthening the Chinese Communist Party's discipline and legal sanctions.

(5) **Budget Softness and Inflation**

According to general rule, the inflation has the following types: cost-push inflation, demand-pull inflation, structural inflation and repressed Inflation. We must say that China's inflation is the mixture of the four. Since the reform, the volume of money issuance (M_1) has increased rapidly from 1981 to 1985, and the ordinal rates are 14.5%, 10.8%, 20.7%, 49.5% and 24.7%. All this has given rise to the phenomenon that the aggregate demands exceed the aggregate supply. The rise of wages or income is the direct reason of the rising of consumption demand, and simultaneously, it is one of the reasons of cost-push inflation. From 1981 to 1985, the wage of workers in the state enterprises had raised averagely by 50.7%, far exceeding the productivity which had increased by 33.5%. Another reason of the cost-push inflation is the adjustment of China's pricing system, for instance, to increase the price of agricultural products, raw materials, transportation, and communication service, etc. The repressed inflation has become evident in China, where a number of daily necessities, such as eggs, meat, soaps, and even matches, are rationed. These products can be, of course, purchased at the higher price at free markets. Certainty, pluralism of interest caused by localism has also engendered inflation on its part as discussed above.

In this study, however, I hold that the fundamental reason of the inflation lies in the insufficiency of effective supply caused by irrationality of industrial structure, and consequently, one of the most important reasons of lack of effective supply is the soft budget restraints. The best thing which can reflect the softness of budget is the subsidy granted by the state to the loss-making enterprises. In 1988, the figure of subsidy was 44.7 billion yuan, about 4.5% of national income of that year (*Liao Wang Weekly*, No. 16, 1989). Theoretically, the market, if any, can orient the adjustment of industrial structure by the changes of demand. This is a "merciless" process—"survival of the fittest". Whereas, in the socialist country, there is usually a supreme target—to guarantee economic development and full employment can show their superiority. If we separate the industry into two parts—traditional industry and newly-rising industry, in order to pursue the designed target under China's existing system, the restraints of soft budget—subsidy protection by custom tax and mandatory supply with priority—will inevitably postpone the process of evolution of industrial structure. Because some industries which should be streamlined in the structural evolution still remain existent, it is natural that the limited resources be transferred to the traditional industries, and therefore, some new potential or promising industries will be driven out or “squeezed”. This point can be reflected, on the one hand, by the subsidy given by the state to the loss-making enterprises (some deserve the subsidy, to be frank, because of the irrational system of comparative prices), and on the other hand, by the imbalance of industrial structure. As a result, the buyers are not likely to buy all the sellers’ products which fail to meet the market demand while they have to face the supply bottlenecks, and sellers are lack of sufficient impetus to transform resource from products kept long in stock and being in the “sunset” industries or goods into the “sunrise” one. Therefore, inflation has naturally appeared.

There is another point to add, if the central government adopt the austerity policy so as to lower its inflation rate, the aggregate demand may probably coincide with aggregate supply, but it may also make the structural problem deteriorating. Under the existing system rules, it is not the enterprises of newly-rising industry but traditional state enterprises in urban cities which are in the monopolistic position have much capacity of survival. If we make supplementary investment in bottle-neck field and in newly-rising industries, then, the inflation will follow. This is the dilemma China is now facing.

Now, we could come to the conclusion that inflation in China is mainly a “systematic inflation” which is engendered by imperfection of the reform, and is consistent with the methodological framework in Sect. 2.1.

It is evident that the causes of four major problems mentioned above are mutually overlapped and interrelated. In my personal opinion, all these causes could contribute to the imperfection of China’s existing institution.

2.5 Measures of Stabilization Adopted by Government and Evaluations in Brief

There are two solutions to these problems: to rely on policy of stabilization to ease various tensions in a short run; or to rely on the transformation and imperfection of economic system to bring substantially all behavior of economic participants onto the track of improving efficiency in mid-and-long run. Of course, the difference between policy of stabilization and system reform is not absolute, and both of them are mutually supportive aiming eventually at reaching the goal of quadrupling the gross value of industrial and agricultural output.

In the government work report made by Premier Li Peng in March, 1989a, the pursuance of economic stability is the top priority in the following two or three years. One of the main contents is to lower inflation rate by easing the contradiction between aggregate supply and aggregate demand. Therefore, a series of policies of stabilization have been worked out.

1. To Encourage Savings Deposit and Inhibit Consumption

Actually, China's so-called improvement of economic environment and rectification of economic order, started from September of 1988, was mainly resulted from the advent of panic buying and bank run happened shortly after the central government's discussion regarding the probability of overall removal of the control over prices (mainly refers to readjustment the ongoing system of comparative price and gradually annul dual pricing system).

To adopt the policy of "value-guaranteed depositing" is the first response made by the Chinese government, which means that to grant interest compensation according to inflation rate while drawing to those who has deposited the money in fixed term for more than 3 years. To subsidize the interest rate according to the inflation rate started from Sep. 10, 1988, and "compensation" interest rate will be publicized quarterly and be usually higher than that normal one. At the same time, the bank has also raised the personal savings deposits interest rate. The annual fixed depositing interest rate has raised from 7.2% in 1987 to 11.34% at present. These measures have borne much results. Prior to April 30, 1989, the savings deposits of urban and rural residents had reached 421.1 billion yuan, 84.7 billion yuan more than that in corresponding time of the previous year. Meanwhile, the momentum of price rising has been held back. Of course, the aforementioned measure is only a part of austerity policy. Another important part is the government's efforts to curb the rapid growth of consumption demands. The concrete policies and measures are as follows: to firmly curtail social group consumption (e.g. to work out the commodity list which abandons or limits the purchasing power of the state enterprises or organizations at all government levels) and strictly control the increase of wages (including bonus), which will be detailed in the following subsection.

2. Austerity Policy

The overheated economy, namely, overdevelopment of processing industries can be particularly viewed as one of the basic reasons which may give rise to an excess of aggregate demand over aggregate supply, and consequently to the inflation. Therefore, the austerity policy aimed at cooling down the overheated economy by curtailing fixed asset investment has been worked out. The government has decided to cut fixed asset investment by 92 billion yuan in 1989, 21% less than the previous year. Through economic, legislative and administrative means, the government should either manage well the budgetary investment inside the state planning or pay much emphasis on the strict control over extra-budgetary investment (including the some retraction from the rights of reducing and excepting taxes granted to the local government). The most powerful mean of implementing austerity policy is, to a great extent, to bring the management of bank credit loans under mandatory plan, namely, the scale and orientation of credit loans of the specialized banks (six all together in China) will be determined in a unified way by the central government, and forbidden any non-financial organizations engaging in any activities concerning the credit loans or investments, as well as to strictly control the issuance of currency.

The first goal of China's financial policy in short run is to make inflation rate in 1989 obviously lower than that of last year.

3. **Industrial Policy**

As we know, China's macroeconomic problems have mainly manifested by the unbalance of total supply and demand (aggregate demand outstrips the aggregate supply) and imbalance of industrial structure (coexistence of bottle-neck and idleness). The austerity policy aimed at keeping the balance of total supply and demands should be implemented according to different actual conditions of various industries, otherwise, the imbalance of structure will remain unchanged, and furthermore, total supply and demands will not be balanced, since the effectiveness of supply has not been enhanced. Therefore, the industrial policy explicitly put forth by the Chinese government in March, 1989, for the first time since 1949, is well reasoned. Its basic orientation and tasks are: to develop the basic industries, such as agriculture, energy, infrastructure and raw materials; to strengthen the development of industries which can increase their effective supply and can earn foreign exchange; to control the scale and speed of the development of processing industries and make them coincide with development of basic industries. The main concrete measures are as follows: to raise the purchasing price of contract quota of grain by 18% and increase the government input in agriculture; to promote the development of priority industries by using the discriminatory tax rate including investment tax (the highest point reaches 100%) and interest rate of the bank loans and to combine closely the austerity policy with industrial policy; and to get the collective enterprises (including township enterprises) and private economy(including foreign direct capital) under the influence of the industrial policy. In order to repay the foreign debt, the Chinese government has concrete countermeasures to increase export and reduce import and to prevent the latent debt crisis from coming true.

One of the most noteworthy things is the reform of fiscal system which is closely associated with the industrial policy. In the budget of government at provincial level, the accounts of recurrent fiscal expenditure and investment expenditure should be kept separately and consequently to bring the budgetary funds for investment of all provincial government into the budget of the central government so as to enable the latter to control effectivity this art of investment, namely, in light of the industrial policy, and to remedy the investment inflation brought about by localism and irrationality of investment structure.

4. **Efforts to Make RMB Yuan Convertible**

In order to absorb foreign direct investment,the Chinese government has stipulated a series of policies of preferential treatment for the joint ventured,solely-foreign-funded enterprises,such as exemption and reduction of taxes,priority supply of raw materials and profits remittance abroad. But the foreign investors are much concerned about the inconvertibility of RMB yuan. On the one hand,the return of investment in RMB yuan(another art is hard currency)is inevitably the impediment of further development of joint ventured and solely-foreign-funded enterprises. On the other hand,these enterprises has to accept the overestimated the exchange rate of RMB yuan and suffered from a great loss when RMB yuan is in need.

The inconvertibility of RMB yuan may contribute to following reasons. Apart from the insufficient foreign exchange reserve, the most important is that if the RMB yuan becomes convertible, it will undoubtedly bring about free inflow and outflow of commodities and China's pricing system will be brought into world pricing system. China has now built up an independent and comprehensive system of national economy, with a huge market and some natural resources. Therefore, China should not and also could not totally incorporate itself into world market. The overestimation on RMB yuan may mainly contribute to the price subsidy of consumption commodities and to the implementation of China's import substitution strategy.

China expects, on the one hand, to absorb more foreign investment, and on the other hand, to try to safeguard the relative independence of China's economy. Judging from these two aspects, China has adopted a compromised proposal, namely, the Chinese government has decided to set up the so-called "foreign exchange regulation markets" in several big cities like Shanghai and Tianjin in second half of 1988. The buying and selling of foreign exchange can be conducted freely among the enterprises (including some enterprises specialized in production of export goods. In order to give them more incentives, they have been allowed to retain a certain percentage of hard currency since the reform) and transaction value will not be less than US$50,000. As of Nov. 1988, the transaction volume amounted to US$ 5.6 billion, doubling the foreign direct investment in 1988. The exchange rate between USD and RMB yuan was around 50–70% higher than the official quotation. This is a decisive step for China to follow the path of opening to the outside world.

5. **Deepening the Reform of Economic System**

The main contents of today's economic restructuring are as follows: to continue to improve and develop the responsibility system in state industrial and commercial enterprises and to foster a well-ordered market.

There are four steps for the improvement of responsibility system: (a) to perfect the bidding procedure of large-and-medium-sized enterprises and make it systemized and normative and alleviate the administrative interference when people make their bids for managing the factories; (b) to pursue the contract secured by the mortgage with all members' risk, namely, not only the successful bidder (manager) of enterprise will make a contract secured by the mortgage composed of his or her wages including bonus and some personal possessions, but also the managerial staff at all levels and all the workers will do so in an attempt to promote the combination of the interest and risks of managers and staffs with the performance of enterprise, and to reach the goal of hardening the soft budget restraints; (c) apart from the hand-over of profit or tax and production quota set by the mandatory plan, to articulate the technical progress and the decrease in the raw material consumption and to the rising of productivity, to articulate the technical progress with total volume of wages (including bonus), which is one of the principal approaches of the government to curb the consumption demands; (d) to optimize the division of labor within enterprise. Under the prerequisite of fair competition, the workers will be selected for the employment on the basis of their qualification. The losers will become wait-to-be employed, and they can only receive 70% of their basic wages and have no bonus (bonus usually makes up one-third or more worker's total income). The enterprises will use the saved wages and bonus on the employee in a bid to make best possible use of them and truly observe the principle of "to each according to his work" and eventually to raise economic efficiency.

As for the fosterage of capital market, annexation (including the auction of small-sized state enterprise) will be encouraged, mainly under the guidance of industrial policy and persistence in principle of voluntariness and principle of compensatory transfer of the assets. At the same time, the experiment of stock-holding system will be carried out steadily. The stocks can be purchased by the working staff within the enterprise, and the enterprises can also purchase the stocks issued by other enterprises. Here, the most significant thing is that the government has started to enact the relevant regulations and rules and to choose some enterprises to appraise their fixed assets and do preparatory work for issuing the stocks, and try to openly sell some of the assets of state enterprises in 1990. It is expected, on the one hand, to promote the healthy development of capital market, and on the other hand, to deepen the reform of enterprise which have more exclusiveness of ownership relation. This step, in the reform, will have long-term and far-reaching significance.

6. **Crackdown on Corruption**

To remedy the rent-seeking behavior mainly resulted from dual pricing system, and especially the corruption—the result of rent-seeking behavior which arouse the resentment of ordinary Chinese people, the central government has launched strict demand that any government officials, departments in charge and enterprises must not profiteer by buying cheap and selling dear the means of production inside the mandatory plan and raise the price of consumption products as well as service fee, and make mandatory planning truly possess its nature, namely, everyone should abide by the plan so as to eradicate the chance of profiteering by raising the price of products inside the mandatory plan. The ceiling price of means of production outside the state plan and price of necessary consumption products set by the state will not be exceeded (the so-called floating price indirectly controlled by the government has ceased to exist except in name). The government expects to "kill two birds with one stone" by enforcing this measure and to crackdown those who try to make exorbitant profits by hoarding and cornering. Any violator will receive penalty according to discipline and law. Other possible means of eliminating corruption are as follows: The governments at all levels should build up crime-reporting centers with hot-lines, so as to mete out severe punishment to corrupt officials and regain the support of the people; the government at all levels should implement the system of publicizing the personal possessions so as to bring them under the surveillance by broad masses.

The measures adopted by the Chinese government are directed against the problems appeared in the process of reform. Generally speaking, they could help government achieve its goal. The fact the market of means of production has been shaped has provided, to great extent, relatively objective conditions for the implementation of industrial policy. Therefore, it is the most comprehensible step at the present to put forward industrial policy and make it as a starting point to enact various economic policies under the circumstance of imbalance of industrial structure. It is, theoretically, quite imaginable that China's industrial policy would bear some good results. Here, I will point it out that to achieve the expected results of industrial policy entails many prerequisites. The typical ones are the response of micro enterprise, which is preconditioned by the deepening of the reform, to policies and measures and effective control of the central government over localism. Under the condition of vagueness of ownership relation and its derivative—soft budget restraints, it is very skeptical of results of any so-called economic adjustment means. Undoubtedly, the reform of micro base is really essential in socialist countries including China.

It is also very comprehensible and feasible that, in the following two or three years, China's reform will be confined to the improvement or perfection of responsibility system and to the experiment of other radical changes in the state sector. From the viewpoint of economic theory, to make ownership relation more exclusive as mentioned in the first section of this paper, in a broad sense, may bring about virtually incentives and furthermore the improvement of efficiency by influencing the target and behavior of economic participants. The present practice and advocation of the government have shown that it had already realized this point, at the same time, it has also been aware of multi-choices to make the ownership relation more exclusive. To achieve this is just the goal of deepening the reform of the state sector in China under the prerequisite of ownership of means of production remaining unchanged substantially. The introduction of share-holding system in the state enterprises is also one of the options. In view of current situation, the ownership reform undergoing in China's state sector might follow the path of perfecting and consolidating the responsibility system in the foreseeable future.

As for the ownership structure, some scholars hold that the percentage of state, collective and private economy in GNP covering 40, 30 and 30% separately or 40, 40 and 20% (Li 1989b) is the ideal one in future, and they hope that the development of collective and private sector could compel the state enterprises to raise their efficiency or competitive capability. In a sense, that is the purpose of reform designers who will continuously encourage the practice of annexation between the enterprises and auction of a number of small-sized state enterprises.

The austerity policy is, so to speak, a strong medical preparation for preventing the inflation. In a short term, it could achieve a certain result, but I must say that it is only a makeshift countermeasure. As analyzed before, China's high inflation rate does not only result directly in the excessive issuance of currency, etc. The more essential reason is the result of soft budget restraints—coexistence of so-called hunger for investment and lack of effective supply under the current system. From this point of view, the medium-term result of austerity policy might be especially determined by the deepening of the reform and industrial policy because the administrative austerity policy is usually a "rigid uniformity", put the other way around, it may be detrimental to the development of sunrising enterprises. It is also because that many large-and-medium-sized enterprises which should be eliminated or reorganized have great vitality. The austerity policy might sooner or later be abandoned while facing the alternatives of stagnation and inflation to some extent.

We have discussed before that one of the basic reasons resulted in corruption lies in dual pricing system. Under the prerequisite of incapability to annul, at least for a short term, the dual pricing system (because it is the component part of responsibility system), to rely on perfecting the legal system and strengthening the discipline is the most rational option. It could be predicted that if the law and discipline can be observed and effectively put into force, the corruption which has more social and political flavors and is also one of the main unstable elements in China at present could be eliminated to a large degree. The expected results of implementation of the so-called "value-guaranteed depositing" policy and the establishment of the foreign exchange regulation market are favorable, and these results are not unpreconditioned. For instance, the introduction of foreign directive investment would largely be seriously affected by the unfavorable social and political environment.

2.6 Some Concluding Remarks

China's reform, just as discussed in section one, is aimed at achieving economic development and realization of industrialization drive by means of reforming economic system and adjusting economic policy. As for the aim of reform, China's reform architects wish to find out a development pattern the most suitable to China's actual conditions, namely, "the socialism with Chinese characteristics", which should fully exploit the merits of both planning and market and avoid the various demerits. To this end, China has adopted the trial-error method known as "crossing the river by feeling the stones beneath your feet". In this process, especially after studying the experiments of other reformed socialist countries, China's economic system has been shaped and characterized by responsibility system, dual pricing system and coexistence of various of ownership forms. This economic system is the inevitable outcome of long-pursuit reform, and same are the four major problems resulted from lack of theoretical preparation, inconsistence between various reform measures and economic policies and underestimation of many latent crisis. Judging from this angle, the counter-measures adopted by Chinese government in process of reform can be viewed as a kind of readjustment mostly suitable to China's pattern of development based on the actual conditions.

As a socialist and developing country, China's reform has provided the way of combining central planning with market. The following experience and lessons, if they are, might be learned or drawn by other countries: the great achievement and problems are closely linked with the existing system, or in other words, China's reform has marked that the economic system and policy—institution—has been a two-edged sword which might be either beneficial or detrimental to the economic development: being a developing country, the experiment on developing industry in rural area in a bid to realize the industrialization is still an option though there are many problems; any reform might be actually the process of readjustment of social interests, in which the social conflicts and tension are unavoidable, therefore, we should do utmost to solve these problems, especially the problem of egalitarian income distribution should not be neglected while pursuing the economic development. As for a huge country like China, strong and effective central control—economic, administrative and legislative control—is the prerequisite for the economic development, because the market could only play a limited role in adjusting the industrial structure, etc., or in other words, to minimize the conflicts between the role of market and maintenance of effective central planning is one of the targets. Last but not least, all the reform measures should be consistent with the country's actual conditions, which is a platitude, but is of great importance.

China has now been following the road of development and prosperity since a decade-long reform and opening to the outside world. China has no rounds and possibility to come to a standstill, though the pace or development of the reform may probably be affected by certain elements, for example, the curtailing of inflation, which may impede the reform of economic system, and social as well as political instability.

References

Bechtold, H. and A. Helfer. 1987. Stagflation problems in socialist economies. In *Crisis and Reform in Socialist Economies*, ed. Peter Gey, Jiri Kosta, and Wolfgang Quaisser. Boulder and London.

Chang, Xuze and Xiaoyu Ge. 1989. On the enterprise innovation. *Economic Research* (Jing Ji Yan Jiu) 2.

Colander, D. (ed.). 1984. *Neoclassical Political Economy: The Analysis of Rent-Seeking and DUP Activities*.

De Alessi, Louis. 1983. Property rights, transaction cost, and x-efficiency: An essay in economic theory. *American Economic Review* 73.

Du, Haiyan, et al. 1989. Current inflation and behavior of state-owned enterprises. *Economic Research* (Jing Ji Yan Jiu) 2.

Friedman, Milton. 1981. *Market Mechanisms and Central Plannins*. AEI.

Gao, Shangquan. 1987. *China's Economic System Reform (1978–1987)*. Beijing.

Goldman, Marshall I. 1987. *Gorbachev's Challenge: Economic Reform in the Age of High Technology*. New York and London.

Gu, Ming. 1988. Strengthening legal system, perfecting enterprises' property right institution and shortening the process of new system replacing the old. *Economic Research* (Jing Ji Yan Jiu) 11.

Hu, Chunli and Shi He. 1988. Technological progress and readjustment of industrial structure. *Planning Economy Studies* (Ji Hua Jing Ji Yan Jiu) Supplement II.

Hua, Sheng, et al. 1988. Ten years in China's reform: Looking back, reflection and prospect. *Economic Research* (Jing Ji Yan Jiu) 11.

Koopmans, Tjalling C. and John M. Montias. 1971. *On the Description and Comparison of Economic Systems*. Berkeley.

Kornai, J. 1984. *Economics, Economics of Shortage* [in Chinese]. Beijing.

Li, Boxi, et al. 1988. An analysis and counter-measure of developing bottle-neck industry. *Economic Research* (Jing Ji Yan Jiu) 12.

Li, Peng. 1989a. *Government Working Report to the Second Session of the 7th National People's Congress*. Guang Ming Daily (Guang Ming Ri Bao), Apr. 6.

Li, Yining. 1989b. Prospects of Private Economy in China. *China Study* (Guo Qing Yan Jiu) 1.

Liang, Chuanyun. 1988. The present situation and development of China's private enterprise. *Guang Zhou Economy* (Guang Zhou Jing Ji) 3.
Lin, Yifu. 1988. On institution and institutional change. *China: Development and Reform* (Zhong Guo: Fa Zhan Yu Gai Ge) 4.
Ma, Hong. 1988. An analysis of industrial structure and industrial policy. In *Collection of Industrial Policy Studies*, vol. I. Beijing: State Planning Commission of China.
Montias, John M. 1976. *The Structure of Economic Systems*. New Haven and London.
Neale, Walter C. 1987. Institution. *Journal of Economic Issues* 3.
Olson, Mancur. 1982. *The Rise and Decline of. Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven and London.
Perkins, Dwight H. 1988. Reforming China's economic system. *Journal of Economic Literature.*
Pu, Shan. 1989. China and economic cooperation of East and Southeast Asia. In *Paper Prepared for Conference on "East and Southeast Asian Economic Cooperation"*.
Schaffer, Mark E. 1987. Budget softness and innovation. In *Paper Prepared for SSRC 1987 Summer Workshop*, University of Illinois.
Si, Chuan. 1988. Institute of Economic system Reform. *An Analysis of Reforming the System of Property Rights*. Jing Ji Yan Jiu (Economic Research) 12.
State Council. 1989a. *Key Points of Economic System Reform in 1989*. Jin Rong Shi Bao (Financial News), Apr 19.
State Council. 1989b. *Decision of Key Points for the Present Industrial Policy*. Guang Ming Ri Bao (Guang Ming Daily), Mar 18.
State Statistical Bureau. 1988. *Statistical Yearbook of China 1987*.
State Statistical Bureau. 1989. *Statistical Bulletin of National Economy in 1988*, Mar 1989.
Su, Shaozhi. 1989. Speech given to the conference on crisis of state-owned enterprise. *Economics Weekly* (Jing Ji Xue Zhou Bao), Apr 2.
Tang, Fengyi. 1986. On enterprises' merger and property rights. *China Industrial Economic System Studies* (Zhong Guo Gong Ye Jing Ji Yan Jiu) 6.
The Editorial Board of the Almanac of China's Foreign Economic Relations and Trade. 1988. Almanac of China's Foreign Economic Relations and Trade 1987.
Wang, Jian and Xiaolin Da. 1988. China's industrial structure and strategy for foreign trade. In *Collection of Industrial Policy Studies*, vol. I. Beijing: State Planning Commission of China.
Ward, Benjamin. 1958. The firm in illyria: market syndicalism. *American Economic Review* 43: 566–589.
Ward, Benjamin. 1979. *The Conservative Economic World View*. New York.
Wu, Jinglian. 1985. Rent-seeking theory and some negative phenomena in China. *Comparison* (Bi Jiao) 5.
Xiao, Liang. 1988. Several comments on issues of private economy. *Literature of Economics* (Jing Ji Xue Wen Xian) 10.
Yang, Keqin. 1988. Review of planning system reform in China. *Planning Economy Studies* (Ji Hua Jing Ji Yan Jiu) Supplement I.
Yang, Zixing. 1988. Efficient allocation of labour and the concerned. *Journal of Industrial Economic Management* (Gong Ye Jing Ji Guan Li Cong Kan) 11.
Zeng, Qinxian and Jinmin Ma. 1988. Total aggregate structure and policy. *Economic Research* (Jing Ji Yan Jiu) 3.
Zhang, Yuyan. 1989. Coase's Theorem, Property rights and economic system. *Reading* (Du Shu) 3.
Zhang, Yuyan. 1988. *Economic System Reform in China*. Working Paper Prepared for WIDER, Hetsinki.
Zheng, Wenping. 1988. The analysis of factors' contribution to industrial economic growth. *Journal of Industrial Economic Management* (Gong Ye Jing Ji Guan Li cons Kan) 12.
Zhong, Pengrong. 1989. *Transition from Collective Ownership to share-holding System*. Jin Rong Shi Bao (Financial News), Apr 11.

Chapter 3
Smith Theorem, Olson Conditionality, and Reform: An Institutional Economics Interpretation of China's Growth Performance During 1978–2008

Yuyan Zhang

Abstract China's Reform and Opening-Up intended to release and develop productive forces so as to maintain a steady, rapid and sustainable economic growth. This paper tries to integrate the ideas of Smith and Olson, and work out a highly complementary, logically consistent and powerfully explanatory long-term economic growth model that can be referred to as the "Smith-Olson Theorem" or "Smith-Olson Growth". This new model can better explain China's torrential economic growth since it embarked on the path of reform and opening-up. It studies, from the perspective of institutional economics, what regular conditions are required to achieve long-term economic growth, or more precisely, it puts forward a definitive proposition of how long-term economic growth can be achieved. On the other hand, the means and procedures by which China expanded its market are genuinely unique in the world, primarily because its reform and opening-up is composed of a wide-range set of institutional arrangements including specific policy measures, regulations, and laws with the miscellaneous contents implemented sporadically.

Keywords Smith-Olson theorem · Institutional economics · China's growth performance

It has been 30 years since China embarked on the Reform and Opening-Up undertaking in 1978. This great endeavor has delivered tremendous achievements, which are arousing world-wide attention and sure to mark a new epic in Chinese history. Deng Xiaoping, the chief architect of the policy, framed Reform and Opening-Up initiative as a cause to release and develop productive forces, a notion that was clearly and repeatedly expounded in his Selected Works (Deng 1993). Expressed in economic terms, to release and develop productive forces means to promote and maintain long-term economic growth, or in more precise terms, to maintain a steady, rapid and sustainable growth in per capita production or per capita income. How to sustain long-term economic growth has perennially been a core issue ever since economics came into being. While works devoted to this subject abound, some even dating back to ancient times, such as the *Biography of Merchants* in *The Records of the Grand Historian* (Sima B.C.93 2008), a book written more than 2,000 years ago, the first person who attempted to explain the long-term economic growth in a

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_3

systematic way is Adam Smith. More than 200 years have passed since Smith (1776) published his masterpiece *The Wealth of Nations.*

The full title of Smith's book is *An Inquiry into the Nature and Causes of the Wealth of Nations.* Smith raised two fundamental questions in the book: what is the source of a nation's wealth and what is its nature? The two questions boil down to one: what is the origin of economic growth and under what conditions can such growth be achieved. Although *The Wealth of Nations* is a voluminous book of several hundred thousand words, Smith sought to explain the reasons behind economic growth in a succinct way. Smith held that economic growth depends to a great extent on productivity improvements, which in turn are the result of a higher degree of division of labor and specialization of the labor force; the latter in turn is limited by the extent of the market. Simply put, we could draw an economic growth model as follows: expanding market→higher degree of division of labor→improved productivity→economic growth. Further simplifying the process, we can have a hint on what economists call the Smith Theorem: Economic growth is determined by the size of the market.

Let us assume that originally, a worker could only make one item during a specified period of time, and now he can make two items under the same labor intensity. We call this an improvement in productivity or the increase in output in a specified period of time. As such, the worker's income will increase accordingly or the possibility of such increase becomes more likely. It is undisputable that improved productivity leads to economic growth. But an ensuing question is how is productivity raised? We have known that Adam Smith's answer to this question is the improvement in the division of labor and the specialization of the production. In order to illustrate the relations between division of the labor and productivity, Adam Smith used pin production as the example.

Although the pin is a very tiny item, a workman in the age of Adam Smith, if neither educated to the business nor acquainted with the machinery used in its production, might not be able to make one pin in a day even with his utmost industry. But the situation changes dramatically after the production procedure for pin-making is divided into about 18 branches or operations. In a small-sized pin factory with only a dozen employees, every worker was assigned exclusively to two or three distinct operations. Although the machinery and equipment were rudimentary, workers there could still manage to produce an average of four thousand eight hundred pins a day if they were working with their utmost industry. Adam Smith observed that productivity could be improved for every mode of production wherein division of labor could be adopted.

Here rises another question: how do the division of labor and specialization of the labor force evolve? According to Adam Smith's reasoning, it is the expanding market size that enhances the division of labor and specialization. How does this work? Let us assume that there is a village with only three households. Due to the limited labor supply, each of the villagers has to possess several skills in order to survive, such as the skills of planting crops and vegetables, and of feeding livestock and poultry. They also have to know how to plant cotton, weave cotton into clothing, build houses, cook, make farming tools, cut hair, and so on. Even if the three households exercised certain degree of division of labor among themselves, the possibility is very limited or rudimentary because the population is so tiny. The situation, however, would witness dramatic changes if the number of households in the village surged to 300 from the current three. As the population increases, it is not hard to imagine that households specialized in various kinds of production or services such as restaurants, hair salons, blacksmiths and tailors are likely to crop up in the village. As the most important production input, the increase in the number of people actually equals to the expansion of the market size. Here we observe how the expanding market is spurring the division of labor and specialization. Meanwhile, technological advancement is a by-product of the division of labor during the process.

How does expansion of the market represented by the rise of population promote the division of labor and specialization of the labor force? The key lies in the fact that the expanding market will lead to the real or potential benefits that can be gained from trade. If two persons (which can easily be supplanted by two companies or two countries) have different productivities when making two products, and if they choose to only make the one product for which they have higher productivity and trade them between each other, the total volume of the two products they get from such exchange will be bigger than what they can produce on their own. The surplus each people gets from this kind of process as a result of the division of labor and specialization is what economists are most concerned about and what they refer to as the gain from trade, a notion equivalent to the concept of "comparative advantage" first proposed by Ricardo (1817) more than 200 years ago in his book *The Principles of Political Economy and Taxation.* It is obvious that as the population swells, the potential gain from trade will increase accordingly, or in a much faster manner, which in turn will stimulate the division of labor and therefore propel economic growth. It is in this regard that both Smith and Ricardo became fervent advocates of free trade. Their firm belief in endorsing free international trade was to some extent tied to their intention to serve the interests of the then emerging merchants' class in Great Britain.

The size of market is related not only to the number of people who are involved in the division of labor and trade, but also to the opulence of the population in the specified area. What degree of purchasing power the population possesses, especially what kind of capacity it has in terms of wealth creation, also has a direct impact on the size of the market. The more affluent the population is, the more productive it is, the more tradable wealth it would possess, the more gains it gets from trade would increase, and the bigger the market size would grow. Others may argue that productivity, which is determined by the division of labor, also conversely determines people's opulence and wealth creation ability. In other words, the extent of the market and division of labor is a reciprocal causation. In his paper "Increasing Returns and Economic Progress" (1928), an article published 80 years ago, Allyn Abbott Young proposed the idea that "change becomes progressive and propagates itself in a cumulative way," which is often referred to as the Young Theorem. On the surface, the observation represents a challenge to Smith Theorem, but in reality, it may not be. The remote relevance between the two theorems does not constitute a casual denial of the cause-and-effect relationship, as in some sense, the complementarity between Smith and Young is bigger than their opposition.

There is another dimension to market expansion, that is, the extension of the scope for tradable goods or services. Goods once banned from trade are allowed to be traded again; China's real estate market in the 1970s and 1980s, for example, falls into this category. New goods and services that before were non-existent are created and allowed to be traded publicly, such as China's stocks and intellectual property rights markets. The release of trade that was once severely depressed is also an act of the market expansion, such as allowing farmers to freely trade their surplus of farm produce. Deregulation of industries, that were once tightly controlled by the government, is also counted as the extension of the market as a result of the removal of barriers to market entry. For instance, China's telecom sector was previously monopolized by the Ministry of Post and was later deregulated to allow several competing firms to co-exist. As key components of the inputs to production, the establishment and growth of the labor or human capital market should also be considered as the expansion of the market, although the "trade"of human beings is always a sensitive and disputed topic in non-economic areas.

Arising along with the expanding scope of tradable items is the increasing degree of monetization of the economy. Simply put, monetization of the economy refers to a process in which the number of items that can be valued by currency, settled in currency, and traded by exchanging currency continuously increases. The process is also accompanied by the continuous, or sometimes rapid, growth of the currency in circulation in order to meet the demand from the rapidly expanding market. The relationship between the degree of the monetized economy and the expansion of tradable items can be described as follows: whether any potential tradable item could become real tradable subject and its real trading volume is determined by whether it could be priced by the currency and be settled in currency and also by its transaction costs in the market. In addition, relaxing the government control on prices and volumes of goods and services, together with lowering barriers to entry, are also part of the monetization of the economy, especially when such regulations lead to gross resources misallocation due to the distorted prices they cause. Of note, reciprocally causal relations between market expansion and economic monetization can be used to explain prices changes: as long as the growth rate of the money supply remains stable, the slowing speed of the market expansion and the monetization of the economy will inevitably push up prices. It means that one of the ways to cope with inflation, at least in the medium-term, is to expand the scope of tradable subjects and enlarge the extent of monetization.

There is one key concept that we have been constantly talking about but have never clearly defined so far: that is the market. In a sense, we should have defined it at the beginning of this article. But there are always some important concepts that we can only define after having laid down more than adequate theoretical foundations. The market is a set of institutional arrangements that allows the exchange of goods and services and rights to take place smoothly, of which the most important part is an arrangement that is set and implemented by the government concerning the protection of property rights and the enforcement of contracts. Since any specific institutional arrangement has its own coverage and applicability boundary, the arrangements that can allow the transactions to take place in an expanded scope or the purposed actions that can help expand the coverage and applicability of those institutions, will both result in expansion of the size of the market. Or in another word, one important factor or parameter that can spur or measure the growth of the market size is whether it can expand the coverage and applicability of those effective institutional arrangements. Effective institutional arrangements refer to those institutions that can ensure property rights and contract rights to be duly protected and respected as well as those social structures or procedures that can help lower transaction costs and contribute to the formation of a unified and augmented market. The following discussion will delve into the issue of effective arrangement.

We now have a relatively comprehensive knowledge of five factors behind the expansion of market size. The first is the increasing number of people participating in the exchange; the second is the rising wealth creation ability of the participants in the exchange; the third is the expanding scope of tradable items; the fourth factor is the rising monetization of the economy; and the final one is expansion of the coverage and applicability of effective institutional arrangements. The five factors complement each other and combine to expand a market's size, while the final factor plays a vital role in the process of market expansion. In geographical or spatial terms, for a specific country or a region, there are two other ways to spur the market expansion: one is to expand the domestic market and the other is to expand the international market.

Although the Smith Theorem is persuasive and convincing, and Smith did discuss in his book the roles government should play as well as that of exchange itself, the establishment of a causal relationship between market size, specialization, and division of labor, or the realization of the gains from trade, still requires a slew of stringent conditions, an area where Smith failed to expound adequately and meticulously. The most crucial part of such conditions is the transaction or exchange which connects market size with specialization and division of labor. Serious studies on transaction were first conducted by some non-mainstream economists. Commons (1934), for example, used the concept "transaction" as the basic unit for analyses. Neoclassical political economists, especially those focusing on organizations and property rights, also conducted research on the transaction (Coase 1937; North 1981). Comparatively speaking, two other relationships contained in the Smith Theorem, namely, the relationship between specialization and productivity, and the relationship between productivity and economic growth, are much more easily understood as their logic is much more direct.

If exchange or transaction did not exist, the outcome of specialization and division of labor would be horrible as the specialized pin-maker would starve to death. Literally, exchange is related to human's action of selling and buying. Basically speaking, transaction also has the denotation of "being tradable", and an institutional condition ensures the exchange of goods and services to be realized. It is the tradability of goods and services that constitutes the necessary condition for specialization and division of labor, and when the extent of the market is big enough, tradability also forms the real condition under which specialization and division of labor is achieved. Trade can be divided into real-time exchange or future trade. If the exchange of goods or services takes place sometime after the two sides agree on the deal, then a contract emerges to stipulate the transaction. As lending and borrowing, delayed delivery, and other futures trade become a more regular practice, contracts almost become tradable items in and of themselves. Putting it another way, tradability is always manifested in the form of contracts. In a word, tradability here serves as the bridge through which division of labor and market size interacts. If the double-meaning transaction did not exist, then the potential comparative advantage brought about by market expansion would fail to spur specialization and division of labor, and therefore the transaction itself would lose its economic value. Given the importance of transactions, especially accounting for the costs generated by ensuring tradability, relevant analyses become a branch of economics, namely transaction cost economics (Williamson and Masten 1999).

Then what is the institutional precondition for the existence of tradability, which is also the precondition for the specialization and division of labor? The answer is property rights, which includes the definition and protection of property rights and the respect of the contract. There would be no trade at all if ownership of property were not clearly defined or if property could be deprived of arbitrarily and contracts wantonly broken. The reason why property rights are of utmost importance lies in the fact that they lay the foundation for transactions. It also lies in the fact that they are a condensed form of human being's social engagement, thus becoming a fundamental issue in human lives. In his book *De Cive*, Hobbes (1651), Adam Smith's predecessor and a 17th century philosopher, condensed all the questions faced by human beings into an insightful one: why can a man call anything his own rather than another man's. Marx and Engels (1844) and other great thinkers in later centuries all delved into the subjects of property rights and the rights of ownership in their works.

Protected property rights and respected contracts have produced two major functions that are supportive of each other: eliminating or reducing uncertainty and providing strong incentives for human beings in making their choices. If people are not clearly sure about ownership of the fruits of their toiling and their sense of safety about their property is shaky, and if people are lacking a relatively stable expectation about their future, then no one would genuinely care about wealth creation and accumulation and therefore no one will make real efforts to efficiently allocate scarce resources.

In order to better explain the preceding paragraph, we may take the story of Robinson Crusoe, a novel by Daniel Defoe, as an example. When Robinson Crusoe was alone in the lonely island, he took responsibility for all the costs and benefits and enjoyed the fruits of his own efforts until "Friday" appeared in the island. The emergence of "Friday"meant the size of the market was expanded. And as their productivity was different, gains from trade emerged. Attracted by the huge potential benefits to be gleaned from their comparative advantages, they naturally turned to specialization and division of labor or cooperation in their production. However, they had to resort to trade or exchange if such potential benefits were to be materialized. If they were master and servant, "Friday" could exchange his labor time for food disbursed by Robinson, and if they were on an equal footing, "Friday" could exchange fish and shrimp he netted for fruits Robinson gathered on mutually agreed terms. In the latter case, they had to reach agreement on the following issues before they conduct exchange: their labor fruits were private property which they should not be arbitrarily deprived of; any exchange should be conducted under the consent of both sides; finally, they were obliged to honor any contract they had signed. Otherwise, tradability could not be guaranteed and no transaction wouldbe materialized.

But due to the existence of uncertainty and the imperfect nature of the contract itself, the infringement of rights and the breach of contract surfaced in the transactions between “Friday” and Robinson. As both “Friday” and Robinson were stakeholders in the transactions, a third party had to be introduced to arbitrate the disputes arising from their transactions in order to make the resolutions fair and impartial. In real life, the third party is the government. Here, the government refers to the broadly defined government that has executive, legislative and judicial powers. Although government is incorporated in economic research through various angles, such as research into vested interest groups, or the government that targets the economy as a subject of its control, the government’s primary identity is the provider of public goods. And among the various public goods, the most important one is the protection of property rights and the enforcement of contracts in general, and the protection of property rights and contract rights of the ruling class in particular. Friedrich Engels (1884) and North both expounded on this tenet through their specific perspectives in their books.

The reason that the responsibility of protecting property rights and supervising the execution of a contract must be shouldered by the government is that the government is a holder of the legal monopoly on the use of coercion and force. It is also because the government, as a “public” institution, shall or is able to hold a more objective and impartial position than any individual does, and its jurisdictional coverage is much wider than that of any individual’s. The possession of such overwhelming and wide-ranging monopolistic power, however, also means that the government is the biggest potential threat to individual property and contract rights as its power is wielded by individuals who unavoidably have some degree of selfishness. The government, therefore, can be a force for good as well as for harm. von Mises (1927), von Hayek (1944) and Buchanan (1986), all reminded readers of the potential encroachment the government may incur on them and all tried to devise ways to minimize such side effects.

The costs of protecting property rights and execution contracts are always high, and form the major part of the transaction costs we commonly refer to. Meanwhile, transaction costs and market size are highly positive correlated. When, partly as a result of enlargement of effective institutional arrangements, a market expands significantly leading to more rapid growth, transaction costs also surge while the market becomes more complicated. In cost benefit analysis, we should always seek to maximize the output with minimized input. This means that the level at which public goods are to be provided depends on the calculation of the benefits and costs of their provision. At a time when the government is unable to protect every individual’s property and contract rights or is unable to provide uniform protection to different groups of people at a specified time period, how to protect property and contract rights and maximize economic growth most effectively, under conditions of scarcity by employing scarce “institutional resources”, is sure to become a focus of attention for institutional economists.

One meaningful proposition drawn by Zhang and Cheng (2004) is that unlike the universal or indiscriminate protection for property rights, the government's differentiated treatment of property protection extended to different social groups or social classes, exercising during a special historical period and under special circumstances, may have a decisive impact on the efficiency of long-term economic growth. The emergence of the West in the 18th and 19th centuries can be attributed to many varied reasons, but the most critical one is that the then government, representing the emerging capitalists, wielded the state machinery and provided discriminated protection to the emerging capitalists in terms of property and contract rights. Coincidentally, the capitalists in that historical period were those who were most productive. In order to facilitate analysis and memory, we conceptualize the issue as: the discriminated protection of property rights should precede universal protection when different social groups differ in productivity. Put in more colloquial terms, extending tilted or preferential property and contract rights protection for classes or groups that represent the most productive forces in wealth creation is actually the key propulsion driving the economic growth, especially its take-off.

In his book *Power and Prosperity*, Olson (2000) studied how economic growth relates to state powers. Contrary to Smith's approach and instead of seeking causes of economic growth as Smith did, Olson attempted to uncover those deep-rooted causes that are hampering the economic growth and obstructing trade from being adequately realized. When market size remains largely stable, people have to look into internal trade obstacles or other hindrances that prevent the market from growing if they seek to explain the differentiated performance in the prosperity of different countries or economies. Olson rightly points out that the failure in one country's economy is mainly because the country failed to meet the following two necessary and sufficient conditions for growth—which can be conceptualized as the Olson Conditionality: first, the existence of reliable and explicitly-defined property rights and the fair and impartial contract execution rights; second, there should be no infringement and plunder, in any form, that arises mainly from government. The major implication of Olson'sgrowth conditions is that economic prosperity is ultimately determined by the effective as well as wise employment of government power. Based on this, Olson developed an important concept that captures and highly condenses his long-term economic growth theory: a "market-augmenting government". In Olson's view, if a government has more than enough power to protect individual property rights and enforce the execution of contracts and the government itself is restrained and prevented from arbitrarily depriving or encroaching upon the rights of individuals, then it is a "market-augmenting government". And as long as such a government is in place, the solid foundation for long-term economic growth is laid.

Smith emphasized market expansion while Olson stressed the "market-augmenting government", indicating that they both recognized the decisive significance of market in economic growth. However, we should notice that they have their own preferences in focus. Smith put more emphasis on expanding"market size", in order to increase the "volume of items" that could be involved in trade. In contrast, the "market" Olson wanted to expand refers more to the "nature" or scope of coverage and applicability of the effective institutional arrangements securing the gains from trade. The market expansion, in the eyes of Smith, was more like a spontaneous process, basically driven by human being's pursuit of their own self interests. Olson by contrast viewed market expansion as the result of a government-led evolutionary institutional process, with the aim of creating conditions that could allow all the potential gains from trade to be realized. Concisely speaking, Smith was more concerned with the external or quantitative extension of the market, focusing more on the spontaneous nature of the market's expansion. Olson, on the contrary somehow, was more concerned with the internal or qualitative extension of the market, focusing more on the rights-based and the man-made nature of the market's expansion.

By integrating the ideas of Smith and Olson, we can work out a highly complementary, logically consistent and powerfully explanatory long-term economic growth model: market size expansion→potential emergence or increase of the "gain from trade"→property rights and contract rights that are adequately protected by government→transactions becoming feasible→specialization and division of labor deepening→improved productivity→economic growth. It is in this model that Smith's "invisible hand" and Olson's "guiding hand" clinch together. To put it simply, we may also refer to it as the "Smith-Olson Theorem" or "Smith-Olson Growth".

As the Smith-Olson Growth model is highly abstract, it is necessary to make some supplemental points in order to enrich our understanding of economic growth. Firstly, the relationship among each and every stretch of the Smith-Olson Growth model is not always necessarily defined by one-way causal effects. For example, economic growth might be the result of market size expansion, or might also be the cause of market size expansion. The expanding coverage and applicability and improving implementation of effective institutional arrangements, characterized by adequate government protection of property rights and contract rights, are the factor driving market size expansion while an expanding market itself also constituting a major part of the market's expansion. Secondly, under special historic circumstances, the protection of property and contract rights is not evenly distributed among different classes or social strata, possibly leading to either brisk or lackluster long-term economic growth performance. In other words, if the classes or social groups representing the most productive forces in the society receive more favorable protection of property rights, then the possibility of achieving long-term economic growth will become higher, or vice versa. Furthermore, the widening coverage and increasing intensification of the protection of the property and contract rights will generate fair competition and therefore stimulate the specialization and division of labor, which will eventually improve productivity. Finally, Olson is not the only one in a large army of economists who have dwelled on the relationship between the market and the government. For example, Polanyi (1944) also touched upon this theme in a thought-provoking way. His article uses Olson as representative of the crops largely because the latter's positions are clear-cut, logic is explicit, and argument is convincing.

For a gigantic economy that was initially isolated from other parts of the world, where resources were mainly allocated according to a plan and spontaneous transactions were restricted by various forces, and where market size was severely depressed, we could unequivocally find a route to long-term economic growth using the Smith-Olson Growth model as a reference. Such a route calls for the expansion of market in order to achieve long-term rapid economic growth. The most important means to achieve this is to protect property rights and respect contracts so as to encourage transaction and garner the gains from trade which come along with specialization and division of labor. The starting point of this pursuit of long-term rapid growth is largely determined by the initial conditions from which a specific economy takes off; in particular it is highly correlated to a government's fiscal position, the structure of its domestic vested interest groups, and the international political economic and security regime. When the government is under tremendous fiscal pressures and unable to fulfill its pledges to achieve adequate employment and raise household's living standards, when the top decision-makers of its central planning system hold sufficient political resources and are free of historical baggage, when other planned economies elsewhere in the world had initiated reform and already scored some headway, when the Soviet-American rivalry greatly intensified and the specific economy found itself a target to be courted by both powers, the conditions were ripe to initiate reform.

It is now clear what a pivotal role reform and opening-up has played in China's 30 years of high-speed economic growth. To generalize, the reform and opening-up China has embarked on in the past 30 years followed a typical Smith-Olson growth model, at least from the perspective of institutional economics. Reform, as a profound institutional improvement, defined and protected property and contract rights, expanded the scope of applicability for effective institutional arrangements, thereby both laying a solid foundation for the expansion of market size and the release of the once-depressed market's vitality. The Opening-Up, as an insightful policy, on the one hand, directly expanded China's external market, allowing the country to maximize its comparative advantages through international division of labor and also letting a maximum number of Chinese enterprises benefit from such specialization and labor division. On the other hand, the Opening-Up itself promoted and deepened reform. Today, we can see that China's market size has expanded dramatically both in terms of internal and external parameters. Specialization and division of labor also advanced tremendously thanks to continuously improved and effective property rights protection, which in turn spurred technological advancement and drastically lifted productivity. In general, those are the reasons behind China's 30 years of high-speed economic growth, or the phenomenon depicted by Lin et al. (1994) in their *China's Economic Miracle*.

It needs to be pointed out here that academics hold highly divergent views on calculations of China's productivity. Guo and Jia (2005) stated that China's total factor productivity only grew by 0.891% annually between 1979 and 2004, and its contribution to the economic growth at the same period of time was only 9.46%. They concluded that China's rapid economic growth was mainly driven by the high capital and labor input instead of the improved productivity brought about by the technology advancement. However, according to a report initiated by the Conference Board (Deng et al. 2007; Bosworth and Collins 2007) productivity of China's large and medium-sized enterprises grew at an average 20.4% annually in the years from 1995 to 2004, while nationwide productivity expanded at an average 7.3% annually at the same period of time. According to their analysis, the annual growth rate for America, EU (15 countries), Japan and India's productivity stood at 2.4%, 1.4%, 2% and 3.9% respectively during the 1995 to 2004 period. Although the above figures do not cover the whole 30-year period of China's reform and opening-up, and although academics and research institutions have different calculations of China's productivity growth, generally speaking, it is still fair and safe to say that cause-effect relationships between China's economic growth and the rapid rise in productivity in the past 30 years do exist to some extent. At least in logical terms, when both labor time and intensity remain largely stable, the continuous and rapid growth in per capita production and per capita income could only be gleaned from improved productivity.

China's reform and opening-up policy was mainly adopted to address the problems of the centrally planned economy, which had been implemented for a quarter century in China. Fairly speaking, it is also the fundamental goal of the planning economy to achieve specialization and division of labor, to expand the exchange or transaction in length and in depth and to seek stable, long-term rapid economic growth. The success of the planned economy was achieved under certain historical circumstances largely because it was highly in line with the Smith-Olson Growth model. As human being's rationality has limits, which means any planning has its own defects, and as incentives provided by the planning economic system are hard to be sustained in the long term, and as the exorbitant transaction costs resulting from the process of implementing the plans while downplaying the importance of the market in pricing and settlement, the sustainability of centrally planned-based growth is consequently under question.

What have been discussed above is aimed to provide a framework for logical analysis to better understand China's torrential economic growth over the past 30 years since it embarked on the path of reform and opening-up. It studies, from the perspective of institutional economics, what regular conditions are required to achieve long-term economic growth, or more precisely, puts forward a definitive proposition of how long-term economic growth can be achieved. But whether such highly abstract argumentation or generalization is really compatible with the actual practices and process during China's reform and opening-up initiative still requires a series of corroboration and validation which is beyond the reach of this thesis.

In addition to listing the key factors that are universally needed in long-term economic growth, there is an issue related to the "uniqueness" of China's reform and opening-up, or the question of Chinese Characteristics. Joshua Cooper Ramo (2004), a senior advisor to Goldman Sachs, discussed this issue in his article *The Beijing Consensus*, and concluded that China's reform and opening-up policy took a completely unique path. Here, we encounter an unavoidable logical conundrum: the relationship between universality and uniqueness. The tremendous achievements China has achieved in the past 30 years are inseparable from the fact that the reform and opening-up policy fit with the long-term economic growth requirements which have been elaborated above. Meanwhile, the means and procedures by which China expanded its market are genuinelyunique in the world, primarily because its reform and opening-up is composed of a wide-range set of institutional arrangements including specific policy measures, regulations, and laws with the miscellaneous contents implemented sporadically. This led to such issues as "combination of institutional arrangements", "grasp of the timing" and "sequencing of implementation" in the process. China Characteristics, speaking purely from an economic perspective, mainly manifest themselves in how to deal with those issues. They not only require wisdom and bravery but sometimes also intuition and a dose of good luck for a country and a people to do the right things at the right time and in the right sequence.

References

Bosworth, Barry and Susan M. Collins. 2007. *Accounting for growth: Comparing China and India*, NBER Working Paper No. 12943.

Buchanan, James M. 1986. *Liberty, Market and State.* Brighton: Wheatsheaf Books Ltd.

Coase, Ronald. 1937. The nature of firm. *Economica* 4 (16): 386–405.

Commons, John R. 1934. *Institutional Economics.* Madison: University of Wisconsin Press.

Deng, Xiaoping. 1993. *Third Volume of Deng Xiaoping's Selected Works (dengxiaoping wenxuan III).* People's Publishing House.

Deng, Haiyang, John Haltiwanger, and Robert McGuckin. 2007. *The contribution of restructuring and reallocation to China's productivity and growth*, Conference Board, Report number: E-0024-07-WP.

Engels, Friedrich. 1884 (1954). *The Origin of the Family, Private Property and the State.* People's Publishing House.

Guo, Qingwan, and Junxue Jia. 2005. Estimating total factor productivity in China. *Economic Research Journal (jingji yanjiu)*, vol. 6.

Hobbes, Thomas. 1651 (2003). *De Cive (lungongmin).* Guizhou People's Publishing House.

Lin, Justin Yifu, Cai Fang, and Li Zhou. 1994. *China Miracle: Development Strategy and Economic Reform.* Shanghai Joint Publishing Company.

Marx, Karl, and Friderich Engels. 1844 (1964). *The Communist Manifesto.* People's Publishing House.

North, Douglass. 1981. *Structure and Change in Economic History.* New York: Norton.

Olson, Mancur. 2000. *Power and Prosperity.* Basic Books.

Polanyi, Karl. 1944 (2001). *The Great Transformation.* Beacon Press.

Ramo, Joshua C. 2004. *The Beijing Consensus.* Foreign Policy Centre.

Ricardo, David. 1817 (1962). *The Principles of Political Economy and Taxation.* The Commercial Press.

Sima, Qian. B.C.93 (2008). *The Records of the Grand Historian* (*shiji*). Zhonghua Book Company.

Smith, Adam. 1776 (1974). *Wealth of Nations (guofulun).* The Commercial Press.

von Hayek, Friedrich. 1944. *The Road to Serfdom.* Routledge Press.

von Mises, Ludwig. 1927. *Liberalism.* Liberty Fund Inc.

Williamson and Masten. 1999. *The Economics of Transaction Costs*, Edward Elgar Pub.

Young, Allyn A. 1928. Increasing returns and economic progress. *The Economics Journal* 152: 527–542.

Zhang, Yuyan, and Cheng Gao. 2004. *American Bullion and the Rise of Western World (meizhou jinyin yu xifang shijie de xingqi).* CITIC Publishing House.

Chapter 4
China's Opening-Up: Idea, Process and Logic

Yuyan Zhang

Abstract China's opening up since 1978 has been a historical process of continuous expansion and deepening. In the course of this process, Chinese policymakers and the mass of the people have gradually deepened their understanding of reform and opening up, and China's relations with the world, especially its role in the world, have been constantly adjusted. At the beginning of reform and opening-up, China adapted to and was integrated into the international economic system; it then became engaged in the participation and improvement of that system, and then became an advocate and leader in the reform of the international system. Moreover, in practice, an incremental series of coherent open economic policies and theories with Chinese characteristics that facilitate an open economy have come into being. Under the guidance of Deng Xiaoping Theory of reform and opening up, China's practice of opening up to the outside world is not only a good fit with China's traditional trade theory, the *Huainanzi*/Sima Qian Theorem, from which people benefit by exchanging their surplus goods for those that they lack, but also is explicable in terms of modern economic trade theories. With the entry of socialism with Chinese characteristics into the new era and profound changes in the international environment, China still needs to open further to lead and promote mutual and shared openness for all countries in the world, so as to create good international conditions for promoting the construction of a shared future for mankind and building a world of lasting peace, universal security, common prosperity, openness, inclusiveness, cleanliness and beauty.

Keywords Opening to the outside world · Historical process · Economic logic

In the forty years of reform and opening-up, China has achieved remarkable achievements in various fields. Opening up to the outside world has become China's basic national policy. This is not only a major choice made by the leaders of the older

In the course of writing this article, I have benefited greatly from the help of Dr. Zhongzheng Jia and Weijiang Feng from the Institute of World Economy and Politics, Chinese Academy of Social Sciences. I owe them heartfelt thanks.

Translated by Xiaoxing Qiu from *Social Sciences in China* (Chinese Edition), 2018, no. 11. Revised by Sally Borthwick.

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_4

generation after summing up domestic and foreign historical experience, but also an internal requirement for developing national prosperity.

Deng Xiaoping, the chief designer of China's reform and opening-up policy, clearly pointed out at the beginning of the policy that "The present world is an open one" and "Without reform and opening-up, it will be hard to develop the economy."[1] Deng Xiaoping's idea of opening to the outside world covered building special economic zones, actively utilizing foreign capital, developing foreign economic cooperation and foreign trade, spreading opening up from coastal areas to the hinterland, correctly handling the relationship among independence, self-reliance and opening to the outside world, and so on. The fundamental goal of reform and opening up is to liberate and develop the productive forces, improve labor productivity, and ultimately achieve the high-quality development of the Chinese economy. In short, reform and opening up is designed to rationalize the government/market relationship through the reform of institutional mechanisms so that the market can play a leading role in resource allocation; strengthen the protection of property rights; accelerate the accumulation of human capital and encourage scientific and technological innovation; and reduce transaction costs, further the international division of labor and specialization, and expand market scale. Reform and opening-up are mutually independent and complementary and constitute a dialectical unity. Domestic reform covers economic, social, political and cultural fields. Reform in each field involves opening up and at the same time provides an institutional guarantee for the promotion of opening up. The continuous expansion of external opening-up on the basis of trade, direct investment and financial cooperation is itself a reform, which in turn will promote and deepen reform in various fields at home. Since the 18th National Congress of the Communist Party of China, opening-up in the new era has stepped up to a new level in terms of concept, form and content. On the basis of this historical process, this paper seeks to sum up the basic content of opening-up and to explore the economic principles and theoretical logic underlying its great achievements.

4.1 Background and Awareness of Opening Up

China's implementation of reform and opening-up has a profound and complex historical background. At home, the Cultural Revolution that started in May 1966 and continued to October 1976 caused the People's Republic of China to suffer the most serious setbacks and losses since it was founded in 1949. In conclusion, the country urgently needed a change that would bring order out of chaos and allow the whole nation to regain confidence and hope. In terms of bilateral relations, at the end of 1978 and the beginning of 1979, as the central figure in the second generation of collective leadership, Deng Xiaoping visited Japan and then the United States. These two visits strengthened his conclusions about the great disparity between world advanced industrial and technological levels and those of China, and confirmed

[1] Selected Works of Deng Xiaoping (1993), pp. 64, 367.

his determination to open-up and development of the country. In terms of the global situation, the Soviet Union had invaded and occupied Afghanistan in December 1979, and the US-Soviet struggle for hegemony was white-hot. One could say that it was these complex internal and external changes that prompted the Chinese leadership of the time to seriously consider the future direction of the country's development. After reviewing the situation, they ultimately determined to promote reform and opening-up and integrate China's economy into the globalized world.

At the beginning of reform and opening up, China basically relied on the planned allocation of resources or factors of production; there were multiple restrictions on transactions involving voluntary contracts, and market scale was under extreme pressure. Reform and opening-up was designed to leave all this behind and allow socialist China to integrate into the world of economic globalization by comprehensively adopting market mechanisms. In terms of the domestic environment, the policy makers of reform and opening-up had eliminated a heavy historical burden with the extensive political resources at their disposal; but at the same time, the government was under considerable financial pressure, full employment was hard to achieve, and the standard of living was very low. In terms of the international environment, China had become the "third pole" that the two hegemonic powers, the US and the Soviet Union, sought to win over; most of the other planned economies had started on and made progress with reforms, and those East Asian countries with open economic models had been very successful. In this context, the time was ripe for China to take the initiative in opening its doors to the outside world, with a view to a speedy exit from these difficulties that would enable the economy to return to the right track and maintain long-term stable and rapid growth.

The successful experience of the open Asian economies played a key role in opening the door for China's reform and opening-up. On the basis of the historical development of the Japanese cotton textile industry, the Japanese economist Akamatsu Kaname had put forward his "flying geese pattern of development" in 1932. On the subject of technology gaps, this theory states that latecomers can achieve industrialization and develop heavy industry and highly processed products by introducing advanced technology from technological front-runners that allowed them to produce, process and export goods at home. Those countries that first emulated innovative developed countries could also develop through trading with those that come later to imitation, forming a trade and industry chain that corresponds to that of the innovative countries. This makes for the rapid development of the national economy.[2] In the 1960s, the emerging industrial economies represented by the "Four Asian Dragons" followed by Japan as the "lead goose," actively pursuing an export-oriented economic development model and participating fully in the international division of labor, with a focus on the development of labor-intensive processing industries. In a relatively short time, they achieved rapid economic development, leaping over the middle-income trap. All this provided valuable practical resources for China to draw on in carrying out reform and opening up. Summing up the successful development experience of these economies, we can see that opening up is a key prerequisite for

[2] Kaname (1994), pp. 93–108.

achieving rapid development. In conjunction with a high savings rate, encouragement of exports, attracting foreign investment (advanced technology, management, etc.), and emphasizing human capital investment. opening up promotes economic growth.

After the Third Plenary Session of the Eleventh Central Committee, the second generation of collective leadership headed by Deng Xiaoping came into being.[3] Faced with the great changes in the world economy and politics at the time, Deng Xiaoping had a keen insight into the way the themes of the times had begun to change from war and revolution to peace and development. He first put forward the idea that "For quite a long time to come, it is possible that there may not be a large-scale world war."[4] Later, he concluded that peace and development were the two main themes of the contemporary world.[5] Based on these scientific judgments, the Central Committee of the Communist Party of China decided to shift the focus of national work to economic construction, and established a policy of invigorating the economy at home and opening-up to the outside world.[6] At the Twelfth National Congress of the Communist Party of China, Deng Xiaoping said "We are unswervingly dedicated to implementing the policy of opening-up and actively expanding foreign exchanges on the basis of equality and mutual benefit."[7] The report of the Twelfth National Congress of the Party clearly pointed out that implementing opening-up was China's unswerving strategic policy. Opening to the outside world was in line with the theme of the times and the general trend of world development. It is an inevitable choice for China's modernization drive and a basic national policy that must be followed for a long time.

Like other major theoretical principles and policies of the Communist Party of China, opening-up has the theoretical quality of keeping pace with the times, and its connotations have been continuously enriched and perfected in a series of important conferences. The report of the Thirteenth National Congress of the Party proposed to further expand the breadth and depth of opening to the outside world and continuously develop economic and technological exchanges and cooperation with foreign countries. The Third Plenary Session of the Fourteenth Central Committee proposed "making full use of internal and external markets and resources and optimizing resource allocation… and developing an open economy." The report of the Fifteenth National Congress proposed to perfect a multidimensional, multi-level and wide-ranging opening up arrangements and develop an open economy. The report of the Sixteenth National Congress pointed out that the focus of developing an open economy in the next five years should be to adhere to the combination of bringing in and going out. The report of the Seventeenth National Congress held that China's open economy had entered a new stage, and for the first time put forward "an open economic system." Following the outbreak of the global financial crisis in

[3] Party Central Committee Literature Research Office (2004), p. 1295.

[4] Selected Works of Deng Xiaoping (1993), p. 127.

[5] Selected Works of Deng Xiaoping (1993), pp. 96, 104.

[6] Selected Works of Deng Xiaoping (1993), pp. 135, 237.

[7] Selected Works of Deng Xiaoping (1993), p. 3.

the United States, Europe and other developed economies, China and other emerging economies played a prominent role in the global governance arena. In 2008, at the G20 summit, China put forward important reform measures, including promoting the reform of international financial organizations and improving the international monetary system.[8] This implies that the emerging economies represented by China no longer passively integrate and adapt the existing international system, but are beginning to become more active in participating and improving the system. The Eighteenth National Congress of the Communist Party proposed that the level of the open economy should be improved in an all-round way. In order to adapt to the new economic globalization, China needs to carry out a more proactive opening-up strategy and make the open economic system one that is mutually beneficial, win-win, pluralistic, balanced, safe and efficient. General Secretary Xi Jinping further pointed out that "China will improve the level of the open economy to give it a wider scope, broader field and deeper level," "will improve the open economic system making it mutual beneficial, win-win, with a diverse balance, and safe and efficient" and "will jointly maintain and develop an open world economy."[9] The Nineteenth National Congress took opening up to new heights. It proposed firmly implementing the developmental concepts of innovation, coordination, green, open and sharing, developing the open economy at a higher level and promoting the formation of a new pattern of comprehensive opening up. This reflects the fact that since the Eighteenth National Congress, China has begun to take the initiative more often and adopt an active approach to leading the construction of a global open economic system and the reform of global governance. In summing up the evolution of reform and opening up policy, it is easy to see that China's opening to the outside world permeates all stages of national economic development from its initial adaptation to participation and thence to advocacy and promotion of improvements. China's opening up has always maintained its vigor and vitality, forming an open theoretical system with a stronger initiative and its own characteristics.

At the Second Plenary Meeting of the Fifth Plenary Session of the Party's Eighteenth Central Committee, Xi Jinping analyzed the outstanding contradictions and problems in current national development, including innovation, coordination, green, open and sharing.[10]These contradictions and problems have become the main obstacles to the transformation of China's economy from "high-speed growth" to "high quality development." It is on the basis of these judgments that the Party Central Committee vigorously promotes innovative development, coordinated development, green development, open development and shared development, and takes them as a whole as being the material road to the realization of the Chinese Dream of the Chinese nation's great rejuvenation. Among the "Five Great Developments" mentioned above, open development has obvious systemic importance. As part of the basic contents of innovation and development, scientific and technological innovation involves not only independent research and development but also the full use of

[8]Selected Works of Hu Jintao (2016), p. 139.

[9]Xi (2014), pp. 114, 347, 335.

[10]Xi (2017), pp. 197–200.

the advanced scientific and technological achievements and beneficial management experience created by human society. In a world of unprecedented interdependence, no coordinated internal development can take place without effective interaction with the outside world. When global problems such as climate change have a serious effect on human survival, green development is itself a topic that requires the joint action of all countries in the world. The ultimate goal of development is the development of all; the achievements of development should be shared by the peoples of the world.

It is particularly worth emphasizing here that the understanding of property rights protection, as one of the cornerstones of China's socialist market economic system, has also gone through a long process. On the eve of reform and opening-up, Deng Xiaoping had already noticed the importance of kindling the enthusiasm of producers; he criticized the view of people who "go on about 'Raising just a few ducks is socialism; raising a few more is capitalism.'"[11] However, moving from keeping producer morale up to establishing a relatively complete property rights system and market mechanisms and implementing them strictly and efficiently cannot be achieved overnight. The report of the Twelfth National Congress emphasized that "China implements a planned economy on the basis of public ownership" and at the same time put forward the principle that "the planned economy is dominant and market regulation is supplementary."[12] The Third Plenary Session of the Twelfth Central Committee proposed "developing the socialist commodity economy."[13] At the beginning of 1992, Deng Xiaoping put forward the important point that capitalism also has plans and socialism also has markets.[14] This sundered the ideological shackles that had hindered the market from playing a leading role in resource allocation. Subsequently, the Report of the Fourteenth National Congress clearly put forward the idea of "establishing a socialist market economy."[15] In 2004, a constitutional amendment clearly stipulated that "Citizens' lawful private property shall not be infringed upon." In 2007, China's first Property Law formally went into force, a full 25 years after the Party's Twelfth National Congress.

4.2 The Main Content of Opening-Up

In the past forty years, policy and institutional reforms related to China's opening up have come in an array of different forms and covered a variety of areas. Having analyzed and reviewed these, we now summarize the main reform measures involved in implementing the basic national policy of opening to the outside world under six heads.

[11] Xiaoping (2004), p. 238.

[12] Hu (1986), p. 22.

[13] Central Party Literature Research Office (1996), p. 349.

[14] Selected Works of Deng Xiaoping (1993), p. 373.

[15] Selected Works of Jiang Zemin (2006), p. 228.

First, we should reform systems and mechanisms and support opening-up. The applicability or coverage of institutions is bounded. Market scale can be expanded by the practice of strengthening the applicability of effective institutional arrangements and increasing their coverage, or by setting up institutional arrangements that enable transactions to be achieved on a larger scale. This means that the promotion of opening to the outside world is inseparable from relatively complete institutional guarantees. Opening-up is closely connected to economic reforms that cover the rural economy, the ownership structure, state-owned enterprises, the price, financial and fiscal systems, taxation, foreign trade and so on. In the case of the reform of foreign trade, the Decision of the State Council on Further Deepening the Reform of the Foreign Trade System issued in January 1994 clearly defined the objectives of the reform: policy unification, open operations, equal competition, self-financing of profits and losses, integration of industry and trade, implementation of an agency system, and establishment of an operational mechanism adapted to the prevailing rules of the international economy.[16] The purpose of institutional reform was to make the system more effective in terms of respect for and protection of property and contractual rights and reduction of transaction costs. All this undoubtedly helped further opening up and the formation of a single or unified market.

Second, the introduction and absorption of advanced science and technology was not only one of the original intentions of China's opening-up, but also a key factor in promoting its rapid economic development. Technological progress, as a direct driver of improved labor productivity, played a crucial role in promoting long-term economic growth. In the early stages of reform and opening up, China faced a grave shortage of funds and of ideas and experience to do with advanced technology and scientific management; going all out to attract foreign investment was aimed at adopting the strong points of others and making them our own. As early as April 1979, the central authorities put forward the policy of "readjustment, reform, rectification and improvement." At the time, the import of technology was mainly reflected in two "shifts": firstly, the shift from new projects to transformative technology, and secondly, the shift from importing complete sets of equipment to trading under license, cooperative production, advisors and consultancies, and technical services. The Decision on Scientific and Technological Reform issued in March 1985 stated that modern science and technology is the most dynamic and decisive factor in the new productive forces. In 1988, Deng Xiaoping put forward the famous assessment that "Science and technology are the primary productive forces." In May 1995, the Central Committee of the Communist Party officially put forward the strategy of "rejuvenating the country through science and education." With the advent of the 21st century, a large number of policy documents have been issued in support of the national plan for medium and long-term scientific and technological development; this played a large part in driving innovation and encouraging scientific and technological innovation.

Third, in line with the idea of "crossing the river by feeling for the stones," a policy was adopted whereby the experience of pilot schemes and trials, if successful,

[16]Central Party Literature Research Office (2008), p. 638.

would be extended to a larger scope region, with a view to expanding the domestic and international markets. Closely related to this were two major measures, the first of which was the establishment of special economic zones. In July 1979, the Central Committee decided to adopt a "special policies and flexible measures" approach to setting up pilot special economic zones in Shenzhen, Shantou and Zhuhai in Guangdong and in Xiamen in Fujian. In April 1984, the Central Committee approved the opening up of a further fourteen cities, including Dalian, to the world, to encourage the creation of economic and technological development zones. In 1988 and 1990, it approved the establishment of Hainan Special Economic Zone and Shanghai Pudong New Area. These special zones attracted foreign investment by creating a favorable investment environment, accompanied by preferential measures such as tariff reduction and exemption, and also introduced advanced science and technology and scientific management concepts and methods that drove and facilitated regional and national economic development. The second measure was the establishment of free trade pilot zones. China's first free trade pilot area, the Shanghai Free Trade Pilot Area, was formally established in September 2013. It centered on institutional innovation, transformed government functions, deepened financial reform, facilitated investment and trade, created a favorable business environment involving internationalization, the rule of law and facilitation, turning the relevant experiences and practices into a national system which is carried out countrywide.

Fourth is increasingly active participation in regional economic, trade and financial cooperation. In the international arena, opening to the outside world is mainly reflected in the following three areas. (1) China's active participation in Asia-Pacific regional cooperation. In November 1991, China was formally admitted as a member of APEC. In 2000, it participated in the Chiang Mai Initiative, which played an important role in promoting the construction of financial cooperation mechanisms and regional integration in East Asia. (2) The establishment of the China-ASEAN Free Trade Area. This marks a new level in China's participation in regional cooperation. The establishment of the FTA will help expand bilateral trade and investment, accelerate the flow of funds, logistics and information among countries in the region, promote the cultivation and development of regional markets, and raise the level of China-ASEAN economic integration. (3) The Belt and Road Initiative. In September and October 2013, Xi Jinping proposed the major initiative of building a "Silk Road Economic Belt and a Maritime Silk Road for the Twenty-first Century" during a foreign visit. The initiative is based on the basic principles of joint consultation, construction and sharing; deepening the "Five Links" of cooperation is a key pillar and building a new pattern of comprehensive opening up is the direction of effort. The active expansion of a new space for international cooperation through intensified trade and investment cooperation, the promotion of infrastructure links and the strengthening of open cooperation in innovation capacity and global economic governance, will bring benefits to countries along the route and even to the whole human race everywhere in the world.[17]

[17] Communist Party of China Central Committee, Publicity Department (2018), pp. 298–307.

Fifth, we should steadily promote the internationalization of economic and trade cooperation and broaden its scope. China's currency, the RMB, has become the pricing, settlement and reserve currency of international economic and financial exchanges, thus lowering exchange rate risks, reducing transaction costs, promoting economic integration between China and its trading partners, sharing in the pricing power for bulk commodities, promoting diversification of the international monetary system, restraining irresponsible behavior on the part of policy makers in key monetary centers, and obtaining seigniorage tax. In December 1996, China took the lead in implementing the current account convertibility of the RMB. After years of effort, the RMB was approved to join the IMF's Special Drawing Rights currency basket in November 2015. This was formally implemented on October 1, 2016, enabling the RMB to take an important step on the road to becoming one of the world's key currencies. Of course, we should also be soberly aware that the internationalization of the RMB is still a long way off, and there is still a big gap between the RMB and the key international currencies.

Sixth, we should participate in and promote the reform of the international structure, improve global governance and reduce the non-neutrality of global rules.[18] China resumed its membership of the IMF and the World Bank Group in 1980, formally joined the World Trade Organization in 2001, and established the Asian Infrastructure Investment Bank (AIIB) in 2015. These actions constitute successive milestones in China's adaptation and integration into the international system during its opening-up. The global financial crisis that began in the United States had severe negative consequences throughout the world, clearly exposing shortcomings in financial regulation and the drawbacks of international financial organizations. To maintain international financial stability and promote world economic growth, China has actively promoted reform of the World Bank and the IMF. In April 2010, World Bank voting rights reform made China the third largest shareholder. The IMF share reform, which came into effect in January 2016, has raised China's voting power from sixth to third place, and has also strengthened its international influence and voice. Promoting the joint construction of international financial institutions such as the BRICS New Development Bank and the Asian Infrastructure Investment Bank marks the first steps in China's initiative as a leader at the center of the world stage. The BRICS New Development Bank focuses mainly on financing long-term development of infrastructure and sustainable projects. BRICS emergency reserve arrangements focus on financial stability, providing short-term liquidity support to members facing balance of payments pressure. The Asian Infrastructure Investment Bank focuses on supporting investment in infrastructure construction and other productive areas in order to promote sustainable economic development in Asia. In the course of its

[18]Institutional non-neutrality means that the same institutions mean different things to different people; that is, under the same system, different people or groups often get different things. Those individuals or groups who have benefited from the established system or may benefit from some future institutional arrangement will undoubtedly do their best to maintain or strive for it. See Zhang (1994).

continuing opening-up, China's role is also changing from adapting to or participating in the international system to being an indispensable advocate, leader and promoter of reform.

China's practice of opening up to the outside world is a historical process of continuous expansion and deepening. With the dramatic changes in the late 1980s and early 1990s in the former Soviet Union and the East Europe, the confrontation between the Soviet Union and the United States and the coexistence of "two parallel markets" collapsed, a wave of marketization sprang up worldwide, and with it the deepened development of economic globalization. China's opening up process also accelerated and intensified, and ultimately achieved the five changes outlined below. First, in terms of countries to which the open door applied, it has moved from "determination to open to the developed world" to "a better combination of opening to developed and developing countries." Second, in terms of areas for opening, China has moved from manufacturing industry and trade in goods to a variety of industries including energy, aviation, the automobile industry, agriculture, finance, insurance, education and consultation. Third, in terms of space for opening, the services trade has changed from coastal opening to coastal plus border opening and thence to comprehensive opening; fourth, in terms of the direction of opening, China has moved from opening-up to the outside world to bilateral opening and joint opening. Fifth, in terms of opening up claims, it has moved from introducing foreign capital and advanced technology and management experience to promoting the joint construction of the global value chain.

The way China's opening up to the outside world changed from partial to general and rose from a low to a high level can be explained by changes in the operation of Sino-foreign joint ventures. Initially, all joint ventures had to produce for export, mainly because the Chinese labor force had entered the international division of labor or global market via commodity exports. They were subsequently permitted to sell to the domestic market, resulting in a growing proportion of domestic sales. The domestic and foreign markets have become increasingly integrated. Foreign capital as a factor of production was initially allocated in relatively narrow and specific areas and fields, with the host country imposing relatively strict limits on equity and "life cycle." Later, with the continuous relaxation of restrictions, the scale, type and conditions of available foreign capital have undergone tremendous changes. Initially, China's domestic products lacked standards or had standards that were relatively low, but later, with the increasing scale of processed exports, the domestic market became more and more conscious of international standards and especially developed market standards, so that the standard of domestic products began to align with those of developed markets.[19]

[19]Lieberthal (2010), pp. 262–263.

4.3 The Theoretical Logic of Opening-Up to the Outside World

Opening up to the outside world promotes economic and social progress and national prosperity and development. This is a profound truth that has been proved by economic theory and development practice both at home and abroad. Marx explicitly included international economic relations in the research framework of political economy. In discussing the methods and systems of political economy, he wrote: "… (4) International relations of production. International division of labor. International exchange. Output and input. Exchange rate. (5) World markets and crises."[20] According to Marxist political thought, technological progress and the development of the productive forces will inevitably lead to the expansion of exchanges and the deepening of the division of labor. The latter will improve production efficiency, thus promoting the development of the national economy and profoundly affecting the world economy.[21]

The practice of China's opening-up to the outside world is highly consistent with traditional Chinese ideas on trade. As early as two thousand years ago, Chinese thinkers and historians had a profound understanding of the relationship between free trade and economic prosperity. Sima Qian wrote in the Shi Ji: Biographies of Merchants of "exchanging one's surplus for something one lacks."[22] The *Huainanzi· Customary Proverbs of Qi* further states that, "On marshes and coastlines, nets were woven. On hillsides and slopes, fields were plowed. People use what they have to exchange for what they lack and use what they are skilled into exchange for what they cannot do."[23] Sima Qian talked about "production for trade or profit" or "chresmatics," which is equivalent to the "returns" or "growth" of modern economics. The essence of ancient Chinese thought on trade is "exchanging one's surplus for something one lacks," or "using what one has to exchange for what one lacks and using what one is skilled into exchange for what one is unable to do." They concisely point out that trade is one of the fundamental sources of economic growth. Accordingly, we can call this the *Huainanzi*-Sima Qian Theorem. Other sayings based on the idea of obtaining economic development and gains from trade through exchange include "adapting measures to local conditions," "capitalizing on strengths and avoiding weaknesses" and "exchanging needed goods." It can easily be seen that across the millennia of Chinese civilization, economic prosperity and social stability flourished when economic policy accorded with this theorem.

Although the *Huainanzi*/Sima Qian Theorem appeared more than two thousand years ago, it concisely crystallizes the basic principles of the modern open economy, i.e. the principles of the three main trade theories. In his enduring work, *The Wealth*

[20] Selected Works of Marx and Engels (2012), p. 709.

[21] Pei and Liu (2018).

[22] Sima (1959), p. 3262.

[23] Gu (2009), p. 179.

of Nations, Adam Smith focused on the logic of a country's prosperity and development. He saw economic development as being characterized by an increase in per capita income that could only be obtained through an increase in labor productivity, which in turn could fundamentally be brought about by the division of labor and specialization. The basic conditions for these desiderata was the expansion of market scale. This gives us a theoretical model of economic growth: expansion of market scale → reinforcement of division of labor and specialization → higher labor productivity → rising per capita income → economic growth.[24] Simplifying this logic, we arrive at the axiom that economic prosperity comes from expansion of market scale, in what is termed the "Adam Smith theorem" or "theory of absolute advantage." David Ricardo's theory of comparative advantage holds that differences in countries' labor productivity reflect differences in technology which result in different costs of production. When a country has no advantage in the production of commodities, it should concentrate on producing for export those commodities where the productivity gap with its trading partner is smallest, on the basis of the principle that choosing the better of two benefits and the lesser of two evils improves the welfare of both countries. This is known as the theory of comparative advantage.[25] The theory further develops the idea that free trade promotes economic prosperity. Marx also holds a positive attitude towards this view. He argues that countries with low productivity in international exchanges, i.e. economically underdeveloped countries, "pay more for objectified labor in physical form than they get, but the goods they get from it are cheaper than they can produce themselves."[26]

The *Huainanzi*/Sima Qian Theorem emphasizes the role of endowment in trade. Two thousand years later, the Swedish economist Bertil Ohlin, building on research by Eli Heckscher, pointed out that "Countries have comparative advantages in those goods for which the required factors of production are relatively abundant,"[27] thereby developing a theory of international trade based on factor differences that is known as the factor endowment theory or Heckscher–Ohlin theory. This theory posits that the production of goods requires different factors of production; beside labor, these include land, capital, technology, and knowledge. The production of different commodities entails differences in the factors of production required. Therefore, a country should export goods in which its factors of production are relatively abundant and import those in which its factors of production are relatively deficient. In other words, the relative differences in countries' factor endowments and in the intensity with these factors are used in production constitute the basis of international trade. Trade allows each participating country to improve its own level of welfare and thus promotes common prosperity and development.

[24] Adam Smith believed that all countries benefit from the international division of labor. If one country uses less labor to produce wine and another uses less labor to produce wool, each should specialize in producing the products that cost it less labor and then exchange them for those of its trading partner. This allows both to save labor, increasing labor productivity and mutual benefit. See Smith (2009), p. 331.

[25] Ricardo (2011), pp. 64–77.

[26] Marx (2004), p. 265.

[27] Ohlin, *Interregional Trade and International Trade*, p. 6.

The above trade theories prove to varying degrees that even without technological advances, as long as the market's micro-agents (individuals or enterprises) or countries focus on production in which they have an advantage and obtain from their trading partners what they produce less efficiently, they can achieve gains from trade that promote economic growth. One of the main sources of the economic miracle that China has witnessed in the past forty years has been the huge trading gains that have accompanied market enlargement. However, in reality, technological progress occurs in tandem with the expansion of market scale, as reflected in the course of upgrading the division of labor and level of specialization. At times, this may even determine the speed and limits of market scale expansion. Moreover, the "changes," "exchanges" or "transactions" mentioned above are all conditional. "Conditional" here, in short, refers to the laws of trade and the institutional arrangements based on those laws. A trinity of conditions made possible the realization of the Chinese miracle: "gains from trade," "gains from technological progress" and "gains from institutional upgrading." As far as the Chinese miracle is concerned, opening up to the outside world was a logical and practical preliminary.

There is an immense amount of literature on the contribution of technological progress to long-term economic growth, with Schumpeter's being representative. Schumpeter points out that growth comes from innovation, which manifests itself in new products, methods, markets, raw materials and ways of organization.[28] One can see from Schumpeter's summing up of innovation that he sees innovation as being closely related to technology. The motive force of technological progress is not only the innovative activity of market players pursuing profits, but also the way people learn or introduce the advanced technology and production organization of others. The theory is not particularly concerned about "new markets." It is precisely on this point that the emphasis on market size in the trade theories of Schumpeter, Smith and others converge. The emergence of new markets inevitably leads to a new division of labor and specialized production. The intensification of competition brought about by the expansion of market scale also forces market actors at all levels to engage in technological innovation or introduction. While emphasizing that specialized production and competition play a key role in promoting technological progress, Schumpeter also points out that an essential requirement for innovation is the existence of an effective financial market to provide the requisite financial support. Given that financial market is a classic institutionally intensive arrangement, the reform of systems and mechanisms or the establishment of effective systems are issues that cannot be avoided.

Progress in technology and trade can promote economic growth, but they depend on effective institutional arrangements. The core elements of these are clearly defined and protected property rights, respect for contracts by all players, and performance by government and the market of their respective functions without trespassing beyond their own sphere. The core elements of the above institutional arrangements constitute the conditions not only for the maintenance and expansion of market scale but also for the ultimate transmission of expansion of market scale to economic growth. The

---

[28] Schumpeter (1991), pp. 73–74.

critical role is that of the government, since it is the government that is responsible for defining and protecting property rights, maintaining contracts and ensuring that the market plays a decisive role in resource allocation.[29] In other words, economic prosperity depends on the effective use of government power. Clearly, its functions are not limited to domestic arrangements. Inter-country exchanges are based on rules. The breadth and depth of coverage of international institutions or rules also determine the size of the market and the quality of trade, while the latter in turn affects the market size. For a country that has long been outside the international trade system, accepting and joining the established international system means not only enlargement of its own market but also the reform of those parts of its original system that are completely at odds with the existing international system. It also implies that the interests of domestic vested interest groups will be seriously affected. This is known as "coerced reform."

The basic approach underlying the economic logic of opening to the outside world provides an explanation of how opening-up can promote long-term economic growth by expanding market scale. This expansion has five dimensions. (1) An increase in the number of people involved in the transaction; (2) Improvement of participants' wealth creation ability due to the accumulation of human capital and technological innovation; (3) Expansion of the scope of tradable products; (4) Increase in the degree of monetization; (5) Expansion of the coverage of effective institutional arrangements and the strengthening of the enforcement. The five complement each other and work together, which eventually leads to the expansion of market scale.[30] Combining the expansion of market scale with the theory of long-term economic growth, we can get a concise model. Its key variables and logical connections are as follows: expansion of market scale → emergence or increase of potential "gains from trade" → property and contractual rights duly protected by the government → the transaction becomes possible and can be successfully completed → the division of labor and the enhancement of specialization → technological progress brought about by innovation and learning → improvement of labor productivity → economic growth (per capita income growth). The discussion in the first two sections of this paper indicates that logical framework above helps to deepen our understanding of the theory behind China's opening-up.

Here, there is a need for some supplementation of global governance. Global governance is essentially a strongly "non-neutral" set of rules used to regulate games among state or non-state actors. Current international institutions and systems have been created and led by the developed West; they reflect the interests of the developed economies. Clearly, emerging economies and developing countries' voice and representation have long been unsatisfactory. Given the substantial changes in the comparative power of the major gamers, some emerging economies are becoming indispensable to the solution of global problems. Their stake in the current international system has increased significantly, as has their desire to safeguard and expand

[29] See Olsen (2005), p. 10.

[30] Zhang and Feng (2017), pp. 89–121.

their own interest claims through global governance.[31] In this context, at the same time as we balance rights and obligations, we should actively promote the reform of global governance, on the principle of "doing everything within our power but acting judiciously," rather than revamping the old system or starting something new and separate. We should circumvent or water down the "non-neutral" institutional arrangements in the global governance system. If, when conditions allow, a country seeks to improve its position in the established international system, either alone or jointly with other stakeholders, this is undoubtedly a rational choice. This logic can be said to give a precise explanation of China's actions in the field of global governance.

4.4 Conclusion

China's opening up since 1978 has been a historical process of continuous extension and deepening. In the course of this process, Chinese policymakers and the mass of the people have gradually deepened their understanding of reform and opening-up, and China's relations with the world, especially its role in the world, is undergoing constant readjustment. At the beginning of reform and opening-up, China adapted to and was integrated with the international economic system; it then participated in it and sought to improve it, and then strove to become an advocate and leader of the reform of the international system. Within Chinese practice, an incremental series of coherent open economic policies and theories with Chinese characteristics have come into being. Under the guidance of Deng Xiaoping's reform and opening-up theory, China's opening-up practice not only is a good fit with the traditional Chinese trade theory of the *Huainanzi*-Sima Qian Theorem, but also coincides with the explanations of modern trade theory and long-term growth theory.

As socialism with Chinese characteristics enters the new era and profound changes occur in the international environment, especially following the election of President Trump, Sino-US relations have begun to enter a period of qualitative change. It remains true that China needs to use its own opening-up to lead and encourage other countries to pursue mutual and joint opening-up, and needs to actively participate in the reform of global governance and regional economic and trade cooperation to create the conditions for a community of shared future for mankind and the building of a world of lasting peace, universal security, common prosperity, openness and tolerance, and cleanliness and beauty. The tremendous achievements of China's economy have benefited from the continuous reform and opening up of the past forty years. The high quality sustainable development of China's economy remains inseparable from the further deepening of reform and opening-up to the outside world. More than thirty years ago, Deng Xiaoping said, "If our opening-up policy remains unchanged in the first fifty years of the next century, then in the last fifty years, our economic

[31] Zhang et al. (2017), p. 11.

contacts with the international community will become even more frequent, interdependent and inseparable, and the opening up policy will be even less likely to change." Over the past forty years, China's policy of opening to the outside world has been consistent. Especially since the Party's Eighteenth National Congress, Xi Jinping has repeatedly stressed on many occasions that China's open door will never close; it will only open wider and wider.

References

Central Party Literature Research Office. 1996. *Selection of Important Documents since the Fourteenth National Congress* (Part I). Beijing: People's Publishing House.

Central Party Literature Research Office. 2008. *Selection of Important Documents in the Thirty Years of Reform and Opening Up* (Part I). Beijing: Central Literature Publishing House.

Gu, Qian (ed.). 2009. *Huainanzi*. Beijing: Zhonghua Bookstore.

Hu, Yaobang. 1986. *Report on the Twelfth National Congress of the Communist Party of China*. In *Selection of Important Documents since the Twelfth National Congress*. Beijing: People's Publishing House.

Akamatsu, Kaname. 1994. Waga Kuni Keizai Hattenno Shuku Gooben Shoohoo. Cited in Pekka Korhonen. The theory of the flying geese pattern of development and its interpretations. *Journal of Peace Research* 31(1), 93–108.

Lieberthal, Ken. 2010. *Governing China: From Revolution to Reform* [Trans. Hu Guocheng and Zhao Mei]. Beijing: China Social Science Press.

Marx, Karl. 2004. *Das Kapital*, vol. 3. Beijing: People's Publishing House.

Ohlin, Bertil. *Interregional Trade and International Trade*. [Trans. Wang Jizu]. Beijing: Capital University of Economics and Trade Press.

Olsen, Mancur. 2005. *Power and Prosperity* [Trans. Su Changhe and Ji Fei]. Shanghai: Shanghai People's, Publishing House.

Party Central Committee Literature Research Office. 2004. *Chronology* (1975–1997) (Part 2), ed. Deng Xiaoping. Beijing: Central Literature Publishing House.

Pei, Changhong and Honggui Liu. 2018. *An Economic Analysis of Xi Jinping's Opening Up Thought in the New Era*. Economic Research, no. 2.

Propaganda Department of the Communist Party of China Central Committee. 2018. *Thirty Lectures on Socialist Thought with Chinese Characteristics in the New Era*, ed. Xi Jinping. Beijing: Learning Press.

Ricardo, David. 2011. *Principles of Political Economy and Taxation* [Trans. Guo Dali and Wang Yan'an]. Nanjing: Yilin Publishing House.

Selected Works of Deng Xiaoping, vol. 3. 1993. Beijing: People's Publishing House.

Selected Works of Jiang Zemin, vol. 1. 2006. Beijing: People's Publishing House.

Selected Works of Marx and Engels, vol. 2. 2012. Beijing: People's Publishing House.

Selected Works of Hu Jintao, vol. 3. 2016. Beijing: People's Publishing House.

Schumpeter, Joseph. 1991. *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle* [Trans. He Fei and Yi Jiaxiang]. Beijing: Commercial Press.

Qian, Sima. 1959. *Shi Ji* . Beijing: Zhonghua Bookstore.

Smith, Adam. 2009. *An Inquiry into the Nature and Causes of the Wealth of Nations* [Trans. Guo Dali and Wang Yanan], vol. II. Beijing: The Commercial Press.

Xi, Jinping. 2014. *The Governance of China*, vol. 1. Beijing: Foreign Languages Press.

Xi, Jinping. 2017. *The Governance of China*, vol. 2. Beijing: Foreign Languages Press.

Zhang, Yuyan. 1994. *Interest Groups and Institutional Non-Neutrality*. Reform, no. 2.

Zhang, Yuyan and Weijiang Feng. 2017. *The Road to Peaceful Development in China*. Beijing: China Social Science Press.

Zhang, Yuyan, et al. 2017. *A Study of the Changing Structure of Global Economic Governance and China's Coping Strategies*. Beijing: China Social Science Press.

Chapter 5
China's Structural Reforms and Implications for Northeast Asia

Yuyan Zhang

Abstract Chinese economy entered the New Normal since 2010. The economic growth rate started to slow down. A number of structural reforms have been implemented by Chinese government to echo the changed economic growth pattern and bring further impact to economic growth in middle and long run. This chapter reviews the factors that contribute to the slowing down of economic growth and summarizes the growing economic and social risks to discuss the necessity of the structural reforms. It then introduces the structural reforms implemented in China, discusses the value and challenges of regional economic integration and cooperation for China, with a special attention to the impact of international economic cooperation in northeast Asia on Northeastern China. The contribution of the chapter is that it analyzes the reality of economic and social problems of current stage in details, and illustrates the logic of international cooperation that China has been expecting, proposing and implementing.

Keywords Structural reforms · The new normal · Northeast Asia

The Chinese economy has grown rapidly since the policy reforms and opening-up, which began in the late 1970s. It has benefited significantly from demographic dividend, increased trade and exportation, the development of markets, privatization, and other major reforms (Lin et al. 2014; Naughton 2007; Wu 2005). However, beginning in 2010, China's economic growth rate started to fall significantly. The growth rate of GDP per capita started to decrease after 2010. In 2015, the growth rate of GDP per capita became 6.6%. In the meantime, the growth rate of fiscal revenue has significantly declined at a much faster rate than the GDP growth rate, from 25% in 2011, to 5.8% in 2015. As a result of this slowing, China is entering what has been called the "New Normal". The issue is of great concern to the Chinese government, which has enacted a series of reforms in the domestic economy in response. Internationally, the government is also exploring solutions by expanding its international projects. This chapter reviews economic growth in China since 2011, and discusses the implications for international economic activity. The chapter is composed of four parts. The first part discusses the reasons for the slowing of the economic growth, and other emerging risks in the economy. The second part summarizes the structural reforms that the central government has implemented. The third part analyzes the

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_5

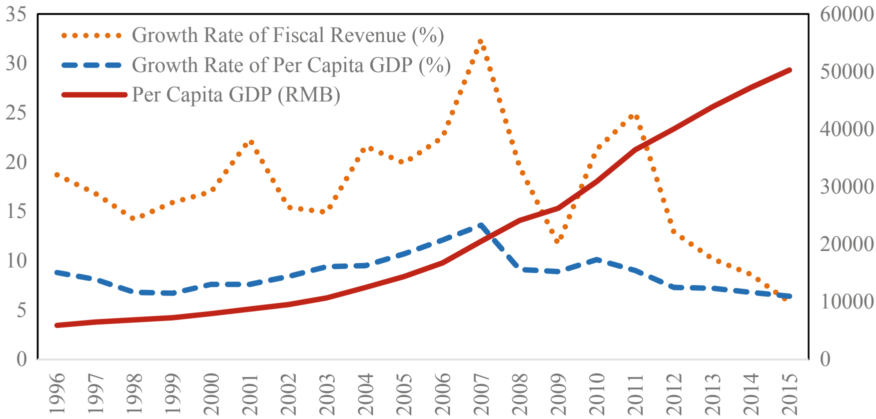

Fig. 5.1 Economic Growth in China, 1996–2015. *Data Sources* National Bureau of Statistics (2016a), http://data.stats.gov.cn/index.htm

importance and challenges for China of regional economic integration and international commerce. The fourth part briefly examines the implications of international economic cooperation in Northeast Asia for the Northeastern part of China.

Globally, the GDP growth rate of new, merging economies goes back to middle or low speed after a period of high-speed growth. During this process, countries often show stagnant development, rise in unemployment rates, decrease in investment return, and severe social contradictions (Clarida 2010). The slowing down of economic growth in China are mainly explained by the following reasons: decreased labor force, insufficient capital input, change in total factor productivity (TFP), growing economic and social risks, arise in mismatch of market demand and supply, and stricter environmental constraints (Fig. 5.1).

5.1 Factors That Contribute to the Slowing Down of Economic Growth

(1) Aging Population

China's demographic transition is among the most rapid ever witnessed. Since 2002, China has been an "aging" society. It is now becoming an "aged" society. In the 25 years leading to 2027, the population of people over the age of 65 will have increased from 7 to 14% of the entire population. In comparison, this transition took 115 years for France, 45 years for England, and 69 years for the United States. Both the rise in life expectancy and the sharp fall in total fertility to approximately 1.5% have driven an increase in the old age dependency ratio. UN Population Projections suggest that it will continue to rise at an unprecedented rate in the coming decades.

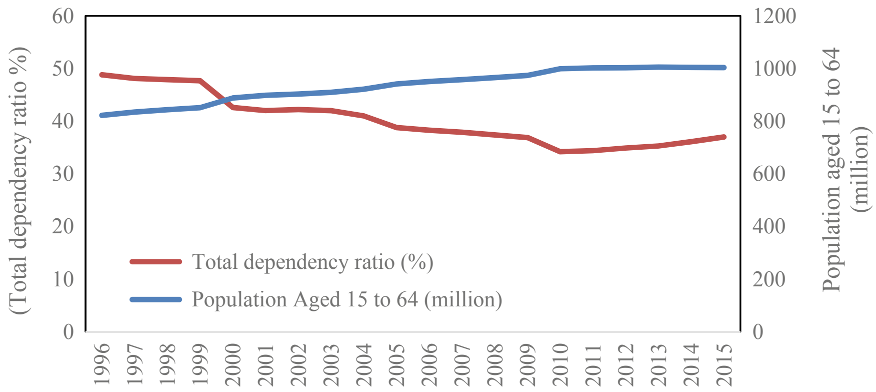

Fig. 5.2 Total dependency ratio and population aged 15–64 in China, 1996–2015. *Data Sources* National Bureau of Statistics (2016a), http://data.stats.gov.cn/index.htm

By 2030, 25.3% of China's population is projected to be over age 60, which is almost the same projected level for the OECD (27.5%). Furthermore, the share of China's population over age 80 (the "oldest old") will also increase rapidly from 1.6% in 2015 to a projected 11% by 2050 (The World Bank 2016a, b). IMF's research shows that worker's productivity systematically varies over his or her working life due to depreciation of knowledge, and age-related trends in physical and mental capabilities (Aiyar et al. 2016). The US Congressional Budget Office found that the global potential productivity increased by 3.2% from 1950 to 2015. It will decrease to 1.8% in the coming two decades. Within that decrease, 70% should be attributed to the slowing down of labor growth (Congressional Budget Office 2016) (Fig. 5.2).

(2) **Depletion of Rural Surplus Labor**

Population migration played a key role in the rapid growth of Chinese economy. Population migration was strictly controlled in the planned economy. From 1949 to 1985, the average migration rate from rural to urban area was 0.24% in China (Zhao 1997). Since economic policy reforms and opening up at the end of the 1970s, economic development on the costal area created a large number of jobs opportunities. Change of farm land arrangement at the same time released rural labor from being surplus labor and underemployed. Rural workers began to flee to nearby towns in search of work. In 1989, the number of migrants from rural areas was 30 million; in 1993 that number was 62 million; in 2016 there were already 282 million. Chinese economic growth has been largely benefited from the increase of market laborers and the matching of labor resources with capital. In the first three decades of the opening-up policy, labor migration contributed to more than 20% of GDP growth in China (Yan and Li 2007). However, the depletion of migration has been happening since the 2010s. The increase of the migration scale from 2009 to 2010 was 12.5 million. This number has been continually dropping from 10.6 million in 2011, to 9.8 million in 2012, 6.3 million in 2013, 5 million in 2014, and 3 million in 2015

(National Bureau of Statistics 2016b). The slowing down of the migration growth clearly signals the disappearance of demographic dividend.

(3) **Insufficient Capital Input**

Since the 2008 global financial crisis, the return rate of investment to real economy in China declined significantly. Statistics of Wind Data show that the growth rate of China's industrial enterprises' profit was 37.55% on average in the period from 1999 to 2007. The growth rate fell to 12.7% from 2008 to 2017, and even to 3.1% in 2015 and 2016. The low return of investment caused capital to flow into stock and bond markets, as well as real estate.

One key reason for the low return of entity investment is the recent rapid growth of labor cost. As mentioned, migration from rural to urban area has come to its completion. As these migrant workers are the main source of low-skilled workers in China, the low-skilled labor supply has begun to tighten. This has put pressure on employers to raise salaries of low-skilled workers. Meanwhile, since 2008, Chinese government has started to improve and formalize labor market policies. The minimum wage policy was formally established in 2004. Local governments began to introduce higher minimum wage standards in order to gain political reputation. 24 out of 31 provinces in China adopted higher minimum wage policies in 2011. The average increase was 22%.[1] Apart from increased minimum wages, a labor contract law was passed in 2008, and amended to an even stricter policy in 2012. A social security law was also passed in 2010, and a special regulation for the protection of female workers' employment was passed in 2012. The establishment of these laws and regulations clearly marked the formalization of the Chinese labor market. But it unavoidably increased labor costs to employers. The following figure shows the increase of average employee wages in urban China. From 2002 to 2015, the average wage increased 13.2% annually. The wage increases for rural migrant workers, those of whom make up the majority of low skilled workers in China, is 17% annually. This puts rising cost pressures on employers (Fig. 5.3).

With China gradually losing its competitive edge in for low-paid, low-skill, and large scale workers, the FDI, which played a key role in previous Chinese economic growth, has begun to outflow significantly. Since the beginning of 2010, China has experienced a bottleneck effect in regards to attracting foreign capital scale. The FDI scale fluctuated around 250 billion USD. Between 2010 and 2015, the annual growth rate of FDI that China attracted was –0.1%. In the same period, the growth rate in the Philippines was 39.4%, 35.3% in Myanmar, 31.1% in Laos, 18.3% in Cambodia, 8.1% in Vietnam, and 5.3% in Indonesia (The World Bank 2016a, b).

(4) **Changed Total Factor Productivity (TFP)**

TFP plays a significant role in the process of economic growth. In 1988, the GDP per capita in the five most economically strong countries was 31.7 times that of GDP per

[1] "24 Provinces Increased Their Minimum Wage Standard By 22 Percent Averagely; Inflow of Social Security Fund is Higher Than Expenditure." http://finance.sina.com.cn/roll/20120101/024511112539.shtml. Published on January 1, 2012. Accessed on September 20, 2017.

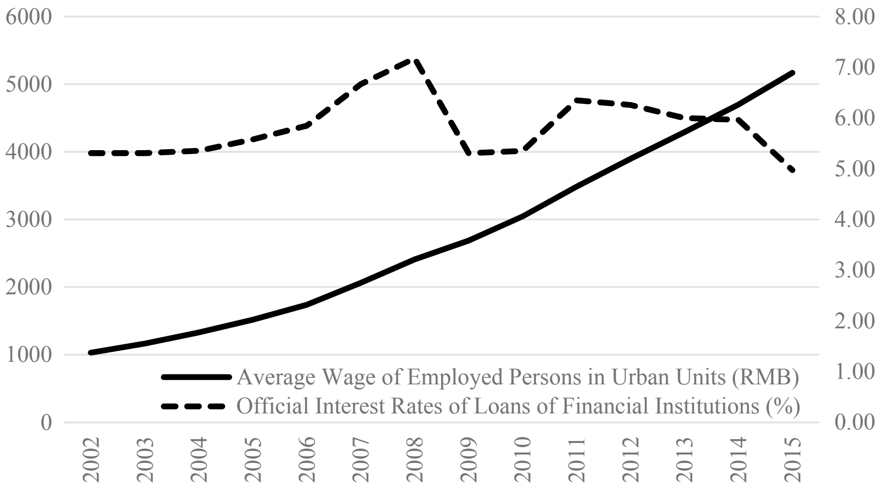

Fig. 5.3 Growth pattern of average wage and interest rate in China, 2002–2015. *Data Sources* National Bureau of Statistics (2016a), http://data.stats.gov.cn/index.htm

capita in the bottom countries. However, if the countries had the same level of TFP, the gap in GDP per capita among them would decrease to less than 4 times (Hall and Jones 1999). In the long run, only TFP is the most fundamental factor of economic growth. The increase of TFP in China in the past decades benefited from two actions. One is the improvement of resource allocation. The other is "learning-by-doing" with the inflow of FDI. However, the situation changed in the 2010s.

Firstly, promoting marketization has been one key characteristic of economic reforms in China, but in recent years, the SOE reform has entered the "Deep-water Area" stage. The government implemented dramatic reforms to SOEs from the end of 1990s to the beginning of the 2000s. According to Decisions on Major Issues Concerning Reform and Development of State-owned Enterprises released by central government in 1999, industries and fields that the state-owned economy should control mainly include: industries involving national security, natural monopoly industries, industries for important public goods and services, pillar industries, and high-tech industries. With the overall concept framework, SOEs and collective enterprises employed 80% of urban workers in 1995, 66% in 2002, and 40% in 2013. In the meantime, the private sector was quickly developing. Private sector, foreign firms, joint-venture and self-employment employed 2% of them in 1995 and 46% in 2013. The indicators clearly show development of market in urban China and reveal increased openness of policies and regulations from the planned economy era. In recent years, the reform has entered a "deep water area". The following figure shows the scale and share of employment in SOEs and public sectors. In terms of absolute number, the scale of SOEs has been stable since around 2005. In terms of relative

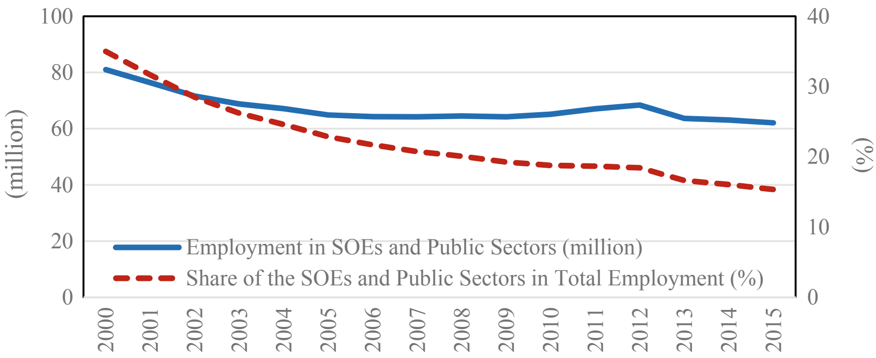

Fig. 5.4 Scale and share of SOEs and public sectors, 2000–2015. *Data Sources* National Bureau of Statistics (2016a), http://data.stats.gov.cn/index.htm

number, the share decreasing has become much milder since 2010.[2] In the left SOEs that are not reformed to be privately operated, common problems include the modern corporate system not being established, underdeveloped monitoring and evaluation framework, prevailing of insider control, transfer of benefits, loss of state assets, and social function and historical legacy mixed with enterprise operation (Fig. 5.4).

Secondly, there is a growing difficulty of realizing technical progress at China's current development stage. Technical progress could increase productivity of a given level of factor input (Solow 1956). Typically, technical progress comes from two sources. One is independent R&D, and the other is introducing technologies. For the lower developed economies whose location is distant from technological frontiers, introducing technologies is their main method of realizing technological progress. For the further developed economies who are closer to technological frontiers, independent R&D is the main method to make technological progress. With growing labor costs and outflow of FDI, there is less opportunity for China to learn from developed countries, and less room for profit in keeping lower-end good production. Independent R&D is crucial.

Thirdly, with economic structural transitions, tertiary industry accounts for higher shares, and slowing down of general TFP is consequently not avoidable. In recent years, the portion of tertiary industry in Chinese economy is growing rapidly. In 2013, the value added to tertiary industry exceeded secondary industry for the first time and became the largest industry (National Bureau of Statistics 2014). In 2016, contribution of tertiary industry accounted for 51.6% of GDP growth. The rapid development of service industry benefited from three aspects. Firstly, with the increase of disposable income, residents' consumption demand for service has increased (according to Engel's Law). Second, technical development and application in recent years, such as big data, mobile internet and cloud computing, enabled the rapid development of the tertiary industry and promoted the upgrading of traditional

[2]A disturbance happened in 2012, which is believed to be caused by some change in statistical method adopted by NBS in 2012. (http://data.stats.gov.cn/easyquery.htm?cn=C01).

industries. Third, institutional reforms were implemented in favor of the tertiary industry. However, productivity of the tertiary industry is considered lower than manufacturing.

(5) **Stricter Environmental Constraints**

With the development of the Chinese economy, pollution problems are also rising. The deteriorated environment has attracted citizens' attention. With induced social pressure, the government put more emphasize on the environment and implemented stricter regulations on environment protection in recent years. Indicators have been established and tracked to measure improvement made on combating pollution. These include the emission of sulfur dioxide and nitrogen oxide, the average concentration of fine particulate matter (PM2.5) in the air, the percentage of energy consumption on clean energy and coal, etc. According to the Government Work Report of 2016 given by the Chinese Primer LI Keqiang, the government aims to intensify efforts to protect and improve the ecological environment, especially air quality (The State Council 2016a) The key measurements include introducing environmental improvement objectives to the government work plan, and setting up deadlines for enterprises to meet emission standards.

However, in practice, the implementation of environmental protection policies was processed crudely by local governments. A large number of small coal mines, refineries, concrete factories, glass factories, and thermal power plants were shut down. In Huangshi city in 2014, 365 industrial enterprises with identified severe pollution were shut down within a year. In Daye city in 2014, 144 small enterprises had their electricity cut within a week.[3] With the abrupt closing of the factories, personnel placement, asset liability disposal, polluted environment recovery, and pollution damage compensation, were not given deliberate consideration. While dealing with pollution control has unsurprisingly caused economic setback. For Taiyuan city, in 2013, local government shutdown 7 enterprises that were above designated size. The direct GDP loss this caused was 3.6 billion RMB.[4]

[3]News "Huangshi City has won the first battle on pollution management", http://www.ecz.gov.cn/wzlm/zwdt/qsczxwlb%20/hs/50431.htm. Published August 18, 2014. Accessed October 10, 2017.

[4]http://jjsx.china.com.cn/lm2430/2014/234342.htm.Published November 23, 2014. Accessed October 10, 2017.

5.2 Growing Economic and Social Risks

(1) **High Corporate Debt**

China corporate debt- GDP ratio was estimated to be 170% in the first quarter of 2016.[5] This is partly attributed to an investment dominated growth strategy, and partly to the institutional dependency of financial systems in China. The economic growth in China is usually highly dependent on investment. Industries such as utilities, transportation, real estate and construction usually grow more rapidly, and the corporate debt is also concentrated in these industries. Due to the decline in profits and debt repayment ability in recent years, industries such as mining, steel, real estate, and some state-owned enterprises have been exposed to debt risks. What is worse, the financial sector in China is still dependent from the government and lacks dependency. When the banks are asked by local governments to provide loans to zombie companies, it is difficult to refuse. In July 2017, Moody downgraded Chinese's sovereign rating due to the high debt in China.

It is commonly agreed that in short and medium lengths of time, corporate debt will not lead to systemic crisis in China (He and Wang 2017; Lang et al. 2017; Wang et al. 2017). Firstly, the total savings in China is up to 48% of GDP. Loanable funds are adequate and the cost of capital can be kept low. Second, the majority of corporate debt in China is to SOEs and from state-owned banks. The debt being implicitly endorsed by the government consequently has a good reputation. Thirdly, China still has a certain degree of control over capital accounts and limits outflow of capital. However, high debt still contains risk factors to economic growth. The assets of financial institutions would be deteriorated and the price of the asset would fall. The investors could be concerned about rising leverage. When they refuse short-term debt delay, it could cause monetary market failure, forcing banks and other financial institutions to raise interest rates and tighten credit, which will further deteriorate the borrowers' ability to maintain debt and increase the size of non-performing asset. Banks and other financial institutions who cannot ensure adequacy of capital will face bankruptcy and the entire financial system will fall into chaos. In the long run, high debt indicates the low efficiency in allocation of capital in the economy and hurts potential productivity.

(2) **Increasing Inequality, Especially Property Inequality**

The Gini coefficient shows high income inequality in China. The indicator dropped a little bit in very recent years but is still as high as 0.465 in 2016. The worst problem in recent years has been the sharp increase in property inequality. The dramatically increasing housing prices in China distort saving behavior and property accumulation behavior of urban residents. In order to catch up with housing prices, the younger

[5]News "China corporate debt levels excessively high, no quick fix: Central bank gov",https://www.reuters.com/article/us-china-economy-debt-idUSKBN1AP0FS. Published March 9, 2017. Accessed September 12, 2017.

generation increases savings, and their life cycle consumption becomes even less smooth than predicted by the life-cycle model of consumption and saving. Households with higher wealth accumulation have strong incentives to invest in housing. That further displaces ordinary households' consumption demand for housing. Housing inequality has significantly increased in the process (Chen and Qiu 2011). Uneven distribution of housing also leads to a difference in scale of renting income and financial asset investment income. Those two parts are the main factors that drive the rise of property income. The growing inequality attributes to poorly performed incentive mechanisms of society and blocks in social mobility. Researchers show that significant welfare losses were caused by the increase of inequality in China. The majority of households suffer from housing prices increasing. Households who are at the top 20% of income distribution are the only exception (Ning et al. 2016).

(3) **Mismatch of Market Supply and Demand**

Several industries in China suffer from overcapacity now. These include the steel, coal, glass, and concrete industries. The capacity utilization ratio in these industries is low. The existence of overcapacity could be attributed to several reasons. First, Chinese economy from the 1980s to 1990s belonged to a shortage economy (Kornai 1980). It has characteristics of thirst for investment, impulsion of expansion, paternalism, and soft budget constraints. Therefore, many industries were overinvested in. Second, local governments are over-protected certain industries and enterprises. Assessments of the performance of local governments in China is still heavily GDP oriented. Local governments provide special support to enterprises that create GDP through environmental protection terms, credit authorization, preferential tax, etc. For employment and tax consideration, governments also subsidize special industries and local enterprises. With the government interfering in the market, overcapacity is common. Third, an exit system for the enterprises that are not performing well is absent from the market. The banking system in China has numerous large banks. This favors financing of large scale SOEs, but does not favor the efficient financing of medium or small enterprises. However, these SOEs largely count on the central government to step in and help rather than expect "having to exit the market" in worst-case scenarios. This leads to SOEs' investing without considering cost-benefits. These SOEs commonly concentrate in special industries, have low innovation incentive and capacity, and low productivity.

However, in the meantime, consumption demand in China has changed significantly in recent years. There are three aspects that have attributed to changed consumption demand. First, demand from international markets has been decreasing. China has been playing the role of "the world's factory". It is estimated that China accounts for around 20% of global productivity for medium and low-end products. Approximately 80 to 85% of the total FDI in Eastern Asian and Pacific countries flows to China, forming large scale exportation (The World Bank 2016a, b). However, the international market has shrunk since the 2008 Financial Crisis. Consumption capacity of the European and North American markets has decreased. From the beginning of the 2000s to 2008, China's total exports of goods grew, with an average annual rate of 26%. However, after the international financial crisis in 2008 and 2009, the growth rate of China's total exports of goods became as low as 5%. In 2009, 2015 and 2016, China's total exports of goods experienced further negative growth. Second, in general, domestic consumption capacity is not strong enough to support total demand volume. Disposable household income has been increasing rapidly over the past decades but housing price are also increasing notably. Housing expenses have led to residents saving more, and the consumption capacity of residents is now much lower. Besides, China's Gini coefficient is as high as 0.465 which can be attributed to tax problems, social protection problems, and employment problems.[6] The middle class in China is not large enough for substantial domestic consumption. Third, as the development of the economy entered its current stage, higher income groups placed higher requirements on quality of service and goods. However, the capacity for producing high quality goods in China is generally very low. According to estimations, the total consumption of luxury goods of Chinese consumers reached up to 117 billion USD in 2015. This accounted for 46% of the total consumption of luxury goods, globally. With import tariffs of luxury goods being set extremely high, 91 of this 117 billion USD was spent abroad. The outflow of demand could block the path for Chinese industry to upgrade. Strengthening the innovation of Chinese enterprises and upgrading production of the industries is the key to equalize market supply and demand, and this is urgently needed.

5.3 Structural Reforms for Progress in China

Reforms have been implemented in the past years to cope with economic problems. In 2015, the Chinese central government formally promoted the term "Structural Reform" at the Central Economic Work Conference. The structural problems identified in China include problems such as industrial development, regional balance, and drivers of economic growth. With the implementation of structural reforms, the policies that the central government emphasized are in the form of five 'pillars'. These include taking measures to stabilize the macroeconomic environment; developing agriculture, industry and service sector respectively, improving infrastructure, encouraging innovation and green development, emphasizing development of the real economy; improving the market environment, stimulating enterprises in market participation; pushing forward the implementation of reform policies; and improving provisions of basic public services.

[6]"National Bureau of Statistics: Gini Coefficient in 2016 was 0.465, Higher than the value in 2015", http://www.chinanews.com/cj/2017/01-20/8130559.shtml. Published on January 20, 2017. Accessed on October 10, 2017.

(1) Liberalize Labor Markets and Improve Labor Productivity

Enhance Labor Market Flexibility

Reform Hukou system: The Hukou registration system is one of the biggest institutional obstacles in the Chinese labor market. With this system, workers are identified as having local urban, local rural, migrate urban, or migrate rural origin. This affects workers' wages, job opportunities, and access to social security, warping the allocation of labor resources through migration. Hukou restrictions in bigger cities are higher than those in medium cities or small cities, and the strictness of this policy reveals concerns regarding population management and financial capabilities (Wang and Song 2012). With hukou registration, a good balance between labor and capital is not reached, leading to a loss of GDP growth by up to 40% (Au and Vernon 2006). Since the 1990s, the Chinese government and local administrations have been attempting to reform the hukou registration system to promote labor market integration. The main efforts that have had long lasting influence so far include township level hukou reforms at the end of the 1990s, hukou uniform reform of different provinces, adopted in 2001, and score accumulation based hukou conversion policy of certain cities since the middle of the 2000s. These reforms have had a profound impact on the labor market and brought new features to the Chinese labor market (Song and Li 2014).

Polish labor market policies: Restrictions on the increase of minimum wage. In 2016, the Ministry of Human Resources and Social Security announced that the local minimum wage standard should be adjusted "at least once every two to three years, and that this adjustment should not exceed the social average wage growth rate". The previous policy stated that the standard should be adjusted "at least once every two years", meaning the increase in minimum wage was much slower. Similarly, the Labor Contract Law was revised towards achieving more balanced rights and obligations between employees and employers; portability of social security contributions and benefits were enabled to protect migration; and increasing public employment services are provided to facilitate labor reallocation.

Improve Productivity of Workers by Improving Education

Fundamentally, the labor force in China is still low skilled. In 2014, the average number of years spent in education for the working age population in China was only 9.28 years. The government aims to increase the average education to 10.8 years by 2020 (Information Office of the State Council 2016). The average GDP created by the employed in North America (i.e. the USA and Canada) was 109,000 USD in 2016 (constant 2011 PPP $). In East Asia, this figure was just 28,000 USD. However, in China the number was as low as 25,000 USD (The World Bank 2016a, b). China began to expand post-secondary education in 1999. The number of college graduates increased from 850,000 in 1999 to 6, 810,000 in 2015. The Ministry of Education is also proposing to expand the scope of compulsory education from the current 9 years to 12 years. At the same time, the government is developing secondary occupation education through the exemption of tuition for vocational education and increasing the "seats" in TVET schools. To develop vocational education, qualified colleges are encouraged to transform into application-oriented institutions. Besides, the number of migrate workers is linked to the fiscal allocation of budgets in regards to education. These policies will improve the overall quality of the labor force and increase the supply of highly skilled labor.

Increasing Fertility Rate

With noticing the disappearance of the demographic dividend, local governments in China gradually loosened their family planning policies to encourage child birth. The family planning policy was introduced at the end of 1970s. According to the policy, each couple was allowed to have only one child (or "one birth" if given birth to twins etc.[7]) Since the beginning of the 2000s, provinces started to loosen the policy to "the second child" standard. First, couples, both of whom were an only child, could have a second child. Although different provinces were adopting these policies gradually, by 2011, all provinces had implemented them. By the end of 2013, the central government announced a unified "Second Child for One-side-single-Child Couple" policy. Across all provinces, couples, at least one of whom was an only child, could have a second child. By the end of 2015, the central government applied the second child policy to all couples. The effect of this step-by-step reform has been significant. The fertility rate has been declining in China over the past few decades. From 2009 to 2011, it reached as low as 1.19%. However, with the implementation of the policies, the fertility rate rose to 1.21% in 2012, and jumped further to 1.24% in 2014.

(2) **Liberalize Financial Markets and Guide Capital Flow to the Real Economy**

Reform financing market: In recent years, the government has been working on leading capital flow back to the real economy. The measures taken include the following points. Encouraging financial institutions to increase credit support for high-tech enterprises, major technical equipment production, strong industrial base engineering projects, and the cultivation and fostering of new motivation for development. Encouraging loan mergers and acquisitions, issuing preferred shares and convertible bonds to raise funds. Broadening financing channels, encouraging the expansion of direct financing such as equity, bonds, etc., and developing the accounts receivable financing. Rectifying financial services charges, eliminating unreasonable fees, and lowering charge standards. Encouraging large and medium-sized commercial banks to set up Inclusive Finance Divisions. Large state-owned banks should implement differentiated assessment methods and support policies, and effectively alleviate the financing difficulties of small and medium-sized enterprises.

Control financial risks: The National Financial Working Meeting was held in July 2017. At this meeting, the point was underlined that financial risk should be prevented and controlled. Special attention was called to bad assets, bond defaults, shadow banking, and internet banking. To gradually reduce corporate debt levels,

[7]In special cases, a second child standard can be applied, such as, if the couple are of an ethnic minority, if the first child had a disability, etc.

policies promoted included encouraging enterprises to revitalize the stock of assets, strengthening financial leverage constraints of enterprises (especially state-owned enterprises), exploring new methods of transforming debt to equity, developing multi-level capital markets, and encouraging financial institutions to increase capital funds and liquidity, particularly institutions who hold large shares of loans to fragile industries.

Improve supporting institutions: Simplify administrative approval procedures; decentralize powers from central to local governments; and transform business tax into VAT to alleviate enterprise taxes; better regulate how administrative fees are charged and how government funds are collected. Expand market access for foreign investors; build and pilot high-standard free trade zones and strengthen the protection of property rights; level the playing field to make China's market more transparent and better regulated.

Opening Up of the Financial Market: On Nov. 2017, China announced to ease limits on foreign ownership in the financial sector. In the past years, banking sector was tightly controlled and overseas companies cannot hold more than 25% of a lender's capital. It is consequently difficult for these companies to play very active role in the local market. With the newly proposed reform, foreign firms will be allowed to own as much as 51% of shares of tie-ups in securities, funds and futures industries, instead of the current 49% limit. Foreign ownership restrictions in Chinese banks and financial asset management firms will also be lifted. It is planned that these limits will be phased out in three years. With the opening up of the financial sector the allocation of financial resources will be largely improved.

Reform SOEs: In 2015, the Chinese central government published "The Guidance Opinions on Deepening State Owned Enterprise Reforms". According to these Opinions, the government aims to push forward SOE reforms in accordance with the category of the enterprises. Based on the business field and function, SOEs are divided into two categories- commercial ones and public welfare related ones. The commercial category SOEs should follow market principles and complete commercial operations. For those whose business fields are within fully competitive industries, they should all, in principle, implement the shareholding system reform. State-owned capital can absolutely control, relatively control, or only hold shares of enterprises. For those whose business fields are within important industries concerning national security or key areas that are influential to the national economy, or commercial category SOEs who undertake major special tasks for the country, the state-owned capital should keep its position. Non-state capital is supported for participating shares. Public welfare related SOEs can take the form of being fully state-owned. In suitable cases, diversification of investment is also promoted. Non state-owned enterprises are encouraged to participate in the operations of these SOEs through the purchasing of services, franchising, principal-agents etc. The aim of this is to improve the efficiency and capacity of public services provisions.

(3) **Build an innovation-driven economic system**

The Chinese central government fully recognizes that China is losing competitiveness in terms of low labor costs and resources in the global market and has been emphasizing the importance of innovation in the new stage of economic development. At the Eighteenth National Congress of CPC it was made clear that "Technological innovation is the strategic support for improving social productivity and comprehensive national strength. This must be placed at the core of the country's overall development." This established the innovation driven development strategy and strengthened the importance of independent innovation. Measures were also taken to develop the innovation-driven economy system, which included several parts. Firstly, to accomplish the target that R&D investment should be increased from 2.1% of GDP in 2015 to 2.5% of GDP in 2020. Second, to update the GDP calculation method and include investments for R&D into GDP statistics. Third, to deduct R&D investments from taxable corporate income. Considering 3/4 of R&D investment comes from the business sector, the policy should largely increase the incentive for R&D investment. Fourth, to create a favorable financial climate for innovation and facilitate the IPO process of VC for promising companies. Fifth, to liberalize the environment for researchers and be more flexible in the way that research funds are managed. In Nov. 2017, the 19th CPC National Congress Report given by President XI Jinping further mentioned that "… pursue the Belt and Road Initiative as a priority, give equal emphasis to 'bringing in' and 'going global', follow the principle of achieving shared growth through discussion and collaboration, and increase openness and cooperation in building innovation capacity. With these efforts, we hope to make new ground in opening China further through links running eastward and westward, across land and over sea… protect the legitimate rights and interests of foreign investors… We will develop new ways of making outbound investments, promote international cooperation on production capacity, form globally-oriented networks of trade, investment and financing, production, and services, and build up our strengths for international economic cooperation and competition."

These gradually published policies significantly promote the progress made in technology of different fields. A number of innovative achievements have been reached. These include the construction of space laboratories, manned submersibles, radio telescopes, exploration satellites, quantum satellites, and large aircraft manufacturing. In the commercial field, internet finance and electronic commerce have been developing rapidly. A number of internet giants have quickly grown, such as Baidu, Alibaba and Tencent. With abundant financial and technical strength, the companies can merge to become compact and enable a wide variety of innovative enterprises through public channels. The companies developed include online shopping website Taobao, ride-sharing platform Didi, multi-function social media platform WeChat, station-less bicycle-sharing system Mobike, etc. These commercial formats bring new opportunities to regional development, poverty alleviation, information transmission, and the development of traditional industries. However, problems are also found in the middle. The development of electronic commerce is accompanied by the closure of huge traditional physical stores, replacing numerous jobs. In addition, with the absence or late-coming of corresponding regulations, environmental pollution, leak of private information, and a lack of protection of customers' legitimate rights and interests occurred. Local governments have been gradually publishing such regulations.

The "Several Opinions on Deepening the Reform of Institutions and Mechanisms to Accelerate the Implementation of Innovation Driven Development Strategy", published by the State Council in 2015, mentioned that an institutional environment and law system that can adapt the requirements for innovation driven development should be formed by 2020.

(4) **Promote Industrial Transfers and Upgrades**

The government aims to "Strengthen the shift from investment-led growth to consumption-led growth, strengthen the shift from heavy manufacturing to high-tech manufacturing and services, and strengthen the shift from government-led resource allocation to market-led allocation".

Cut excess production capacity: Several measures were taken to cut excess production capacity. First, shutting down "zombie companies", which refer to companies that are losing money, may have debts, and would find it difficult to survive without subsidies. In addition, a national fund will be created, aiming to enhance the ability of the unemployed to find new jobs, minimizing the negative impacts on economic and social stability. According to the Ministry of Human Resources and Social Security, in 2016, the government worked intensively on cutting the capacity of steel and coal. This involved 1,905 enterprises from 28 provinces. 726,000 workers were reallocated during this process. In 2017, it is estimated that 500,000 workers were reallocated.[8] Second, making the reduction of overcapacity a major indicator for assessing the performance of local governments. According to the State Council's "Opinions on Cutting Down Overcapacity of the Steel Industry to Avoid Issues and Promote Development" in 2016, the central government aimed to cut down the production capacity of raw steel from250 million to 150 million within five years starting from 2016 (The State Council 2016b). Since these policies, the achievements of capacity cutting have become the supplemental indicators of GDP growth rate when evaluating the performance of local governments.

Encourage upgrading of industrial structure: There are two aspects that the Chinese government has been working on to develop the service industry and upgrade industrial structure. On one hand, the government promotes the development of the service industry by reducing administrative restrictions on service industries, such as education, financing, and health. A number of institutional barriers were removed to encourage the private sector to enter the market. On the other hand, the government aims to support the development of productive service industry. The productive service industry has been identified as being crucial to industrial improvements. The productive service industry in developed countries accounted for about 50% of their

[8]News "*Ministry of Human Resources and Social Security: Cutting Down Capacity, 726,000 Workers Replaced in 2016 and 500,000 Replaced in 2017*", http://news.sina.com.cn/o/2017-03-01/doc-ifyazwha3352627.shtml.

GDP, while this same industry in China accounted for only 15% of its GDP. The government promotes manufacturing enterprises in their expansion of their business to support the service field, and encourages the development of these productive services, regarding their orientation towards specialization and a higher value chain.

(5) **Developing the Green Economy**

In 2016, "Green" was emphasized in the 13th Five Year Plan and listed with "Innovation, coordination, openness, sharing" as a key development concept for China. This is the first time that "green" incorporated into the overall plan for development. The measures taken include the followings.

Developing green industries Speeding up the transformation of traditional industries, upgrading industries with "high pollution, high energy consumption, high water consumption, high carbon emission". Eliminating excess capacity in low-grade steel, cement, plate glass, aluminum, coal, etc. Restricting carbon emissions in the electricity, steel, building materials, and chemical industries. Promoting the development of energy-saving and green industries, technologies and equipment. Supporting R&D and the development of new energy industries such as nuclear power, wind power, solar power, biogas, geothermal, shallow geothermal energy etc. (e.g. new energy vehicles, ecological agriculture, and forestry industry). Facilitating the research, design and manufacture of green products.

Improving institutions In recent years, China has promulgated regulations including the "Air Ten" and "Water Ten". A "Soil Ten" regulation is also expected to be introduced in the near future. The passing of China's strictest-ever environment protection law will be a significant stimulus for green industry. The government announced a number of large projects which will bring significant investment to green industries.

Encouraging green consumption Promoting the use of energy-saving and environmentally-friendly engines, vehicles, washing machines, lighting and other products (e.g. By 2020, air conditioners, refrigerators, water heaters, and other energy-saving appliances with energy efficiency ratings above level 2 should have a market share of over 50%). Speeding up infrastructure construction to adapt to energy-saving products (e.g. electric vehicles).

Fostering green trade Stricter environmental inspections of exporters. Domestic environmental standards to be better linked with international environmental standards. Introduction of international green product certification. Promoting the export of products that meet higher environmental standards through lower tax rates, and streamlining procedures for export approval and tax refunds.

Developing green finance Increasing financial support for green products. Increasing the availability of credit and insurance for the export of green products by assigning a higher priority to these projects. Some researchers estimate that in the next five years, China's green industry would generate a demand for investment of more than 2 billion RMB; government funding can only meet 10–15% of the total demand. The rest will be provided by private investment through green bond markets, the stock market, and related investment products.

5.4 The Value and Challenges for China of Regional Economic Integration and Cooperation

Trade, division of labor, and specialization always help an economy to increase its potential growth rate. The Northeast Asian countries have high economic dependency on each other and highly complementary economies, which supports integration. In 2016, the total trade volume among China and the other five Northeast Asian countries was approximately 605 billion USD. It accounted for 16.4% of China's total foreign trade. Since 2010, China has become the biggest trade partner of Russia. The bilateral exchange of goods between China and Russia was 69.5 billion USD in 2016, up 2.2% from 2015. From January to July of 2017, the trade between China and Russia totaled 46.8 billion USD. Compared to same period of last year, that is an increase of 25.5%. Also this year, the five Northeast Asian counties have thus far invested 7.9 billion USD in China. Further regional cooperation in Northeast Asia will continue to open up new avenues for cooperation, realize potential productivity gains, and establish a basis for trade at multiple levels and in multiple areas. The frameworks of the possible CJK FTA, RCEP, the Belt and Road Initiative, AIIB, the Greater Tumen Initiative (GTI), etc. could significantly encourage cooperation, bring down transaction costs, and promote economic growth in China.

(1) **Value of Regional Economic Integration and Cooperation for China**

The Chinese government is very aware of the value of regional economic integration and cooperation. Since 2015, Chinese government has been promoting the Belt and Road Initiative, among several other international trade initiatives. The Belt and Road Initiative is quite promising in terms of potential value created.

First, international cooperation on production capacity especially equipment production capacity should be promoted. The fundamental benefit of trade is to take advantage of specialization, reduce transaction costs and provide of positive incentives for investors in order to improve the allocation of production factors. China has overcapacity in certain industries; it also has advanced technology in fields such as infrastructure, including high speed railways. Encouraging capacity cooperation is an efficient way for China to take advantage of its domestic capacity and technologies. There are very significant infrastructure gaps between developing countries, so increased cooperation in this area would benefit both China and other countries.

Second, trade and economic cooperation can be boosted to bring more opportunities for economic development. China has benefited enormously from the reform and opening up since the end of the 1970s. More free trade and international cooperation have been a constant policy direction for the Chinese government. During this

"New Normal" stage, opening up the market and introducing international competitors will facilitate trade and investment, bring in more FDI, stimulate new technologies, and help China to climb the global value chain. After decades of resource-intensive development, China is now losing access to low-cost resources. Boosting trade and economic cooperation will help China to stabilize access to resources including minerals.

Third, through economic cooperation, China can play an active role in world development. Positively promoting international cooperation is a chance for China to build up a positive international image. China became the world's second largest economy in the world in 2012. It is natural that international society expects that China's large economic weight will translate into international responsibilities and contributions to world development. At this stage, China is still a developing country. To encourage free trade and cooperation among countries is away for China to fulfill the expectations of the international community, play a positive role and accept its responsibilities.

Fourth, this is an opportunity for China to create pressure for domestic reforms. As mentioned above, Chinese domestic reforms are now in a difficult implementation phase ("deep water"), and in this "New Normal" stage of growth, there is now significant resistance from various vested interests in the economy. However, encouraging opening up and cooperation means the Chinese domestic enterprises would be well-positioned in world competition and could integrate into international markets. They need to adapt to international regulations and standards, not just to gain international market share but also to maintain their position in the domestic market. This is a window of opportunity for China to promote innovation, modernize China's industries and push forward domestic reforms.

(2) **Challenges of Regional Economic Integration and Cooperation**

Outflow of domestic demand

The integration of the region and opening up of the Chinese market will enable Chinese residents to purchase goods and services abroad. This could exacerbate existing imbalances between weak demand and overcapacity. Also, exploitation of overseas demand may trap China's industries in their current (low) position on the value chain. The incentives to modernize and upgrade would be weakened.

More trade diversion than trade creation

Northeast Asian countries seem to have different levels of economic links with countries outside the region. China is the biggest trade with non-Northeast-Asian countries. The expansion of trade between China and other countries within the region could cement China in its (low) position in the international value chain. That could lead to a decline in trade between China and countries outside region.

Pressure from domestic interest groups

Increased regional integration would inevitably create winners and losers domestically. China is a large country with significant regional differences and complex interest groups, and pressure from domestic parties should not be ignored nor underestimated. At the central government level, the linking of international industrial capacity is highly valued. But mitigation policies would be necessary during a transition period. The potential economic and political pressures and policy considerations would inevitably appear hand in hand with any move toward a regional FTA.

(3) **Focus: CJK FTA**

A CJK FTA has always been part of China's long-term policy goals in Northeast Asia. A successfully implemented FTA would make the region literally the world's largest economic zone in terms of economic value, population and geographic area. With the establishment of a CJK FTA, the three-member countries could actively participate in the negotiation of international standards, norms and regulations, better represent the opinions and concerns of the region, and seek opportunities to better resolve problems. It definitely would help the development of China in long run. The present CK FTA has achieved remarkable results. However, creating FTA between China and Japan will be more difficult. Between these two countries, there are three obstacles in FTA negotiations. Firstly, for historical and political reasons, the countries have low political trust. Secondly, Japan follows high standard in participation TPP. That sets the threshold of establishment of CJ FTA to be very high. However, it is very hard for China to commit high standard level FTA with the comparatively lower development level. Thirdly, some researchers argue that the inter-dependency of China and Japan is decreasing.[9] In 2014, China made up 20% of Japan's foreign trade, but the rate has been decreasing since then. As global trade in industrial items has grown, the economic structure of Japan gradually adjusted. Many traditional industries have shrunk, and some capacity has moved to Southeast Asia, India and even Europe. The importance of the Chinese market for Japan has decreases. It is also very hard for China invest more in Japan. Looking for common interests between China and Japan, strengthening cooperation and aligning interests, are ways of bringing gains rather than conflict in trade.

Towards setting up of CJK FTA, one suggesting direction is to copy the CK model, which is to establish basis agreement framework among the three countries first and expand the terms within the framework gradually. Fundamentally, even the CJK FTA negotiation has not achieved significant result, the existence of the discussion mechanism would allow the countries to avoid a variety of negative scenarios.

[9]News: "*ZHANG Yunling: Japan should change its 'resist as long as China related' attitude, China should change its 'no need to cooperate with Japan' attitude*", http://www.sohu.com/a/76747430_362017. Published on May 23, 2016. Accessed on September 15, 2017.

5.5 Implications of International Economic Cooperation in Northeast Asia for Northeastern China

(1) Current Economic Situation of Northeastern China

In October 2003, the Chinese central government issued *Several Opinions on Implementation of the Revitalize Strategy in the Northeastern* etc. *Old Industrial Base Area* (CPC Central Committee and the State Council, Document No. 11 of 2003). Statistics shows that from 2003 to 2012, northeastern provinces of China developed very rapidly. In 2003, the GDP of the three northeastern provinces was 1.27 trillion RMB. In 2012, it reached 5.05 trillion RMB, 3.97 times more. The average annual growth rate was 12.5%. In 2006–2008, economic growth in northeast China reached a peak. Jilin province grew by 16% per year for two years, the second fastest growing province in the country. Liaoning province ranked eighth for growth in the same period. During this period, the economic contribution of the Northeast provinces was significant, and was sometimes the largest of the four economic zones in China. The turning point for the northeastern economy came in 2011. GDP growth in that year was 12.6%, which was 1.1% lower than that of year 2010. In 2012, the growth rate dropped to 10.2%. In 2015, the growth rates of Liaoning, Jilin and Heilongjiang fell to 3.2%, 6,5% and 5.7% respectively. Furthermore, in 2016, the rates became –2, 6.3, and 6.2%. All ranked at the bottom of province economy rankings. This situation has attracted much concern.

In general, Northeast China benefited from the fast growth of the Chinese economy as a whole. China's fast growth generated high demand for energy, raw materials, and equipment. In recent years, China's economy has entered the New Normal. The declining economic growth of the entire country has led to insufficient demand for the Northeastern industries, and has exposed distinctive problems in the three provinces. Specifically, the Northeastern provinces of China have particular difficulties in coping with the slowing down of economic growth.

Economic Structure Secondary industry makes up a much larger part of the economy in the Northeast provinces than the national average. Within secondary industry, the proportion of heavy industry is also much higher. In 2014, heavy industry accounted for 70% of secondary industry in China on average, while in Heilongjiang and Liaoning province, the ratio was 80%. Furthermore, the heavy industry of the northeast provinces is concentrated in the steel, coal, oil and other dirty industries, in which China is currently suffering from overcapacity. This problematic industry mix makes the economy vulnerable to cyclical downturns and exogenous shocks, (e.g. declines in commodity prices such as crude oil and grain). If the government decides that overcapacity in these resource-based industries must be cut, then the northeast economy will be affected harshly.

Dominance of SOEs SOEs and the public sector account for more than 30% of the total economy in Liaoning province, more than 40% in Jilin province, and more than 50% in Heilongjiang province. The dominance of SOEs has trapped the northeastern economy in a position which is highly path-dependent, traditional industry-dependent, public sector-dependent, and policy-dependent. The problem in the economy is the lack of incentives for structural adjustment and modernization. It is difficult to shift the northeast from a resource-driven model to a productivity-driven model, let alone an innovation-driven economy. There is a lack of space in which market mechanisms can develop, and the private sector has insufficient soil do develop deep roots. The government in northeastern provinces still plays a major role in resource allocation. This can easily lead to overcapacity. The review and approval procedures in local government are not as flexible as in southern provinces.

Outflow of Labor Resources Data from the National Bureau of Statistics shows that from 2011 to 2015, the annual population growth rates of Heilongjiang, Liaoning and Jilin were –0.144, –0.006 and 0.033% respectively. The national average rate was 0.502% over the same period. These three provinces had the slowest population growth rate in the past five years. The stagnant population is attributed to two reasons. First, the large SOE sector meant that the One Child Policy was more smoothly implemented. Fertility rates are low. Second, as the economy in northeastern China has grown slowly, new job creation and wages have both stayed low. Population migration and the brain drain phenomenon have been significant. As an example, between 2000 and 2011, net emigration of Heilongjiang province was 3.25 million households (Heilongjiang Provincial Academy of Social Sciences 2014). The data does not even include migration without hukou registration. Among the migrants, 70% of them are the younger workers age between 15 and 45. Technical workers and management level workers also account for majority of total migration. This population outflow, has also helped to depress fertility.

Low Rated Business Environment In 2017, Xiamen University published "Assessment Report on Current Business Environment in Shenyang City and the Improvement Strategy Report".[10] The report followed assessment standard adopted in the World Bank's "Doing Business 2017: Equal Opportunity for All". It separately estimated performance of the city on 10 aspects which include setting up enterprises at the start-up stage, construction approval issuing, electricity accessing and property registration at the ground acquisition stage, credit obtaining and minority investor protection at the financing stage, tax paying and international trade convenience at the routine operation stage, and contract fulfilling and bankruptcy management at crisis, etc. According to the result, business environment in Shenyang is scored 61.25, the equivalent to the score of 92th in the rank of 190 economies in the world. In Shenyang city, to gain construction permission for a project, it takes 55 days to finish the process of applying land using permission and permission for the related specialized using.

[10]News *"Assessment Report of Business Environment in Shenyang Published; Finding Out Gap with the Advanced Using 10 Indicators"("沈阳市营商环境评估报告发布 10 大指标对标先进找差距")*, http://www.myzaker.com/article/58cc7dbc1bc8e0ff6500000b/. Published March 18, 2017. Accessed Oct. 20, 2017. News *"Precisely comparing with and targetting the advanced, focusing specific details, and fully speeding up services" ("精准对标先进聚焦具体细节服务全面提速")*, http://www.shenyang.gov.cn/zwgk/system/2017/03/02/010174827.shtml. Published March 2, 2017. Accessed Oct. 10, 2017.

This contains 2 days for project examination, 6 days for construction land using permission, 3 days for air defense examination, 19 days for construction project plan examination, 14 days for design programme investigation, 1 day for energy saving examination, 10 days for original plan expanding investigation. Comparatively, the same procedure in Xiamen takes 8 days in total. The huge gap between 55 days and 8 days shows the difference of business environment of Shenyang and Xiamen, while the business environment in Northeast provinces are generally similar.

(2) **Value of Northeast Asia Cooperation to Northeastern China**

The northeastern provinces of China may benefit significantly from international economic cooperation in Northeast Asia because of their geographical position. The Chinese government has a Northeast Revitalization Plan. The strengthened international cooperation could help the Plan to realize its targets.

First, the northeastern provinces would directly benefit from enhanced Northeast Asia cooperation due to its geographic advantage. Looking ahead the cooperation in Northeast Asia, to push forward economic and trade cooperation under the Belt and Road Initiative would request special effort, however, to strengthen functional cooperation and improve the physical connection among the countries would be a very direct direction under the BRI framework. Throughout China, the provinces that can intermediately connect with South Korea and Japan would be the Northeastern provinces and Shandong. The strengthened economic cooperation under the BRI would directly benefit these provinces as a result.

Second, as geographically the provinces are closer to the Northeast Asia countries, transaction cost of international business actions with Northeast Asia countries in these provinces would be lower than that in other provinces in China. With strengthened economic cooperation in Northeast Asia countries, a large part of foreign capital will flow into these provinces. It would request the provinces to increase transparency and formality of the institutional environment and improve the business environment. A more opened environment and strengthened exposition to international market will also force the provinces to deepen internal reforms.

Third, within the proposal of enhancing Northeast Asia economic cooperation, North Korea issue could be a difficulty but also a potential opportunity. Strengthening interconnection of the Northeast Asia countries under the BRI could bring huge gain to economic development of the DPRK. That provides incentive for the DPRK to participate in the physical interaction projects and deepen reform and opening up in the middle. A opened up DPRK market and developing of the country would bring opportunity for the development of the northeastern provinces in China.

5.6 Conclusion

Since the 1970s, the Chinese economy has experienced several decades of high speed of economic growth and has entered the “new normal” stage in recent years. According to the Nineteenth National Congress of CPC Report, the Chinese economy at this stage is shifting from a high speed growth model to a high quality development model. The Chinese government has implemented a series of reforms to cope with the factors that have contributed to the slowing down of the economy. The reforms look promising but it will take time for the policies to produce effect. The effectiveness of the policies will also need a while to be examined and evaluated.

The Chinese economy is large, and contains the largest market in the world. It has significant spillover effects on other countries. The development of the Chinese economy has brought many opportunities for other countries, and the slowing of the economy has affected other countries, too. More domestic reform and international cooperation will bring new opportunities for the Chinese economy and is in the interest of all Northeast Asian countries. Northeast Asian countries have a well-balanced mix of industries and markets. This means that in the medium term, countries within the region can cooperate and develop hand in hand. In 1997, the Asian Financial Crisis caused severe damage to a number of Asian counties. One important reason for the huge damage is that the export-oriented development strategy that the countries adopted had high dependency on European and northern American markets. The economic growth itself was vulnerable. In the past twenty years, China has gradually become the main export market. South Korea was seriously affected by the Asian Financial Crisis. In 1996, South Korean exports to China were just 8% of total exports. In 2016, this proportion increased to 25%. From a forward-looking perspective, the role that China can play as an important global export market will continue to rise. The vigorous development of China creates a booming export market for other Northeast Asian countries. It will bring opportunities and incentives for economic growth of the countries within the region.

References

Aiyar, Shekhar, Christian Ebeke, and Xiaobo Shao. 2016. *The impact of workforce aging on european productivity*. IMF Working Paper, WP/16/238, https://www.imf.org/external/pubs/ft/wp/2016/wp16238.pdf.

Au, Chun-Chung and J. Vernon Henderson. 2006. How migration restrictions limit agglomeration and productivity in China *Journal of Development Economics* 80(2): 350–388.

Chen, Yanbin and Zhesheng Qiu. 2011. How does housing price affect household saving rate and wealth inequality. *Economic Research Journal* 10: 25–38.

Clarida, Richard. 2010. *The Mean of the New Normal Is an Observation Rarely Realized: Focus Also on the Tails*. PIMCO, July: Global Perspectives.

Congressional Budget Office. 2016. The budget and economic outlook: 2017 to 2026. https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51129-2016outlook.pdf.

Hall, Robert E. and Charles I. Jones. 1999. Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics* 114 (1): 83–116.

He, Dexu and Chaoyang Wang. 2017. Risks and causes of financial sector's high growth in China. *Finance & Trade Economics* 38 (7): 16–32.

Heilongjiang Provincial Academy of Social Sciences. 2014. *Population migration and population mobility research report of Heilongjiang Province*, 267–281. Social Science Literature Press.

Information Office of the State Council, Action Plan on Human Rights. 2016–2020, Published on Sept 29. http://www.scio.gov.cn/zxbd/wz/document/1492804/1492804.htm. Accessed 18 Oct 2017.

Kornai, János. 1980. *Economics of Shortage* [Original: 1.6, in Hungarian, 1980], vol. A-B. Amsterdam: North-Holland.

Lang, Lihua, Mingsheng Zhou, and Jiazhang Zhao. 2017. Speeding up growth and transition of chinese economy and preventing financial risks—review of "Chinese economic growh and circle" forum 2017. *Journal of Economic Studies* 8: 202–208.

Lin, Yifu, Fang Cai, and Zhou Li. 2014. *China's Miracle: Development Strategy and Economic Reform*. Gezhi Press.

National Bureau of Statistics. 2014. *China Statistical Yearbook 2014*. Beijing: China Statistics Press.

National Bureau of Statistics. 2016a. *China Statistical Yearbook 2016*. Beijing: China Statistics Press.

National Bureau of Statistics. 2016b. Monitoring Investigation Report of Migrant Workers 2015, Published on Apr 28. http://www.stats.gov.cn/tjsj/zxfb/201604/t20160428_1349713.html. Accessed 20 Sept 2017.

Naughton, Barry. 2007. *The Chinese Economy: Transitions and Growth*. MIT Press.

Ning, Guangjie, Lei Luo, and Wei Qi. 2016. Study on the contributing factors of property income inequality 4: 116–128.

Solow, Robert M. 1956. A contribution to the theory of economic growth. *The Quarterly Journal of Economics* 70 (1): 65–94.

Song, Jin and Shi Li. 2014. Hukou's impact on labor occupation segmentation. *China Agricultural Economic Review*.

The State Council. 2016a. The Government Work Report of 2016, Published on Mar 5. http://news.xinhuanet.com/fortune/2016-03/05/c_128775704.htm. Accessed 18 Sept 2017.

The State Council. 2016b. Opinions on cutting down overcapacity of steel industry to escape dilemma and achieve development, Feb 1. http://www.gov.cn/zhengce/content/2016-02/04/content_5039353.htm.

The World Bank. 2016a. Live long and prosper: Aging in East Asia and Pacific, The World Bank, Washington, DC. https://openknowledge.worldbank.org/bitstream/handle/10986/23133/9781464804694.pdf.

The World Bank. 2016b. World Development Indicator. http://data.worldbank.org/.

Wang, Dewen and Jin Song. 2012. Understanding the Hukou system through quantifying Hukou thresholds: Methodology and empirical findings. *Background report for World Development Report 2013*. The World Bank.

Wang, Zhe, Ming Zhang, and Shida Liu. 2017. From "tunnel" to "peer"—the evolution process, potential risks and developing direction of Chinese shadow banking system. *International Economic Review* 4: 128–148.

Wu, Jinglian. 2005. *Understanding and Interpreting Chinese Economic Reform*. Texere.

Yan, Yulong and Xiaoyun Li. 2007. Quantified measurement of migrants' contribution to economic growth and its result. In *Statistics Study*, vol. 1.

Zhao, Yaohui. 1997. Labor migration and returns to rural education in China. *American Journal of Agricultural Economics* 79 (4): 1278–1287.

Part II

Chapter 6
The Relationship Between China and India Within the Framework of Asian Economic Integration

Yuyan Zhang

Abstract Regional economic integration is undergoing an unprecedented boom since the 1990s, and the process of Asian economic integration has been accelerating at multiple levels. The development of regional integration is changing the overall pattern of traditional relations between countries and is reshaping the state of the world. Meanwhile, such political and economic factors as conflicts of interest between domestic groups, competition between nation states, and external pressures still restrict the depth and scope of such integration. During the Asian economic integration process, the economic relationship between China and India is attracting greater attention around the world. This process will not only affect the two countries, but will also have great impact on the regional integration process in Asia and on international relations. This paper attempts to throw light on the incentives for and impediments to closer economic relations between the two countries and, and based on these analyses, to outline the prospects for Sino-Indian economic relations.

Keywords China-India relations · Asian economic integration

6.1 Introduction

For numerous historical, political and economic reasons, economic relations between China and India have been at a standstill for a longtime. With the deepening of Asian economic integration and the rapid economic development of both countries, Sino-Indian relations have been put on the global agenda. Strengthened Sino-Indian cooperation would bring a wide range of common benefits to both countries, but nonetheless various factors restrict the two countries in the development of further cooperation. This chapter argues that China and India have ended their long history of self-imposed isolation from each other and that cooperation between the two countries can and should be expected to develop progressively and continually. However, the depth and extent of the cooperation should generally be termed as “being good neighbors”, in that China and India will cooperate at regional and international levels and on specific issues. Generally speaking, the likelihood is not great that, in the short term, China and India will establish a bilateral free-trade area or form an overall strategic alliance.

Y. Zhang, *Reform, Opening-up and China’s Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_6

Regional economic integration is undergoing an unprecedented boom, and according to World Trade Organization (WTO) statistics, by July 2005 the total number of regional trade agreements (RTAs) had exceeded 180 worldwide and, by subtracting some overlapping areas from the total, there are 138 RTAs playing an active role. In Europe, the Maastricht Treaty officially took effect in 1993, creating the European Union (EU), the highest-level institutionalized organization for economic integration so far. On 1 May 2004, the entry of 10 new members expanded the EU to 25-member states. In the Americas, there is the North American Free Trade Agreement (NAFTA) in the North, and the Southern Common Market (Mercosur) and the Andean Community in the South. On the basis of these organizations, preliminary discussions for setting up the Free Trade Area of the Americas (FTAA), encompassing 34 members, have taken place with the vigorous promotion of the United States. Since the late 1990s, the process of Asian economic integration has also increasingly developed, with the Association of South-East Asian Nations (ASEAN) being the central hub, and ASEAN+1 and ASEAN+3 being two main supporting pillars.

The process of economic integration is one of continuous reduction of transaction costs between members in order to bring about increased gains from trade through the progressive expansion of the scope and scale of the market, and to achieve other non-trade benefits through the unification and extension of institutions. Although increased costs may be brought about by increased numbers of members, 'free-riding' problems, and greater distances in the process of global economic integration, regional economic integration can bring about the benefits of integration in an even more concentrated way. For instance, among constituent members, even closer economic connections can be established, more trade generated and concomitant benefits obtained. Furthermore, the bargaining strength of the collective members can be enhanced in the negotiation of international rules as in the WTO. Since the 1990s, regional economic integration has been prospering worldwide. Meanwhile, such political and economic factors as conflicts of interest between domestic groups, competition between nation states, and external pressures still restrict the depth and scope of such integration. The development of regional integration is changing the overall pattern of traditional relations between countries and is reshaping the state of the world today.

Asia is a latecomer in regional integration. However, its integration has been accelerating at multiple levels. During this process, the economic relationship between China and India—two countries that have experienced similar aftereffects of colonialism in their history, that are opening up their economies through similar reforms at present, and that share long geographical borders—is attracting greater attention around the world. This process will not only affect the two countries themselves, but will also have great impact on the regional integration process in Asia and even on future international relations. This chapter attempts to cast light on the incentives for and impediments to closer economic relations between the two countries and, on this basis, to outline the prospects for Sino-Indian economic relations.

The remainder of the chapter is organized as follows. The next section discusses the benefits and costs of economic integration as well as the progress of integration in Asia. The history and current status of Sino-Indian relations is then introduced, before the incentives for and impediments to Sino-Indian cooperation in the new context are analyzed. Finally, the prospects for Sino-Indian relations are considered in the concluding section.

6.2 Development of Economic Integration in Asia

Economic integration is the collective action that allows the enlargement of the scale and scope of the market, with the concomitant unification and extension of rules and institutions. The result is increasingly close economic connections between members.

1. **Benefits and costs of economic integration**

There are many potential benefits of integration generated from the enlargement of the scale of the market and unification of the rules and institutions. As far as the scale and scope of the market-that is, the depth and extent of exchange–is concerned, economic integration helps in realizing potential gains from trade based on each member's respective advantages; promoting members' economic growth through deepening the division of labor; and enabling enterprises to realize economies of scale.

As far as the unification and extension of internal rules and institutions among members is concerned, economic integration is firstly conducive to decreased transaction costs.[1] Market segmentation results in various transaction costs, which include tariff, non-tariff barriers, non-free movement of capital and labor, currency-conversion risks, and other costs arising from the differences in rules and extent of enforcement among members. Economic integration can internalize external transactions, thus hugely decreasing transaction costs. Speaking from an even broader perspective of institutions (Zhang 1992), the unification of the 'rules of the game' contributes to providing information to each member, stabilizing expectations and encouraging members to cooperate. A good example in this respect is the effect of integration on national security. Because integration signals that the country will adhere to opening-up and reform, other countries will have greater confidence in that country.[2]

Global economic integration is the realization of economic integration on a worldwide scale, while regional integration is confined to a smaller geographical area. While global economic integration is still moving ahead, regional economic integration, being an alternative and supplement to globalization, has also been flourishing

[1]Here transaction costs refer to all kinds of non-production costs. For further discussion of transaction costs, see Coase (1937).

[2]Substantial empirical evidence exists to support the proposition that economic integration reduce conflicts between nations. See, for instance, Polacheck (1980). By utilizing data from 30 countries in the 1958–67 period, Polacheck showed that a doubling of trade between two countries led to a 20% decline in the frequency of hostilities.

since the 1990s, changing the traditional relations between countries, and reshaping the state of the world today.

The reasons for the rapid development of regional integration include, first of all, the costs that global economic integration entails. The costs of economic globalization mainly find expression in three aspects: (a) any integration has an optimal scale on which marginal benefits equal marginal costs. On the one hand, integration reduces the transaction costs resulting from market segmentation, while on the other hand the expansion of the scale of integration also increases internal transaction costs.[3]Thus, the development of integration is often confined within a certain scale. (b) In the supply of global public goods there are 'free-riding' problems which increase the cost of global economic integration (Olson 1965). However, being in the nature of 'club goods', regional economic integration can partially overcome such problems through providing exclusive club goods. (c) Lastly, there is the cost generated from greater distances. Although technological progress hugely shortens space-time distances, the problem of distance does not fully disappear, and thus transportation costs and costs arising from cultural difference are still limiting the division of labor. Due to the fact that regional economic integration has relatively low transportation and cultural costs, it can be achieved relatively easily compared to global integration.

Secondly, regional economic integration can bring member countries more concentrated regional benefits compared to non-member countries. Even closer economic connections can be established among member countries through eliminating tariff barriers and lowering non-tariff barriers; more trade and a greater variety of trade benefits can be obtained; and, furthermore, the strength of collective bargaining can be enhanced in the negotiation of international rules such as with the WTO. As far as the formulation of international rules is concerned, currently the 'rules of the game' for globalization are mainly under the control of the developed countries. The relative development of emerging markets makes the establishment of new rules necessary. In order to increase bargaining strength, the major powers strive to consolidate and enlarge their sphere of influence, establishing rules that benefit themselves within the region and hinder competition outside the region. In this process, some countries take the lead in forming economic integration organizations, while other countries respond by doing likewise due to their fear of being excluded from the benefits.

Thirdly, some forms of regional integration are generated in special historical contexts, featuring path dependency. The origin of the European Coal and Steel Community (ECSC) in 1951 was fundamentally political-namely, a desire to prevent yet another European war between France and Germany-while the establishment of ASEAN in 1967 was a product of the Cold War. Since then, these non-economic organizations have developed into economic integration organizations- that is to say, there has been a 'spillover effect' from political cooperation to economic cooperation.

---

[3]This is similar to Ronald Coase's Theory of the Firm. The boundary of economic integration is dependent on the contrast between the reduced transaction costs generated from the internalization of transactions and the increased costs in scaling-up as a result. See Coase (1937).

Despite the benefits of integration, it is worth noting that the development of economic integration in reality does not always run smoothly. There are various political and economic factors that hamper the development of economic integration.

Domestically speaking, there are conflicts of interest among groups. Since the benefits of free trade are not distributed equally, some groups gain and some groups lose, absolutely or relatively. As a result, the groups that benefit most are often those with the greatest enthusiasm to push liberalization further, such as multinationals and trade sectors. Those interest groups that lose out may hamper the process of integration. The struggle among domestic interest groups often brings high political costs to integration.

Internationally, there is competition among nation-states. To some extent, economic integration requires that member countries cede part of their sovereignty in order to integrate. However, the main structural unit in today's international community is still the nation-state, and globalization does not eliminate such national interests. To a large extent, nation-states strengthen their national interests by virtue of globalization, and they have their own identities, which gives them a distinct role in the global arena. Thus, competition between nation-states also hampers the realization of the common interests deriving from integration.

Moreover, external pressures also have an impact on the degree of integration. Positively speaking, a common sense of identity can be strengthened within a regional grouping in order to protect its members' common interests when there is considerable external pressure. The larger such external pressure, the greater the motivation to integrate, and conversely. Negatively speaking, integration among relatively weak or competing countries may be vulnerable to the external pressure from the big powers.

To a large extent, the process of regional integration is the process of achieving common benefits through continuously overcoming political and economic barriers.

2. **Development of Asian economic integration**

Compared with Europe and the Americas, Asia[4] is a latecomer in regional economic integration. The importance of sovereignty resulting from a history of colonialism and the Cold War impeded the development of regional integration. In recent years, however, the aforesaid factors promoting regional integration have also manifested themselves in Asia. With the increasing opportunity cost of not being integrated, Asia rapidly strengthened economic ties and established free-trade areas. Asia, as a whole, is forming its own identity in parallel with those of the Americas and Europe.

Currently, East Asia has the highest degree of regional integration in Asia. After the Japan-led 'flying-geese' model of production,[5] East Asia is forming new regional

[4]Asia here specifically refers to the East Asian countries of China, Japan and South Korea: the ASEAN/AFTA 10 countries of Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam: the South Asian Association for Regional Cooperation (SAARC) countries of Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka; and the Shanghai Cooperation Organization member countries of China, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, and the Asian parts of Russia.

[5]For detailed discussion of the 'flying-geese' model, see Kojima (2000).

production chains and networks based on a horizontal division of labor, with China at the core of assembly work, and the final products being exported to the global market. This production chain has increased the intra-regional trade in components and parts, especially with information technology (IT) products. What is more, in recent years, with the increase of domestic demand in East Asian countries, intra-regional demand has risen still further for products other than IT goods, making for even more mature integration in East Asia. According to Kawai (2005), by 2003, intra-regional trade accounted for 54% of total trade in East Asia, while intra-regional trade made up 64.4% of EU trade and 46% of NAFTA trade. Measured by the trade-intensity index, East Asia's intra-regional trade intensity index was 2.2, which was higher than the EU figure of 1.7 but slightly lower than the NAFTA figure of 2.5. Both sets of figures would indicate that the degree of trade integration is relatively high in East Asia.[6]

Compared with East Asia, the degree of integration in South Asia is much more moderate; intra-regional trade accounts for only 4% of its total exports (Table 6.1). The main reason is that India, as a great power in South Asia, has very limited trade with other countries in the region.

In the institutional construction of economic integration, unlike in the Americas and Europe where regional integration was dominated by giant powers or core countries, Asia -due to the lack of a power with an absolute advantage-is attempting to ultimately build widespread regional integration through multilevel integration, including at regional, subregional and bilateral levels. At the regional level of cooperation proposed by India in 2004, Asia has been considering the establishment of an Asian Economic Community similar to the EU. Bilateral free-trade agreements are also thriving (Table 6.2). At the subregional level, some integration organizations have been established in Southeast Asia, East Asia and South Asia; these subregions would then be combined into a bigger Asian integration 'road map'.

In Southeast Asia, the ASEAN Free Trade Area (AFTA) has been in effect among the original five ASEAN members since January 2002. It is expected to eliminate tariffs and realize free trade within the entire region by 2015. To move further, in 2003 ASEAN leaders agreed to establish an ASEAN Economic Community, a single market and production base with a free flow of goods, services, investment, capital and skilled labor, by 2020. In East Asia, ASEAN, as the hub, incorporated China, Japan and South Korea to form ASEAN+3 and (the original) ASEAN+1, thus forming two parallel mechanisms for integration. ASEAN+3 was institutionalized in 1997, and since then cooperation on trade, finance, agricultural, information and energy cooperation has been strengthened. In 2004, the ASEAN summit proposed the establishment of an East Asian Economic Community (EAEC), signaling a new

[6]Share of trade alone does not provide a sufficient indication of the extent to which the home country regards its trading partners as being important in relation to that country's trade with the rest of the world. For this reason, the trade intensity index is considered a more useful tool for measuring bilateral trade. It is calculated as *[Xii/ ({Xiw + Xwi)/2}]/ [{(Xiw + Xwi)/2}/Xww]* where *Xww* is total world exports. An index rating that is greater (or less)than one unit indicates that the trade flow is larger (or smaller)than would be expected, given the region's importance In world trade-i.e., the index takes account of the region's relative size in world trade and provides a more accurate measure of trade integration within a region. See Kawai (2005).

Table 6.1 Exports of trade groupings intra-regional trade as of total exports and total 2002 exports in millions of US$

Trade grouping	Date of creation	1970	1980	1990	2002	Total exports 2002
Americas						
Andean Community	1996	1.8	3.8	4.1	10.6	5,673
Central American Common Market	1960	26.0	24.4	15.3	11.5	2,598
Caribbean Community	1973	4.2	5.3	8.1	13.5	1,276
Free Trade Area of the Americas	1994	45.0	43.4	46.6	60.7	788,114
Latin American Integration Association	1980	9.9	13.9	11.6	13.6	43,094
Southern Common Market	1994	9.4	11.6	8.9	17.7	16,544
North American Free Trade Agreement	1992	36.0	33.6	41.4	56.0	612,965
Asia						
Association of South East Asian Nations	1967	22.4	17.4	19.0	22.8	94,760
Bangkok Agreement	1975	2.8	1.7	1.6	7.4	44,470
South Asian Association for Regional Cooperation	1985	3.2	4.8	3.2	3.9	2,697
Europe						
European Community (EU)	1957 (1992)	59.5	60.8	65.9	61.0	1,469,856

Source UNCTAD data

stage of East Asian cooperation. At the same time, ASEAN has conducted separate bilateral negotiations with China, Japan and South Korea within the Framework of ASEAN+1. China signed the Framework Agreement on Comprehensive Economic Cooperation with ASEAN in 2002, aimed at completing a free-trade agreement (FTA) by 2010 for the ASEAN-6 members and by 2015 for the CLMV countries (Cambodia, Laos, Myanmar and Vietnam). In order to accelerate the process, an 'early harvest' system has been implemented since 2004, involving the rapid reduction of tariffs on a number of products, mainly agricultural. Then Japan and ASEAN agreed on an economic partnership agreement (EPA) with a view to achieving free trade by 2012 (including allowing an additional five years for the CLMV countries), with due consideration given to the level of economic development and the sensitivity of various sectors within each country. South Korea is also considering similar negotiations with ASEAN, aiming at achieving a high level of trade liberalization, with at least 80% of products having zero tariffs by 2009, and with consideration

Table 6.2 Recently established or proposed FTAS in Asia, 1999–2004

Country/Grouping	Partners	Status of agreement, 2004	Country/Grouping	Partners	Status of agreement, 2004
ASEAN	China	Framework agreement signed	**Malaysia**	China	Under negotiation
	India	Framework agreement signed		Japan	Under negotiation
	Japan	Framework agreement signed		USA	Proposed
	South Korea	Under study			
	USA (TIFA)	Under negotiation			
	CER*	Under study			
	ASEAN+3	Under study			
	EU	Proposed			
China (mainland)	ASEAN	Agreement signed	**Philippines**	China	Under negotiation
	Australia	Proposed		Japan	Under negotiation
	India	Under study		USA	Proposed
	Hong Kong	Agreement signed			
	Macau	Proposed			
	Malaysia	Under negotiation			
	New Zealand	Proposed			
	Thailand	Under negotiation			
	Singapore	Proposed			
India	ASEAN	Framework agreement signed	**Singapore**	Australia	Agreement in force
	China	Proposed		Canada	Under negotiation
	South Korea	Proposed		China	Proposed

(continued)

Table 6.2 (continued)

Country/Grouping	Partners	Status of agreement, 2004	Country/Grouping	Partners	Status of agreement, 2004
	Singapore	Under negotiation		Egypt	Proposed
	Sri Lanka	Agreement in force		EFTA	Agreement in force
	Thailand	Agreement in force		EU	Proposed (rejected by EU)
	BIMSTEC	Framework agreement signed		India	Under negotiation
	SACU	Proposed		Japan	Agreement in force
	COMESA	Proposed		Jordan	Agreement in force
	Southern Common Market	Framework agreement signed		Korea	Under negotiation
	Mauritius	Under negotiation		Mexico	Under negotiation
	GCC	Proposed		New Zealand	Agreement in force
	Chile	Proposed		Sri Lanka	Under negotiation
	SAARC/SAFTA	Agreement in force		Pakistan	Proposed
				USA	Agreement in force
				Panama	Proposed
				Pacific Three (P-3) (New Zealand, Singapore and Chile)	Under negotiation
Japan	ASEAN	Framework agreement signed	**Thailand**	Australia	Agreement signed
				Bahrain	Agreement signed

(continued)

Table 6.2 (continued)

Country/Grouping	Partners	Status of agreement, 2004	Country/Grouping	Partners	Status of agreement, 2004
	Canada	Proposed		China	Agreement signed
	Chile	Under study		India	Agreement in force
	Korea	Under study		Japan	Under negotiation
	Malaysia	Under negotiation		Korea	Under study
	Mexico	Under negotiation		New Zealand	Under study
	Philippines	Under negotiation		Peru	Agreement signed
	Singapore	Agreement in force		South Africa	Under study
	Thailand	Under negotiation		USA	Under negotiation
	Australia	proposed			
Korea	Australia	Under study			
	China	Under study			
	Chile	Agreement signed			
	Japan	Under study			
	Mexico	Under negotiation			
	Peru	Proposed			
	New Zealand	Under study			
	Singapore	Under negotiation			
	Thailand	Under study			
	USA	Under negotiation			

*CER refers to Australia—New Zealand Closer Economic Relation
Source Rajan and Sen (2004)

for special and differential treatment and additional flexibility for the newer ASEAN member countries.

In South Asia in 2004, the SAARC proposed the establishment of a free-trade area (SAFTA) by 2006 and the lowering of tariff duties to 0–5% in seven to ten years.

It is worth mentioning that the Shanghai Cooperation Organization, which connects China and five Central Asian countries, has also started to move into economic cooperation from its initial security and counter-terrorism cooperation. In September 2003, these countries signed an economic cooperation outline, setting out the three stage development objectives of moving from facilitating trade and investment to the free flow of trade, services and investment by 2020. In July 2005, India, Pakistan and Iran were offered observer positions, bringing the organization one step closer toward accepting them as member countries.

In addition to the abovementioned, other subregional cooperation efforts in Asia include the Greater Mekong Subregion, Tumen River Area Development Programme, and Yellow Sea Rim Economic Region.

Asian regional integration still has a long way to go but such integration is following a generalized and continuous trend. Its significance is to offer a new path for regional cooperation. Furthermore, if it proves feasible, a new Asia, with more than half the world's population, nearly a quarter of global GDP, and more than three-fifths the total foreign reserves of the world, will have a profound impact on the future shape of the world.

In the process of Asian integration, there is currently uneven development between East Asia and South Asia, with the former being the fastest-developing and the later lagging behind, relatively speaking. Nevertheless, India is now actively joining the East Asian integration process. India adopted the 'Looking East' policy in 1991. Along with the rapid growth of their economies, the economic connections between India and East Asia have increasingly expanded. India's overall trade in merchandise with East Asia more than doubled from aboutUS$13 billion in 1997–98 to about US$27 billion in 2003-04, registering a compound annual growth rate of 13%. In 2003-04, bilateral trade in merchandise between India and ASEAN accounted for 9.3% of India's foreign trade, while that between India and ASEAN+3 accounted for 19.9%; the corresponding bilateral trade between India and the EU represented 19%, while that with NAFTA accounted for 12.9% (Ministry of Finance of India 2005).

In order to further increase and facilitate trade between India and ASEAN, a Framework Agreement on establishing an FTA between ASEAN and India was signed in 2003, and negotiations have begun. The full implementation of the ASEAN-India FTA is expected by 2011 for the ASEAN-5 and by 2016 for Philippines and the CLMV countries. The participation of the India-ASEAN FTA will change ASEAN+3 into ASEAN + 3 + 1 or JACIK (Japan, ASEAN, China, India and Korea).

6.3 History and Status of Economic Relations Between China and India

In the process of Asian regional integration, the development of Sino-Indian relations has attracted special attention around the world. China and India are two big neighboring countries, separated by along land border. They are symbolized by the dragon and the elephant. China is situated in the assembly centre of East Asia and now has a market with enormous demand, while India is the eminent regional power in South Asia. The development of Sino-Indian relations will not only have a great impact on the Asian integration process in connecting East Asia and South Asia but also, to a greater or lesser extent, on the emerging pattern of the world. With the purpose of better understanding the direction of Sino-Indian relations and how far they could go, it is essential to look at the history and current status of economic relations between the two countries first.

1. **Economic relations between China and India before the 1990s**

Both China and India are great ancient countries and civilizations along history, representing a centuries-old traditional friendship. The famous Eastern in Dynasty monk Faxian (334–420 AD) and the well-known Tang Dynasty monk Xuanzang (600–660 AD) left a legacy of many oft-told stories demonstrating the friendship between China and India. In the Ming Dynasty, Zheng He (1371–1435) sailed overseas seven times, binging China and India into the closest contact of any period in their history. However, in the past few decades, due to the paths chosen for economic development and territorial disputes, economic exchanges between China and India were basically left at a standstill.

With regard to the respective paths they chose to develop their economies, China was isolated from the world economic system by the West after the start of the Cold War. Its own ideology also tended to seclude the country from the outside world. China developed through self-reliance and limited trade within the socialist camp's system. Meanwhile, having just gained independence from colonialism during the same period, India endeavored to overtake the developed countries through a state-directed and import-substituting industrial development strategy. Although the respective starting points of the two countries to formulate economic policy were different, they ended with the same overall results. In their closed domestic markets, these two countries both set up relatively integrated industrial systems but, due to the overprotection of their respective domestic industries, they both had problems with inefficiency and a lack of international competitiveness. This development path meant that both China and India experienced slow development in overall foreign trade, not to mention trade between the two countries themselves. They could neither utilize international demand to promote domestic production and industrial upgrading nor had they any means to achieve the optimal allocation of resources and improve economic efficiency by participating in the international division of labor.

After China began to implement its reform and opening-up policies in 1978, accentuating differences in economic development began to emerge between China and India. Like other East Asian countries, China adopted an export-oriented path to develop its economy by actively participating in and exploiting the international division of labor, based on its competitive advantage of low-cost labor. During the two decades of reform, China has been aware of the need to open boldly to other civilizations including those of the capitalist world, to narrow the gap between China and the developed countries. After 1992 when Deng Xiaoping made his famous speech during his inspection tour of South China, China's economic reform and opening-up entered a new era. Currently, China is the world's third-largest trading country. In 2004, its foreign trade was worth US$1,154.8 billion, of which exports were US$593.4 billion and imports US$561.4 billion. Foreign trade contributed to more than a quarter of economic growth and became an engine of economic growth. By the end of 2004, China had cumulatively attracted US$1,096.6 billion in foreign direct investment (FDI) and actually utilized US$562.1 billion. China has been ranked first among the developing countries for the utilization of FDI for 12 successive years. With foreign investment and trade promoting each other, China now plays an important role in the worldwide chain of production, and its rapidly growing domestic market is one of the engines of global economic growth. The Chinese economy is integrated into a wider world.

By contrast, the Indian economy was still in a relatively closed condition until recent times. Even though India had implemented piecemeal privatization and opening-up measures in the 1980s, real systematic reform did not start until the 1990s.

These different development paths resulted in great differences emerging in the opening-up between these two countries. Measured from every angle, China is significantly more open than India. By 2005, China's average tariff rate had reached as low as 9%, while this figure remained as high as 30% in India. In 2004, China's total trade constituted 70% of GDP, while India's trade was 30% of its GDP. Furthermore, in 2004, China attracted US$60.6 billion in FDI, 9.4% of the worlds FDI inflow, while India attracted US$5.3 billion, 0.8% of the world FDI inflow (United Nations Conference on Trade and Development, UNCTAD 2005). During the period in which China rapidly developed its trade with the world, bilateral trade between China and India remained undeveloped.

The border disputes between China and India also cast a negative shadow on the development of economic relations between the two countries. For historical reasons, there has been no officially defined border between China and India, giving rise to territorial disputes covering a large area. In 1962, an unpleasant border war broke out between the two countries, which restricted the development of Sino-Indian relations to a large extent and made these two countries keep a watchful eye on each other even long after the war itself, given that the border issue is related to each country's fundamental interests and national sentiments.

For the aforementioned reasons, China and India have had highly limited economic exchanges for a long time. Official trade between China and India started in 1951, and the governments of the two countries signed a trade agreement in October 1954. However, for decades the scale of bilateral trade was very small and developed slowly. From 1950 to 1962 bilateral trade was worth only US$260 million, and then due to the border war was interrupted for 14 years until 1976. When China and India resumed diplomatic relations, bilateral trade was restored. In August 1984 the two governments signed a new trade agreement, and since 1986 seven annual trade agreements have been signed. By the 1990s, China and India had opened several entrepots in border regions, including the restored trade between Plan in China's Tibet Autonomous Region and Gunji in the India state of Uttar Pradesh in 1992, and the newly opened trade between Jiuba in China's Tibet and Nangal in the Indian state of Himachal Pradesh in 1994. On the whole, trade between China and India was rather small before the 1990s and remained so even during the early 1990s.

2. **Economic relations between China and India since the 1990s**

The rapid development of India's economy and trade has brought Sino-Indian economic relations to a new phase. A decade after China's opening-up, India also started its systematic economic reform, embracing deregulation, marketization and globalization. During the past decade, its average annual GDP growth reached 6.5%, its trade openness increased from 15 to 30%, and tariff and non-tariff barriers dropped from 128 to 30%. In 2004, India's foreign trade amounted to US$188.1 billion. Of this, exports were worth US$79.8 billion, up 24.4% from the year before; and imports were worth US$108.2 billion, up 35.6%. In August 2004, India announced its *National Foreign Trade Policy 2004–2009* (Department of Commerce of India 2004) and laid down the ambitious target of achieving an export growth rate that would enable India to account for 1.5% of world trade by 2009. Furthermore, India also actively adopted measures to attract FDI, and has now become one of the most popular investment destinations along with the United States and China. Foreign investment mainly focuses on such sectors as power, which occupies 26.8% of total FDI; pharmaceuticals, 10.6%; and consultancy services, 8.0%. Usually the most competitive sectors are also those that draw the most investment, and such investment activities could further increase India's export capabilities and external competitiveness.

Sino-Indian economic relations have been accelerating since the end of the 1990s, as represented in trade, investment, technological cooperation and other exchanges and communications, as well as in other areas.

From 1999 to 2004, bilateral trade increased from US$1.99 billion to US$13.6 billion (Fig. 6.1). China's exports to India grew fromUS$1.16 billion to US$5.93 billion, and imports grew from US$830 million to US$7.68 billion. The robust growth continued in 2005 when, from January to July, trade between the two countries reached US$10.76 billion, a year-on-year rise of 39.8%. Of this trade, China's exports to India were worth US$4.67 billion, a year-on-year increase of 58.8%, and imports from India were worth US$6.09 billion, a year-on-year rise of 28.1% (Ministry of Commerce, China 2005). Bilateral trade focuses on natural resources and energy, electrical machinery, pharmaceuticals, organic chemicals, IT products, and so on; India mainly imported electrical machinery, organic chemicals and silk from China, while China mainly imported iron ore, steel, plastics and organic chemical products from India.

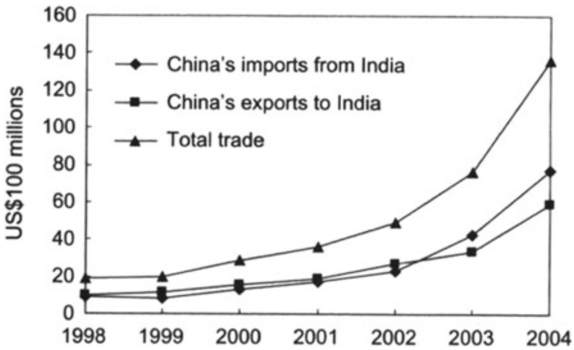

Fig. 6.1 Trade-development between China and India, 1998–2004. *Source* MOFCOM (Ministry of Commerce of China), China

Sino-Indian investment is also thriving. Indian companies come to China not only because of the market's huge potential but also for the infrastructure facilities and preferential policies and regulations which make Indian companies competitive worldwide. The main reason for Chinese enterprises investing in India is to avoid India's high trade barriers.

By April 2005, India had signed up to US$235 million worth of FDI agreements in China (India Today 2005). The investment is mainly in high-tech and knowledge-intensive industries such as software, pharmaceuticals and the biotechnology industries, and in car parts and low-added-value manufacturing industries such as diamond processing, the production of fireproof and packaging materials, and so on. In terms of diamond enterprises alone, 19 enterprises have entered China, scattered over several areas such as Shanghai, Shandong, Guangzhou, and others.

By the end of 2004, China had invested US$22.8 million aggregate in India, focused mainly on IT, natural resources and white goods.

In addition to trade and investment, the relations between the two countries have also advanced comprehensively in services, tourisms, scientific and technological cooperation, the movement of labor and border negotiations, for example. With regard to services, there is a lack of accurate data, but some examples can give a general idea of their status. At present, four major Indian software enterprises—Tata Consultancy Services, Infosys Technologies, Wipro Technologies, and Satyam Computer Services-have all invested in China. Of these, Infosys Technologies has established a software development center in China. In 2005, Tata Consultancy Services was selected as an IT partner by the China National Development and Reform Commission to offer IT-related services. And the long-term Chinese IT training market has basically been monopolized by two Indian-Chinese joint venture companies, namely the NIIT (National Institute of Information Technology of India) Information Technology School and Aptech Beida Jade Bird Information Technology Co Ltd. Concerning tourism, the India-China Tourism Agreement signed in 2002 opened the door to tourism between the two countries. The two countries are preparing to open new flight routes and increase the number of flights to each other's country. In the field of scientific and technological cooperation, India's technology for the peaceful use of atomic energy, agriculture, genetic engineering, personal computer (PC) technologies, and particularly software development, are of interest for China. China's small-scale blast furnace, mini-hydropower, household appliance, space development and other technologies also have interested India. The two countries have already signed cooperation agreements and/or memoranda of cooperation and understanding in most of these fields, and positive results have been achieved. Several joint ventures involving large amounts of investment have been put into operation, and the governments and business communities are further exploring ways and approaches to realize further cooperation. In addition, the two countries also signed cooperation memoranda for personnel exchanges and labor cooperation. Regarding the border dispute, the premiers of the two countries appointed special representatives in June 2003 to explore ways to solve the border problem, and through five rounds of contacts the two countries have reached a consensus on guidelines for solving the problems. The sixth round of negotiations, held in September 2005, brought the negotiations to a substantial phase.

With the premiers of the two countries exchanging visits in 2003 and 2005, Sino-Indian relations have been comprehensively upgraded, symbolizing that China and India have entered a new phase of cooperation. The rise of both China and India will be one of the significant themes and phenomena of the twenty-first century. As Asian economic integration deepens and the economies of both countries develop rapidly, new conditions are being created for reshaping Sino-Indian relations. In addition, discussion of Sino-Indian relations has been put on the global agenda. Looking ahead, the cooperation and strengthened economic relations between the two countries mean a lot of common benefits for both countries. However, there are also a series of impediments to further cooperation.

6.4 Incentives for Sino-Indian Cooperation

China and India have greater and greater mutual interests and mutual gains that can be realized through Sino-Indian cooperation include the following:

- Firstly, broader gains from trade shall be obtained through enlargement of the scope and scale of their common markets. Although bilateral trade and investment are rapidly developing, they are presently insignificant considering the economic scale of the two countries (Fig. 6.2). In 2004, foreign trade with India accounted for just 1.2% of China's total foreign trade, of which exports accounted for 1.0% of China's total exports, and imports accounted for 1.4% of total imports (Ministry of Commerce, China 2005). According to statistics from India (Department of Commerce, India 2005), its foreign trade with China in 2004 accounted for just 5% of its overall foreign trade, of which exports accounted for 4.6% and imports accounted for 5.2%. FDI is also very small between China and India. China's investment in India is less than 1% of its overall foreign investment. Although India had a slightly higher investment percentage in China over the last two years, amounting to between 3 and 6%, India's foreign investment scale is fundamentally

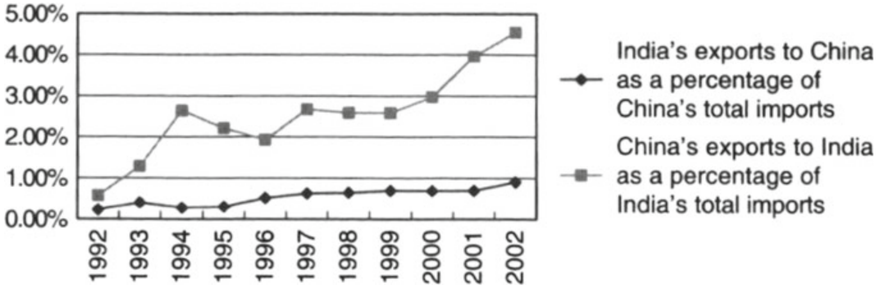

Fig. 6.2 India's and China's exports in proportion to the others imports. *Source* Calculated from the UN COMTRADE database

smaller than that of China. In 2004, India's total foreign investment stock was just one-fifth that of China.

- There is thus a lot of room for China and India to enlarge the scale of their bilateral trade. They are the two largest developing countries in the world, India having a population of 1.07 billion, and China having a population of more than 1.3 billion. Added together, they account for one-third of the total world population, and 6% of the world's total GDP. Moreover, they have also been enjoying the fastest economic growth among the world's larger economies. From 1980 to 2004, China's average annual GDP reached 9.2%, while since the beginning of economic reform in the 1990s India's annual growth rate has reached 6.5% and, in recent years, its growth figures even reached 7–8%. Although both countries' GDP per capita is still low, the potential scale of the market in the two countries is huge, based on their large populations and GDP and their sustained rates of economic growth, especially when world markets are otherwise becoming saturated in developed countries. China's and India's opening of their respective domestic markets to each other will bring an exponential increase in trade and investment opportunities, thus enhancing the tremendous gains from trade for both countries.
- Secondly, rapid economic development may be derived from deepening the international division of labor. Although the level of economic development is still low in both countries, the economic structures of China and India complement each other to a relatively strong degree. The reasons for this lie in the fact that both countries have their own absolute or relative advantages in various factors and products, and that economic reform and opening-up was initiated earlier and more broadly in China than in India.
- According to the World Bank (2005), agriculture had a 15% share of China's GDP, industry 5.2%, and services 33% in 2003, while agriculture accounted for 22% of India's GDP, industry and services respectively accounted for 27 and 51% of that.
- Compared with India, China is more competitive in manufacturing, with a better-trained and low-cost workforce. Its manufacturing sector accounts for 39% of China's GDP and is mainly aimed at exporting, making China known as a world

assembly center, the 'workshop of the world'. As well as conventional labor-intensive consumer goods, China' s competitiveness has become increasingly stronger in electrical and electronic products assembly in recent years. In contrast, India's productivity in the manufacturing industry is lower than that in China. The estimates of Gopalan (2001) in relation to labor productivity in manufacturing suggest that, except for petroleum products and non-electrical machinery, the productivity of a Chinese worker is higher than that of an Indian worker by anywhere from 30 to 180%, depending on the product.

- India's competitiveness is primarily reflected in high-tech industries, including software and IT services, and India regards the software industry as a key part of its national development strategy. Through increased investment in higher education and tax preferences, the software industry is growing at an annual rate of more than 26%. In 2003, the exports of the software industry were worth US$9.5 billion, accounting for 20% of India's overall exports. Now, India's share of world service exports has reached 1.5%. Of this, the great majority comprises information technology and related services. Due to its competitiveness in IT services, India is becoming the 'back-office of the world' serving more and more European and US enterprises.
- In addition to information technology, India has also shown competitive advantages in pharmaceuticals, biotechnology and some other high-tech products. Indian Chamber of Commerce and Industry (ICCD) research shows that the productivity of India's pharmaceutical industry has grown by 10% annually during the past decade, compared with 7% for the world as a whole. Today the scale of India's pharmaceutical industry ranks fourth in the world, and its pharmaceutical output ranks 13th. By 2007, the production potential of India's pharmaceutical industry is expected to reach US$48 billion (India Today 2005).
- In contrast, China's service sector, especially the software and IT service, lags behind, relatively speaking. In 2003 commercial services comprised 10.6% of total trade in China, while the figure for India was 26.9%. Furthermore, the technological content of services is low in China. Financial and insurance services, and other commercial services, including computer, information and communications services, comprise 45.4% of total commercial services in China, while the figure is 76.6% in India (calculated from WB 2005).
- China's advantages in industrial and mechanical equipment and processing, and India's advantages in software and the high-tech industry, create complementary spaces for the two countries to cooperate in vertical and horizontal specialization
- Vertical specialization has already emerged in these two countries and is continually deepening and expanding. From 1999 to 2002, primary products as a proportion of China's total exports to India decreased from 33.1 to 19.5%. In the corresponding period, manufactured products increased from 66.9 to 80.5%, of which machinery and transport equipment exports accounted for 35% of manufactured product exports. In recent years, with high economic growth, China's imports have expanded rapidly. Indian exporters find ever-increasing opportunities in China's intermediate input market, and exports of dye, primary plastics, steel and other metals, and pulp have increased rapidly.

- Horizontal specialization has also been growing rapidly, which is highlighted in two major fields: motor vehicles, and PC software and hardware.
- Indian motor vehicle manufactures have entered the Chinese market in a timely manner in recent years. To date, bilateral trade under this heading has not been large but it is growing rapidly. In 2002, Chinese imports from India were worth US$6.0 million and exports to India were worth US$4.0 million. From January to July 2003, imports from India increased by 355% and exports rose by 50.5%. Regarding PC technology, China's hardware processing industry and India's software and service industries show strong potential for cooperation. The then premier of India, Atal Bihari Vajpayee, said on his visit to China in 2003 that China's [hardware] products and India's [software] solution complemented each other, constituting the natural foundation for sustained cooperation between the two countries. He said that both Chinese and Indian enterprises should cooperate directly.
- Thirdly, enhanced bargaining strength in the process of formulating international rules shall be enabled, so as to protect and promote the two countries' common interests as developing major powers.
- Despite the increasing power of both China and India, each of them individually has no effective means to counterbalance today's global system. Kenneth Waltz defined 'power' as the 'extent that[one] affects others more than they affect [oneself]'. A state's power can thus be understood as a combination of that state's capacity to influence others to behave as it wants them to behave and, conversely, to resist the unwelcome influences of others. Based on this definition, Perkovich (2004) argued that:

  India today lacks great power in that, for the most part, it cannot make other important states comply with Indian demands, nor can it obtain all that it desires in the international arena, although India does have the capacity to resist most if not all demands placed upon it by other states, including the recognized major powers.
- As far as China is concerned, China can influence other countries' behavior in some respects and can resist the demands made by other countries but, in comparison, the impact of other countries on China is larger than China's impact on other countries.
- The current international economic system is still dominated by the Western developed countries, particularly the United States. This is reflected in the financial and trade institutions based on the post-Bretton Woods system and WTO. As two rising developing great powers, China and India potentially challenge the interests that the Western countries have traditionally enjoyed, and hence face strong resistance from the West. With regard to trade, the protectionism from Western countries has been surging as they deal with the rapid development of both China and India. China faces a strong degree of protectionism against its increased manufacturing exports, while the outsourcing of services to India is also generating opposition from Western countries, even though this protectionism is inconsistent with the free-trade principles of the WTO. In respect of finance and exchange rates, China has accumulated large foreign reserves, US$609.9 billion in 2004.

Although it enjoys a large trade surplus with the United States, overall trade basically is balanced. China has been accused of having an undervalued exchange rate. Like China, India also has an increasing foreign-reserve surplus, US$141.2 billion in 2004. Outsourcing is likely to bring a greater surplus to its current-account balance. India's exchange regime has been a managed floating one, and China too adopted a more flexible exchange-rate regime in July 2005. Since then, the RMB exchange rate has increased. But this is far less than what is demanded by the United States. Currently both China and India have not liberalized their capital accounts, and there remain substantial capital controls. With the US trade deficit accumulating and unemployment increasing, both countries are likely to be criticized of exchange rate manipulation.

- Against this background, China and India have more and more mutual interests and, on many issues, their claims and requirements based on their differing social conditions are unlike from those of the West. Through Sino-Indian cooperation, the two countries' bargaining strength can be increased in the process of formulating future international rules to guarantee their interests and win favorable 'rules of the game' for developing countries, including themselves. China and India have cooperated in the WTO and G20 organizations. For example, India, in cooperation with Brazil and China, played a key role in developing a consensus at the WTO General Council meeting in Geneva in July 2004. Such cooperation is likely to expand in the future.
- Fourthly, higher costs can be avoided in the exploration and exploitation of natural resources and energy. Both China and India are experiencing three similar economic reforms and social shifts: from a planned or heavily regulated economy to a market economy; from an agricultural economy to a modern economy; and from a closed economy to one that is opening up. A significant challenge to the world can be foreseen as the two countries follow the Western mode of development at the same time. Currently, the two countries have faced similar resource constraints in their economic development and both have an increasing demand for resources such as copper, iron ore and petroleum, which is viewed as challenge to the world supply of energy and natural resources.
- Now, one-third of China's and two-thirds of India's oil consumption depends on imports. In *Mapping the Global Future* (National Intelligence Council 2004), the US National Intelligence Council (NIC) indicates that China will need to boost its energy consumption by about 150% and India will need to nearly double its consumption by 2020 to maintain a steady rate of economic growth. This report anticipates that 'the energy needs will be the major factor in shaping China and India's foreign and defense policies including expanding their naval power'.
- If the two countries compete with each other for energy exploration in the world market, the result will be disadvantageous to them both and even the world, and fierce competition in the worst-case scenario could even result in war. History teaches that mutual benefits can be achieved by establishing an institutionalized

process of cooperation. Taking account of each other's interests, the two countries can coordinate with each other to explore new energy sources and to undertake technological cooperation for the efficient utilization of energy and natural resources.

- Fifthly, border security can be created, laying a favorable foundation for mutual economic development.
- China and India are undergoing unprecedented domestic development and reform, and both very much need peaceful external environments to succeed in their economic reform policies. China is a neighbor of 20 countries, of which India is very significant to the security of China's southwestern border. Similarly, India hasbeen alerting to its northeaster neighbor for a long time. Historically these two countries built up rancor and lack mutual trust. However, as noted earlier, economic integration contributes to peace, and thus the development of Sino-Indian trade relations helps create a foundation for peaceful external security for both countries. It is noteworthy that, since 2003, India's Department of Defense has excluded China from the list of threats to India in its annual report, and military communications between the two countries have begun. Security relations between the two countries are being reshaped and restructured constructively.

6.5 Impediments to Sino-Indian Relations

Although Sino-Indian cooperation promises vast mutual benefits for both China and India, some political and economic factors continue to create bottlenecks and obstacles in the development of Sino-Indian relations.

First of all, conflicts of interest are inherent among domestic interest groups in both countries. China's political system gave the government the authority to implement its opening-up policies once China decided to do so, and unless exceptional social instability is encountered such a path is unlikely to be reversed. But it cannot be denied that, as relevant political and economic structures change, interest groups are playing increasingly obvious roles in China and exerting an ever-greater influence in the formulation of economic policies. Kennedy (2005) comprehensively surveyed industries including steel, electronic products and software in China and found that lobbying was becoming popular in China. The interest groups lobby government officials by telephone, email and personal visits, and they can have an increasingly significant effect on taxation, technical standards and intellectual property policies. In the formulation of China's exchange-rate policy, some research shows that export departments, particularly of state-owned enterprises connected to local governments, have exercised outstanding influence in the lobbying of government, which induces policies to veer in directions that benefit these export departments (Zhang and Zhang 2005). China's interest groups are developing increasingly, and they will surely exert an increasing influence in the development of Sino-Indian relations.

India's much more diversified interest groups and democratic politics mean that India faces even greater resistance to economic reform and free trade compared to China. India is now implementing a system of representative democracy, and it features a diversified, multi-religion and multi-level social structure. For along time, India maintained a balance between its multifarious groups, and even British colonialism failed to break this. Singh (1999) said that from the perspective of civilization, India is a diversified entity; compared with China, India has existed in a somewhat stateless condition while China has always existed in a unified and hierarchical condition. India's central and local governments, as well as all kinds of interest groups, are highly decentralized and they often compete with each other.

This social and political system makes it difficult for India to mobilize its social forces as a whole to move in any decisive direction. Although the national interest is felt to be supreme, domestic conflicts of interest make it hard to implement a unified policy. Although most parties use opening-up and free trade as campaign slogans and profess intense political will, it is very difficult in reality to move free trade forward. For instance, although there are calls for the reduction of agricultural subsidies, reform has seldom really touched these fields due to opposition from vested interest groups and the lack of effective political will. Another example is that, although the service sector calls for freer trade, small and medium-sized enterprises, family businesses and their allied forces also hamper progress towards further reform. When it comes to opening-up in India, the free-trade measures that are implemented relate mainly to the promotion of exports and the introduction of FDI. Progress toward the liberalization of the domestic market, however, remains limited.

Considering that China's competitive manufacturing industry may harm some vested interests in India, protective measures and resistance from India make the development of Sino-Indian relations potentially difficult.

Secondly, geopolitical considerations and the coexistence of economic cooperation and competition in the two countries are important factors. Both China and India are highly conscious of the prospect of becoming prosperous and wealthy countries, and hope to re-establish themselves as the world's major powers in terms of industry, technology, trade and finance through economic development. Similar approaches adopted to achieve such objectives determine that these two countries are inevitably in competition with each other.

Although India is highly competitive in IT and related services, taken as a whole this sector accounts for only around 3% of the entire GDP and employs around 1 million people. The history of successfully industrialized economies suggests that modernization cannot be achieved without a developed manufacturing sector. Unexceptionally, India's economic development cannot bypass the industrialization stage, especially considering that industrialization is an indispensable step for providing employment opportunities and reducing the number of people suffering from poverty.[7] Owing to the irreplaceable role played by the manufacturing sector

[7]According to the World Banks World Development Indicators 2005, the number of people living in poverty in India is estimated at 260 million to290 million. If measured by the international living standard of those living on less than US$1 per day, the figure would be 390 million.

in the industrialization process and the unwillingness of India to watch its manufacturing sector wither as a result of competition from China, India has tried to take measures in the hope of protecting and stimulating the sector.

On 26 September 2005, India's National Manufacturing Competitiveness Committee (NMCC) published a draft of the *National Strategy for Manufacturing* (NMCC 2005), proposing a 12% annual growth rate for India's manufacturing industry in the coming decades. This growth rate is regarded as a guarantee for India's overall economic growth rate of 9%. The report also pointed out that India would compete with China for the position of the world's assembly or manufacturing center by creating more favorable policy environment. In 2005 the Global Economic Forum (GEF) issued the 2005–2006 *Global Competitiveness Report* (GEF 2005), indicating that the competitiveness of China and India ranked 49th and 50th respectively, with China dropping three places and India rising five.

In this context, China's products and enterprises have made little progress in the Indian market despite their global competitiveness. One main reason is that Indian governments erect trade and non-trade barriers against China's products and enterprises. By September 2005, India had initiated 85 cases of anti-dumping investigations against China, and the number of cases being implemented even outnumbered those taken by the United States, which makes India the country that has raised the most anti-dumping cases against China (WTO 2005). In a few months in 2005, India raised seven anti-dumping investigations against China, involving about US$250 million. Of these cases, the anti-dumping investigation of 18 May 2005 relating to imported Chinese silk fabric involved US$ 180 million, the highest amount in a single anti-dumping investigation raised by India against China in the past few years.

India's Foreign Investment Promotion Committee has occasionally suspended the review of investment projects from China for reasons of 'national security', and such reviews have even included durable goods. According to *The Times of India* of 16 August 2005, the Indian government had twice used such approach in the past five years to postpone the expansion of the Chinese firm Huawei Technologies in India. The newspaper described the government's behavior towards Huawei Technologies as 'a hard decision between cheap Chinese products and India's national security'.

In the case of China, in order to ensure sustainable economic growth, policymakers have to find a proper way to complete the process of industrialization and urbanization. At present, China faces two somewhat competing targets: upgrading its industrial structure and creating numerous job opportunities simultaneously. The sustainable development will remain a dream if China does not catch up with the industrialized economies in terms of technology-intensive products and cope successfully with the politically sensitive problem of employment. This situation requires China to continue its opening-up strategy on the one hand-that is absorbing FDI and actively participating in global production at the low end, and providing more job opportunities to the domestic workforce-and boosting its own high-tech and high-value-added and environmentally friendly industries on the other hand. All of this indicates that India's strongly regulated and limited market cannot satisfy the needs of both Chinese exports and investment. Recently, China has revealed its determination to support the development of the software sector. This means, more or less, that

Indian competitiveness in software and outsourcing may be challenged by Chinese competition.

Thirdly, the economic development of both China and India depends a great deal on external markets, especially the US market. However, due to considerations of its own national interests, the United States does not and will not support the building of closer alliance-like relations between China and India.

Currently, the economic development of both China and India relies very much on the United States, the superpower of today's world, to provide the required market, capital, technology, and so on. At the same time, US dependence on these two countries is much less. To a great extent, such disproportionate interdependence determines that the United States has much greater leverage in bilateral relations with each side of the two countries.

It can be seen in *America National Interests* (Commission on America's National Interests 2000) that one of the vital interests of the United States is to maintain its leadership worldwide and deter the emergence of a hostile major power in its neighboring regions. In *Mapping the Global Future*, the National Intelligence Committee pointed out that, in the next 15 years, China and India would become global powers. This report predicted that China's GDP would be the second biggest in the world by 2020, next only to that of the United States. By then, India would outdo most European countries, and both China and India might become world technological leaders.

Were China and India to form an alliance, they would pose a credible challenge to the United States. For the benefit of its national interests, the United States prevents China and India from developing an even closer strategic alliance through the United States itself developing closer relations with India. The United States changed its Cold War mentality towards India and described US-Indian relations as an even closer new partnership. Bill Clinton's visit to India in 2000 signaled that US-Indian relations had entered a new era, and since the Bush administration took the reins of power, US-Indian relations have warmed continually. In order to highlight how the United States and India are different from China and to weaken the common sense of identity between China and India, the United States defined US-Indian relations as 'cooperation between the two largest democracies. In March 2005, the Bush administration promulgated a project, with a view of enhancing the strategic communication with India and deepening bilateral cooperation in high-tech, economic and energy areas. The United States claimed that it would help India to become a great power for the twenty-first century. In April 2005, President George W. Bush held talks with India's Minister of Foreign Affairs, Natwar Singh, and said that US-Indian relations would be elevated to a 'higher level'.

One of the main purposes for developing US-Indian relations is to target the rise of China. In a report, Tellis (2005) pointed out that, thanks to the tremendous development potential of India in the next 20 to 25 years, the Bush administration should help India grow into an Asian superpower to counterbalance China. This report suggested that the United States ought to adopt five measures to build up an alliance with India, which are: helping India to develop in order to prevent China from growing into the leading power in Asia; abandoning the illusion of keeping a military balance between India and Pakistan; supporting India's request for permanent membership of the United Nations Security Council and helping India to join the Group of Eight (G8), the Asia-pacific Economic Cooperation forum (APEC) and the International Atomic Energy Agency (IAEA); agreeing to construct an Iran-Pakistan-India oil and gas pipeline; and selling dual-purpose nuclear engineering technology including nuclear safety equipment to India, and so on.

Some people think that the US-led Western world deliberately compares China and India with a geopolitical strategic intention. By highlighting the competing features between these two countries, the consensus between China and India will be weakened, thus preventing them from forming a strategic alliance.

6.6 Prospects of Sino-Indian Relations

Since the late 1980s, the changing shape of the world, the deepening of Asian economic integration, and the rapid economic development of China and India have created the necessary conditions for the reshaping of Sino-Indian relations. China and India have already ended their long history of self-imposed isolation. Cooperation means a wide range of mutual benefits for both countries, such as realizing and expanding trade gains, promoting economic growth, enhancing bargaining strength in the process of formulating international rules, avoiding higher costs in exploring natural resources and energy, as well as maintaining a peaceful border, something that is conducive and indispensable to economic development. Meanwhile, a series of conflicts of interest among domestic groups in the two countries, economic competition and geopolitical considerations between China and India, and the pressure or influence of external powers-restricts the depth and extent to which the two countries can cooperate further.

There are three scenarios for Sino-Indian relations. The first scenario that China and India will remain isolated from each other, and that a zero-sum competitive relationship will exist between China and India. At the same time, the two countries will inevitably compete with each other as they grow stronger. Realistically, it is hardly possible to return to the situation in which the two countries found themselves before. The second scenario is the establishment of a full-fledged bilateral free-trade area and the formation of an overall strategic alliance between the two countries in the global arena. However, the incentives and impediments that lie ahead of Sino-Indian economic relations determine that this is also unlikely to happen, at least in the short term. The third scenario is that Sino-Indian cooperation will move slowly and smoothly toward mutual prosperity but the relationship between the two countries will generally develop on a 'being good neighbors' basis. Based on the above analysis, this scenario may actually be the most likely relationship between China and India.

The term 'being good neighbors' needs to be elaborated in a little more detail. Such a relationship between China and India has four aspects: the maintenance of long-term peaceful coexistence; the keeping of political and economic differences and conflicts manageable; the further opening of markets and the facilitating of economic cooperation in fields of mutual benefit; and strengthened cooperation on specific issues at regional and international levels. Good fences make good neighbors. Here, 'good fences' refers to clearly defined and strictly enforced international rules or institutions. In the case of Sino-Indian relations, the two countries can intensify communication and cooperation within the framework of JACIK and the Shanghai Cooperation Organization, and they can also cooperate within the framework of the WTO and G20. The cooperation between them, albeit gradually strengthened and specific-areas focused, will contribute to Asian economic integration, to the common interest of developing countries, and the welfare of the human being as a whole.

References

Coase, R. 1937. The nature of the firm'. *Economica* 4: 386–405.

Commission on America's National Interests. 2000. *America's National Interests.* Washington, DC: The Commission on America's National Interests.

Department of Commerce of India. 2004. *National Foreign Trade Policy 2004–2009.* New Delhi: Department of Commerce.

Department of Commerce of India. 2005. http://commerce.nic.in/india_trade.htm. New Delhi: Department of Commerce.

Global Economic Forum. 2005 (2005–2006). *Global Competitiveness Report.* Davos: Global Economic Forum.

Gopalan, R. 2001. *'China's Competitiveness'.* Discussion Paper. New Delhi: Department of Commerce, Government of India (mimeo).

India Today. 2005. *Indian Economic News*, p. 10, Apr 2005.

Kawai, M. 2005. *Trade and Investment Integration for Development in East Asia: A Case for the Trade-FDI Nexus.* Washington, DC: World Bank, ABCDE Europe Meeting.

Kennedy, S. 2005. *The Business of Lobbying in China.* Cambridge, Mass.: Harvard University Press.

Kojima, K. 2000. The "flying geese" model of Asian economic development: Origin, theoretical extensions, and regional policy implications. *Journal of Asian Economic*s 11(4), 375–401.

Ministry of Commerce of China. 2005. http://www.mofcom.gov.cn.MOFCOM.

Ministry of Finance of India. 2005. http://indiabudget.nic.in/es2004-05/chapt2005/chap66.pdf. Ministry of India.

National Intelligence Committee. 2004. *Mapping the Global Future: Report of the National Intelligence Council's 2020 Project, Based on Consultation With Nongovernmental Experts Around the World*. Washington, DC: National Intelligence Committee.

National Manufacturing Competitiveness Committee. 2005. *National Strategy for Manufacturing*. New Delhi: National Manufacturing Competitiveness Committee.

Olson, M. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups.* Cambridge: Harvard University Press.

Perkovich, G. 2004. Is India a major power? *The Washington Quarterly* 27(1), 129–144. The MIT Press.

Polacheck, S. 1980. Conflict and Trade. *Journal of Conflict Resolution* 24.

Rajan, R. S., and R. Sen, 2004. Asian economic cooperation and integration: Sequencing of financial, trade and monetary regionalism. In *ADB Volume on Asian Economic Cooperation and Integration.*

Singh, J. 1999. *Defending India.* London and New Delhi: Macmillan.

Tellis, Ashley, J. 2005. *India as a Global Power: An Action Agenda for the United States.* Washington DC: Carnegie Endowment for International Peace.

The Times of India, Aug 16, 2005.

UNCTAD. 2005. *World Investment Report 2005*. Geneva: UNCTAD.

World Bank. 2005. *World Development Indicators 2005*. Washington, DC: The World Bank.

WTO. 2005. http://www.wto.org/english/tratop_e/adp_e/adp_e.htm#statistics.

Zhang, Yuyan. 1992. *Economic Development and the Choice of Institutions*. Renming University Press.

Zhang, Yuyan, and Jingchun Zhang. 2005. The international political economy of exchange rates: A case study of the RMB based on the debate between China and the US. *Contemporary Asian-Pacific Studies* 9.

Chapter 7
How G20 Can Better Support Global Governance?—A Chinese Perspective

Yuyan Zhang and Huifang Tian

Abstract G20 will be the most important and the most representative global governance platform in today's world and for the foreseeable future. It should enter a new phase in its institutional development, moving beyond crisis management towards robust governance including establishing a permanent secretariat in decision-making and a setting up rules, more inclusiveness, effective policy coordination and equal and just rights of participation. The recognition of the relevance of civil society and business organizations for global governance is one step forward. The importance in the world economy and the broadly representatives of developing countries both indicate that E11 has a huge space of internal cooperation. Actively promote the internal cooperation of E11 can apparently create win-win situation between developed and developing countries and improve the efficiency. In E11, China is still a new player on the international stage and not the rule maker. Given the risks and problems of the Chinese economy, China needs to adopt a series of macroeconomic measures, including fiscal, monetary, taxation, financial and industrial policies to maintain exchange rate basically stable, prevent the inflow of hot money, contain credit binge, curb inflation, expand domestic demand, stabilize external demand, promote economic restructuring and adjust income distribution. In the next decade China's basic attitude to global governance is to minimize the loss, not maximize the benefits. How to ponder and understand the relationship between the partial and the overall, the long-term and the short-term international obligations and right, and what kind of a global governance structure is most consistent with China's long-term development targets, are all challenging problems that China faces in future.

Keywords Global governance · International organizations · Financial stability · Global unbalance · Sustained development

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_7

7.1 Global Governance: A Global Public Good Approach

1. **The concept of global governance**

Globalization brought along a new form of governance. The idea of global governance became increasingly popular in the last decade despite the fact that its importance is a variable of the geographic area or the issue discussed.

The global governance and international organizations vary greatly: firstly, global governance comprises of a large variety of international actors, not just visible aspects of world political and economic authority (United Nations, World Trade Organization, International Monetary Fund, World Bank Group etc.), but also intergovernmental forums, even the quasi-formal ones like G-8, World Economic Forum, state groups, organizations (UN's Global Compact, International Labour Organization), private organizations (International Chamber of Commerce), privatemilitary forces (Sandline International, Executive Outcomes), nongovernmental organizations, transnational religious groups, terrorist organizations, political movements, financial markets, global law firms, multinational companies etc. Secondly, it is important that the way in which international actors associate to manage a wider and wider panel of political, economic or social issues. From this point of view global governance can be considered a multitude of associative forms between global, regional, national or local partners. Therefore, global governance does not only suffice multiplying actors or power organizations, but it is also defined by the way all these interact.

The principles of good governance can be observed as follows (Coolsaet and Arnould 2004):

(1) Global governance is not a world government. It is not about creating strongerinstitutions. It is about raising coherence, efficiency and legitimacy of the existing ones, about identifying and filling the gaps of multilateral institutions and that in the law; good global governance creates institutions only where needed.
(2) Must be based on rules and on institutionalized multilateralism. The states are the main actors and they choose to share their sovereignty.
(3) Multi-level approach on all authority levels. Global institutions and mechanisms must not replace similar local, national or regional actions, but complement them. Global integration should be encouraged as a starting point for global governance. The success requires reforms and efforts at all levels: responsibility is not only for the international organizations to bear and must not be used by states to shedresponsibility.
(4) In order to be legitimate, global governance has to be more participative by allowing international non-state actors to play an important part along with thestates. Specialized global governance networks, international organizations, transnational corporations, and civil society are instruments for a larger participation and for creating linkages between all those involved.
(5) Global governance must be democratic by providing an equitable representation to all states and non-state actors together with transparency and accountability.

2. **Global public goods and global governance**

Good governance tries to explain the characteristics of a process, but the object of the process is considered less. The theory of global public goods seems to indicate the object of global governance (Afrasine Laura 2010). At the same time the capacities needed for providing global public goods (efficiently) is the starting point for identifying the actors that must participate actively in global governance to provide these goods.

A classification of global public goods can be the following one (Coolsaet and Arnould 2004):

(1) International stability and security—the stability of the international system; the responsible powers have to establish a rule-based regime regarding use of force (all states must refrain), proliferation, terrorism, organized crime;
(2) An international law order: the existence of an international society depends on the existence of shared values, common laws and rules; the rules and the institutions exist, but the deviations are frequent and that is why a new approach is needed: a growing importance of law and law institutions at national level, human rights monitoring systems, responsibility to protect (R2P), a permanent dialogue between civilizations and cultures;
(3) An open and inclusive economic system—eliminating inequalities;
(4) Global welfare similar to national human security systems;
(5) A shared commitment to resolve regional and internal conflicts.

Globalization implies the emergence and development of global public goods. The major problem in the current international economic system of governance without government is that no effective means exist for assembling the necessary resources for financing these global public goods.

7.2 Key Global Governance Issues in the New Stage: Financial Stability, Global Unbalance, Sustained Development

The world economy stands at a critical juncture. Global trade, global production networks, and global finance have now reached a scale, degree of complexity, and speech of change that they have become harder to model or predict.

Financial crisis promoted global governance to a new stage. Since the Seoul Summit in November 2010, global economy has continued to recover, gradually moving towards the goal of strong, sustainable and balanced growth. However, the global recovery is still not firmly established and remains uneven. Global economy is facing the following major risks (Figs. 7.1, 7.2, 7.3, 7.4, 7.5 and 7.6). First, major advanced economies are inflicted with sluggish growth, persistently high unemployment, slow progress in fiscal consolidation and financial sector repair and reform. The risk and shadow of European sovereign debt crisis have not been dispelled.

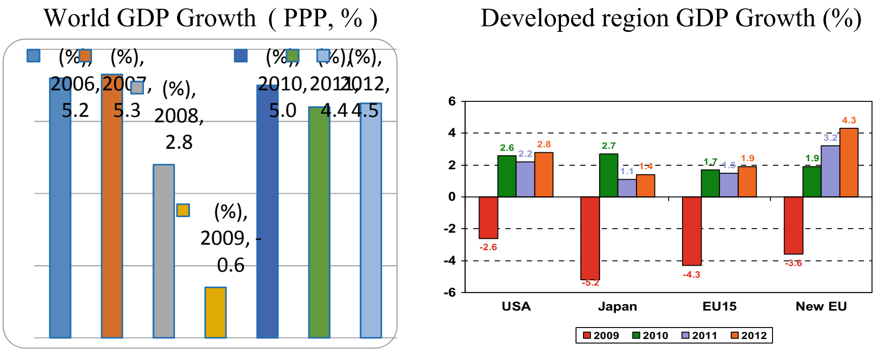

Fig. 7.1 Developed countries continue to hamper the recovery. *Source* IMF, WEO

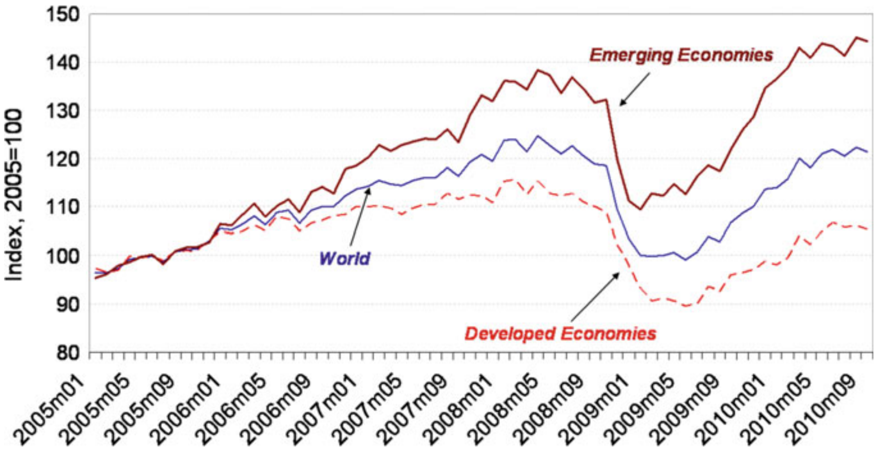

Fig. 7.2 International trade situations

Second, the earthquake and nuclear crisis in Japan and the events in the Middle East and North Africa added new instable and uncertain factors into global economy and financial markets. Third, commodity price hike heightened inflationary risks in emerging markets. Fourth, monetary policy directions of major economies diverged. Volatile short-term capital flows may inflict new financial and economic risks.

The trend toward a multi-polar world is irreversible and dominant. The global economic structure is undergoing a historic transfer of power to the developing world in the wake of the unprecedented financial and economic crisis. The importance of Brazil, China, India and other countries lies in their future economic potential that is already being translated into present political weight. We are seeing a major global rebalancing of economic, political and even moral relations between the West and the rest.

And globalization is still active in spite of rising trade protectionism worries and some certain influence from the crisis. However, the collapse of the global financial

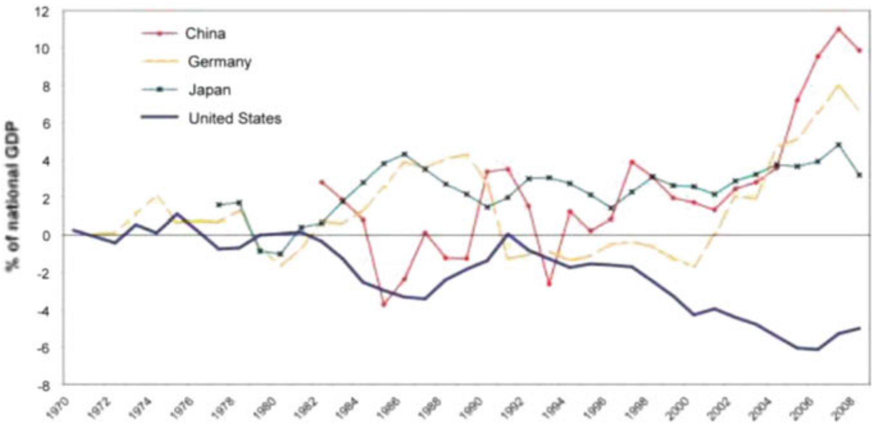

Fig. 7.3 Current account balances as % of national GDP, major countries, 1970–2009

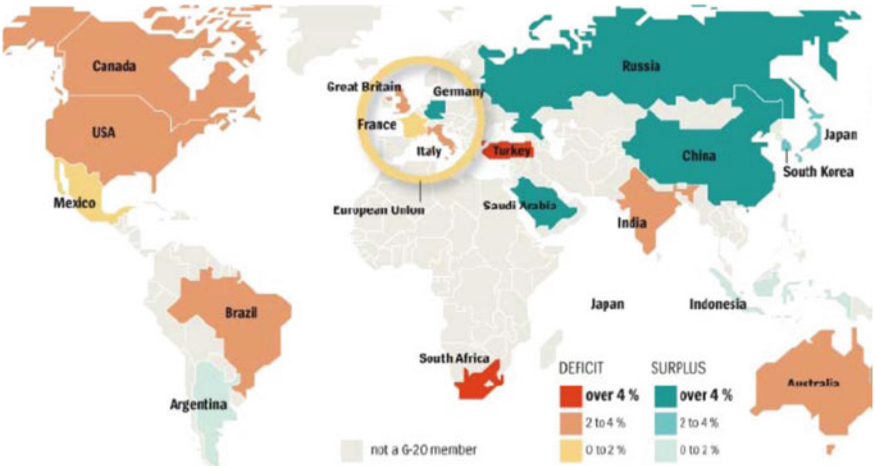

Fig. 7.4 Trade balances of G20 Member states (2010, as a percent of GDP). *Source* IWF

system and the worldwide synchronized economic downturn, the growing divide between poor and rich within and between countries, the risk of unabated global warming as well as the energy and food crises weave all nations into a global risk community. The international agenda is growing more complex and demanding.

To shape globalization, to manage global systemic risks and to strengthen international stability and prosperity requires new cooperative frameworks. Main motivations come from two aspects: one is the crisis highlighted defects of the original management system, and calls for change; second, the successful cooperation of all countries in dealing with the crisis and the profound reflection of the crisis provide the possibility to construct a new framework for global governance, like G20.

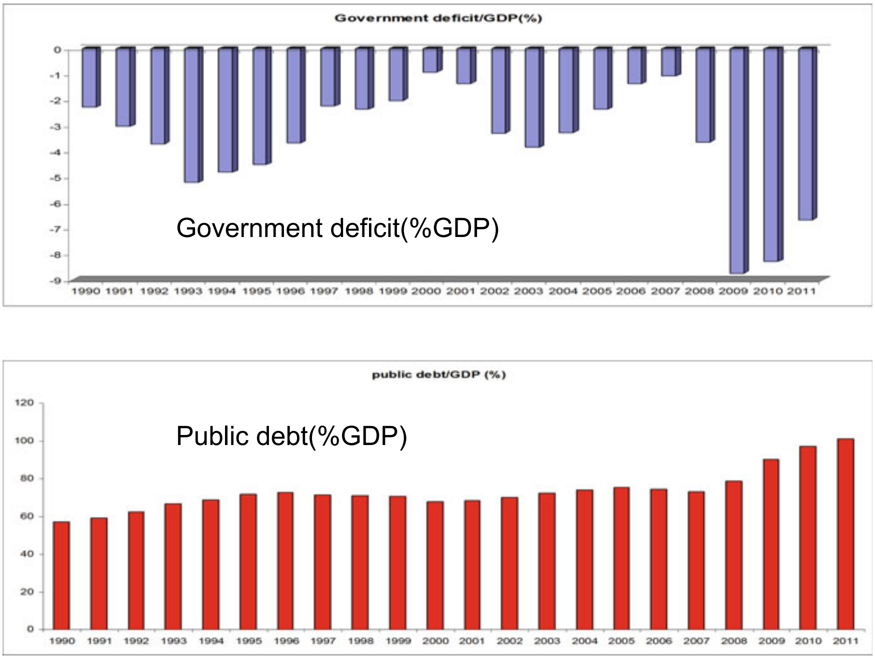

Fig. 7.5 Debt problem continues to worsen spread

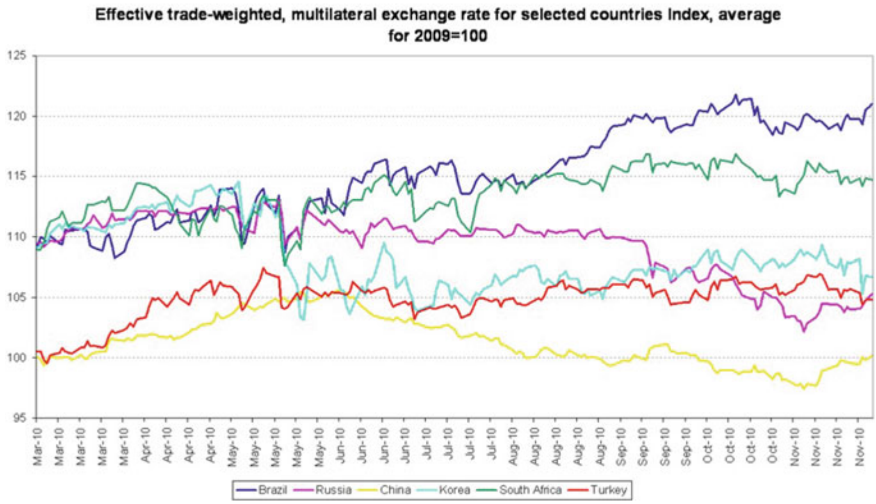

Fig. 7.6 Currency appreciation pressure on emerging economies

7.3 Role of the G20: A New Framework for Global Governance?

The G20 emerged partly as a result of political pressure on world leaders to 'do something' about the global financial crisis. But it also was a response to the absence of international institutions where international coordination could take place quickly on issues including fiscal and monetary policy, financial regulation, and development financing.

1. **Role transformation of the G20 in and after the crisis: crisis management to promotion of sustainable growth**

The Group of 20, usually known as the G20, has since its formation in 1999 demonstrated its potential as the major international economic forum. In September 2008, the group was elevated to the level of leaders in view of the size of the challenges posed by the financial and economic crisis, which was later dubbed the Great Repression. So far, G20 leaders have met in Washington in 2008, in London and Pittsburgh in 2009 and in Toronto and Seoul in 2010. With respect to the scope of G20 issues, the top priority at its first three summits was to stave off a crash of the world economy and then evolve to post-crisis management and the promotion of sustainable growth when having helped manage the crisis in the recent two summits.

G-20 leaders focused their international reform agenda on regulatory issues during their first two summits. The financial crisis promotes the global governance to enter the new stage. At their first meeting in November 2008, the G-20 leaders committed to using fiscal measures to stimulate domestic demand to rapid effects. This commitment helped to catalyze new fiscal initiatives in many countries, including in emerging countries, such as China, which announced a large fiscal stimulus programme at this time. At their second summit in London in April 2009, the G-20 leaders went much further, supporting not just national fiscal and monetary expansion, but also a 1.1 trillion US dollar programme to help jumpstart the world economy. Alongside these decisive initiatives relating to crisis management, the G-20 leaders immediately launched a forward-looking international reform agenda.

As the global economy reorients itself, G20 had also begun to address global imbalances by the time of the third Pittsburgh summit in September 2009. The Framework signals a welcome commitment to strengthening international macroeconomic cooperation and a move towards a more balanced pattern of global growth. This appeared to mark an historic break in the character of global economic governance: downgrading other forum (such as the G7) and subordinating others (such as the IMF and various international standard setting bodies) to the new and upgraded G20.

In post-crisis era, the G-20 is also in a strong position to expand its mandate as the window of support for tackling a wider set of global problems beyond economics by targeting a key set of global public goods—climate change, food security and global health. The fifth summit of the G-20, in Seoul, marked a new step in the reform of the international economic order. The main progress in South Korea was reform of the governance of the IMF, giving greater weight in decision-making to emerging and developing countries. Additionally, more emphasis was placed on concluding the Doha Round of the WTO talks in 2011, with a more assertive accent, and a specific development agenda with drive of its own, called the Seoul Consensus, has been set as a new front for the G-20.

2. **The G20—will be a robust and sustained global governance model?**

(1) **Top-level configuration and strong influence**

The G-20 as the primary forum for international economic cooperation at the level both of leaders and of finance ministers has been the impetus behind very significant changes in the international economic order. The G20 is more like a board of directors, and its shareholders are the world's largest 20 countries. The board made some significant decision-making, especially some political decisions, then let specific institutions implement. The G20 represents a major attempt to rebuild the global regulatory infrastructure that is necessary for global markets to function. The G20 has mobilized both national and international fiscal stimulus packages, and served as a catalyst for a new regulatory regime. Further, the G-20 has also promoted change in three multilateral pillars of the international economic order that were designed under the Bretton Woods accords, and also adds a new one on financial regulation and oversight. These are illustrated in Fig. 7.7.

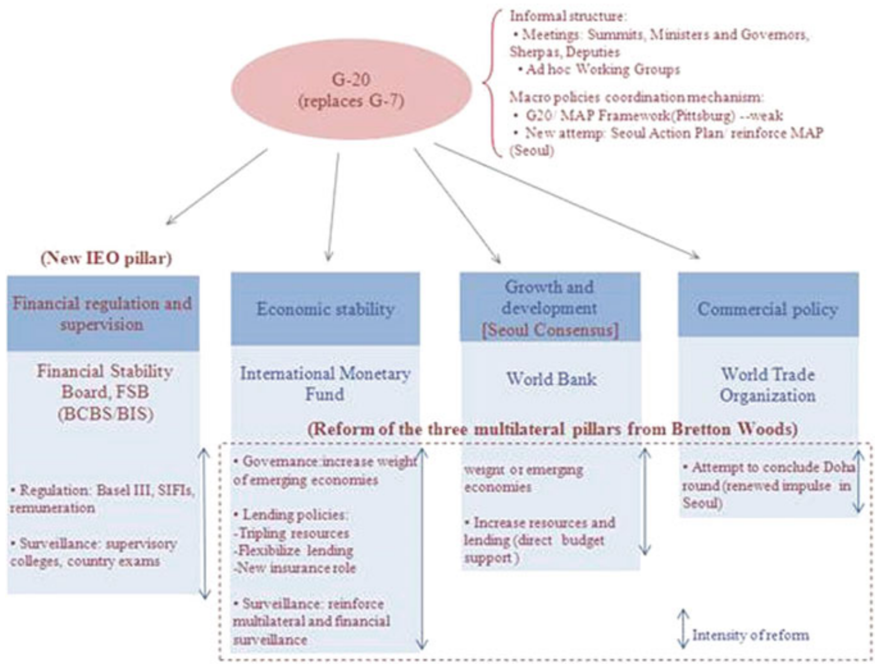

Fig. 7.7 New International Economic Order from 2009

(2) **Broad representatives**

The G20 bring industrialized countries and most important emerging economies into discussions of coordination and agenda-setting by providing a flexible, confidential, and non-bureaucratic forum within which the most important economies can exchange views, build consensus, and issue directives to international organizations in a single voice. The G20 economies comprise 85% of global gross national product, 80% of world trade (including EU intra-trade) and two-thirds of the world population, proving itself valid enough to be recognized as a leading force of the world economy. The G20 is a more representative forum than its predecessor, the G8. It has consecrated the rise of important new economic powers like the BRIC countries, and makes abundantly clear that the world is moving toward a more multi-polar world order.

(3) **Rebalance of world power**

The make-up of the G-20 more accurately highlights the economic potentiality and increasing influence power of developing countries as a whole in the global economic business and reflects the structural shifts in global power at the start of the twenty-first century (Fig. 7.8). In the G20, there are 11 developing countries, which we name E11 (Argentina, Brazil, China, India, Indonesia, South Korea, Mexico, Russia, Saudi Arabia, South Africa and Turkey). In 2008, E11 population totaled 3.412 billion, accounting for 51% of the total world population, is the 4.55 times of G7 + AUS total population (7.5 million), and 3.48 times of G4 + EU total population (9.8 million). Among them, China and India are the two most populous countries worldwide and their total population in 2008 reaches as high as 1.327 billion and

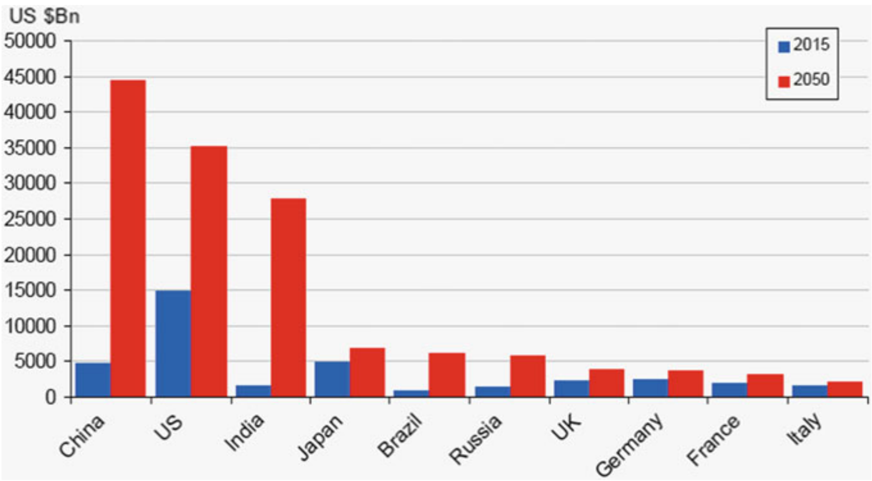

Fig. 7.8 The predicted shift in the economic balance of power. **Source* Goldman Sachs 2009, Global Economics Paper 192, 'The long-term outlook for the BRICs and N-11 post crisis'

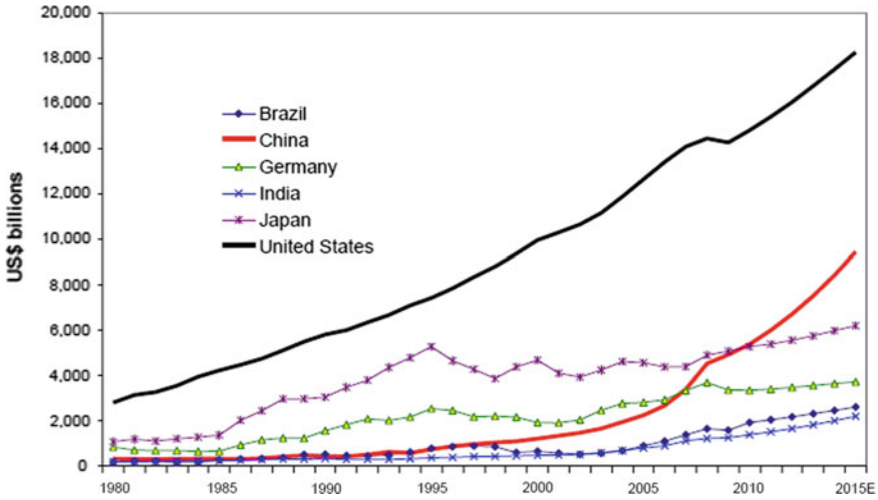

Fig. 7.9 Major national economies, GDP in current $dollars, 1980–2015. *Source* IMF, World Economic Outlook Database, April 2010 (estimates after 2009)

1.186 billion separately. In 2009, E11's combined GDP are 12.78 trillion dollars, accounting for the 22.1% of world share, and G7 + AUS for 55.2%, G4 + EU for 66%. This means that the GDP share of E11 is almost equal to at least the rest 173 economies of the world. And with the lapse of time, some emerging countries even exceed some moderately developed countries out of America and Japan, or with who is neck-and-neck (Fig. 7.9). In international trade, from 2000–2008, E11 import and export growth obviously surpasses the actual growth of real GDP; the E11 trade-GDP ratio is 63.4% in 2008, almost twice of G4 + EU (34.6%); in 2008, E11 accounts for 23.2% and 19.8% of the world cargo export and import, 13.2% and 16.9% of the world export and import in services, and has become the world's main trading countries (Fig. 7.10). In the international investment, E11 financial accounts gross asset reaches as high as 5.6 trillion U.S. dollars, and capital inflow on the stock to E11 has reached 6.5 trillion with various forms of securities investment or direct investment, etc. Meanwhile, E11 also has 47% of the world total foreign reserves (2008), which is nearly 8 times of ten years ago (1997). From a proportion of international capital flows to GDP, E11 before the crisis has reached a high level of 3.88%, mainly for foreign direct investment and foreign loans, and only less than one-fifth of foreign investment in securities.

(4) **Efficiency and authority**

Effectiveness and legitimacy are the two terms global governance reform needs to resolved. Through its dual existence, first as a forum of ministers and then as a leaders' summit, the G-20 has shown itself to be capable of robust action. The G-20 leaders' forum played a catalytic role in fostering closer cooperation in crisis management. Although ostensibly a network with no formal authority, the G20 has

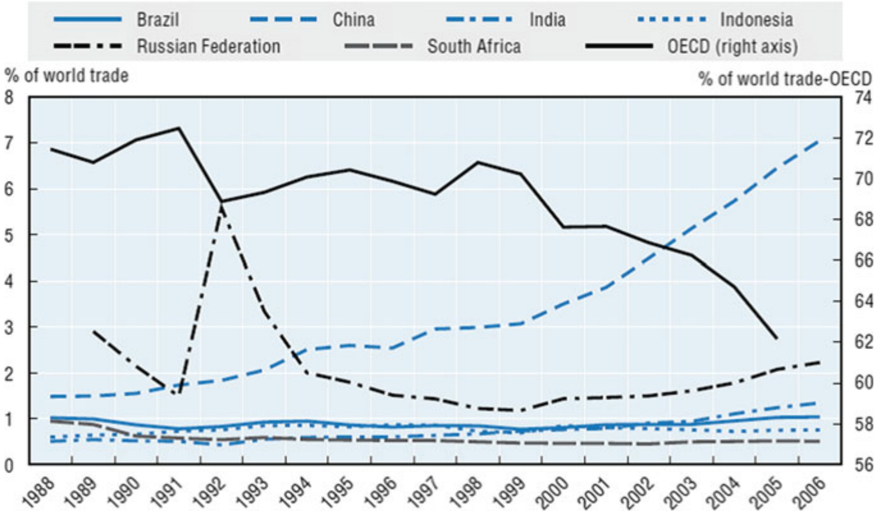

Fig. 7.10 OECD and BR IICS: share in world exports of goods and services. *Source* WDI (2009)

nevertheless made some authoritative decisions, such as the SDR allocation in the IMF and the upgrading of the Financial Stability Forum to the Financial Stability Board. Its informal structure and near-limitless purview provide many comparative advantages over the traditional international institutions. In 2010, the G20 leaders endorsed the agreement proposed by the Basel Committee on Banking Supervision (BCBS), the so-called Basel III, calling on lenders to raise quality, quantity of capital and liquidity and increasing capital requirements for the world's largest banks. G-20 leaders also called on the International Accounting Standards Board (IASB) to "further enhance the involvement of various stakeholders". Following a request by G20 leaders, the WTO secretariat, together with the secretariats of the OECD and UNCTAD, prepares regular reports on G20 trade and investment measures. Four reports have been submitted in G20 meeting till now. They play key roles supporting the G20 with analysis, data and policy recommendations. The OECD and UNCTAD also released a separate report on G20 investment measures. All these make G20 distinguish itself from other global and regional organizations.

Since its launch, the relative success of the G20 in fighting the global financial crisis and averting a long economic recession has grabbed the headlines. It is able to trigger collective action, coordinate stimulus packages and regulate finance. The G20—with its unique combination of top-level political authority and decision-making flexibility—has played a very important role and proved to be the most effective institutional response to the big global governance issue.

7.4 Challenges Faced by the G20 and Way to Reform

From the start, the G20 was designed as a deliberative body rather than a decisional one, but as a forum tailored to encourage the formation of consensus on international issues. While the achievements deserve kudos, much work remains to be done. It should enter a new phase in its institutional development, moving beyond crisis management towards robust governance.

1. **Challenges faced by the G20**

(1) **Mechanism dilemma**

The G20 was modeled on the G7: without a charter, votes, or legally binding decisions, members are supposed to interact as equals. The G20 is only a network—it has no permanent secretariat, no permanent staff, no institutional capacity of its own, and no way to implement policies. G20 work is carried forward by "working groups" of national officials, with a heavy reliance on secretariat functions provided by the host country. These opaque, ad hoc arrangements also contribute to a lack of public accountability. As a result of the lack of a bureaucratic machinery of its own, it must rely on formal institutions such as the IMF and the World Bank as well as other networks such as the Financial Stability Board and the Basel Committees to follow through and implement its. It has only indirect ways to follow up and ensure that its instructions are implemented by international organizations. Moreover, since there is no G20 secretariat and the leadership of the Group changes every year, it is very difficult for civil society to enter into a dialogue and have their critics heard. Especially the post-crisis renewal of the importance of the IMF and the World Bank calls for continued critical monitoring of their role vis-a-vis the G20.

(2) **Lack of legitimacy**

There is no treaty that created the G20. It is a self-appointed directory. Whereas the UN Charter gives some sense of shared purpose, legal and procedural clarity, and a values orientation to the organization's work, the G20, like the G8, is little more than the sum of rolling declaratory commitments. Like G8, some commitments are honored, others are ignored.

(3) **Internal divisions**

By bringing emerging economies into discussions of coordination and agenda-setting, the G20 may strengthen the influence of these economies in global governance. However, this will depend on how those countries use the new forum (or side-forums) to strategize, share information, and coordinate with one another. Internal divisions continue to exist on regulatory issues, preventing the move from being a recession-beater to a steering committee.

(4) **Conflict between inclusiveness and effectiveness**

The Norwegian Foreign Minister, Jonas Gahr Støre, for example, has already questioned the group's legitimacy and called for changes in its membership structure. As most members of the UN are not in the G20, a balance has to be struck between effectiveness and inclusiveness. Although the 'Gs' can play an important role in placing new issues on the agenda and facilitating consensus among major powers, no structure of governance can generate legitimacy as long as decision-making processes are not inclusive. The way in which the membership was defined implies the exclusion of some large countries.

(5) **Competitor or cooperator with other institutions?**

The G20 is often seen by existing institutions as a competitor, wresting authority away from formal bodies such as the International Monetary and Financial Committee of the IMF and the Development Committee of the World Bank. Also, some agree that the G20's task is not to compete with established multilateral organizations, or to rival or replace the newer informal, plurilateral bodies that have emerged. Rather, it is to cooperate with such institutions to govern an interconnected, complex, uncertain world. The G20 has performed best in its relationship with the old Group of Eight (G8) major market democracies. The G20 has also done well in forging a working relationship with a growing array of functional organizations to help analytically support and implement the decisions it has made.

2. **Ways to reform**

(1) **More perfect operation mechanism**

It's necessary to configure and operate the G20 as the hub of networked global governance, including establishing a permanent secretariat in decision-making, and at the same time setting up rules. It's very difficult getting all things agreed within 20 economies, thus in some important decisive things, there should have divisions of roles within countries. Lessons can be taken from the G8 experience of growing inefficiency and fading legitimacy. The G20 should replace the G8 as the grouping that counts, with the UN serving as a universal validator rather than a creaky negotiating forum. No forum can guarantee resolution of clashing interests, but an intimate yet representative group whose members get to know, understand and trust one another is more likely to succeed than the G8 or the UN.

(2) **More inclusiveness**

To increase the effectiveness, accountability, inclusivity and credibility of decisions, the G20 must provide more effective articulation of information and positions from the international civil society, policy research communities, as well as excluded countries. The G20 must be a steering group for the world, not an exclusive club of, by, and for self-interested members. It must complement its core composition with a consultative network that reaches out to other governments as well as business, think tanks and civil society.

(3) **Effective policy coordination**

Take an important issue of "economic imbalances" as an example. World economic imbalance is the reality and has been discussed many times in G20 meeting. Global imbalances are a product of sustained cross-country differences in savings-investment balances. Many argue that global imbalances have therefore persisted primarily because the policies that produce them have deep roots in the domestic political economies of the major countries, and because international power asymmetries have provided incentives to shift adjustment costs to others. In Seoul summit, some developed countries strongly suggest to resolve current-account imbalances by setting quantitative indicators, which are strongly refused by developing world. As we know, there are complex and profound structural causes, including north-south uneven development, the international division of labor imbalances, monetary system imbalance, etc. Current account imbalance is only a kind of surface phenomenon of world economic imbalances, not the root. It requires the spirit of seeking common ground while reserving differences and the spirit of mutual respect, equality, mutual benefit to deal with major global issues. Cooperation is a critical condition for success, and the engagement of major powers is a key factor. The overarching purpose, however, should be to build mutual trust, bring more coherence to what has been defined as 'messy' multilateralism and harness the political capital and resources of major powers while doing so.

(4) **Equal and just rights of participation**

The main task is to increase representation of the developing countries. It is necessary to ensure developing countries sufficient and effective participation in global institutional and systematic arrangements. G20 should increasingly promote the public goods of international financing, such as technology to help cope with climate change or raise agricultural productivity.

(5) **A fair share of responsibilities**

Countries have different roles in global governance as they vary in terms of natural endowment and development levels. We should fully respect and appreciate the capacity of sovereign states for a reasonable division of responsibilities. There are nine developed economies in G20, and eleven emerging economies, namely E11 (Argentina, Brazil, China, India, Indonesia, South Korea, Mexico, Russia, Saudi Arabia, South Africa and Turkey). These 11 emerging economies have some of the same demand and can be seen as representatives of emerging economies. These countries as a whole already have a global impact. E11 is increasingly becoming an important international power no matter in overall economic size, international trade volume, international capital flow or key product output etc. In this crisis, developed economies were heavily stoked, and to the extent the growth prospects are much stronger in the emerging world with its relatively low per capita GDP level, huge population and long-term stable and higher economic growth rate. We cannot deny that E11 is the important beneficiaries of globalization and has also realized the responsibility to take in global governance. But emerging body is still in its development process, with large gap compared to the developed world, it's reasonable that the responsibility should be differentiated between developed and developing world.

(6) **Better to improve G20–multilateral working relationship**

G20 could extend its participation to the UN galaxy's environmental and food-agriculture bodies, given the permanent, prominent part of these issues now occupy on the G20's built-in agenda. The G20 should incorporate the functionally core multilateral bodies into more commitments that it makes. And it should make independent civil society assessments of G20 members' comply with those commitments.

If the expanded membership of the G20 is to reflect the new global order, it must also employ a diverse policy tool kit to address the new global challenges. It must gradually expand to tackle the global issues like climate change, global food security, and global health. It is vital to strengthen existing UN-based professional institutions that have a legitimate mandate to tackle the problems of climate change, climate finance or food security to name a few examples. The G20 needs to see the comparative advantages of the UN, such as: long experience, universality which breeds consent, geographical breadth and substantive breath.

The two institutions are not rivalling, but in fact have unique comparative advantages and can thus complement each other. The United Nations has proven to be a very effective mechanism for consensus building and generation of new ideas and frameworks for international cooperation. The UN, as an institution consisting of 192 nations, can help the G20 on both challenges: it can help to broaden G20's agenda and harness the assets of nonmembers in addressing major problems. The UN can also help the group carry out its decisions more effectively.

By working more closely with the UN, the group can benefit from the UN's broader agenda. Full participation of the UN secretary-general in G20 summits would enable the group to take better account of the full range of UN concerns, from peace and security to climate change and health, from combating poverty to food and fuel security, human development and the Millennium Development Goals. The UN can help in wider and more meaningful implementation of G20 decisions, because they can be communicated among all UN members and addressed in the larger UN context in their implementation.

There are many proposals for strengthening the relationship between the G20 and the UN. Four stand out as promising: the first is to give the UN secretary general a permanent equal status at the G20 table in recognition of current situation in the world: the central challenges are systemically interconnected rather than functionally discrete, and global rather than regional; the second, the chair of the General Assembly could be invited to participate in the G20 summit every year, both to represent the full global community and to expand the diversity of the G20 further; the third, as a reciprocal step, the chair of the G20 summit could be invited to serve as an additional member of the UNSC every year. This could be done using the existing legal provisions that enable a country to be at the UNSC table when the deliberations of the council affect that member; the fourth step is to focus the Seoul and subsequent summits squarely on the full agenda set by the UN's Millennium Development Goals (MDGs) and the extensions such as climate change control and Haiti's reconstruction, recently identified by UN secretary general Ban Ki-moon and the World Bank's Robert Zoellick. By doing so, in the interests of accountability, it gives the G20 summit a multilaterally approved set of targets and timetables in the development and social domains comparable to those it has created for itself in the finance and economic fields.

7.5 Role of China in Supporting Global Governance as a G20 Member

The provision of public goods faces great challenge, the so-called collective action problems, that carried over to the global level through increasing openness and interconnectedness of economies and policy fields. Considering the urgency of solving international problems, it is high time to raise the global awareness of humankind, to maintain public good, to get rid of the drawbacks of the state-centred system and the conflicts between countries over one's own interests caused by these drawbacks. China's current economic status and development trend has let China become an indispensable member. Without China's participation, the validity and representative global governance must be discounted. G20 will be the most important and the most representative global governance platform in today's world and for the foreseeable future. As a member of the equal status with other countries, China is willing to participate and provide public goods for the world.

1. **China's position in global governance**

Many argue that China may take a leadership role in global governance. However, we say that's not correct. China's approach to global governance is to minimize the loss, rather than maximize the benefits. China is reluctance to take on a leadership role in global governance.

There is a perception gap between how China views itself and how the rest of the world views China. In per capita terms, according to IMF, World Bank and human development indices, China is still a low-income, large rapidly growing but still poor developing country. On the other hand, with the aggregate and comprehensive national strength it has accumulated over the last 30 years, China's influence is becoming global and China's status is more complex and straddles.

Chinese government recently unveiled its 12th Five-Year Plan and proposals for transforming economic growth pattern and adjusting economic structure. In the next decade China will continue focus on domestic stability and economic development, rather than maximizing the global benefits. China also raised interest and currency exchange rates, not only in the interests of China but also to strengthen its coordination with other major economies.

For China, the international order is based on the consensus of sovereign counties. Bilateral and multilateral agreements and treaties between sovereign countries are the most important ingredient of the international order. The sovereignty of a national state is inviolable. On the one hand, China accepts the current international order that reflects the political and economic reality after the Second World War in the form of the authority of the UN and the Bretton Wood institutions. On the other hand, China wishes to reform the international order to better reflect the changes since the end of the Second World War. China does not have a problem with the G8, as long as this informal forum has no intention to replace or weaken the authority of the UN or to impose its will on the rest of the world. China has long regarded the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Organization (WTO)/the General Agreement on Tariffs and Trade (GATT) as the three pillars of the world economic order. China has maintained very good relationship with the IMF and the WB, especially with the latter, since the early 1980s.

Although the emerging economies in the G20 members (narrow BRICS or broad E11) have common interest, but whether they can become a mechanism to balance the influence of G7 is still unclear and to a certain extent depends on the future behavior of G7 + Australia + EU. China has no intention to contend with the developed country through the establishment of emerging economy alliance or the coordinated mechanism under the G20 frame.

2. **What China has done since the G20 Seoul Summit**

Since September 2008, the Chinese government has decisively implemented a package of measures in response to the negative impact of the global financial crisis, and achieved positive results.

China's economy received less damage than other major economies from the crisis. Amid the financial crisis, almost every economic stimulus plan launched by China is in the global spotlight. Concerted efforts globally fight against the crisis, especially the huge stimulus plans launched by China and the United States, are a decisive factor in facilitating a reversal of the economic downturn. Through the G20 summit, China has started to take part in international fiscal and financial decision making, a crucial step made on the international stage. For example, China and other emerging economies have raised some proposals in the G20 including setting up a global early warning system for the financial sector, building effective responding and rescuing mechanisms, and most importantly, greater representation for emerging and developing countries within the IMF and the World Bank. China should still take the chance and increase its contributions to the organization to boost China's influence on world financial issues.

The Chinese Government has continued to adopt the policy of structural tax reductions, further optimized the investment structure, increased expenditures on agriculture, farmers and rural areas, development of underdeveloped areas, social programs, restructuring, and scientific and technological innovations, thus promoting the growth of the national economy. In 2010, the national public fiscal revenue increased by 21.3% while the fiscal spending increased by 17.4%. The Central

Government's public investment was 1,071 billion yuan, which was mainly used for agricultural infrastructure, projects to improve the wellbeing of rural residents, social programs including education and health, low income housing, energy conservation and emission reduction, ecological improvement, independent innovation and restructuring.

The Chinese Government has strengthened the management of deficit and public debt, enhanced fiscal sustainability, stepped up supervision over local investment and financing, and reduced the debt risks of local governments. In 2010, the general government fiscal deficit accounted for 2.5% of the GDP, lower than 3%. At the end of 2010, the central government debts accounted for 18% of the GDP, lower than 60%.

The Chinese Government has been energetically promoting an economic growth pattern driven by consumption, investment and export in a balanced way by virtue of policies like increasing spending on expanding consumption, increasing subsidies for urban residents of low income and farmers, continuing to implement the programme of home appliance subsidies for rural areas and subsidies for trade-in old home appliance for new ones. In 2010, domestic demand drove GDP growth by 9.5%, and accounted for 92.1% of the total GDP growth. Meanwhile, the Chinese Government has implemented a proactive fiscal policy, deepened the reform of the income distribution system, and strengthened the social security system, thus ensuring more balanced development between urban and rural areas and across regions.

While focusing on helping itself at home, China is also offering help to boost the world economy by encouraging a raft of new Chinese investment overseas, including £1bn of extra investment in its China-Africa Development Fund. China will increase its investment abroad, but needs a friendly global environment. The world wants us to help more and yet it is suspicious of, and creates barriers to Chinese outbound investment.

3. **What public goods China can provide to better support global governance?**

How to eliminate or reduce China's anxiety regarding global governance (i.e. this concept is used by the developed country leadership to hinder China's development or lets China undertake excessive responsibility), will be a main difficult problem faced by other members of the G20, particularly the developed country member. How to ponder and understand the relationship between the partial and the overall, the long-term and the short-term international obligations and right, and what kind of a global governance structure is most consistent with China's long-term development targets, are all challenging problems that China faces in future.

(1) **Global economic imbalance issue**

The causes of global economic imbalance covering several aspects, like the movement of production factors worldwide and the transformation of industrial division of labor, the deficiencies of the existing international monetary system, macroeconomic policy mistakes of major advanced economies, and widening gap of North-South development etc.

Addressing excessive external imbalance requires concerted efforts of all G20 members. Globally, member countries should promote orderly adjustment of the industrial structure, speed up the reform of international monetary system, and strengthen surveillance over macroeconomic policies of major reserve currency issuing countries. Domestically, a host of measures should be implemented, including fiscal, monetary, financial, trade and investment policies as well as structural reform and development policies.

Continued efforts should be made to promote economic transformation and upgrading, further improve the growth pattern,deepen the reform of income distribution system as well as the fiscal and taxation system, optimize the social security system, safeguard and improve people's livelihood, create a more favorable consumption environment, establish a long-term and effective mechanism to expand consumption, promote domestic demand, maintain stable import growth, restructure and upgrade processing trade, and put in place a growth model which is driven by consumption, investment and export in a balanced manner. In the meantime, China will implement the prudent monetary policy, reinforce the liquidity management, and advance steadily the market-based interest rate reform and the reform of the RMB exchange rate regime.

(2) **Reform of international monetary system**

The rise of the G20 as the current forum of choice to address broad-based global financial issues like those to be discussed in G20 Nanjing monetary seminar reflects changing global power dynamics. It shows how international institutions can adapt to these shifting dynamics. The G20 also pushes a more active role of China and global Special Drawing Rights (SDRs), an international reserve asset created by the International Monetary Fund (IMF) to serve as an alternative to the US Dollar, the de facto global reserve currency.

The reform of the international monetary system (IMS) is a necessary requirement to promote the world's trade and capital flow. The international monetary system should gradually evolve to reflect the major trends in the world economy. The SDR, a quasi-currency used as the Fund's unit of account, is currently composed of the dollar, euro, yen and sterling. The use of SDRs as a substitute for the U.S. dollar as the world's reserve currency is a "realistic option" for reinforcing global financial stability.

China's economy is now the second-largest in the world. Due to China's furious growth, the country is expected to surpass the United States as the world's largest economy by 2030. Adding the Yuan to the basket would make it more representative and credible and could set the stage for the SDR to play a greater role as an international reserve asset in future, thus giving countries an alternative to accumulating huge reserves of dollars. However, the Renminbi internationalization or "yuanization" as well as the international currency system reform (like the expansion of SDR function) etc. might entail the floating of the domestic currency and would shift China's stance to the untenable situation of having concurrently free capital flows, a sovereign monetary policy, and a fixed exchange rate. Thus, China's plan for reforms must carry out over an extended time framework and in a gradual manner. In the process, it's nature that national interests will make adjustments. China still requires the G20 for help and cooperation in dealing with the economic reform.

(3) **Commodity**

The wide and sudden price variations observed on commodities markets since 2007, in particular on oil and agricultural markets, have made commodity price volatility a vital issue for the world economy. Three areas are involved:

Economic growth. Excessive price fluctuations foster uncertainty and disrupt the forecasting abilities of the various economic stakeholders. This uncertainty is exacerbated by the lack of transparency in commodities markets, which in turn makes prices more volatile.

Food security. The food crisis of 2007–2008 and the subsequent rioting, for instance in Haiti and Senegal or more recently in Mozambique, provided dramatic proof of the consequences of fluctuations in commodity prices in developing countries. Such fluctuations particularly affect consumers' purchasing power as well as the earnings of commodity producers.

Financial stability and regulation. The financial markets must provide the means for managing this volatility, by allowing actors to protect themselves against price variations. However, commodity derivatives markets are not covered by a specific regulatory framework that is adapted to the volume of trading that takes place on them (for example, the volumes traded on the financial oil markets are some thirty-five times those of their physical counterparts. In the same way, every year, the Chicago Mercantile Exchange trades the equivalent of 46 times the world's annual wheat production and 24 times the annual production of corn).

The G20 is the appropriate forum to deal with the issue of volatility, given that its members are major stakeholders on both oil and agricultural commodity markets. The G20 countries accounted for 54% of the world's agricultural surfaces, 65% of farmland and 77% of global production of grains in 2008. The G20 examined the issue for the first time at the 2009 Pittsburgh Summit, where the leaders agreed to "improve the regulation, functioning, and transparency of financial and commodity markets". However, few concrete measures have been taken to date. France would like to place the issue of fighting against excessive commodity price volatility at the top of the 2011 G20 agenda.

With the increasing internationalization of China economy, it is conceivable that the extent of China's participation in the global governance will continue to increase. To discuss the commodity price formation and the supply-demand mechanism within the framework of the G20, and at the right moment to enhance the construction of the G20 mechanism, is necessary.

(4) **International trade and protectionism**

G20 has effectively avoided the dangers of global economic sharp decline through clarifying the implementation of unprecedented strength monetary and fiscal stimulus, and stabilized the financial markets, fought brightly for protectionism, committed to the WTO Doha round of trade negotiations, promoted global trade and investment, and established an open global economy.

China was one of the most open economies in the world and has benefited a lot from its opening up over the past 30 years. China had made significant progress on free trade and investment in recent years. The average tariff currently has dropped to 9.8 percent, with 8.9 percent for industrial products and 15.2 percent for agricultural produce, which is just one quarter of the world's average level and much lower than those in other developing countries. In service industry, some 100 sectors have been opened up to foreign investors, nearly as open as developed countries. China has also made adjustment to trade system and policies. For example, China has annulled the approving system for foreign trade business. China's policy of increasing tax rebate rates for some exports is WTO rules consistent. China has also taken part in the WTO trade policy review. Measures China has taken to boost its economic growth tally with WTO principles.

Current-account surplus is not the intended outcome of Chinese trade policies. China's foreign policy making is more seriously constrained by domestic vested interest groups; simultaneously there is a gap of the capacity between making international commitments and achieving the pledge. Chinese own carrying capacity is also a question which must be concerned to understand China's trade and financial policy.

With the acceleration of the aging population and rising labor costs, especially with the transformation of growth pattern (the twelfth Five-Year Plan emphasis on consumption and domestic demand) and the improvement of the domestic market (One of the most important reason that China enterprise are keen to export is the domestic market entry barriers and higher transaction costs than the external market), the reduction of current account surplus will be a spontaneous process.

China, as the biggest beneficiary of globalization, will oppose protectionism of all kinds and promoting deeper integration. In particular, it should urge G20 leaders to strengthen the political determination achieved during the Doha round of World Trade Organization negotiations.

In order to consolidate global economic recovery, G20 members should closely monitor new risks worldwide, strengthen macroeconomic policy coordination and continue to take strong, sustainable and balanced growth as top priority on the agenda. Advanced economies, especially the major reserve currency issuing countries should adopt responsible macroeconomic policies, promote fiscal consolidation, and reduce negative policy spillover effects when expediting their economic recovery. Emerging economies should take measures to prevent and address risks of inflation and volatile international capital flow. Meanwhile, member countries should reinforce international economic and financial cooperation, take measures to stabilize commodity prices, guard against all forms of protectionism and promote the Doha Round to achieve a comprehensive and balanced outcome as early as possible.

At present, Chinese economy remains sound and stable, yet it still faces both domestic and external risks. First, there are many uncertainties in China's economic restructuring. Second, employment pressure remains large. Third, with prices rising quickly, the inflationary expectations are building up. Fourth, development is imbalanced between urban and rural areas and across regions. Fifth, income distribution is disproportionate. Sixth, upsurge of global trade protectionism and worsening trade environment cast a grim outlook on China's export. Seventh, uncertainties still remain in the international financial market.

Given the risks and problems of the Chinese economy, China needs to adopt a series of macroeconomic measures, including fiscal, monetary, taxation, financial and industrial policies to maintain exchange rate basically stable, prevent the inflow of hot money, contain credit binge, curb inflation, expand domestic demand, stabilize external demand, promote economic restructuring and adjust income distribution.

(5) **Governance of civil society**

Authority is institutionalized as social interests—the governed—invest in assets specific to that authority and the rules it produces. Members may possess different views of the appropriate counterfactual. For global governance or any other international rules (system), authority is never neutral, or basically no "institutional neutrality". Rules matter. Even if everyone in society benefits from having a social order in general, some always benefit more than others. The question is not only about the special privileges taken by bigger powers, but also about the unequal capabilities of states to monitor and implement agreements.

Formerly and the existing international rules of the games were made mostly by developed countries. It's natural that China has willingness to avoid disadvantages to achieve its global governance objective. China's skeptical of the international new rules is understandable. It has been, therefore, recommended that flexibility and facilitation, rather than coercion, should be used as instruments of enforcement. In other words, dispute settlement, capacity building, and persuasion should replace the use of economic and other punishments as means of global governance.

The recognition of the relevance of civil society and business organizations for global governance is one step forward. NGOs by definition have a fundamental problem of legitimacy in speaking on behalf of a stable constituency. As soon as a civil society organization becomes powerful enough, it tends to have its own interests and become bureaucratic. NGOs are very good pressure groups and they should remain as such.

(6) **International Coordination**

The need of coordination also increases almost exponentially with the growing complexity and fragmentation of global governance. The diversity of G20 consisting of vastly different countries predetermines the difficulty of reaching consensus among member countries. Coordination does not mean a standardization of policies for all countries but "means that each country must do their work properly in order to build a system beneficial to everyone. Developed and emerging countries should adopt different policies. This is reasonable because not all economies are recovering from the crisis at the same pace. But policy gaps should not undermine coordination. In other words, a country is not wrong to consider its own interests, but is wrong to care only for itself.

E11 (Argentina, Brazil, China, India, Indonesia, South Korea, Mexico, Russia, Saudi Arabia, South Africa and Turkey) in G20 is increasingly becoming an important international power no matter in overall economic size, international trade volume, international capital flow or key product output etc. In the crisis, emerging economy industrial output takes the lead to recover, however, this fact cannot show that these countries already “got unhooked” with the other economies, particularly the developed country. From another angle, this instead is “the suspension hook” evident proof, because the developed economy economic growth condition’s improvement and international trade’s normalization, is the important power which emerging economy industrial output grows.

G20 is an important platform for enhancing cooperation in E11. The promotion of G20 and the relevant achievements obtained in the summits comply with the fundamental interests of the E11. E11 should be based on the platform to create a positive enabling environment for development.

The importance in the world economy and the broadly representatives of developing countries both indicate that E11 has a huge space of internal cooperation. Actively promote the internal cooperation of E11 can apparently create win-win situation between developed and developing countries. Compared with G7/G8, Australia and the European Union, E11 need to strength the cooperation ability in the definition of common interests, agenda-setting and position coordination, etc. Overall E11 cooperation should be gradual. Imitating the G8/G7 summit, E11 can have its own minister conference before G20 meeting to strengthen mutual position on major issues of coordinated.

E11 should adhere to the “common but differentiated responsibilities” to deal with the relations under the G20 framework. In the highly interdependent world, the interaction between the emerging economies and developed economies is not a zero-sum game. The long-run development of emerging economies has been greatly benefitting from the developed world, while developed economies are increasingly inseparable from the rapid development of emerging economies. It’s good to see that emerging economies and developed economies can further strengthen cooperation between each other.

7.6 Conclusion

Economic, financial and security issues are transnational and require international cooperation, where both advanced economies and systemically important emerging markets are at the table.

The financial crisis promotes the global governance to enter the new stage, prime motors from two aspects: First, the crisis highlighted the shortcomings of the original system of governance, and the transformation voice surged upward along with it; Second, the efforts of all countries work together to overcome the crisis and a profound reflection on the causes of the crisis provides the essential turning point to construct a new global governance framework. Under this background, in 2009 the global governance reform made an important progress: G20 transforms into the main forum of international economic cooperation. The G20 status' promotion is the result of various countries' coordinating the economic policy and dealing with the crisis hand in hand, and is also a positive correction of global governance imbalance.

The stability of the international monetary and financial system is a global public good and, as it is well known, the provision of public goods gives rise to collective-action problems: countries may be tempted to free ride on each other's efforts to preserve international stability. The G20 has entered a new phase in its institutional development, moving beyond crisis management towards robust governance. A central mission of the G20 is to address global collective-action problems.

In a post-hegemonic world, no individual country or coalition is in a position to lead the reform of the multilateral architecture that only embodies its own values and interest. Instead, it will be a matter of permanent compromise between countries with different historical experiences, levels of socio-economic development and internal political systems. The G-20 leaders have also demonstrated their ability to drive a forward-looking international regulatory reform agenda.

In an intrapolar world, the strategic objectives of major powers—among others, sustaining growth, benefiting from globalization, mitigating climate change, enhancing energy security but also promoting development and improving global health—do not essentially diverge, although their tactics occasionally clash. Policy coordination within the G20 is crucial. The leaders and finance officials of emerging economies should form a caucus of their own within the G20 to coordinate in a counter-balancing way. The agenda-setting and consensus-building activities of the G20 are important. However, to fully use the G20's agenda-setting power, developing countries may need to form parallel networks.

To improve this G20–multilateral working relationship, the G20 could extend participation at its summits to the executive heads of the UN galaxy's environmental and food-agriculture bodies, given the permanent, prominent part these issues now occupy on the G20's built-in agenda. The G20 should incorporate the functionally core multilateral bodies into more commitments that it makes. And it should add independent civil society assessments of G20 members' compliance with those commitments.

G20 should promote equal and just rights of participation and a fair share of responsibilities. In a world of interconnected risks, segmented institutions will not suffice. In a system where the growing power of emerging countries amplifies their influence, frameworks where they are not adequately represented will lose relevance. The G8 of industrialized countries can no longer claim to represent a global steering group lacking both legitimacy and effectiveness in addressing systemic challenges. The rising powers of the global South must now join—on an equal footing—the core of global policy coordination and assume joint responsibility. However, countries have different roles in global governance as they vary in terms of natural endowment and development levels. It's necessary to fully respect and appreciate the capacity of sovereign states for a reasonable division of responsibilities.

An internal E11 negotiation platform may improve the efficiency. In the highly interdependent world, the interaction between the emerging economies and developed economies is not a zero-sum game. E11 should adhere to the "common but differentiated responsibilities" to deal with the relations under the G20 framework. Actively promote the internal cooperation of E11 can apparently create win-win situation between developed and developing countries.

As a member of the G20, China is willing to participate and provide public goods for the world. However, China is still a new player on the international stage and not the rule maker. In the next decade China's basic attitude to global governance is to minimize the loss, not maximize the benefits. China has no intention to compete with the developed world through any forms of economy alliance or the coordinated mechanism under the G20 frame.

References

Afrasine, Laura. 2010. *The financial crisis—global governance failure?* The Tricontinental Series on Global Economic Issues, 05/2013, vol. 2. ISBN: 978-981-4401-87-6.

Ahearne, Alan (ed.). 2006. *European and Asian Perspectives on Global Imbalances.* Brussels: Asia Europe Economic Forum.

Brender, Anton, and Florence Pisani. 2010. *Global Imbalances and the Collapse of Globalised Finance.* Brussels: Centre for European Policy Studies.

Coolsaet, Rik, and Valerie Arnould. 2004. *Global governance: The next frontier*, Egmont papers, no. 2, Brussels: Egmont.

Gleckman, Harris. 2009. *Global Governance and Policy Coherence: Before and After the G20 Summit, Global Policy Coherence 2009 Project*, Institute for Environmental Security.

Grevi, Giovanni. 2010. *The G20: Panacea or window-dressing?* FRIDE Policy Brief. ISSN: 1989-2667.

Martinez-Diaz, Leonardo, and Ngaire Woods. 2009. *The G20—the perils and opportunities of network governance for developing countries*, Global Economic Governance Programme briefing paper.

Moreno, Pablo. 2010. *Two Years of G-20 Summits*, ARI 162/2010.

OECD. 2009. *Globalisation and Emerging Economies*, OECD policy brief March 2009.

Schulz, Nils-Sjard. 2010. *The G20 and the global governance of development*, 1989–2667. ISSN: FRIDE Policy Brief.

Tiberghien, Yves. 2010. *Global Power Shifts and G20: A Geopolitical Analysis at the Time of the Seoul Summit*, The 12th Smart Talk Forum.

Walter, Andrew. 2009. *Global economic governance after the crisis: The G2, the G20, and global imbalances.*

Woods, Ngaire. 2010. *The G20 Leaders and Global Governance*, GEG Working paper 2010/59.

Chapter 8
Non-neutral International Institution and Catch-Up Strategy of Emerging-Market Economies

Yuyan Zhang and Weijiang Feng

Abstract The United States remains dominant in the world in terms of material output. In the past decades, however, other countries have become increasingly unlikely to model either the rights-related provisions of the basic structural provisions of their own constitutions upon those found in the US Constitution. It is a sign that the US' institutional advantage has been on the wane. Against that backdrop, it is necessary to examine the theories regarding experiences and limitedness of China's rapid development. How to constrain the information advantage of the dominating powers, bring out their own information advantage, find a proper risk indicator, and avoid devising misguided strategies is an important technical issue that urgently needs to be tackled by China or other emerging-market economies as they rise against the backdrop of a non-neutral system environment. To that end, it is necessary for researchers to analyse and summarize the experiences of multiple international actors at different development stages.

Keywords Non-neutral international institution · China case · Catch-up strategy

8.1 Background

Why have rational individual actors chosen systems that, in hindsight, "do not contribute to or even contradict with their own interests"? Some researchers have tried to decipher the puzzle from the internal perspective of a nation and discussed "why some nations or regions have chosen or acquiesced at the existence of systems that caused their decline or long-term stagnation."[1] It would be equally interesting, however, for us to look at the issue from the perspective of inter-national relations.

[1] Zhang (1993).

Zhang Yuyan is a research fellow and director of the Institute of World Economics and Politics, the Chinese Academy of Social Sciences. His email address is yyzhang@cass.org.cn; Feng Weijiang is a deputy research fellow of the Institute of World Economics and Politics, the Chinese Academy of Social Sciences. His email address is fwjack@163.com. The English version of this paper was first published in Study in Xinxing jingjiti yanjiu [Emerging Economies], 2014(6). It has been abridged and adjusted when it is translated into English.
Translated by Zhiming Xin.

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_8

Why have those forerunning countries, which base their activities on "economic rationality", and international rules and systems, which they dominate, left room for their rivals—those latecomer countries—to catch up?

It is well known that as dominant of the post-war international systems, the United States has devised most of the current international systems and rules based on its own interests and those of its allies. It not only takes control of the organizational structure, location, and authorization of major international governance institutions, such as the United Nations, the World Bank, and the International Monetary Fund, but also makes their operation and behaviour reflective of its own interests. In a world that is highly sensitive to and reliant on rules, it is hard to imagine that countries outside the rule-making camp of countries and their allies (if not opponents) can avoid being affected by those rules that reflect the interests of the dominating countries or even break through or make use of those rules to catch up with and even surpass them.

China's rise, however, means it is making much headway in surpassing those rule-making countries (it has already surpassed them if we compare China and the major allies of the US). In 2010, China surpassed Japan, a main ally of the US, to become the world's second-largest economy in terms of exchange rate-based GDP scale. In reality, the Chinese economy is regaining the importance it held in the world economy a thousand years ago, a fact that may shock those who cannot look at the issue from a historical perspective. They may have forgotten that China's GDP remained as large as over 20% of the world's total for the most part of the period from the birth of Jesus Christ until the start of the Sino-British Opium War.[2] Since it started its reform and opening up drive in the late 1970s, that proportion had increased from 2 to 12% in 2012. Economists from some think tanks are optimistic about China's economic prospects and hold that its GDP scale would account for one fourth of the world's total within 20 years (while the US will only account for 12% then). By 2030, they forecast that China's trade volume would double that of the US, making it once again a world leader and dominator.

In reality, China is only one of the emerging-market economies that have tried to catch up with the developed economie—only it has the best performance. In the past two decades, the rise of the emerging-market economies has become a worldwide phenomenon. The Asian emerging-market economies, led by China and India, have shocked the world by registering fast-paced economic growth while those Latin American countries, which used to be bogged down in debt crises, have also played a role in reshaping the world economic order. Some countries, such as Russia, have accumulated significant amounts of wealth thanks to rising global energy prices and attempted to boost their economy after their political transformation. In particular,

[2]Estimation of the economic scale of world economies by Angus Maddison using purchasing power parity shows that China's economy accounted for 26.2% of the world's total in the year of Jesus Christ's birth while it was 22.7% in the year 1000 before it rose to 25% in 1500 and 29.2% in 1600. It dropped to 22.3% in 1700 and reached its peak of 32.9% in 1820, accounting for about one third of the world's total. Even in the wake of the Opium War, when it was invaded by foreign countries and suffered setbacks in its fight against the Taiping Rebellion forces, its GDP still accounted for as high as 17.2% of the world's total by 1870. Maddison (2003).

against the backdrop of the advanced markets suffering from the US-borne subprime mortgage crisis and the European sovereign debt crisis, the emerging-market economies have suddenly come to the central stage to become the backbone of global economic growth. They are reshaping the world political and economic landscape for their exceptional performance after registering high economic growth rates.

Many factors can explain the rise of the emerging-market economies. We have focused on their skills in adapting to and making use of international rules. Some of those emerging-market economies are successors of the most powerful rivals of the US in history; some of them have starkly different ideology from the US; some of them share religious feelings with those who were directly involved in the September 11 attacks, which caused heavy casualties in the US. How have they obtained the growth opportunities while global rule-making is under the control of the US? Can their behavior and strategies apply to other countries? This paper will use the contract economics concepts to construct a theoretical framework based on international political economics and, with China as the typical case, try to resolve the puzzle of catch-up in an environment of non-neutral institution.

8.2 Tentative Theoretical Explanation

We attempt to use the analytical framework in contract economics to explain behaviors and of advanced and latecomer countries and outcomes in an environment of non-neutral international institution. Compared with more traditional objects of analysis, such as enterprises, market, and government, there have not been many studies that take inter-national relations or international rules as objects of contract economics analysis.[3] Studies in those fields have mainly focused on arms race and deterrence among different countries and recognition of international systems using game theory analytical methods. On the one hand, the contract economics theory originates from study in the field of enterprises. The important methods proposed by the theory to eliminate or reduce the effect of information asymmetry or incomplete contract can be hardly applied directly to analysis of international relations. On the other hand, the international rules or pacts are relatively more complicated and the formal models based on corporate behavior can hardly cover topics in the field of international relations, thus limiting the application of contract economics theories in the field of international relations.

Despite those limitations, we can still use the key concepts and main conclusions in the contract economics to explain the catch-up myth in an environment of non-neutral international rules. Seen from the perspective of contract economics theory, latecomer countries face two types of constraints when they participate in international rules or systems dominated by advanced countries—one is the limitation of information

[3]There are still some studies using that methodology. For example, there is a study using concepts in new institutional economics and the hegemony leadership concept to analyze the signing and implementation of the Louvre Accord (Rithter 1998).

asymmetry as mentioned before; the other is the limitation caused by incomplete contracts.

1. **Information asymmetry**

In economics, information asymmetry means different parties of economic behavior have different information regarding all economic variables; or in other words, the resources or costs for concerned parties to obtain information are different. In a game of international rules, the party that has the advantage of information can make better use of the rules to benefit its interests, thus possibly leading to opportunist behavior. Based on whether information asymmetry and the resulting opportunism happen before or after contracting, it can be divided into adverse selection caused by information asymmetry before the contracting and moral hazard caused by information asymmetry after the contracting. Based on the signaling theory in the adverse selection and moral hazard mechanisms, researchers can further devise such concepts as strategic misleading and risk indicator to analyze inter-national gaming.

(1) **Adverse selection**

George Akerlof is among the earliest batch of economists that put forward the concept of adverse selection. The example he used is the second-hand automobiles market. Anticipating that the seller, who has the advantage of information, could inflate the quality of the vehicle on sale for a good price, the buyer is only willing to accept a price for a lower-quality car, thus driving out better-quality cars and disrupting the workings of the market.[4] Adverse selection can nevertheless be overcome; for example, the seller can be required to publicize reliable signals to prove the cars on sale have good quality, or a guarantee can be provided.[5]

For latecomer countries, if it is beneficial for them to participate in a certain international regime but they are not qualified, then they can "cheat" the dominating countries in the regime by sending plausible but actually false signals to get admitted into the regime. For example, to meet the Stability and Growth Pact requirement on debt/GDP and deficit/GDP ratios, Greece, helped by Goldman Sachs, resorted to foreign exchange transactions to whitewash its debt conditions and underestimated its debt and deficit levels through complicated financial tools in 2001 to join the euro zone. Italy, which seriously suffers from the current European sovereign debt crisis, has a similar record. Generally speaking, large financial enterprises, whose reputation constitutes their main asset, should not violate professionalism to help their clients through cheating. Their provision of such services bears high costs. Therefore, such countries as Greece and Italy can hardly send signals of "good vehicles". However, the lack of regulation on complicated financial innovation in an environment of prolonged financial liberalization has reduced the costs of rule violation for such an enterprise as Goldman Sachs. Or rather, Goldman Sachs may hold that its operation can be interpreted as a method that does not violate the rules and

[4] Akerlof (1970).

[5] Varian (1992).

can avoid paying high prices. Therefore, it has priced such operation's possible impact on its corporate reputation at relatively low levels. As a result, it has received $300 million from the Greek government to help it whitewash its balance sheet through innovative accounting methods. Although Greece has successfully joined the euro zone through irregular signaling, the after-contracting formation is still symmetric for dominating countries, such as Germany and France. As those unqualified peripheral countries approach the euro zone, the core countries could ultimately pull out of the euro zone, an adverse selection that could bring about the collapse of the zone. Despite that, sending false signals to benefit from participation in international rules is one of the possible methods for latecomer countries to make use of the current international rules.

(2) **Moral hazard**

A main reflection of moral hazard is the ability of the agent that has the advantage of information to hide action after the signing of contacts. The principal cannot know, control or redress actions taken by the agent to allow risks to grow. In the history of international relations, backlash or catch-up caused by runaway moral hazard or hidden actions is not rare. Essentially, it is because the dominants of the current system have overestimated the controlling power or emotional appeal of their own or the system they dominate while they have had a misguided perception of the real intentions and actions of those latecomer countries so that they have used the resources or power of the system to encourage the anti-system behavior of those countries. For example, in 1934, the first diplomatic proclamation made by Adolf Hitler after he became chancellor and prime minister of Germany was a reassurance of peace. He stressed giving up any attempt to demand a change in the arrangements of the Treaty of Versailles by force. His actions are quite deceptive. What concerned the UK and the US was mainly their anger about the totalitarian nature of Nazi rule, not the deeper worries about Nazi Germany's open defiance of the peaceful arrangements made by the major powers in 1919, which was more meaningful. Therefore, UK and US policies toward Germany remained largely unchanged. Before the eruption of World War II, Hitler sent troops to occupy the Rhineland where was defined by both the Treaty of Versailles and the Locarno Pact as a "demilitarized zone". To deceive the UK and France, Hitler announced that the occupation was purely symbolic and suggested that Germany sign 25-year non-aggression pacts with its neighbors to the east and the west. Sticking to their anti-communist prejudice, the British and French leaders refused the suggestion made by the Soviet Union that they establish an anti-Germany alliance. Instead, they stuck to their appeasement policy toward Germany, which encouraged further risk-taking by Hitler. The UK and France expected to divert German attention to the East, but the Soviet Union and Germany unexpectedly signed a non-aggression pact and other secret agreements on 23 August 1939. Only a week after the signing of the pact, German troops invaded Poland on September 1, leading to the full outbreak of World War II. Germany had successfully hidden its actions so that the UK, the US, and France made wrong strategic decisions, which created optimum conditions for Germany to pool its forces and use blitzkrieg to defeat Poland and France.

(3) **Strategic misleading**

A concept of "strategic misleading" in the field of international relations can be defined by referring to the concepts in economics and information asymmetry theory. The so-called strategic misleading refers to false signaling before contracting or hidden information or action after contracting, which drives the dominating countries to consistently make wrong major decisions, causing their decline.[6]

Seen from the perspective of the dominating advanced countries, strategic misleading is caused by external factors, i.e., the misleading signaling or concealing of key information or action, such as real intention, resources, and growth trend of abilities by latecomer countries, which are their potential rivals. However, it is indisputable that their failure to effectively manage the moral hazard of latecomer countries is also caused by internal factors. If those internal factors do not work, it is hard for them to be misled strategically.

First, the dominating countries generally were winners or at their height of development. It is easy for them to ignore risks or overvalue factors in the intentions and actions of latecomer countries that could benefit them while ignoring the potential risks. For example, the euro zone was an indulgence at the peak of European integration and as a result, it is fair to say that it had opted to ignore the risks when it agreed to accept Greece and other countries as new members. There is proof that Germany and France had noticed the tailoring of data by Greece, but the political significance and urgency of the rise of the euro had overweighed their doubts. A similar situation occurred before the outbreak of World War II. After winning World War I, the UK and France were unrealistic in their demands on Germany. They not only demanded huge amounts of war reparations from Germany, but morally insulted it by blaming it alone for the war. The UK and France ignored the risks posed by the rise of Nazi Germany toward the international order and expected it to offset the influence of the communist Soviet Union so that they could benefit from the rivalry between the two countries. They were just like the Wu State during the Spring and Autumn Period.

Second, the dominating countries often make wrong judgments regarding the strategic landscape or key strategic rivals. For example, the Allies saw the Soviet Union as the biggest threat before the outbreak of World War II and were caught off guard by the Germans.

Third, there are internal political divisions within the dominating countries, which lead to their sustained failure to implement containing policies toward latecomer countries (potential rivals) effectively and consistently. In the post-World War I years, the UK maintained a policy of balance of power, hoping that Germany was not overly weakened while France did not become too powerful. The US had maintained a similar stance with the UK. France, however, hoped that Germany could be weakened as much as possible, with the best scenario being that Germany would be unable to rise again. Such fundamental differences were popular in European politics at

[6]For discussions on strategic misleading see Feng and Yu (2012).

that time. Before the outbreak of World War II, Germany violated the disarmament articles of the Treaty of Versailles and proposed to the UK that the total tonnage of all types of vessels (including submarines forbidden by the treaty) in the German navy should be fixed on a permanent basis at 35% of the total tonnage of the British Royal Navy. France resolutely refused to make any concession to the expansion of German military forces, but the UK signed a naval agreement with Germany and the British-French difference caused chaos in France, Italy, and the Soviet Union. On the whole, before World War II, France was inclined to isolate and encircle Germany while the UK's mainstream public opinion was that Germany should not be encircled of and German complaints should be discussed in a friendly manner. The differences between France and the UK provided opportunities for Germany to continually cross the security bottom line of the dominating countries and benefit from the gaming.

To sum up, resorting to strategic misleading through internal and external factors in the dominating countries, the latecomer countries could benefit greatly from the current order or rules or even break the current order. Given the limitations caused by internal and external factors, such strategic misleading ostensibly benefits the dominating countries, but actually coaxes them into a trap set up by the latecomer countries taking the advantage of information asymmetry. Strategic misleading can be divided into different types—material-level misleading, system-level misleading, and concept-level misleading. The first type of misleading is reflected in the rivalry between State Wu and State Yue during China's Spring and Autumn Period. After Yue was defeated by Wu, Yue selected its best grain seeds and sent them to Wu after they were heated to become germinate. Wu took the seeds, planted them, and was fatally hit by a nationwide famine. The system-level misleading can be reflected in the various treaties Germany signed with other European countries ahead of the outbreak of World War II to hide its aggressive intentions. The concept-level misleading can be reflected in Japan's rise in the 1980s, when the Western world, led by the US, sang the same tune of "Japan being No. 1". The concept of Japanese policymakers changed as a result and then Prime Minister Yasuhiro Nakasone put forward the "political power" strategy and actively pushed the idea of Japan transforming from an economic power into a political power and the Yen a dominant currency. Thanks to such conceptual change, Japan had made a strategic move to allow the Yen to appreciate against U.S. Dollar and to promote Yen internationalization by signing the Plaza Accord and the Louvre Accord, which, together with other factors, did not make the Yen triggered the "lost decade" for the country.

(4) **Risk indictor**

Strategic misleading mainly refers to latecomer countries benefiting from the current power order by taking advantage of information asymmetry. However, as mentioned before, there is a bilateral principal-agent relation in the field of international rules. The advanced countries, which dominate the relationship, also have an advantage in information in the field of international rules (although, generally speaking, such advantage is greatly offset by the relatively high transparency of international rules and international organizations). Therefore, it is an important task for a country to overcome the information advantage of dominating countries (and its allies) and avoid falling into the "rule trap" if it wants to successfully rise in an environment of non-neutral international institution.

In theory, if the latecomer countries can rapidly find a rule-participant that has similar social and economic development level and close stance in negotiation as a low-cost reference and risk indictor, then even if they cannot have the knowledge of all the hidden information and actions of the dominating countries, they can still circumvent risks as best as they can so long as they take the risk-indicating country as a reference to make promises in rule participation. In reality, however, it is not without a price in looking for the risk indicator. In many cases, the cost is so high that the latecomer countries cannot make decisions in a timely manner. After the cost-benefit information related to rule participation becomes fully available, the latecomer countries may have lost the best opportunities for action. Moreover, the cost of looking for a risk indicator also lies in the failure to find the right one, thus exaggerating or underestimating the risks facing the latecomer countries and leading to wrong decision-making.

For example, at the G20 meeting of finance ministers and central bank governors in Gyeongju, South Korea in October, 2010, US Treasury Secretary Timothy Geithner proposed setting a 4% ceiling for a proportion of a country's current account balance to GDP. His proposal was opposed by major exporting countries, such as Germany and Japan and failed to become a formal quantitative target for G20. China supported Germany's stance at that time.

With hindsight, we know that China has chosen the wrong risk indicator of Germany. Although data at that time (in 2009) indicated that the current account surplus/GDP ratio was above 4% in both China and Germany and it was even as high as 10.1% in China in 2007, the two countries were starkly different in terms of their structure of surplus and development trend. Germany's surplus came mainly from within the euro zone and a change in the ratio not only required its own policy change, but that of other deficit-suffering countries in the zone. Those deficit-suffering countries were heavily indebted while they had access to the many benefits of the zone. Therefore, they did not have the incentive to proactively make adjustments while Germany was not willing to shoulder all the adjustment costs. Therefore, it was very difficult for Germany to lower the ratio of current account surplus to GDP to below 4% in both the short and long term. In 2011, the ratio was 6.8% in Germany; it rose to 7.5% in 2012 and according to IMF estimates, it would average at above 6% in each of the years from 2014 to 2017 and the average ratio would be 6.9% during that period.

What China was worried about at that time was that once the ceiling became a hard constraint, then it may become a substitute policy, as expected by Timothy Geithner, to force the renminbi to appreciate. As it happens, China soon reduced its surplus/GDP ratio to below 4%. In 2011, it was 1.9% and later, although it rose slightly, it was still only 2.3%. According to IMF estimates, the ratio would not exceed 3% at least by 2019. A report released by the China Finance 40 Forum also shows that the possibility of a falling Chinese surplus/GDP ratio is higher than that of a rising ratio and, although a deficit cannot be overruled, the possibility is slim that the surplus/GDP ratio would rally significantly.[7] Suppose the G20 reached a consensus on the ceiling of 4% for the surplus/GDP ratio and the US used the target to replace its policy of forcing renminbi appreciation, which lacked explicit criteria, then the pressure from the US on China's exchange rate policy would have been fundamentally eased now and would continue to ease in the future.

As mentioned above, China's failure this time in choosing a proper risk indicator also results from its adjustment of its economic structure, which is starkly different from that of Germany. Transformation of economic growth patterns creates great demand for high-end industrial equipment. Even without the exchange rate factor, China still needs to expand imports and the trend is for its surplus/GDP ratio to decline. In other words, suppose there is a 4% ceiling for the surplus/GDP ratio, China can narrow its surplus through expanding imports while not limiting its exports. Those countries that do not face the challenge of restructuring would have to reduce exports to meet the 4% requirement, thus helping China increase its share in overseas markets. In all, by choosing Germany as the risk indicator to gauge the US proposal on international rules, China exaggerated its own risks and made a mistake in participating in writing relevant international rules, costing a good opportunity to make use of new rules to benefit its national interests.

2. **Incomplete Contract**

The incomplete contract theory is the latest of all the contract economics theories and its development remains incomplete. Although it has a very clear definition, much of it is yet to be proved by formal economics models and it is still developing. Here we can only introduce a few of the proven contents of incomplete contract theory into the analysis of international relations and international rule-making.

The so-called contract incompleteness refers to the impossibility of making specific agreements that can be proven (and carried out compulsorily) by a third party since it is impossible to specify every possible state in the limited number of contracts. Generally, it is held that factors causing contract incompleteness include[8]: First, ambiguous or unclear language, which causes ambiguous or unclear contract; second, due to negligence of parties concerned, relevant matters are not clarified in the contract so that it becomes an incomplete contract. It is related to the so-called "bounded rationality" put forward by Herbent Simon; third, the cost is higher than the gain from writing relevant clauses of the contract by parties concerned to fix specific matters; fourth, information asymmetry; fifth, heterogeneity of market entities. It is similar to information asymmetry, but it stresses the peculiarity of market entities, not other information grasped by market entities. In the existing incomplete contract theory, renegotiation and relationship specific investment are relatively important concepts that have been studied by many scholars.

---

[7] Guo http://www.cf40.org.cn/plus/view.php?aid=5557.

[8] Schwartz (1999).

(1) **Renegotiation**

The incompleteness of contract leaves room for renegotiation. When the contract is complete, the ability to renegotiate exists as a constraint on the plan of the principal before the signing of the contract and generally can cause loss of efficiency. However, when the contract is incomplete, renegotiation allows the concerned parties to respond to contingencies. Therefore, it is beneficial on the whole. Renegotiation happens even in a state of equilibrium. In other words, in a world of complete contracts, renegotiation is purely targeted at distribution, not production and, therefore, such renegotiation can only reduce overall gains (since it also carries costs or prices). In a world of incomplete contracts, however, new benefiting opportunities can possibly be obtained through renegotiation. If the latecomer countries can put forward a distribution method that the advanced countries accept to push forward renegotiation, then they can have access to new opportunities to gain through cooperation. The latecomer countries can even increase their relative well-being as a result.

Renegotiation in international relations and international rules can be successful if the following requirements are met. First, the gains of renegotiation should exceed costs. Second, the dominating countries gain more than they lose in the renegotiation. In other words, the losses incurred by refusal to renegotiate should be more than the gains. Third, the latecomer countries should benefit from the renegotiation.

Reform of the quota and voting share by the IMF and the World Bank is a typical renegotiation. It happens against the backdrop of two major developments. One is that the global financial crisis triggered by the US-borne sub-prime mortgage crisis worsened. The other is the exceptional performance of the emerging-market economies, led by China, in the global financial crisis, which has made them indispensable in the global efforts to manage crisis. After the eruption of the global financial crisis, the US and its allies, which dominated the old international regime, realized that without support from the emerging-market economies, such as China, the Bretton-Woods Institutions can only play a diminishing role in the tackling of the crisis and global governance. They may even fail to push forward crisis management. It was just the crisis, or the menace of losses, and China's indispensability that made the US unable to refuse renegotiation. Since the London Summit set the tone of reform in April, 2009, the IMF and the World Bank have accelerated their quota and voting power reform in the crisis thanks to the urging of the G20 summits. Since 2012, however, the impact of the crisis on the US has been diminishing, which means diminishing gains of renegotiation for the US. Therefore, the US has used various excuses to postpone the quota and voting share reform and failed to submit the reform plan devised in 2010 to Congress for approval.

Currently important IMF and World Bank decisions require a supermajority of 85% of votes, and even if the current reform plan is approved and implemented, the US still has more than a 15% share, meaning it can veto any major decisions. If the reform of quota and voting share is passed to win the capital support from other countries, such as China, which will increase the influence of Bretton Woods Institutions in global governance, while the veto power of the US is not weakened, then such renegotiation results would bring more gains than losses to the US and the US would not be justified in stubbornly opposing it.[9]

The more crucial issue is how to boost reform. Germany once put forward the idea that the European countries give some of their voting power to the emerging-market economies in exchange for US agreement to give up its veto power. Chinese policymakers and researchers could have been encouraged by such signs of difference within the group of dominating countries and the mainstream opinion of its policymaking and academic circles is that the US veto power should be eliminated in some manner. Zhang Zhixiang, former IMF executive director for China, proposed three reform plans. One was that the proportion of US votes be directly cut; another was to raise the basic quota and lower the proportion of subscription. is the third was that the 85% supermajority required to pass major decisions should be lowered to 75%. Technically, all three plans could eliminate the veto power of the US, but none of them satisfies the requirement that "the dominating countries gain more than their loss in the renegotiation" and, therefore, seen from the perspective of renegotiation theory, none of those plans can be realized. In fact the German attempt did not materialize and although the increased quota and votes of the emerging-market economies mainly came from the European countries, the veto power of the US, which is the core dominant of the system, is yet to be weakened.

In the gaming of this international rule, the US has two-level interests. First, US dominance of the IMF and the World Bank is centered on its ability to veto major decisions in those two institutions, which is its most crucial interest and should not be affected. Second, the US hopes that the Bretton Woods Institutions, which are under its control, should play a larger role in global governance. To that end, more capital and policy supports are needed from the emerging-market economies. The greater their supports, the greater the US gains. Any reform plan that could be accepted by the US should ensure its interests at the first level while its second-level interests can be greatly expanded. This means the US Congress would require reservation of its veto power while other countries, such as China, should provide more capital and policy supports. The interests of China as a latecomer country lie in the provision of capital support and increase in its voices while US dominance is weakened. As long as all the above interests are satisfied then can an effective renegotiation be possible.

It could be feasible to transform the current governance structure of "US dictatorship" into one of "two-country coordination". In the fourth-round China-US Strategic and Economic Dialogue in May, 2012, China for the first time put forward a new idea of "two-country coordination" (C2), which won understanding and support from the US side. The quota and voting power reform the IMF and the World Bank could be the field in which China pushes the implementation of the C2 blueprint. According

[9]In reality, the US has greatly strengthened its ability in negotiation and renegotiation through its two-level game structure, i.e., the international commitments agreed by the US government would not be valid without Congress approval. The US has used the excuse of failure of the Congress to approve the reform plan to postpone the implementation of the agreements on IMF quota reform. The costs of such a strategy have greatly declined following the end of the global financial crisis since it becomes less dependent on capital sources from the emerging-market economies, such as China. The US could even overturn its previous commitments and demand renegotiation.

to the new philosophy, the proportion of votes required for major decisions to be passed in the IMF and the World Bank should be raised, not reduced (as currently discussed), while China's quota and voting share should be increased so that it also has the power of veto. For example, the supermajority ratio can be raised from 85 to 90%, while China's quota and voting share can be raised above 10% (the increased quota and voting shares can come from the US). Such a plan would not affect the US veto power. Compared with loss of that power, it is easier for the US to accept a plan of shared veto. Such a method can also increase the global governance capacity of the Bretton Woods Institutions thanks to China's increased inputs of resources and the US would benefit. China, meanwhile, could balance the dominance of the US by having the power of veto and its voices would increase significantly. Other countries could have more freedom as the single-power dominance of the international rule by the US is weakened. They can have more room for maneuver as China and the US game with each other. If the renegotiation plan can be redesigned in accordance with such a philosophy, then the possibility of it being accepted by all countries is higher than that of a plan targeted at eliminating the veto power of the US.

(2) **Relationship-specific investment**

Relationship-specific investment means once investment is made, it is more valuable within the relationship than outside the relationship. In other words, such investment can increase productivity within the relationship but when applied outside the relationship, it does not have much value and investors need to pay for it. According to the theory of incomplete contract, due to the incompleteness of contracts, contracts that cover matters of specific investment and can be verified by a third party cannot be signed beforehand and no one dares to make specific investment without transaction or transfer of residual right of control, because once investment is made, one would be "locked" in a disadvantageous position in the negotiation and the other side in the negotiation could overcharge. Anticipating such a risk, the investor would reduce relationship-specific investments beforehand so that the production potential cannot be fully brought out, as reflected in adequate relationship specific investment. Then the residual right of control is especially important. If it is put in the hands of people making relationship specific investment, it would produce higher productivity. In the making of rules, the "reservation of interpretation right" clause, which is very common, is a way to keep the residual right of control in the hands of rule-dominants.

Apart from the possibility of the investor being overcharged in the negotiation, relationship specific investment could also have positive functions. Because investment is not very valuable outside the relationship, being in a disadvantageous position in the relationship specific investment could also become a way to increase trustworthiness and reliability in the so-called "capture-bonding" effect. Such investment means attachment of importance to mutual relations and the targets of such investment are normally international relations, which are quite important, and its importance would decrease if it is in other countries.

Besides the different proponents of mainstream theories that the asset ownership provides an incentive for relationship specific investment, there are scholars who hold that under certain conditions, loss of assets can on the contrary increase the investment incentive for the agent.[10] This is because for those with mainstream theories, the cooperative game method takes outside option as the status quo point while for those who hold that loss of assets can increase the investment incentive for the agent, the non-cooperative game method takes outside option as a threat point and could become residual claimer through relationship specific investment.[11]

8.3 China Cases

There have been a large number of insightful studies on China's international strategy or grand strategy and China's successful practices have been confirmed. Scholars in the US in the RAND think tank are the main providers of those research results. As early as in 2000, a Rand publication, *Interpreting China's Grand Strategy: Past, Present and Future,* had pointed out that China had adopted a calculative strategy that is characterized by: (a) a non-ideological policy approach keyed to market-led economic growth and the maintenance of amicable international political relations with all states, especially the major powers; (b) a deliberate restraint in the use of force, whether toward the periphery or against other more distant powers, combined with efforts to modernize and incrementally streamline the Chinese military; and (c) an expanded involvement in regional and global interstate politics and various international, multilateral forums, with an emphasis, through such interactions, on attaining asymmetric gains. Under China's calculative strategy, confrontation or conflict with the US or its allies in Asia would most likely occur as a result of "normal" disputes between states—especially those disputes arising from perceived threats to China's domestic order and well-being and China's territorial integrity—and not from explicit or implicit great power struggles over control of the international system.[12] Those judgments imply that China has rightly sent a signal of easing tension, not increasing confrontation, to system- and rule-dominants. It has swayed the judgment of the dominants and created favorable conditions for its own development.

In 2009, RAND researchers pointed out in a publication titled *China's International Behavior* that China's history has had an influence on its perception of its own security environment and its role in global affairs as well as its foreign policy objective and international behavior. According to the article, China has been largely working within—indeed, deftly leveraging—the current international system to accomplish its foreign policy objectives. It sees more opportunities than constraints in using the current system to advance its interests. China's international behavior is not ideologically driven and China is not pursuing a revolutionary foreign policy that seeks to acquire new territory, forge balancing coalitions, or advance alternative models of

[10]Chiu (1998), de Meza and Lockwood (1998).

[11]Yang and Nie (2006).

[12]Swaine and Tellis (2000).

economic development or global security. China is not trying to tear down or radically revise the current constellation of global rules, norms, and institutions. Rather, it has been seeking to master them to advance its interests—and approach that, to date, has proven quite productive for Beijing.[13]

Those research results do not go against observations of this article and they have even confirmed some of the analyses in this article. The methodology used in this article, however, is very different. Those researchers have generalized China's strategies and rules of behavior based on observation of China's history, political interests, and geopolitical environment to explain China's success story. With the analytical tools introduced in earlier chapters, this article mainly adopts a deductive approach and provides some explanations for how China has risen in an international system or framework of non-neutral international rules dominated by the US. It emphasizes China's success in three aspects as it tackles non-neutral international rules. First, it has chosen the right risk indicator when it participates in framework of international rules that concern major interest considerations, such as the World Trade Organization, and successfully put the risk of the dominating countries making use of information asymmetry to harm China's interests under control. Second, China has made use of US strategic misleading to effectively safeguard its core values and independent development track. Meanwhile, it has won widespread understanding, cooperation, and support from the international community. Third, through shouldering the huge costs of relationship specific investment, China has successfully dismantled the alertness and repulsion of the dominating countries and the effect would last for a fairly long time.

1. **Accession into the WTO**

China took fifteen years—from July, 1986, when China applied to resume its status as a GATT contracting party, to Dec. 11, 2001, when it formally joined the WTO—to go through a series of tough negotiations to be accepted into the WTO. Regarding China's decision to join the WTO, Long Yongtu, former top negotiator for China's WTO membership talks, and Sun Zhenyu, Chinese Ambassador to the WTO, both mentioned the following factors. One is the creation of a favorable external environment for China. The other is pushing domestic reforms. The first factor sends a signal that China is willing to integrate into the international community and, more importantly, the WTO membership normalizes China's bilateral relations with the US and China would no longer need to hear the "anti-China chant" staged every year when the US decides whether to grant China most-favored nation trade status. The second factor is in line with US expectations of China. The US has had expectations that have gone beyond the economic sphere toward China's market reform. China's WTO accession actually is a sign of its recognition of the non-neutral international system dominated by the US and provides an opportunity for the US to make use of the system to make China abide by international rules.

[13] Medeiros (2009).

It is neither without a cost nor without any risk for China to send such a signal. As dominator of the system, the US is privileged to have an automatic information advantage. None of China's negotiation team members ever went through such detailed negotiations. Long said later: "For a 500-page English protocol, it's hard to examine the full text word by word, not to mention bargaining with the other parts in English." Even after its accession into the WTO, China was still not very familiar with relevant knowledge and rules. Therefore, it had gone beyond the abilities of the negotiation team members to rely on themselves to screen out potential pitfalls of rules.

Based on previous analysis, one way to prevent the dominating countries to make use of their information advantage to harm the interests of latecomer countries is to find a proper risk indicator. China had found a proper risk indicator when it joined the WTO, i.e., the developing countries. As early as in 1993, when he met then US President Bill Clinton for the first time in Seattle, former Chinese President Jiang Zemin put forward three principles governing China's resumption of status as a GATT contracting party, including balanced rights and duties and China's status as a developing country when it joined the WTO. In principle, it is meaning to balance a country's rights and duties, but, as mentioned earlier, in practice, it is difficult to sort out all the rights and duties China should have when it joins the GATT/WTO. Therefore, it is crucially important for China to join GATT/WTO as a developing country. Chinese policymakers have been very sober-minded about this issue. At an internal meeting, Jiang said:

> China is a developing country and we can only accept negotiation conditions that are in line with our economic development level. If our accession into the WTO is detrimental to our fundamental interests and national security, then why should we join it! It's nothing big even if China does not join it. China's opening up and modernization construction will continue to press ahead. We will by no means sacrifice our national interests and security in exchange for a WTO membership. It's our bottom line.

It is clear that Chinese policymakers have been very conscious of the costs and risks of signaling. They have made it clear that China's accession into the WTO as a developing country concerns the country's bottom line. In this way, the technical problem of balancing rights and duties has been solved through the risk indicator of developing countries. Two thirds of WTO members are developing countries and most of them had become WTO members long before China's accession. Although they are not dominating forces of WTO rules, it is difficult for the dominating countries to set a trap of rules for all of them.

2. **US strategic misleading**

The US has all the endogenous conditions for being strategically misled. First, in the post-Cold War era, the US became the world's only super power and such "triumph or height of power" status can easily make it overly optimistic and ignorant of risks. Second, affected by the American exceptionalism mentality, the US has seen itself as the leader and guard of freedom in the world. It often points fingers at other peoples, countries, and civilizations, thus incurring opposition from various entities. It makes it more difficult and costly for the US to find its key strategic rivals. Third, there are differences within the group of dominating countries, namely, the US and its allies. The division is widening, as reflected in the hands-off stance of the US as Europe is bogged down in a serious sovereign debt crises. Although it is Europe's ally, the US has not done much to help the debt-stricken euro zone economies, although it did not worsen the situation, either. As a result, the possibility of the US being strategically misled could be quite high.

Regarding China's participation in international rules, US strategic misleading is mainly reflected in its excessive confidence and optimism in the international system it dominates. It holds that the economic reform following China's accession into the system is set to lead to an all-round political and economic transformation driven by "peaceful evolution" and ultimately China would undergo the same changes as the former Soviet Union experienced in the process of disintegration. The US tolerates and even encourages China's rise in the system of rules that it dominates, but it does not mean it welcomes China's rise. For the US, a quite strong or a quite weak China does not make much difference and the key is that China must be cooperative and toe the line when it deals with the US. Considering that the protection and expansion of interests mainly stem from rules and their quality of being non-neutral, the US, which established and dominates the system of rules, naturally becomes the largest beneficiary of the system. And in that process, its tolerance of China's rise can be optimistically seen as an investment that promises handsome returns in the future. The US believes that through integrating China into the system of rules, the country can ultimately be changed into a "democratic" country that poses no threat to the US. Seen from Russia's transformation, such a "democratic transformation" has significant economic and strategic implications. First, the big redistribution plan following the "democratic transformation" drives significant amounts of social resources into the non-production fields, which lowers the overall effective investment level of the society. Second, the redistribution measures that accompany the "democratic transformation" lead to fragmentation of social resource distribution, which lowers investment efficiency. Third, in the process of "democratic transformation", the controlling power and authority of the government are also damaged and for a time, it even becomes unable to maintain basic order for production and social life.

The US has obviously underestimated the influence of the transformation of former Soviet Union and East European countries and their ensuing predicaments on China. It has also underestimated China's resolve to stick to an independent road of development with Chinese characteristics. China's leadership has never given up its caution about external forces. Some Western scholars have interpreted such caution as a result of China's modern history of suffering from invasions that has made China highly sensitive toward foreign powers' attempts (imaginary or real) to encroach upon its sovereignty.[14] It is just such caution and sensitiveness, which are rooted in history, that have helped China lay an ideological foundation for its decision to seek an independent road of development instead of relying on dominating

[14]Medeiros, *China's International Behavior.*

countries of the system. The predicaments Russia faced in its transformation process, in particular, have made "Chinese characteristics" even more valuable. The lessons from former Soviet Union's breakup have become textbooks for Party members and ordinary people and "Chinese characteristics" have become an unyielding belief that is comparable to "American exceptionalism".

Seen from the perspective of complete contracts, the US blueprint, in which it expects China to rise economically and, politically, get assimilated by international rules after long-time accommodation and encouragement by the international regime, or get weakened by its "democratic transformation" to ultimately become a cooperative member of the international system, is almost flawless and there have been successful precedents. However, contracts are always incomplete. The richness of real life always goes beyond the theoretical imagination of mechanism designers. China's economic rise, thanks to the tolerance and encouragement by the US-dominated international regime, has improved its self-esteem as a major power and created a culture self-confidence that have been buried in the country's long history. Contrary to US expectations, China has not been entirely assimilated by the international system and it has failed to show a subservient attitude. Instead, the various versions of the "China model" have aroused expectations and resonance from other members of the international system. On the whole, US encouragement of China's integration into the international system and achievement of economic growth is like a "sugar coat" while in it lies the "bullet" of "peaceful evolution". The US expects China to deviate from its pre-set tracks after it shoots the "bullet" and join the "democratic and free" camp that it dominates. However, the US has miscalculated. China has taken the "sugar coat" but spits out the "bullet", a move that is full of wisdom and courage and makes the country more attractive. It even starts to shake the legitimacy of the international system led by the US.

3. **China's relationship specific investment**

It is very difficult either for the US to accept the risk indicator China has chosen or for the US to be strategically misled by China's behavior. Why can China achieve both? One of the important reasons is that China has made effective relationship specific investment in Sino-US relations. China's foreign exchange reserves are a case in point.

China's dollar-denominated foreign exchange reserves entirely conform to the definition of relationship specific investment. First, the investment is more valuable inside the Sino-US relationship than it is outside the relationship. The US is the dominating force in the group of advanced countries in today's world. For China, it invests its foreign exchange reserves in dollar assets because the US can guarantee the value of its investment. It is much more worthy than investing them in Sino-European or other bilateral relations. As Long Yongtu has said, "The Sino-US relations are the most important in China's international relations structure. If we have good relations with the US, we'll have good international relations on the whole; if our relations with the US sours, then our overall international relations would suffer". Moreover, such a guarantee of value is especially valuable given the "lack of strategic mutual trust" between the two countries. Second, such investment can increase the "productivity" of Sino-US relations. Although China's concentration of its foreign exchange reserves investment in the US market equals the offer of a "hostage" and, as a result, China risks being robbed by the US. China's behavior, however, also makes the US feel at ease about increasing economic and trade exchanges with it and supporting its participation in the international economic regime the US dominates. The resulting increases in its well-being, including benefits from trade, far outweigh the opportunity costs of investing its foreign exchange reserves in the low-interest rate US treasury debts. Third, such investment has a price tag. Apart from the economic cost of a low level of returns, the resulting public criticism of the low level of returns of China's overseas investment constitutes its political cost while the US inflationary policy as it tackles its debt burdens can encroach upon China's assets. Moreover, the controversy surrounding the US attempt to raise its debt ceiling indicates that China also faces the default risks if the US defaults on its debts. All these are costs of China's relationship specific investment.

China has based its investment decision-making on a comprehensive calculation regarding investment returns and costs. Proper scale of investment can send a signal of reassurance and help China's rise while easing the US anxiety about China's expanded power. As the scale expands, however, the costs are increasingly higher while returns remain stagnant. As a result, China faces more risks and it is necessary for China to consider halting its offer of "hostage". It could even withdraw its "hostage". The increase in China's foreign exchange reserves is determined by the endogenous factor of economic development mode and could accelerate. If it fails to strengthen efficiency- or returns-oriented investment portfolio management and continues to invest its incremental foreign exchange reserves in the US treasury debt market, the costs it has to shoulder would accelerate. However, due to the political attribute of the relationship specific investment, in terms of the method of dollar-denominated foreign exchange reserves management, China cannot make adjustments simply from the technical perspective of investment portfolio optimization; instead, it must abide by some principles so that the general situation of its external environment would not be affected.

History shows that there are the following ways to stop and withdraw the "hostage". First, the "hostage" can be withdrawn forcibly. This is possible when the bilateral relations are no longer important for the party that has offered the "hostage" and the hostage-offering party does not fear retaliation from the other side. Obviously, no other bilateral relations can replace the Sino-US relationship and the depreciation caused by expectations of China dumping its dollar-denominated assets would only be unaffordable for China. Second, if bilateral relations improve substantially, "hostage" is no longer a necessary reassurance. For China and the US, it means they establish high-level strategic mutual trust (close to or even more important than the relations between the US and its allies). The strategic mutual trust between the US and its allies is based on more defining relationship specific investments. For example, by 31 December 2011, the US troops stationed in Germany, Italy, the UK, and Japan numbered 53,526, 10,817, 9,317, and 36,708 respectively. South Korea did not even have wartime operational control; instead, this was in the hands of the US military. Obviously, China and the US are yet to be so close to each other. Third, there are major changes in the country that has offered the "hostage" (e.g. death of the king) and the "hostage" is summoned back. For example, when major natural disasters hit or foreign forces invade the country, the hostage-offering country would need to mobilize reserves to purchase large amounts of materials from other countries to sustain its people's daily life or make preparations for war. Those cases belong to external shocks and it is hard for them to be taken as the result of systematic design. Fourth, withdrawal because of the special conditions of the "hostage", such as worsening health conditions in the foreign country. China now is trying to optimize its investment portfolio and diversify its investment risks in the US. The most apparent cause of China's moves is just the worsening "health" conditions of the "hostage": The irresponsible monetary policy of the US, its heavy debt burdens, and its financial system that has shouldered too much risk combine to harm the health of China's foreign exchange assets and things could get worse. What is not that apparent is the US strategy of "Return to Asia" that shows the country's attempt to target and encircle China, which increases risks for China's dollar assets if we look at the issue from the perspective of economic efficiency and risk control. Seen from the perspective of relationship specific investment, however, after the unhealthy "hostage" returns home, there must be a healthy "hostage" of at least the same importance to take its place; otherwise, the relations would be jeopardized for lack of reassurance. Obviously, China is not prepared to use other assets to replace its foreign exchange assets as the "hostage" offered to the US.

In reality, the Chinese authorities do not even realize the function of foreign exchange reserves as reassurance for the relationship specific investment, although the reserves do have such a function. China is not purposefully lowering the proportion of its dollar-denominated foreign exchange assets. In terms of absolute amount of dollar assets, from 1 July 1 2010 to 30 June 30 2011, China's holdings of dollar assets increased by \$115 billion. Because the overall scale of China's foreign exchange reserves increased too fast during the same period, the increase in China's holdings of dollar assets becomes less significant compared with the expansion of its overall foreign exchange reserves. In this way, the ratio of dollar assets in its overall foreign exchange reserves was lowered.[15] After the US announced its return to Asia, US President Barack Obama, Vice-President Joe Biden and Secretary of State Hilary Clinton all repeatedly said that the US welcomes a strong, prosperous, and stable China that plays a larger role in the world. Chinese President Xi Jinping also said during his trip to the US that, "The vast Pacific Ocean has enough space to accommodate the two major nations of China and the US". He said China respects US proper interests and concerns in Asia Pacific and welcomes US efforts to promote regional peace, stability, and prosperity. However, the US high-profile announcement of "Return to Asia" itself has left a scar on bilateral relations. Although China only wants to diversify the risks of its foreign exchange investment, which is a technical consideration, the move itself could further increase US strategic suspicion since it weakens the function of reassurance of the relationship specific investment.

[15] Orlik and Davis (2012).

Currently, in particular, the euro assets, which have the potential to replace dollar assets in China's investment portfolio, are no less risky than dollar assets; actually they could pose more risks. China's option to purchase euro assets, therefore, seems to have verified the doubt of the US. Being doubtful about China's strategy, the US has taken further steps (e.g. supporting the Philippines and Vietnam for their provocative actions in the South China Sea), which in turn makes China more worried about the safety of its assets in the US and further reduce the ratio of dollar assets. Ultimately, there could form a vicious cycle and the two countries would no longer share a tacit understanding of each other's stance as a result of the reassurance function of the "hostage". They could even get into confrontation, which goes against the interests of both countries and the world as a whole.

It is not that China should not take the initiative to optimize the scale and structure of its foreign exchange reserves, but it should be pointed out that the political implications of economic behavior could go beyond the anticipations of policymakers. In reality, the poor efficiency of China's foreign exchange reserves management is not rooted in the asset allocation of foreign exchange reserves, but the country's "dual surplus" caused by irrational economic structure and trade policies and the continual passive accumulation of foreign exchange reserves. The real solution lies in accelerated restructuring of the economy and reduction in the current account surplus through structural adjustments while strengthening capital account management to stem capital inflows. The exchange rate and export tax rebate policies also need to be reformed to reduce international balance of payment surplus.[16] It should not only tackle superficial problems. At least for now, it is necessary to keep a proper scale and proportion of dollar-denominated foreign exchange reserves as a relationship specific investment.

8.4 Conclusion

It is fair to say that it remains too early for China to catch up with and surpass its competitors in the West. It remains unknown whether China can avoid the fate of Japan and Europe. In the first part of this article, China's catch-up in terms of GDP is mentioned, which could be misleading. What needs to be clarified is that although catch-up is related to "a country's ability to narrow down its gap in productivity and income with advanced countries", the industrialization process, structural transformation, and systematic improvement could deserve more attention. A study that analyzes the similarities between the constitutions of the US and those of all other countries finds that more and more countries have opted not to take the US Constitution as the model for their own constitutions.[17] It is a sign that although the US remains dominant in terms of material output, its institutional advantage has

[16] Yu (2011).

[17] Law and Versteeg (2012).

been on the wane. If, in the coming decades, studies show that the constitutions of other countries are based on the Chinese Constitution, then such a catch-up is more meaningful than the GDP-based catch-up. That said, it is not meaningless to examine the theories regarding experiences and limitations of China's rapid development so far. How to constrain the information advantage of the dominating powers, bring out their own information advantage, find a proper risk indicator and avoid devising misguided strategies are important technical issues and key techniques that urgently need to be grasped by China or other emerging-market economies as they rise against the backdrop of a non-neutral system environment. To that end, it is necessary for researchers to analyze and summarize the experiences of multiple international actors at different development stages.

References

Akerlof, G. A. 1970. The market for 'lemons': Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics* 84(3), 488–500.

Chiu, Y. S. 1998. Noncooperative bargaining, hostages, and optimal asset ownership. *American Economic Review* 88(4), 882–901.

de Meza, D. and B. Lockwood. 1998. Does asset ownership always motivate managers? Outside options and the property rights theory of the firm. *The Quarterly Journal of Economics* 113 (2): 361–386.

Feng, Weijiang and Jieya Yu. 2012. Lun Baquan de Quanli Genyuan [A Power Approach to the Source of Hegemon]. *World Economics and Politics* 12, 4–25.

Guo, Kai. From People's Bank of China Research Bureau, Zhongguo Jingchang Xiangmu Shuncha de Qianjing Zhanwang [Outlook of China's Current Account Surplus], paper for China Finance 40 Forum. http://www.cf40.org.cn/plus/view.php?aid=5557.

Law, D. S. and M. Versteeg. 2012. The declining influence of the United States constitution. *New York University Law Review* 873, 762–858.

Maddison, Angus. 2003. Shijie jingji qiannian shi [Trans. Wu Xiaoying and Xu Xianchun et al.], 261. Beijing: Peking University Press.

Medeiros, E. S. 2009. *China's International Behavior: Activism, Opportunism, and Diversification.* RAND Publishing.

Orlik, T. and B. Davis. 2012. Beijing diversifies away from U.S. dollar. *Wall Street Journal.*

Schwartz, Alan. 1999. Falv Qiyue Lilun Yu Bu Wanquan Qiyue [Legal Contract Theories and Incomplete Contracts]. In *Contract Economics,* eds. H. Werin and H. Wijkander, 96–140. Peking: Economic Science Press.

Swaine, M. D. and A. J. Tellis. 2000. *Interpreting China's Grand Strategy: Past, Present, and Future*, 1st ed. RAND Publishing.

Varian, H. R. 1992. *Microeconomic Theory*, 469, 3rd ed. New York: Norton.

Yang, Ruilong, and Huihua Nie. 2006. Bu Wanquan Qiyue Lilun: Yige Zongshu:一[Incomplete Contract Theory: A Summary] *Economic Research Journal* 2, 104–115.

Yu, Yongding. 2011. Shijie Jingji Da Huanjing He Zhongguo Jingji Jiegou Tiaozheng [World Economic Environment and China's Economic Restructuring], *Guoji jingji pinglun* [*International Economic Review*] 6, 12–15.

Zhang, Yuyan. 1993. Geren Lixing Yu 'Zhidu Beilun'—Dui Guojia Xingshuai de Changshixing Tansuo—[Individual Rationality and 'Systematic Paradox'—Preliminary Study of the Rise and Fall of States]. *Economic Research Journal* 4, 76–82.

Chapter 9
Global Governance: A Theoretical Framework

Yuyan Zhang and Lin Ren

Abstract Since the end of the Cold War, globalization has accelerated at an unprecedented pace and global issues have become increasingly important, making global governance a key research topic in international political economy. A review of published research on global governance finds that most have focused on specific areas or issues but few have discussed the basic theory or logic of global governance. With critical reference to the foundations of institutional economics, this paper aims to establish an analytical framework for research on global governance. This framework consists of basic assumptions, key concepts, theory (or the logical relationships among concepts), and core issues. Our goal is to reduce the cost of exchanging ideas and raise the level of discussion so as to promote the development of global governance theory.

Keywords Global governance · Problem of collective action · Player characteristics · Stake-holding intensity · Governance equilibrium

9.1 Foreword

Since the end of the Cold War in the late 1980s, the history of artificial separation has come to an end and has been replaced by an increasingly integrated world. During this historical process, globalization has played a crucial role in rapidly increasing interdependence among all countries. As goods, services, capital, and technology have moved and dispersed at an accelerating pace around the globe, as global output, energy consumption, and population have all grown substantially, and as imbalanced political and economic development has become more serious across different countries and regions, an entire series of global problems are starting to become

---

Zhang Yuyan, Director and Senior Fellow of the Institute of World Economics and Politics, Chinese Academy of Social Sciences (CASS), Ren Lin, Associate Research Fellow of the Institute of World Economics and Politics, CASS. This paper is the initial result of “Research on the change of the governance structure of the global economy and China’s strategic countermeasures,” a key national project of social sciences (Approval Number: 14ZDA081). The Chinese version of this article was first published in *Guojizhengzhikexue* [*Quarterly Journal of International Politics*] 5 (2015).
(Translated by Qiwen Zhu.).

Y. Zhang, *Reform, Opening-up and China’s Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_9

conspicuous, or are worsening. Regardless of their urgency or severity, it is high time to take seriously global issues, concerning the well-being of humankind, can only be addressed through the joint efforts of all countries. However, existing global governance is obviously lagging behind in addressing global issues. The huge void between global governance and global issues has not only led to all kinds of efforts, such as global summits and bilateral, plurilateral, and multilateral negotiations but has also stimulated broad and deep discussions in the academic community.

Most literature on global governance focuses on specific areas or issues, while few discuss the basic theories or concepts of global governance. In particular, we still lack a complete, logical, analytical framework, a set of concise theories, and a conceptual system conducive to dialogue and exchange of ideas. In fact, after the joint efforts and the accumulation of knowledge by several generations of people, economics and international politics have become relatively mature disciplines; the analytical, logical, and conceptual tools they use are quite consistent and rich. In view of this, in this paper we aim to combine our own thinking with critical reference to the achievements of institutional economics and international political science to develop a preliminary theoretical and analytical framework for research on global governance. In the next five sections, we shall discuss the concept of global governance, the basic assumptions of the theoretical system, the core concepts, the theory that links these core concepts through logic and illustrates the stable relationships among them, as well as the key problems that needs to be addressed. The limitations of this paper and the problems for further research will also be discussed in the conclusion.

9.2 The Concept of Global Governance

Current research on global governance has the following characteristics. In the beginning, global governance research was not separated from research on international institutions as scholars used the term "internationalization" instead of "globalization" and attached importance to international cooperation, not global governance.[1] From the perspective of research mode development, as globalization deepens, traditional research on international cooperation and international institutions can no longer cover all the inner content and broader implications of global governance or provide an adequate conceptual and theoretical basis for research. Current research on global governance must deal with more diversified participants, more networked and complex interdependence, larger-scale financing for global public goods, and

[1] We can observe the change of research focus in this field by looking at Oran R. Young's changes of research topics: he published *International Cooperation* in 1989, *International Governance* in 1994, and *Governance in World Affairs* in 2007. See Young (2007).

more variegated institutional arrangements.[2] Global governance has become an inescapable, independent, and distinct domain of research.[3]

Defining global governance requires a comprehensive summary of the particular qualities of all dimensions such as governing bodies, the objects and objectives of governance, and means of governance or implementation. In 1995, *Our Global Neighborhood*, a report published by the Commission on Global Governance, gave a practical definition of global governance:

> Governance is the sum of the many ways that individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests could be accommodated and co-operative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest.[4]

Global governance, with its stress on equal dialogue and the accommodation of conflicting interests, differs from past regulation and management with their mandatory nature. Global governance does not reject power relations but advocates executive power through coordinating and empowering institutions.

There are fundamental differences between global governance and state governance. The problems that global governance deals with include war prevention and conflict resolution, climate change, prevention and treatment of infectious diseases such as SARS and Ebola, maintaining the stability of the international financial system, and safeguarding the open international trade system. After the Cold War, the theme of world politics has shifted from struggles between nation-states over conflicting interests to consultation among various players, including states, sub-state actors, multinational corporations, and interest groups, in order to solve conflicts of interest, reach agreement, seek cooperation, and properly deal with global affairs in a split world without a world government.[5]

---

[2]The greater complexity of research objects: the diversification of the concept of security, the diversification of the concept of power, the diversification of interests, and the increase in layers of governance. First, the concept of security has gone beyond the traditional military security to include broad non-traditional security. Second, unlike previous dependence on military measures, the power struggle in globalization has taken on a more diversified form typified by control of governance rules in certain fields. In different issue areas, the interests of all sides need to be coordinated. All sovereign states, commercial interest groups, global civil societies, and international organizations have their own interest appeals, and with different intensities and preferences. Finally, implementation of global governance measures may involve governance activities at both domestic and international levels. Domestic politics are closely related to global governance.

[3]While having borrowed achievements and analytical language from research on international cooperation and international institutions, global governance research not only has covered a research subject that better reflects the characteristics of old and new ages but also has reshaped the analytical language. This paper attempts to develop an institutional analytical framework for global governance research by learning from past research achievements on international institutions, and on that basis, follows a research agenda that gradually includes the new theoretical elements.

[4]Commission on Global Governance, *Our Global Neighborhood*, Chapter One; see http://www.gdrc.org/u-gov/global-neighbourhood/chap1.htm.

[5]Rosenau (2001).

Global governance needs to overcome a public goods deficit. In other words, global governance needs to address the problem, "Who will pay the bill for governance?" National (economic) institutional design emphasizes the combination of market principles with state macro-control. However, there is no "global government" that is similar to national governments. Therefore, it is impossible to circumvent "governance failure" through administrative control. Because of the scarcity and non-excludability of public goods, an actor usually, for rational considerations, wants to persuade others to pay the bill for governance so that he can be a free rider. Due to lack of regulation, global public goods are thus rivalrouslyoverused. This is "the tragedy of the commons" and the problem of "collective action" often mentioned in the study of institutional economics.

Garrett Hardin was the first to put forward the concept of "the tragedy of the commons." He believed that interacting individuals shared a complex system in which unregulated commons would fall into the tragedy of the commons and limited public resources (such as forests, water, and fisheries) could not meet every individual's profit desire.[6] However, governance means "the use of power in various institutional relations to guide, control, and regulate activities of the citizens in order to maximize the public interest."[7] Hence, the core driving force for realizing the self-enforcement of global governance is to put forward institutions' roles in designing, guiding, and restricting players' activities.

O. E. Williamson holds that governance consists of connecting governance structures with trading activities through contracts and agreed-upon institutional structures to guide and reshape actors' motivations, so that resources are allocated and used.[8] In short, governance puts emphasis on institutions' role in coordination, guidance, and regulation. In the context of global governance, the goal of coordination, guidance, and regulation is to avoid "governance failure" caused by "the tragedy of the commons" and "the problem of collective action."

Mancur Olson, Jr. discusses feasible approaches to overcome "the tragedy of the commons" from the perspective of collective scale. He thinks that free-riding is easier to distinguish in collective actions with fewer members. Therefore, reducing collective scale or providing selective incentives to a few participants through institutional arrangements would all be important approaches to reducing transaction cost and boosting effective cooperation.[9]

Elinor Ostrom thinks that traditional theoretical models for analyzing public affairs often lead to pessimism, requiring involvement of either market measures or administrative management. She suggests autonomous governance of public goods as a third approach to resolving "the tragedy of the commons." The subject of her research was "common pool resources" that are both rivalrous and non-excludable. To prevent "the tragedy of the commons," people can develop small-scale social

---

[6] Hardin (1968).

[7] Yu (2005).

[8] Williamson (2000).

[9] Olson (1965).

contracts on their own and resolve the problem through the transfer of limited power.[10]

In general, there are many ways to overcome "the tragedy of the commons," including defining property rights through institutions, providing selective incentives, and controlling group size. Due to the impact of "the tragedy of the commons" and "the collective action problem," global governance needs to solve the problem of "governance failure" with regard to public goods deficit through institutional regulation. It is worth mentioning that having clearly-defined property rights is a precondition for providing selective incentives.[11] Without clearly-defined property rights, it is impossible to deal with external problems effectively. A common solution is to introduce government interventions in order to define property rights and clarify rights and responsibilities. By defining property rights, externalities can be internalized and transaction costs be cut accordingly.

In the practice of global governance, institutions are constantly going through the processes of "trial and error" and "adjustment "to deal with "the tragedy of the commons." Sometimes formal institutions work better, and at other times informal institutions do; sometimes top-down institutions are needed, and at other times bottom-up ones are. As for forms of governance, global governance so far has not developed any definite organizational or institutional model, but rather a cooperative relationship formed through consultation among many global actors at different levels (including global, national and regional). All kinds of global governance platforms, formal and informal, intergovernmental and non-intergovernmental, including the UN, G20, BRICS Summit, Red Cross, International Labor Organization, and Climate Change Conference, play irreplaceable roles in the governance of global affairs. To ensure that rules are implemented, global governance requires the establishment of related mechanisms such as secretariats, independent budgets, charters and regulations, and regular meetings. The executive organs can be either formal or informal.

In sum, if we take into account all the characteristics of actors, subjects, objectives, and forms of implementation, global governance can be defined as the sum of the international regimes, rules or mechanisms of a self-enforcement nature established by the international community of multi-power centers, which are constituted by states or economies; or, in the absence of a world government, the process whereby international players make efforts to overcome the international political market failure through collective action.

[10] Ostrom (2000).

[11] One of Coase's contributions was his discussion of the importance of defining property rights. See MacKenzie (2008).

9.3 Basic Assumptions of Global Governance

A theoretical framework firstly requires basic theoretical assumptions. The basic assumptions of global governance include the following: there is a scarcity of material resources and means (materials, institutions) that satisfy people's needs and desires; all players, including states, are self-interested[12]; there are common interests for all humankind; no world government exists.

Assumption 1: there is a scarcity of material resources and means (materials, institutions) that satisfy people's needs and desires.[13] Scarcity refers to the fact that global resources are limited and cannot satisfy global needs and wants. As the world's population grows, per capita share of resources declines, and the degree of scarcity of resources skyrockets. Acquiring global public goods is one of the important means for meeting people's needs and desires. Typical global public goods include global peace and security, law and order, stable financial markets and monetary order, sustainable resources, and a good living environment. In a manner like the scarcity discussed by Lionel Robbins, one party's use of more global public goods means less use by the other party; because of non-excludability, they are often overused, but no one wants to pay for them, and free-rider behavior becomes rampant. Global governance needs to address the problem of scarcity, coordinate the different interests of all the (major) actors, shape positive interaction, and realize effective governance.

Assumption 2: all players act to maximize their own interests. There are many different kinds of players participating in global governance, including states, international organizations, corporations, and individuals. All actors aim to maximize their own interests. We shall limit ourselves here to focus on the most important players, namely states. Players have both common and conflicting interests, they all seek to maximize their own interests, and they are all rational opportunists, hence it is difficult to develop unified collective rationality. The relationship between collective rationality and selfishness is complex, but both exert influence on the process and outcomes of global governance. Reinhold Niebuhr recognized that on one hand, "The strength of the natural impulse of individual selfishness is often beyond the control of rationality," while on the other hand, because "rationality has actually provided the veil and the tools for individual selfishness,"[14] individuals will transfer cost to other participants. Sometimes self-interested actors who put emphasize on relative benefits would rather suffer a loss of self-interest in the hope that their competitors will suffer an even greater loss. In such a case, a "negative-sum" game may take place. Some actors would try to maximize their self-interest by calculation, scheming,

---

[12]Because state actors need to appeal to the legitimacy of rule, all states will seek a balance between domestic development and state aid. This is one of the basic assumptions of political economics. In this regard, the amount of global public goods that states provide will be directly restricted by domestic political factors. First, states need to protect the interest of domestic people and improve domestic welfare through economic development. Second, states also need to participate in global governance and gain international reputation by providing public goods.

[13]Zhang and Li (2008).

[14]Niebuhr (1998).

gamesmanship, or cooperation. Nevertheless, because of objective restraints, such as information asymmetry (in particular, the challenges brought about by unprecedented and extremely complex global issues), the limited rationality of self-interested individuals, the uneven strength of international players, and power asymmetry during bargaining, actors cannot always ensure the maximization of self-interest.[15]

Assumption 3: there are common interests for humankind. As globalization accelerates, global issues become more conspicuous. Systemic crises threaten all members. Global issues, such as maintaining world peace, addressing climate change, preventing the global spread of SARS, maintaining the stability of the international financial system, and safeguarding the open international trade system, concern the welfare of all humankind and all countries. Governance of such problems goes beyond the capacity of individual countries, so global cooperation is required. Effective governance of these issues increases absolute well-being and is in the common interest of all. Thomas C. Shelling believed that the coexistence of common and conflicting interests is the basis for negotiation, while demonstration of sincerity and willingness to compromise are the preconditions for reconciliation.[16] All players have common but differential interests and seek for consensus (common interest) through interaction. Hence, global governance is therefore "a new set of rules, mechanisms, methods, and activities for managing human public affairs that is value-oriented toward human holism and public interest and that fosters equal dialogue, consultation, and cooperation among diverse actors for collectively responding to global change and global challenges."[17] The existence of human common interest is the basis for cooperation on governing global issues. It is particularly noteworthy that common interest is not a strictly necessary condition for the formation of collective actions. In many circumstances, people come together for different goals. We call this process "muddlingthrough."[18] Moreover, the process of "muddling through" makes it easier to solve the problem of collective action when common interest exists.

Assumption 4: there is no world government. Above states and other governing bodies, there is no authoritative organization that can maintain order like a central government. Even if all actors have made a decision on governance, it is still difficult to ensure that decisions are thoroughly implemented and violationspunished. International organizations can at most provide different levels of governance mechanisms in different fields. Nevertheless, no international organization has the power to levy taxes around the world or in any region, making it difficult to raise funds for

---

[15]Uncertainty is one preset condition that decision-makers have to face. Uncertainty can be either endogenous or exogenous. The decision-maker is subject to the limitation of his or her knowledge reserve and information access; besides, external factors such as the unknowable orientation of other actors or unpredictable environment are also important source of uncertainty.

[16]Schelling (1956).

[17]Tuo (2004).

[18]The story of *Journey to the West* goes well with "muddling through." Among the actors in that book, some are whole-hearted, some are half-hearted, and some have no choice. But they all work together to obtain the true Buddhist scriptures and accomplish immortal achievements. Economist Lindblom called such a process of collective choice with multiple aims and unified action "muddling through." See Lindblom (1959).

carrying out governance. Therefore, in contrast with domestic politics, the international community displays the "disorder" of "anarchy." In the absence of a world government, each actor aims to maximize its self-interest. Once these differential interests cannot be accommodated, "composition fallacy" results, or "the tragedy of the commons," or "governance failure." Only the accommodation of differential individual interests can put global governance on the right track.

9.4 Key Concepts in Global Governance Research

Key concepts are the basic elements for building a theoretical system. Before building a theoretical framework on global governance, we need to clearly define the connotation and denotation of related concepts, such as global issue, public goods, player characteristics, stake-holding intensity, governance cost, selective incentive, and two-level games.

Global issues are the numerous cross-border problems, brought about by globalization, that feature externality and spillover effects. Globalization is characterized by trade growth, the internationalized division of labor, capital flow, technological proliferation, and convergence of phenomena. Globalization has led to the increased prominence of global issues. Global issues such as climate change, instability of the global trade and financial system, destruction of resources and environment, the spread of infectious diseases, and terrorism have spillover effects, which means they can move across borders to threaten the outside world. The advance of transportation and communication technologies has further deepened global interdependence while accelerating spillover. Global issues may cause systemic crises that threaten the interests of all system members. Hence, the demand from all actors for the governance of global issues is growing in strength.[19]

Global public goods are the various mechanisms and institutions designed to deal with global issues and serve as the basis for financinggovernance. The characteristics of public goods[20] depend mainly on the differences of the issue areas.[21] Different kinds of public goods have distinctive financing methods[22] and face varying degrees

[19] Keohane (2002).

[20] According to the different combinations of non-excludability and non-rivalrousness, public goods can be divided into following categories: pure public goods (non-rivalrous + non-excludable), non-pure public goods (rivalrous + non-excludable) and club products (non-rivalrous + excludable). See Buchanan (1965).

[21] Governance of specific issues requires provision of different public goods. Accordingly, this has put requirements on the capacity of various actors to provide global public goods. Security governance is the main domain for states and transnational organizations; stable global economic order is the goal that many related interest groups such as transnational organizations and corporations have tried to reach by lobbying state actors vigorously; most non-governmental organizations, such as the Red Cross and Greenpeace, advocate and promote global public affairs.

[22] Sandler thought that financing for pure public goods depends on promotion by the public sector; financing for non-pure public goods which has the characteristic of being rivalrous and non-excludable depends on public international organizations; financing for non-pure public goods

of difficulty. Some public goods have a higher chance for successful fund-raising, while others are always troubled by "free-riding." First among global public goods[23] are those that are completely non-excludable and non-rivalrous, such as ozone layer protection, reduction of global warming, and preventing infectious disease. These public goods require some public agencies to promote fund-raising, and their beneficiaries include all countries, peoples, and future generations. The second kindare semi-public goods that are not completely non-excludable and non-rivalrous, such as protection of fishing grounds, protection of forests, and protection of hunting grounds. Provision of such public goods relies on the efforts of relevant international organization platforms, while there is certain private financing according to the characteristics of specific goods and individual preference. Club goods are a very important category of semi-public goods, since they are relatively excludable and partially rivalrous. Currently, the providers of semi-public goods include platforms of international governance such as NAFTA, NATO, G7, G20, and TPP. Public goods of this kind display obvious group preferences and are often involved with issues of crucial national interest.

Player characteristics are the different objective functions of the various players participating in global governance. Because of the relatively high cost of participating in governance, providers of global public goods are mainly states. The major players are also states. "Player characteristics" mainly refers to heterogeneity of state or state asset specialty which, narrowly defined, is manifested as related comprehensive strength, the degree of scarcity of certain assets within a country, the structure of technology, resources and energy, patents, competitiveness, the capacity of state apparatus in handling risk, and other internal characteristics of the state. Broadly defined, it includes geographical location, resource endowment, size of the state, degree of development, military strength, history, culture, and religion. In addition, people are still fond of dividing states into North and South, depending on their degree of economic development.[24] However, even among the states of the North, "… differences are considerable and persistent. To take just one example, financial patterns differ markedly across countries. The United States depends on capital imports, Western Europe does not, and Japan is a major capital exporter."[25] In addition to state actors, other non-state actors such as corporations, organizations and individuals all bear unique interest functions and demonstrate different player characteristics during their participation in global governance. Non-state actors like individuals, organizations and multinational corporations have different governance structures, objective functions, and behaviors, so they display different player characteristics.

---

which has the characteristic of being excludable needs club structure with financing incentive; club products depends on scale economy; financing for mixed products needs to consider the proportional structure of private (market) and clubs. See Sandler (2002), Zhang and Li (2008), 195.

[23]Kaul et al. (1999); Zhang and Li (2008), 186.

[24]There are also a number of research papers which distinguish and define players by regional difference. See Zhang (2007).

[25]Waltz (1999).

Stake-holding intensity refers to the stake or interest that players hold in global issues, which is closely related to the nature of the issues and player characteristics. Global issues include climate change, peace and war, environment and resources, the stability of trade, investment, and financial systems, and so on. Depending on their characteristics, different players are more sensitive to certain specific issues than other players. In other words, various actors have different preference intensity[26] when participating in the governance of certain issues. Because of differences in stake-holding intensity, actors are more enthusiastic about providing certain kinds of global public goods than other kinds. Actors with the same stake-holding intensity on one issue are more likely to cooperate and form an alliance.[27] During research, attention should be paid to if actors have comparative advantages or relative sensitivity and fragility when dealing with specific global issues. In different issue fields, actors of different types have different preference intensity: in some issue fields, such as security governance, global financial stability and open trade environment, states assume a more active role; in other issue fields, such as environmental protection, anti-whaling, and protecting the ozone layer, non-state actors may play a larger role. Actors have different interest sensitivity about different issues. It is fairly difficult to lobby members with low stake-holding intensity to participate in financing. The less stake that an actor feels about governance of one issue, the lower its willingness to provide public goods, and the higher the transaction cost for agreeing on cooperation.

The problem of collective action refers to the difficulty of cooperation in collective action. Generally speaking, people take collective action to accomplish something because they are motivated by common interest. However, this idea has been challenged, because we can easily find many areas or situations in which collective action has not been taken despite the existence of common interest. The old story of three monks who have no drinking water (when any one of them could have fetched it) illustrates how at times, "Everybody's business is nobody's business." The key reason behind the problem of collective action is that each of the potential beneficiaries of collective action wants to be a free-rider but at the same time does not want to let the others be free-riders. Since common interest does not necessarily lead to collective action, or common interest makes only one necessary condition for collective action, discussion about the sufficient conditions for collective action has become a core topic of the theory of collective action. Mancur Olson has provided a standard answer to this problem: if a group wants to take effective collective action, every member of the group must be able to acquire an additional piece of excludable private goods from the public goods as a result of collective action, or be constrained by certain moral teachings or be threatened. For the convenience of analysis, Olson had called these excludable additional private goods and benefits and threats "selective incentives."

[26]High stake-holding intensity may occur in two situations: in one, states have relatively strong capacity in providing certain public goods and little difficulty in coordinating domestic policies; in the other, the characteristics of state asset specialty determines the state's lack of comparative advantage and relative vulnerability. The two situations will positively or negatively affect the preferences of the state as it participates in global governance and add to the difficulty for non-state actors to lobby states to provide global public goods.

[27]Lin and Weijiang (2014).

Whether collective action will be taken is also closely related to the number of participants, because of the widespread free-riding phenomenon. "In short, the larger the group, the less it will further its common interests."[28] For every international actor, always seeking to maximize self-interest, the source of the "selective incentive" they receive is usually a non-neutral institution that can bring them additional benefits, or other states' promises, persuasions, or threats.

Governance cost is the sum of the costs that players pay to address global issues. In short, the concept of governance cost derives from the concept in economics of transaction cost, applied to the analysis of global governance. In economics, transaction cost is defined as the sum of the costs incurred by two or more parties when they carry out a transaction, reach an agreement, and implement a contract. Specifically, transaction costs include: the cost of acquiring and processing information; the cost of establishing bargaining positions; the cost of the mutual search for potential trading partners; the negotiation cost of signing formal or informal contracts; and the cost of supervising the implementation of the contract.[29] By comparison with the concept of transaction cost, we can conveniently define governance cost as the sum of costs that international players pay to address global issues or effectively and fairly provide and use global public goods. In the real world, governance cost consists at least of the following costs: the cost of acquiring, processing, and using relevant information(including thoroughly understanding each player's own preferences); the cost players pay during the process of seeking domestic consensus to form an international negotiation stance or strategy (including compensation for domestic interest groups and lobbying costs); and the cost of supervising implementation of signed global or regional treaties (conventions or agreements). Governance cost varies greatly because of the differences among the various international players' characteristics and stake-holding intensity.

Governance equilibrium describes a kind of balance between the supply and demand of global public goods. In such a situation, the amount of global public goods that players voluntarily provide exactly equals what they expect to obtain. In a sense, the contribution that international players make for the provision of global public goods can be seen as their voluntary payment for global public goods while the latter also satisfies the preference of the various international players. In view of their various demands in the kind and quantity of global public goods, the contribution each international player would like to make also varies. Governance equilibrium will be achieved when their voluntary contribution to the provision of global public goods exactly equals their expectation concerning all kinds of global public goods. At this equilibrium point, international players can buy enough global public goods in terms of kind and quantity at a price level they accept. Governance equilibrium is an ideal situation of global governance; it meets the requirements of both fairness and efficiency, to the delight of satisfied international players. As an institutional arrangement, global governance aims to approach and eventually realize governance

[28] Olson (1965), 36.

[29] Stevens (1993), 68; Eatwell et al. (1992a), Coase (1960, 1992, 1998).

equilibrium while international players are seeking to maximize their self-interest.[30] It is necessary to add that one condition for realizing governance equilibrium is that the transaction cost related to global governance should be zero. However, in the real world, governance cost is greater than zero.

Institution neutrality refers generally to institutions that contain selective incentive measures. Douglass C. North argues that institutions are used in a disorderly world to maintain the stability of exchange, provide game rules and incentive frameworks, and achieve market effectiveness.[31] So-called non-neutrality means that:

> [T]he same institution means different things to different people. In the same institution, different persons or groups often get different things, and those persons or groups who have benefited from an established institution or will benefit from a certain future institutional arrangement will undoubtedly strive to protect it or seek it.[32]

Appropriate "institution non-neutrality" is a guarantee for maintaining the vitality of the institution, while extreme "institution non-neutrality" will hurt the interests of disadvantaged groups and erode the legitimacy of the institution. The inherent problem of collective action of public goods brings relatively high transaction costs and reduces states' enthusiasm for participating in global governance, which adds to the difficulty of effective governance. Under such a circumstance, institutional design becomes particularly important for global governance. Specifically, it is necessary to provide selective incentives for specific objects in addition to peer-to-peer games, and to encourage countries to take initiative in assuming their share in the financing of public goods. Once transaction costs are lower than returns, actors are willing to exchange ideas and participate in the design and planning of a governance institution. Only when members are motivated to maintain the operation of a certain governance institution will the institution function well. Persistently vital institutions are usually not completely neutral. "The rules of any institution will reflect the relative power positions of its actual and potential members, which constrain the feasible bargaining space and affect transaction costs."[33] In a sense, a necessary condition for the continuing vitality of the institution is encouraging some of the members to take the initiative to provide public goods and share governance cost through appropriate institution non-neutrality and selective incentive. But it is difficult to keep the degree of non-neutrality proper and prevent it from becoming the "umbrella" for vested interests. For instance, in the field of international finance,

---

[30]When proposing the concept of governance equilibrium, we borrowed the concept of "Lindahl equilibrium" from public finance economics and reshaped it to replace individuals with states. Erik Lindahl is a well-known Swedish economist who studied how to determine the amount of public goods to be provided and how to finance public goods through the use of a pricing system or market exchange. Specifically, Lindahl equilibrium means that the supply of all types of public goods, at a given set of prices, is equal to the demand for different public goods, or the cost for each person is equal to its (marginal) benefit. See Eatwell et al. (1992b)

[31]North (2003). Drobak and Nye referred to Douglass.

[32]Zhang (1994).

[33]Keohane (1988).

developed countries have controlled the voting quota under the "non-neutral institution" framework to protect their vested interests and impede the rise of emerging countries.

9.5 Theoretical Construction

Russell regarded theoretical propositions as logic relations among main variables,[34] and Frege further explained the relationships among theory, fact, and entity: the former is separated from complex fact and summarizes the main logic relations but is not necessarily subject to fact.[35] Therefore, the meaning of theory is that it provides a concise framework to understand fact. Starting with the definition of global governance, this section describes the main relations among basic concepts and simplifies the logic of theoretical reasoning on global governance, on the basis of theoretical assumptions and basic concepts (see Fig. 9.1).

The first question global governance needs to answer is what factors decide the player's perception of the benefit of participating in governance, which then leads to the success or failure of collective action. In Fig. 9.1, the factors that players take into account in calculating cost include the governance cost of global issues, stake-holding intensity, player characteristics, and institution neutrality.

In an ideal situation, governance cost is zero, and players overcome the temptation of free-riding to compose a collective rationality or realize governance equilibrium, based on the common interest of humankind. Under such a circumstance, global issues would be completely solved. When the contribution made by each player to the provision of global public goods marginally equals the benefit it gains from global public goods, it can be said that global governance has reached equilibrium or an ideal state. Of course, it would be very difficult to reach an ideal state in reality. Making global governance, which has deviated from the ideal state, approach the ideal state infinitely should be the goal of all players. In today's world, the relative strength among major players around the globe is undergoing profound changes, and the stake-holding intensity of many players on current international institutions has risen sharply, making them more willing than ever to maintain and expand their self-interest through global governance. Against this backdrop, calls to adjust the current international order and gradually make global institutions more neutral are constantly emerging.

The actual providers of global public goods are mainly international organizations, such as the United Nations, World Trade Organization and International Monetary Fund, which are jointly established by sovereign states. Once an entity becomes an international organization, how it functions and how efficient it is will become matters of common concern. Since the eruption of the latest global financial crisis,

[34] Russell (1919, 1996).

[35] Frege (2003).

	Limited solution	Real provision of global public goods (width, depth, and intensity))			Taking collective action (problem partly solved)	Positive incentive > Negative incentive	Non-neutral institution
Global issues		Governance deficit	Improve public goods	Pareto improvement/ Kaldor-Hicks improvement			Stake-holding intensity
				Approach	No collective action	Negative incentive > Positive incentive	Player characteristics
	Complete solution	Governance equilibrium (ideal situation)			Common interest of humankind + overcome the problem of collective action	Governance cost equals zero	Governance cost is bigger than zero

Fig. 9.1 Flow chart of global governance

some international organizations have been criticized for inadequate advance warnings and handling of the aftermath, which highlights that there is room for improvement in the provision of global public goods. Important ways to approach balanced governance are to constantly improve the rules and decision-making procedures of international organizations, improve their decision-making efficiency, improve their performance appraisal mechanisms, prevent over-bureaucratization, and eliminate conditions that lead to rent-seeking behavior, whether it is as a client among state actors or as an agent among international organizations. During the practice of global governance, all members' participation in global governance is, in essence, a joint action seekinga relatively stable "governance equilibrium."[36] By making concessions, major actors (states) can reach among themselves a "tacit compromise" that effectively provides global public goods while governing globalization. The stability

[36]There is no such thing as an institution of absolute equilibrium. Generally speaking, institutional arrangements that appear in various forms are all only relatively stable and can be temporarily accepted but are actually not in a state of absolute equilibrium.

of an institution refers to the "equilibrium of equal opposing variables" or "equilibrium of variables."[37] At the "institution" level,[38] equilibrium hinges on the accommodation of interests on all sides and effective provision of public goods through compromise; on the "objects" level, equilibrium of variables refers to the relative balance of power structure among major actors; on the "concept" level, established institutions realize a "balance" between the appeals of the actors' rational interests and of their ethics.

It is always difficult to realize an ideal "governance equilibrium" in the real world. When global governance is not in a state of equilibrium, governance cost will not be zero, which entails two possibilities: when the negative incentive is greater than the positive incentive, collective action fails, and when the positive incentive is greater than the negative incentive, players partly solve the rational synthesis problem and a base for collective action forms. These two scenarios are the two situations shown in Fig. 9.1 which occur when governance cost is not zero and non-absolute governance equilibrium has been realized. When negative incentive is greater than positive incentive, collective action fails. In contrast with the best scenario, absolute "governance equilibrium," at the other extreme is the worst result, which occurs when no collective action forms and governance fails. What the range of values between the optimal and worst solutions describes is a real situation occurring when positive incentives outweigh negative incentives, and global issues are settled to a certain extent.

In the real world, there are numerous cases in which global issues are partially resolved, due to the selfishness of actors, the characteristics of public goods, the problem of collective action, etc. However, the fact that a limited solution is possible indicates something else, and it is necessary to explicate the dialectical relationship between common interest and conflicting interest. If there is a certain degree of common interest, the actors will reach agreement on certain degree of collective action. About half a century ago, Thomas Schelling, a Harvard professor, published a book entitled *The Strategy of Conflict*, in which one of the core arguments is that the existence of common interest and conflicting interest is the pre-condition of the participation of potential players in a game and how they play. To illustrate the coexistence of common and conflicting interests, Schelling discussed in his book the following case: two people will share \$100 provided that the sum of the expected amounts that each writes down is no more than \$100, or neither of them gets a cent. The two can obtain a specific number of dollars only through cooperation, which indicates that there is a common interest between them; the more one gets the less the other gets, which indicates a conflicting interest between them. The coexistence

[37] Arnold Toynbee had used the three levels of objects, institutions, and ideas to describe the world in a stable state. The stable state in which the world is guided by a set of established institutions can also be reached by achieving equilibrium at the three levels. See Zhang et al. (2007).

[38] It is necessary to add that the civilized human world is the crystallization of a certain civilization of institutions. It is impossible to discuss the world at a certain historic "juncture" without discussing institutions, and using earlier institutions to explain the stability of later institutions is not circular. We are not using institutions at a "static" state to explain institutions at certain "juncture." Institutions are "dynamic." Institutions in every historical period have the indelible features of their own time.

of common and conflicting interest highlights a common situation that humankind faces: even if you are seeking to maximize self-interest, it is always wise to consider the other's interest.

That an actor can maximize self-interest while taking into account the other player's interest not only speaks of the possibility of taking collective action but also is one of the important approaches toward addressing global issues to a certain extent. This approach includes not only the familiar "Pareto improvement" but also the "Kaldor-Hicks improvement" that promotes cooperation in a broader range.

> "Pareto optimality" describes an efficient allocation of resources under which an actor can improve self-interest without hurting others' interests. An improvement made to achieve "Pareto optimality" is called a "Pareto improvement." The accomplishment of "Pareto optimality" means that no more room is left for "Pareto improvement."

In addition, we still need to improve our understanding of how global issues can be partly solved by studying the concept of "Kaldor-Hicks improvement." "Kaldor-Hicks improvement" was named after the economists Nicholas Kaldor and John Hicks, who thought:

> [A] policy should be regarded as adding to social welfare if it has the potential for making someone better off without making anyone else worse off. . . . if the gainers could compensate the losers and still have something left, then the policy should be adopted because it would represent a *potential Pareto improvement*.[39]

"Kaldor-Hicks improvement" makes up for the regret that strict pursuit of "Pareto improvement" may cause. It enables an increase of welfare that strict pursuit of "Pareto improvement" would not otherwise bring. We say "Kaldor-Hicks improvement" makes up for regret because in maintaining or advancing in gone party's interests it is often difficult to avoid harming the other parties' interests. If the benefit gained by the former exceeds the loss suffered by the latter, so that the welfare of the whole has been enhanced, then such a change is called a "Kaldor-Hicks improvement." Therefore, even in a situation where some interests are damaged, collective action is still possible. Nevertheless, "Kaldor-Hicks improvement" does not neglect some people's interests, and a precondition for its realization is that the beneficiaries will make a corresponding compensation to those who have suffered. In this sense, the two kinds of improvements are some aspects in common.

Finally, with regard to the approaches for improve the welfare of the whole, there is a statement in the *Analects* of Confucius to the effect that a person of virtue "wanting to establish himself, will establish others, and wanting to enlarge himself, will enlarge others." This "one for all and all for one" system order actually enhances everyone's interest. We shall name such effort for improvement "Confucian improvement." "Confucian improvement" goes far beyond "Pareto improvement" and "Kaldor-Hicks improvement" since it concerns every party's interest.

---

[39] Stevens (1993), 47.

9.6 Relevant Issues in Global Governance Research

The value of the theoretical tools discussed above lies in the analysis of specific issues. Using this theoretical framework, we will do specific analysis of some examinable issues and, within a certain field, explore the functioning mechanisms of various theoretical factors such as the characteristics of public goods, player characteristics, stake-holding intensity, and governance cost. This section will attempt to provide a list of issues in the hope that the explanatory power of related theories will be examined in follow-up research and practice.[40] In sum, basic issues of global governance that may still be discussed include the following:

First, the "fragmentation" of governance and the diversity in the forms of governance.

Shaping the form of an institution is a very complex topic. The differences and transformations of governance models can be observed through their being regional or group-oriented,[41] functional,[42] or structural[43] (inclusive or exclusive membership); the degree of institutionalization; whether they are integrated or fragmented[44] or state-led or non-state-actor-led. Why do the forms of global governance vary so much? Through institutional design, global governance has effectively, reasonably, and cooperatively addressed a series of global issues brought about by globalization. In reality, efforts to avoid damage from asymmetries of power and interest and to provide selective incentives to avoid free-riding have all caused governance institutions to become more diversified and group-oriented.

Regional or trans-regional multilateral governance is one of the forms of diversification. The relationship between regional integration and global governance is both contradictory and complementary. Multilateral and regional cooperation will help member countries avoid the systematic risk caused by non-neutral institutions, protect their interests, and prevent hegemonic states from promoting discriminatory clauses and hurting the interests of member countries. If properly dealt with, multilateral and regional groups will become an important component, necessary link, and

[40]What is involved here is the logical and empirical examination of theory, more specifically, the stable relationship between concepts—correlation or causation.

[41]Zhu (2009).

[42]Exploration of potential interest in specific functional fields has promoted institutional innovation. In the context of global governance, the establishment of an international organization or other governance platform is usually first initiated and advocated by one state or other actor. Some individuals and non-state actors also organize spontaneously to protect rights and interests in a certain field. For instance, ananti-whaling organizations may be spontaneously set up by a group of activists engaging in whale protection. In the context of global governance, the proposal of an innovative plan is part of the process of designing an institutional framework. Historically, this has happened with the design of the framework and rules of organizations like the League of Nations, the United Nations, World Bank, and IMF. The operation of a governance platform, to a large extent, depends on the quality of institutional design. See Young (2007), 146.

[43]A shift in composition occurs mainly through a change of power composition. See Qin (2013).

[44]Haijun and Yi (2013).

appropriate supplement of global governance. Organizations or mechanisms such as APEC, ASEAN 10+3, and EU27 have all, to a certain extent, contributed to the progress of global governance.

The level of institutionalization depends on the transaction cost needed for effective governance. A high level of institutionalization level has stronger binding power, while a low level of institutionalization has less binding power but can coordinate the interests of all sides by taking their concerns into consideration. In addition, spontaneous institutional arrangements/self-enforcement institutions have relatively weak binding power but have the advantage of low governance cost.[45] When the environment changes drastically, there is a high demand for policy flexibility, and states are reluctant to bear the cost; under such conditions, spontaneous and informal institutional arrangements will be more welcome. Informal agreements can play their role only when they are combined with formal agreements. The two are interlinked and work together.

"Who leads the governance process" mainly involves the degree of authority[46] that opens to non-state actors. State actors and non-state actors have different depths of participation in global governance. "Who leads governance" is closely related to factors such as the characteristics of issues and player characteristics. Spontaneous institutional arrangements can be set up by individuals, certain interest groups (such as experts), or some countries. All kinds of actors have worked together to develop the various forms of global governance. James N. Rosenau describes it as a "bifurcated world": on the one hand, states still play a leading role; on the other hand, diverse powers made up of non-state actors have also hada non-negligible influence.

Second, representativeness and efficacy.

Because of the extreme difficulty of taking global collective action, particularly considering that the world is essentially a monopolistic competition market, most collective actions related to global governance are "small-scale" collective actions. The G20is a typical example. The emergence of regional governance advocated by major regional players is an example of another phenomenon. A consequent problem is the tension between incentive and justice, which is another expression of the balance between efficacy and representativeness that people often talk about when discussing global governance. Dealing properly with this tension will be a challenge for humankind. Successfully meeting the challenge will hinge on the vision, wisdom, open-mindedness, and courage of all players, particularly major players. Here, China's traditional way of thinking will be of great use. In this Chinese way of thinking, the highest realm is not black-or-white, death-or-life but rather the doctrine of the mean, so that during the process of negotiating the establishment of rules, the feelings of other stake-holders are taken into consideration.

[45] Lin, Transaction Cost and Varying Institutional Level: Inclusive and 'Informal' Global Governance of the G20, Abbott and Snidal (1998).

[46] Lake (2010).

What the criteria are for assessing global governance involves the question of how to assess the performance and legitimacy of various governance mechanisms.[47] Legitimacy means that a certain order is recognized and people have the motivation to obey it.[48] In reality, it is very difficult to find unified standards for assessing the legitimacy of some governance arrangements. A certain institutional arrangement may be just the result of temporary compromise that actors have reached among themselves during a specific historic period. Most of the time, it is only when states make concessions, seek consensus, and reach agreement with other participants that an institution becomes effective and gains recognition. The pursuit of legitimacy has also found its expression in increasing transparency of decision-making, expanding the scope of participation in governance, and stressing protection of the collective welfare of all humankind. Discriminatory institutions are characterized by having selective and closed membership. They also have positive and negative aspects. In their organization, they can broaden access to membership (lower the discriminatory institutional threshold) and increase procedural democracy in order to be accepted by the governing bodies and to gain legitimacy and authority.

Efficacy is another criteria for assessing the legitimacy of global governance. It is very likely that "the problem of collective action" occurs with broad procedural democracy, lowering governance performance. Douglass C. North believed that the ability to overcome moral hazard in collective cooperation is a criterion for measuring the efficacy of an institution. "Any successful ideology must overcome the free rider problem. Its fundamental aim is to energize groups to behave contrary to a simple, hedonic, individual calculus of cost and benefits."[49] Good institutions encourage collective action. The generation and resolution of global issues originate from global public goods created after the formation of global collective action.

To facilitate collective action, institutional arrangements are constantly weighed between legitimacy and efficacy, as "legitimacy is generated from both procedure and result."[50] On the one hand, "Global governance institutions, like institutions generally, must not persist in committing serious injustices. If they do so, they are not entitled to our support."[51] On the other hand, legitimate and effective institutions must recognize a certain interest, prove that it is of sufficient ethical importance that they have responsibilities to fulfill, and explain why these responsibilities belong to the right-holder,[52] so as to persuade major participants to provide international public goods. Considering the extreme difficulty of forming global collective action, it is often necessary to provide small-scale groups with selective incentives.

[47]United Nations Development Program (UNDP) and China Centre for International Economic Exchanges (CCIEE) (2012).

[48]Habermas (1989), Weber (1997).

[49]North (1992).

[50]Ibid.

[51]Buchanan and Keohane (2011).

[52]Ibid.

Once the narrow collective interest of small groups becomes dominant, global governance becomes lop-sided, to the point that even the interests of most actors aresacrificed. Here, a contradiction between selective incentive and justice appears—it is the dispute between efficacy and representativeness. In the words of Allen Buchanan and Robert O. Keohane, this is the time to find a "lowest point of moral acceptance"[53] that maintains the stability, order, and efficacy of institutions.

Third, the relationship between global governance and domestic politics.

When participating in global governance, states need to make policy adjustments as well as concessions on rights. Todd L. Allee and Jamie E. Scalera, using the example of the WTO, have analyzed the various possible effects of the different entry thresholds of international organizations. They think trade benefits are proportional to concessions that states make upon their accession to the WTO. The stricter the accession requirements and the sharper the adjustments of domestic policies, the more member states can benefit from that organization.[54] Other scholars argue that there is a limit on sovereignty concessions. Transnational organizations may not be popular when they generate excessive sovereignty costs.[55] In addition, the term "two-level games"(even multi-level games) describes the necessity in global governance to consider how complex it is for states to decide to participate in governance. Unlike others who have described states as atoms, Robert D. Putnam believes that states represent a concentration of various domestic interest groups' preferences (such as people, groups, industrial sectors). Thus, he put forward the concept of "two-level games,"[56] which refers to the way a state's preferences in foreign affairs are influenced by factors at the internal or other levels. Ina state's decision-making, it is still open to discussion which level's factors decide the final result. With the advance and spread of information technology and the development of transportation, opportunities for the public to get involved in foreign policy decisions have increased, and the effect of "two-level games" and even "multi-level games" becomes more obvious than ever. All these indicate that, with the concentration of interests of various groups, a state is no longer an atom, and its decisions are influenced by factors at multiple levels.

Fourth, factors (such as state characteristics and power structure) that may influence a state's participation in the process of global governance.

In some fields affecting players' key interests as shown, for example, when the global financial crisis broke out, immediate governance arrangements can often be self-enforced as it is aggressively advocated by states highly vulnerable to the crisis. However, the post-crisis long-term institutional arrangements scarcely stimulate the actors' enthusiasm to participate in governance to the same extent. The intensity of a state's preferences when participating in global governance depends on its player

[53] Ibid.

[54] Allee and Scalera (2012).

[55] Tallberg et al. (2014).

[56] Putnam (1993).

characteristics (such as state characteristics), as well as its perception of stake-holding intensity formed on this basis.

In the real world, institutional arrangements of governance are also profoundly influenced by changes in the world power structure. There is always asymmetry and a synchronization between power and strength. During the Cold War, world politics can roughly be divided into two “hierarchies”; after the Cold War, the world has been moving towards multi-polarization. Urgently needed are effective modes of multilateral interaction for coordinating the interests of all states and resolves the many governance difficulties that the world faces. Because of the time lag and asymmetry of the original global governance institutional frameworks, they cannot correctly reflect the change of all countries’ relative strength and the greater say in global affairs that some states and non-state actors duly deserve. In recent years, developed countries have tried hard to maintain their dominance in the governance of global economic issues, while emerging countries and developing countries are eager to reform unreasonable governance arrangements. Since enjoying due say within the institutional framework is an essential guarantee for reflecting and maintaining their national interest, emerging countries tend to seek governance structures in line with their strength and conducive for realizing their national interests.

Fifth, the issue of reglobalization.

Here we need to introduce two concepts, namely “systematization” and “reglobalization.” First, “systematization” refers to a situation wherein developing countries and emerging countries passively accept international institutions dominated by developed countries. In this situation, institutional design is clearly “non-neutral,” since countries with first mover advantage can make use of the asymmetrical distribution and grab extra interest benefits within the system. Recently, “systematization” is also being manifested as the latest round of “reglobalization.” The Trans-Pacific Partnership (TPP) and Trans-Atlantic Trade and Investment Partnership (TTIP) are representative: through them, the United States hopes to take a lead in shaping the rules of the new global system and to reconstruct the old one, which has gradually lost effectiveness. During this process, the new rules will be higher-standard, stricter, and non-neutral. Under the cover of institutions, the extremely non-neutral appeals of certain groups might become subtler. Emerging and developing countries should be wary of this tide of “reglobalization,” protect their rights and interests, and defend the future development rights of all countries.

9.7 Conclusion

Global issues are all about the well-being of all humankind, and each country is a stakeholder. Resolving these issues, moreover, far exceeds the capacity of one country or group of countries, so we must resort to international cooperation. Provision of global public goods involves cost-sharing and bargaining, and opportunistic behaviors, such as free-riding, that arise from attributes of public goods, such as non-excludability, further complicate the issues. Due to the lack of unified supervision by a world government, collective actions suffer from composition fallacy, which leads to governance failure. Global governance, serving as a substitute for the absent world government, establishes self-enforcing institutions and rules to address the various global issues. Each international player has different demands on global public goods in terms of kind and quantity. Therefore, the provision of public goods requires consultation among all stake-holders and the reaching of consensus after negotiation. To increase international players' willingness to participate in the financing of public goods and enhance their consensus on cooperation, some institutions have adopted various measures, such as providing selective incentives, to reduce free-riding, that is, reducing the number of participants or stake-holders, which makes it easier to distinguish each actor's contribution. Based on these factors, global governance institutions are often in a state of dynamic change. In a relatively stable institution, however, equilibrium is achieved after all actors have weighed common interest against conflicting interest. During this process, many basic concepts are woven into a networked logic framework, which also generates various related issues, such as the efficacy and representativeness of global governance.

This paper attempts to provide a theoretical framework for analyzing global governance, establish a platform for dialogue among researchers, and put forward a series of basic concepts (such as player equilibrium, stake-holding intensity, governance equilibrium, etc.). Even though the authors have done their best to cover the broadest possible analysis points, theoretical elements, and approaches to understanding, many topics remain to be researched in the field of global governance. The framework as it appears now is still quite preliminary, and this is evident mainly in the need for further logical argument on the existence and stability of the correlation or causation among variables, while there is still room for further scrutiny on some of the concepts. These have put new requirements on our future work. Since this paper has focused on theoretical construction, it has done relatively less to test and prove the correlation and causation among variables. This task remains to be done in the future, and we hope that other researchers will critically examine the theory this paper has put forward. We also hope that by engaging in the construction of a theoretical foundation for global governance, we will have done our own small part to promote research on global governance.

References

Abbott, Kenneth W. and Duncan Snidal. 1998. Why states act through formal international organizations. *Journal of Conflict Resolution* 42: 3–32.

Allee, Todd L. and Jamie E. Scalera. 2012. The divergent effects of joining international organizations: Trade gains and the rigors of WTO accession. *International Organization* 66(2), 243–276.

Buchanan, James M. 1965. An economic theory of clubs. *Economica* 32 (125): 1–14.

Buchanan, Allen and Robert O. Keohane. 2011. Quanqiuzhilijizhi de hefaxing [The Legitimacy of Global Governance Institutions]. *Nanjing daxuexuebao* 35.

Coase, Ronald H. 1960. The problem of social cost. *Journal of Law and Economics* 3: 1–44.

Coase, Ronald H. 1992. The institutional structural of production. *American Economic Review* 82 (4): 713–719.

Coase, Ronald H. 1998. The new institutional economics. *American Economics Review* 88 (2): 72–74.

Eatwell, John, et al. (ed.). 1992a. Jingjizuzhi he jiaoyichengben [Economic Organization and Transaction Cost] and Jiaoyichengben [Transaction Cost], entries. In *XinPoergeleifujingjixue da cidian* [*The New Palgrave Dictionary of Economics*], vols. 1 and 4. Beijing: Jingjikexuechubanshe.

Eatwell, John, et al. (ed.). 1992b. Lindaerjunheng. [Lindahl Equilibrium] and Lindaerluncaizheng [Lindahl on Public Finance]. In *Xin Poergeleifujingjixue da cidian*, vol. 1, 216–218.

Frege, Gottlob. 2003. Function and concept. In *Logicism and the Philosophy of Language: Selections from Frege and Russell*, 143–161, ed. Arthur Sullivan. Peterborough, Ont.: Broadview Press.

Habermas, Jürgen. 1989. *JiaowangyushehuiJinhua* [*Communication and Social Evolution*] [Trans. Zhang Boshu], 212. Chongqing: Chongqing chubanshe.

Haijun, Cao and Zhang Yi. 2013. *Tongchouquyufazhanshiyu xi de kuayuzhili: yuanqi, lilunjiagouyumoshibijiao* [Trans-regional Governance from the Perspective of Integrated Regional Development: Cause, Theoretical Framework, and Mode Comparison], 14. Tansuo.

Hardin, Garrett. 1968. The tragedy of the commons. *Science* 162: 1243–1248.

Kaul, Inge, Isabelle Grunberg, and Marc A. Stern. 1999. Global public goods: Concepts, policies and strategies. In *Providing Global Public Goods: International Cooperation in the 21st Century*, ed. Kaul, Grunberg, and Stern, 454–455. Oxford: Oxford University Press.

Keohane, Robert O. 1988. International institutions: Two approaches. *International Studies Quarterly* 32 (4): 387.

Keohane, Robert. 2002. Introduction: From interdependence and institutions to globalization and governance. In *Power and Governance in a Partially Globalized World*. London: Routledge.

Lake, David A. 2010. Rightful rules: Authority, order, and the foundations of global governance. *International Studies Quarterly* 54 (3): 587–613.

Ren, Lin. 2013. *Transaction Cost and Varying Institutional Level: Inclusive and 'Informal' Global Governance of the G20*. Barcelona Workshop on Global Governance. Barcelona: Spain.

Ren, Lin and Weijiang Feng. 2014. Ruhegaishanershiguojituan de juecexiaolü? Jianlun 'xieshangminzhu' yuanze de shijiexingyiyi [How to Improve the G20's Efficiency in Decision-making? With a Discussion of the Global Significance of 'Consultative Democracy']. In *Quanqiuzhilibiangeyuguojifazhichuangxin* [*Global Governance Reform and Innovation of International Rule of Law*], ed. Cai Tuo and Liu Zhenye. Beijing: Zhongguozhengzhidaxuechubanshe.

Lindblom, Charles E. 1959. The science of 'muddling through'. *Public Administration Review* 19(2), 79–88.

MacKenzie, Douglas. 2008. Coase, Ronald H. (1910–). In *The Encyclopedia of Libertarianism*, 73–74. Thousand Oaks, Calif.: SAGE, Cato Institute.

Niebuhr, Reinhold. 1998. *Daode de renyubudaode de shehui* [*Moral Men and Immoral Society*] [Trans. Jiang Qing], 201–217. Guiyang: Guizhourenminchubanshe.

North, Douglass C. 1992. *Jingjishizhong de jiegouyubianqian* [*Structure and Change in Economic History*] [Trans. Li Yiping. Beijing: Shangwuyinshuguan.

North, Douglass C. 2003. Introduction, *Xinzhidujingjixueqianyan* [*The Frontiers of the New Institutional Economics*] [Trans. Zhang Yuyan], ed. John N. Drobak and John V. C. Nye. Beijing: Jingjikexuechubanshe, 14.

Olson, Mancur, Jr. 1965. *The Logic of Collective Actions: Public Actions and the Theory of Groups*, 36. Cambridge: Harvard University Press.

Ostrom, Elinor. 2000. *Gonggongshiwu de zhilizhidao: jitixingdongzhidu de yanjin*: [*Governing the Commons: The Evolution of Institutions for Collective Action*] [Trans. Yu Xunda and Chen Xudong]. Shanghai: Shanghai sanlianshudian.

Putnam, Robert D. 1993. Diplomacy and domestic politics: The logic of two-level games. In *Double–Edged Diplomacy: International Bargaining and Domestic Politic*s, 436, ed. Peter B. Evans, Harold K. Jacobson and Robert D. Putnam. Berkley and Los Angeles: University of California Press.

Rosenau, James N. (ed.). 2001. *Governance Without Government* [Trans. by Zhang Shengjun and Liu Xiaolin]. Nanchang: Jiangxi People's Publishing House.

Russell, Bertrand. 1919. On propositions: What they are and how they mean. In *Proceedings of the Aristotelian Society*, Supplementary vol. 2, 1–47. Problems of Science and Philosophy.

Russell. 1996. *Luojiyuzhishi* [*Logic and Knowledge*] [Trans. Yuan Lijun]. Beijing: Shangwuyinshuguan.

Sandler, Todd. 2002. Financing international public goods. In *International Public Goods: Incentives, Measurement, and Financing*, 81–117, ed. Marco Ferroni and Ashoka Mody. Boston: Kluwer Academic Publishing.

Schelling, Thomas C. 1956. An essay on bargaining. *The American Economic Review* 46 (3): 281–306.

Stevens, Joe B. 1993. *The Economics of Collective Choice, 68*. Boulder Co.: Westview Press.

Tallberg, Jonas, Thomas Sommerer, Theresa Squatrito, and Christer Jönsson. 2014. Explaining the transnational design of international organizations. *International Organization* 68 (4), 741–774.

Tuo, Cai. 2004. Quanqiuzhili de Zhongguoshijue he shijian [The Chinese Perspective and Practice of Global Governance]. *Zhongguoshehuikexue*, 95.

United Nations Development Program (UNDP) and China Centre for International Economic Exchanges (CCIEE). 2012. *Reconfiguring Global Governance—Effectiveness, Inclusiveness, and China's Global Role*, Report of High-Level Policy Forum on Global Governance in Beijing, China, Dec 17, 2012, http://issuu.com/undp/docs/undp-ch_global_governance_report_20. Accessed 23 Feb 2015.

Waltz, Kenneth N. 1999. Globalization and Governance. *PS: Political Science and Politics* 32(4), 695.

Weber, Max. 1997. *Jingjiyushehui* [*Economy and Society*] [Trans. Lin Rongyuan], vol. 1, 239. Beijing: Shangwuyinshuguan.

Williamson, O.E. 2000. The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature* 38 (3): 595–613.

Qin, Yaqing. 2013. Quanqiuzhilishilingyuzhixulinian de chongjian [Global Governance Failure and the Reconstruction of the Idea of Order]. *Shijiejingjiyuzhengzhi* 7.

Young, Oran R. 2007. *Shijieshiwuzhong de zhil i* [*Governance in World Affairs*] [Trans. by Chen Yugang and Bo Yan]. Shanghai: Shanghai shijichubanjituan.

Yu, Keping. 2005. *Governance and Good Governance*, 5. China, Beijing: Social Sciences Academic Press.

Zhang, Yuyan. 1994. Liyijituan he zhidufeizhongxing [Interest Group and Institution Non-neutrality]. *Gaige* 98.

Zhang, Yuyan. 2007. *Globalization and China's Development*, 225–226. Beijing: Shehui kexue wenxian chubanshe.

Zhang, Yuyan and Zenggang Li. 2008. *Guojijingjizhengzhixue* [*International Economic Politics*], 191. Shanghai: Shanghai renminchubanshe.

Zhang, Yuyan, et al. 2007. *Quanqiuhuayu Zhongguofazhan* [*Globalization and China's Development*], 225–226. Beijing: Shehuikexuewenxianchubanshe.

Zhu, Tianxiang. 2009. Yigexianxiang, duozhongJincheng: diqujianzhuyicanyuquanqiuzhili de duoyangxingfenxi"一[One Phenomenon, Multiple Processes: A Diversity Analysis on the Participation of Cross-regionalism in Global Governance]. *Guojiluntan* 48–52.

Chapter 10
Understanding Global Governance

Yuyan Zhang

Abstract Starting from Thomas Schelling's theory, this paper examines the dilemma of collective action in global governance, including dealing with global issues and providing global public goods. Due to the stake-holding intensity and players' capacity of different actors in the world, global governance takes different forms, achieves different results, and is either non-existent or inadequate. Global dominant players often use non-neutral public goods to attain more benefits at the expense of the interests of most stakeholders. Small-scale collective action and regional governance systems tend to uneven the balance between effectiveness and representativeness in global governance. Therefore, to pursue equilibrium governance, international organizations as major providers of global public goods need incentive compatibility through optimizing performance evaluation system. According to China's Confucius Improvement, no country can be fully established and developed while others are not; to go forward is to go together.

Keywords Global governance · Global public goods · Equilibrium governance

It was around half a century ago when Harvard University professor Thomas Schelling published a book entitled *The Strategy of Conflict (1960)*. Schelling wrote that whether and how potential players participate in a game depends both on their common and conflicting interests.

To explain the co-existence of these two, Schelling gave an example: Two players can share \$100 as long as the sum of their expected amounts is smaller than or equal to \$100. So, in order to get at least some of the \$100, the two must cooperate. This is the common interest of the two players. However, one may get more and the other will thus get less. This is the conflicting interest of the two players. In other words, the game they play is a zero-sum one. This is very common in life: even though you aim to maximize your own interests, it is also wise to take into account the other party's interests.

Global Issues

Common and conflicting interests exist not only among individuals, but also among sovereign states or other types of organizations whose aim is to maximize their particular interests. Global issues—such as peaceful coexistence, climate change, a

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_10

fair and open trade system, cyber-security, cross-border crimes including terrorism, money laundering, and a stable international monetary or financial architecture—are all vital to the wellbeing of humanity.

No single country or group of countries can address these issues alone, thus making international cooperation necessary. Every country is a stake-holder in this process and, thus, all countries have common interests. However, addressing these issues involves both cost and benefit sharing—there is no such thing as a free lunch. Once cost and benefit sharing are involved, stakeholders will have conflicting interests, and fierce bargaining becomes inevitable.

Global Public Goods

Addressing these issues is similar to the provision of public goods, thus complicating the matter. Since global public goods—such as maintaining peace and controlling climate change—are not exclusive to a specific country, nations are naturally incentivized to become free riders, leaving other countries bearing the costs of public goods.

As a result, there is a shortage of global public goods, which is well evidenced in the breakout or escalation of wars and unrestricted emissions of carbon dioxide. All of these issues damage the overall wellbeing of humanity. To explain this kind of phenomenon, many concepts or theories have been advanced, including the collective action problem, the prisoner's dilemma, market failure, the tragedy of the commons, and the fallacy of composition.

Global Governance

To address these increasingly serious global issues, international cooperation is required. A common approach is to call for the establishment of a central and authoritative world government that is authorized to levy taxes, acquire resources, and provide public goods globally. However, under current conditions, it is impossible to establish such a system. As a substitute for this missing world government, global governance has emerged.

In essence, global governance is a sum of institutions—either rules or organizations—established by state or non-state actors with the intent of addressing global issues. The creation of these institutions is based on consensus reached by stakeholders through negotiation after they have balanced their common and conflicting interests. The fundamental function of global governance lies in the provision of global public goods.

Stakeholding Intensity and Players' Capacity

There is a long list of global issues, but the importance of a specific global issue varies greatly by actor.

A typical example is the United Nations Convention on the Law of the Sea, which has varying significance to coastal countries and landlocked states. Actors also have hugely differing sizes and negotiating power, which is a key factor in determining the depth and breadth of their involvement in global governance. They—especially state actors—have different internal political structures and decision making mechanisms, and their social cohesion and stability are also different.

The interests or values held by huge multinationals, whose total assets can be equal to those of a country, or influential religious groups, play an essential role on the world stage.

This explains why global governance takes different forms, achieves different results, and is either non-existent or inadequate. It also explains why, in such a context, it is difficult to reach a consensus and take collective action.

Logic of Collective Action

Mancur Olson, one of Schelling's students who later became his colleague, is a great contributor to the concept of collective action. Five years after Schelling published The Strategy of Conflict, Olson published his doctoral thesis, The Logic of Collective Action (1965), under Schelling's guidance. In this book, Olson developed some of Schelling's concepts further.

One of his major arguments was that common interests are only a necessary condition, not a sufficient one, for collective action. Another was that collective action only happens when two conditions are satisfied: first, that there are only a small number of players, and second, that selective incentives are in place. According to Olson, selective incentives work when players can accrue more benefits through participating in collective action, and may incur higher opportunity costs, or even penalties, if they do not participate. If only a few individuals participate in a game, the selective incentives will be reinforced, as each individual can get a larger share from the output of the collective action and the contribution made by each individual can be more easily identified. In other words, if there are fewer participants, it is less costly to reach a consensus and take action collectively. This will reduce the free riding behavior.

Non-neutral Institutions

As mentioned above, the goal of global governance is to provide global public goods. Some global public goods are in short supply, due to the failure of the global governance market. Some, however, are in a surplus. An example of the latter is discriminatory international trade and investment rules.

The rationale behind these can be found in Olson's aforementioned *The Logic of Collective Action*: if incentives are insufficient and a world government is not in place, a few conscientious and capable players who care the most about common issues may take collective action, actively providing public goods that can either bring them net benefits or minimize their losses. If narrow interest groups—those that are driven by selective incentives—take a dominant role, then global governance, in the form of certain international institutions, is likely to be non-neutral or discriminatory.

Dominant players may, thus, use these non-neutral public goods to attain more benefits at the expense of the interests of most stakeholders. Here, non-neutral international institutions in fact serve as the tools of some interest groups to realize their own goals.

Representativeness and Effectiveness

Given that it is extremely difficult to take collective action worldwide—especially as the world is, in essence, a market-like environment dominated by a few players—most collective action involving global governance is small-scale. The G7 can serve as a typical example.

Another example of an attempt at small-scale global governance is the emergence of regional governance systems. Regional governance systems, launched by major players, emerge constantly. This might cause tension between incentives and justice, and raises questions regarding how to strike a balance between effectiveness and representativeness in global governance discussions.

Whether we can address this challenge successfully depends on the vision, wisdom, and courage of all parties—especially the major players.

China's traditional mindset works quite well in this case, as it holds that there is always a middle ground; there is no absolute black or white; and all stakeholders' needs should be considered during negotiations on global rules.

Equilibrium Governance

While thinking about global governance, we need to consider the criteria used for evaluation. When the contribution made by each player to provide global public goods is marginally equal to the benefits each can obtain, global governance is in an equilibrium or ideal state. The reason is that, at such a point, every player maximizes the benefits that can be gained from the provision of public goods. In the vocabulary of the theory of mechanism design in economics, the concept of governance equilibrium is equivalent to incentive compatibility.

Within such an international regime, the problems of free riding, moral hazard, and adverse selection—which hold up the formation of collective action for common interests—would disappear. Although it is very difficult to achieve the goal of equilibrium governance in reality, the ideal state can function as a theoretical reference point to help us assess the performance of global governance, while indicating directions and ways to improve both the quality and quantity of global public goods. In principle, all players must strive to bring global governance as close as possible to a state of equilibrium.

From Selective to Compatible

In today's world, both the absolute and relative power of major global players has changed greatly, even when compared to the recent past. This is giving rise to what is termed a power shift.

Since the world is becoming more and more interconnected, existing international institutions are of greater interest to various players. Thus, there are roughly two groups of players with divergent desires: those who have vested interests and hope to maintain what they have already obtained through the established modalities of global governance; and those who are substantially aware of the gains and losses brought about by non-neutral international institutions and expect to reap the benefit from altering the status quo. It is worth noting that the latter category—namely the one that used to play a peripheral role in world politics—has become indispensable to global governance.

Against this backdrop, we must underscore that there is an increasing need to adjust existing international rules and make global institutions as neutral as possible. Staying updated with the times and substituting selective incentives with compatible ones seems to be an effective approach to making the existing and future global governance system more legitimate and effective.

International Organizations and their Performance

The major providers of global public goods are international organizations jointly established by sovereign states. These include the United Nations, the World Trade Organization, the International Monetary Fund, and the World Health Organization.

Once an international organization is established, stakeholders become concerned about whether it functions well and efficiently. Since the outbreak of the most recent global economic crisis, though, it has been argued that some international organizations failed to do a good job in pre-crisis warning and post-crisis management. The fact that a number of critiques which have been put forward are reasonable indicates that there is still room for improvement in the provision of global public goods. It is therefore necessary to improve both the rules of procedure and the decision making processes of international organizations, along with increasing their decision execution efficiency and optimizing their performance evaluation system. The overall aim of such reforms would be to prevent them from becoming too bureaucratic, as well as minimizing their rent-seeking behaviors. This is an important way to achieve equilibrium governance—both for countries that act as the principal stakeholders and the international organizations them-selves that act as the agent.

Enriching Economic Thinking

In *The Strategy of Conflict*, Schelling mentioned a phenomenon long ignored by mainstream economics: creating and destroying wealth and order is a highly asymmetric process. In his estimation, a worker with a high school diploma can only make tens of thou-sands of dollars a year. But he or she is also capable of destroying wealth that is worth thousands of times more than he or she can earn. If this worker can attain a small portion of the wealth that he or she can destroy by threats, that person can become a blackmailer. Schelling's reminder is indeed necessary, as there are some players who could destroy the world or endanger humanity in a certain way.

It would be a great contribution to humanity if we could make these players—such as brutal terrorists—follow rules and behave in an appropriate manner in a fair and effective global governance system. It would also be a meaningful contribution to the social sciences disciplines if we could generate valuable outputs while applying economics to the analysis of global governance.

Vision

Countries are becoming more interdependent than ever before in human history. The issues we face are global, and addressing them requires global cooperation. It is true that each country has its own interests. However, to paraphrase European Union founding father Jean Monnet: we do not sit on opposite sides of the table, but on the same side, because we are addressing common issues that we all face. Sometimes we need to make deals to take collective actions; but we should aim higher.

Two thousand years ago, Confucius once worded: establish and let establish, develop and let develop. A modern Chinese philosopher Mr. Zhao Tingyang has, in his A Political World Philosophy in terms of All-under-heaven (Tian-xia), coined it as a Confucian improvement, an oriental wisdom on a par with Pareto improvement in the western context. It leads us to believe that no country can be fully established and developed while others are not; to go forward is to go together.

Chapter 11
Perception of "The Great Transformations Once in a Century"

Yuyan Zhang

Abstract World history is a constant flow of change. In the last century, this planet saw so many dramatic events: two world wars, followed by a cold war, and the clash of civilizations between Islam and Christianity; and a kaleidoscope of amazing technological progress. But deeper changes are happening today. As Chinese President Xi Jinping said, "This is China's best period of development in modern history. The world is undergoing the most profound and unprecedented changes in a century. The two tendencies have become increasingly intertwined and contentious." In other words, the secular changes happening right now will have a greater impact on the future of humanity than all of the transformations of the twentieth century. It was President Xi who recognized the importance of this critical moment in world history, and his analysis in a speech a little more than a year ago sparked vigorous discussion among China's scholars and researchers. This article has catalogued eight dimensions in which we can identify the depth of these profound changes.

Keywords Great transformations once in a century · Strength comparison · Big country game

World history is a constant flow of change. In the last century, this planet saw so any dramatic events: two world wars, followed by a cold war, and the clash of civilizations between Islam and Christianity; and a kaleidoscope of amazing technological progress. But deeper changes are happening today. As Chinese President Xi Jinping said, "This is China's best period of development in modern history. The world is undergoing the most profound and unprecedented changes in a century. The two tendencies have become increasingly intertwined and contentious."[1] In other words, the secular changes happening right now will have a greater impact on the future of humanity than all of the transformations of the twentieth century. It was President Xi who recognized the importance of this critical moment in world history, and his analysis in a speech a little more than a year ago sparked vigorous discussion among

[1] "Guided by the Socialist Diplomatic Thought with Chinese Characteristics in the New Era, Strive to Create a New Situation for the Diplomacy among Major Powers with Chinese characteristics", *People's Daily*, June 24, 2018.

Y. Zhang, *Reform, Opening-up and China's Changing Role in Global Governance*,
https://doi.org/10.1007/978-981-33-6025-9_11

China's scholars and researchers. This article has catalogued eight dimensions in which we can identify the depth of these profound changes.

Balance of power: Fundamental shifts

The most important variable in these secular changes is the balance of power among the world's great powers. The balance of power has been shifting for the past 20 to 30 years, and the creeping changes are now adding up to a qualitative shift in global power. There are many indicators that serve as a proxy for a nation's strength or power; the most broadly applicable one remains the size of a country's economy. By this measure, the pace of China's development over the past 40 years has been dramatic.

In 1978, China's GDP per capita was just US$200; in 2018 it was nearly US$10,000. Particularly in the last decade or so, the speed of China's economic growth has even exceeded our own expectations. At market exchange rates, China's GDP was still less than half of Japan's in 2005. By 2010, China's GDP had overtaken Japan, and in 2015, it was twice the size of Japan's. At our current rate of growth, our economy may well be three times the size of Japan's in 2020.

40 years ago, China's GDP was about 2/30 of America's. By 2018, it was 2/3. China is fast closing in on economic size with the world hegemon, the US; and these two countries are pulling steadily further ahead of all other countries in the world. This is the key frame through which we should understand the upcoming fundamental shifts in China-US relations.[2]

Some Chinese commentators see the 2/3 ratio as a crucial marker that heralds a turn for the worse in the relationship between the world's two largest economies. China is not the first country to approach 2/3 of the US's GDP in the 70 years since the end of World War II. Both the Soviet Union and Japan recorded economic performances equivalent to 2/3 of the US's GDP at the time. And when each of those countries hit that 2/3 ratio, America's policy posture towards them underwent a rapid change. In each case the instruments were different, as was the ferocity of implementation, but the results can be clearly seen for both countries: In 2018, neither comes close to their former economic strength. Japan's economy today is less than 1/4 the size of the US's; Russia just 1/14. Perhaps this is one of the reasons the phrase "Thucydides's Trap" quickly became known around the world.[3]

Scientific progress: A massive but unpredictable factor

One of the major components of secular changes is fast-paced technological progress. Our technological landscape is changing day by day, particularly with the lightning pace of development in Internet and digital technologies. In turn, these new tools are driving chain reactions through production, distribution, allocation, and employment in every sector.

---

[2]Zhang (2018), p. 1.

[3]Allison (2017).

Automation and production lines in the manufacturing sector created huge numbers of new jobs (for engineers). But today's digital technologies and artificial intelligence are likely to destroy jobs without creating corresponding new positions. These new problems have motivated a series of important publications[4] from economists like Daron Acemoglu, author of *Why Nations Fail*. McKinsey estimates that 800 million industrial workers will be replaced by robots by the year 2030. In theory, almost all jobs could one day be replaced as the price of artificial intelligence continues to fall. Where economic globalization and international foreign policy affect the relative statuses of different countries, the advancement of technology will drive change within each economy, exacerbating income inequality and holding down workers' wages.

In theory, new technologies should increase productivity. However, the reality has proved quite the opposite: In both developed economies like the US, the EU, and Japan and major emerging economies, efficiency is improving at a slower and slower rate since the 21st century. The contrast with the massive investment in R&D is stark. This phenomenon has been christened the "productivity paradox" by economists, and it is indubitably creating a drag on the world economy.

New technologies are also starting to fundamentally alter the nature and form of warfare. An article[5] in *The Economists* explains that digital military technology has led to the emergence of new, digital battle lines. Autonomous weapons are being developed and deployed in large numbers, which is changing our traditional understanding of what it means to be a soldier, and is posing a new set of ethical questions: Can a smart weapon be a murderer? Military experts are also discussing "gray zone" conflict, which involves activity that is strategic and coercive, but does not escalate the situation and avoids a major response. In layman's terms, this is action where the target cannot precisely identify the aggressor, such as cyber-attacks and propaganda.

It is worth pondering that the accelerated networking of the world has greatly affected the power structure among countries. While not denying that the Internet is conducive to promote decentralization, it ironically awards network-dominated countries such as the United States enormous networking power in terms of the advantages of 'panopticons' and 'strokepoints' over other countries. Furthermore, these advantages are not only self-reinforcing, but also could be used as a weapon by networking hegemony.[6]

Individual interests: Increased public awareness

One of the obvious results of the spread of the Internet has been a precipitous drop in the cost of communications, a massive expansion in the content transmitted, and a great boost in the speed of information transmission. This means much more access to information, new ideas, and communication. People today have a much clearer understanding of their own interests, and much more understanding of how to protect

---

[4]Acemoglu and Restrepo (2018a, b, 2019); "Automation and New Tasks: How Technology Displaces and Reinstates Labor". NBER Working Paper 25684.

[5]Salisbury Plain 2019.

[6]Farrell and Newman (2019).

their rights. This widespread awareness of personal rights and interests is one of the major forces currently driving changes in society.

At the same time, populism and nationalism are rearing their heads on the political stage in certain countries. In Europe, the Italian far right is growing in strength. In Latin America, a "Trumpista" has taken the Brazilian presidency. It is a worrying trend for observers of world politics. Another consequence of digital technology has been the fragmentation of social cohesion. The information explosion that followed the arrival of the Internet means that information now flows to Internet users in a constant stream. As a result, they pay much less attention to their information, and a new "paradox of plenty" has developed.[7] Internet users prefer to see and hear information that suits their own preferences, so various media sources compete by honing their selection algorithms to deliver highly customized data; even fake news can look convincing when it comes from your own online contacts.

The "yellow vest" movement in France was the inevitable result of class groups who saw and read news only from within their own grouping, without any exchange or communication across class lines. When the Speaker of the US House of Representatives says, "I don't want to see [Trump] impeached. I want to see him in prison," the polarization of American society is plain for all to see.

Populist/nationalist parties and politicians taking the reins of power is an expression of the working classes, hit by the downside of globalization and connected by the Internet revolution. And their political successes will speed the spread of populism/nationalism around the world. The strength of this global movement will also determine whether the collapse of the current international order is followed quickly by the construction of a new system, or whether a long period of disorder intervenes.

Humanity has experienced two networking revolutions: The first was the spread of new knowledge through Europe following the invention of movable type by Gutenberg in the 1440 s; the second was the interconnection of humanity in the 1970 s after the invention of the computer and the Internet. In *The Square and the Tower,*[8] Niall Ferguson concludes that the election of Donald Trump, the rise of ISIS, and the 2008 financial crisis, like the French and American revolutions and religious reform movements, all occurred in periods of expanding networks. The connected world is always in danger of descending into chaos of anarchy.

Demographics: Crucial but complex

Demographic change can be divided into changes in population age and changes in ethnic mix. The major developed nations are all experiencing some level of population aging. The effect is most pronounced in Japan and Europe. Population graying has also begun in certain developing nations, including China. An aging population brings numerous connected challenges, such as the sustainability of the welfare system, issues of macro policy, maintaining balance between savings and investments, and the political attitudes of older people.

[7] Nye (2019).

[8] Niall (2017).

We should also note that aging populations are not the only problem. In contrast, young populations in many emerging economies also present major challenges. In Africa, the Middle East, and India, we are seeing a population explosion. In some countries, 40% to 50% of the population are under the age of 25. Such a young population inevitably results in serious unemployment among the youth. And a booming population can breed social instability, and take a heavy toll on resources.

Compared with the polarizing trend of demographics, shifts in the ethnic or racial mix can have a more direct effect on a country's social cohesion, political stability, and foreign policy. According to a survey report published in November 2017 by the Pew Research Center,[9] the number of Muslim citizens in the EU rose from 19.5 million in 2016 to 25.8 million in 2017, accounting for 4.9% of the EU's total population. Given a moderate rate of immigration growth, this ratio is predicted to increase to 11.2% in 2050; if a high growth rate is maintained, Muslim citizens will account for 19.7% of Germany's population in 2050.

Today more than half of the babies born in the US do not have European ancestry. By 2024, half of the population under 20 will be non-white. Given these statistics, it's not difficult to understand the reason behind the "Muslim ban" that Trump tried to impose soon after he came to power.

The natural result of ethnically diverse society is the reinforcement of ethnic identity. Eric J. Hobsbawm, author of *Nations and Nationalism Since 1780*,[10] points out in the book that one of the basic features of group or ethnic identity is to determine who the victims and the villains are. The villains are those to be held accountable for "our" suffering. "They" causes the anguish, disappointment, anxiety, and the sense of loss "we" live with as a group. "They" do not belong to the groups of "us"; they are strangers, and thus are our enemies. Minority groups that are in constant conflict tend to reject good will and tolerance of other groups. It may even be political wisdom to see to it that some enemies are identified in order to ensure the group's effectiveness, unify its members, and ensure these members remain conscious of their unity. Extreme situations in which we see the rise of ethnic identity and conflict within one nation, or between nations, is the focus of *The Clash of Civilizations and the Remaking of World Order,*[11] by renowned American political scientist, Samuel Huntington.

Post-WWII dollar economy: Nearing a crossroads

A new round of diversification—or de-dollarization—in the world economy has gained momentum and attracted wide attention in recent years. At market exchange rates, the US represents 22% of the world economy; measured by purchasing power parity, it is 15%. However, the US dollar accounts for half or more of cross-border invoicing, settlements, reserves, liquidity and funding. In an article titled *Trump's*

[9] https://www.pewresearch.org/fact-tank/2017/11/29/5-facts-about-the-muslim-population-in-europe/.

[10] Hobsbawm (2012).

[11] Huntington (2010).

Policies Will Displace the Dollar,[12] Professor Jeffrey Sachs notes that the US reaps many benefits from the dollar's predominant role as a reserve currency. It can collect exorbitant seigniorage on dollar reserves, avoid exchange rate risk, easily sell banking services to other countries around the world, minimize the cost of financial transactions, affect the pricing of commodities, and exercise significant influence over other countries' policies, particularly those that use the dollar extensively.

The creation of the euro, and the increased international use of the renminbi following the 2008 financial crisis both increased diversity in the international monetary system. Now the determination of many major economies to end their reliance on the dollar has been reinforced by Trump's trade wars, America's ballooning budget deficits, and the use of the dollar-based SWIFT settlement system to monitor global financial activities and apply economic sanctions.

In 2018, Turkey began to divest its US dollar assets. Iran has announced that it will price its oil in euros rather than dollars. Russia sensed that the dollar was now a risky currency for conducting international transactions, and has started to increase the use of the euro, ruble, and even the renminbi instead. Shanghai International Energy Exchange has launched a renminbi-denominated crude future product, and trading volumes are steadily growing. Meanwhile, China's Cross-Border Interbank Payment System (CIPS), an international settlement system using the renminbi, has now scaled up beyond the original limited rollout. Reforms to the international monetary system are a perennial topic at BRICS summits, and the world has seen the establishment of the BRICS Contingent Reserve Arrangement (CRA) and the New Development Bank. The group may well launch its own cryptocurrency. The Instrument in Support of Trade Exchanges (INSTEX) is a highly significant new development. This instrument was set up by the UK, France, and Germany to enable trade with Iran, and uses the euro in order to circumvent US sanctions.

In an article titled *Trump's Economic War of Choice,*[13] published at the end of 2018, Jim O'Neill, a former chairman of Goldman Sachs Asset Management and a former UK Treasury Minister, wrote, "At some point, the dollar's status as a global means of payment and reserve currency could be challenged." The international monetary system is a large and complex force. Its actions impact directly on the international status of the dollar, one of the pillars of US hegemony. But it also has a role to play in global economic stability and long-term growth, and it is directly implicated in the fate of digital currencies, such as Libra, issued by technology giants.

Multilateral system: Time for dissolution and reconstruction

One of the symptoms of secular change will be the dissolution and reformation of the existing multilateral order. The Trump administration has already withdrawn the US from the Paris Agreement, the Trans-Pacific Partnership (TPP), and the UN Human Rights Council; it terminated the Iran nuclear accord and the Intermediate-Range Nuclear Forces (INF) Treaty; the US administration has considered leaving the World Trade Organization, and has sharply attacked NATO and even the UN.

[12]Sachs (2018).

[13]O'Neill (2018).

The US appears to be voluntarily abandoning the postwar international order that it so painstakingly built.

There are some who locate the causes of the collapse of the current order in the failure of the US's democratic system and its consequent decline, the swift rise of China, and the revival of Russia. However, from the perspective of liberal theories—still the dominant school in international relations—the formation of international alliances is a crucial pillar in the story of America's success. Trump's unilateralism[14] and protectionism will destroy it.

From an economic perspective, trade wars have no winners (at least in the short to medium term), only two losers. Because of this, many have said that Trump's behavior is irrational, but his policies do have their own internal logic. Over the last 40 years, American GDP per capital has risen by more than US$50,000. One of the primary drivers of this growth has been the enthusiastic engagement of China with the globalization process dominated by developed nations. Supporting globalization is the international system carefully planned and constructed by the US since World War II. The underlying cause for America's abandonment of an international system that has brought it massive benefits is the rise of a new power: China.

China is threatening America's position of dominance within the global order. Size is a unique and vital factor in the rough-and-tumble of international relations. Major powers seek not just an economic edge over other countries, but also political superiority. The fundamental difference between politics and economics is that in economic terms, you can choose to align, and seek shared benefits for all; in politics you always seek to put the greatest possible distance between yourself and your competitors.

The worsening global situation has highlighted a global governance deficit, which shows an objective and pressing need for major improvements in the international order.

According to the *IUCN Red List 2018*[15] update, of the 100,000 species assessed, more than 28,000 species are threatened with extinction. That is 28% of all assessed species. Since 1970, the number of vertebrates on the planet has decreased by 60%, and only 30% of the original bluefin tuna population still exists due to overfishing in the Pacific Ocean. Studies have also shown that the current species extinction rate is 100 to 10,000 times the normal rate.

Given our unique historical predicament, if humanity refuses to take collective action and stop the mass extinction, then the very existence of humanity will be threatened, because of the collapse of the food chain.

I fear that this is the reason why the multilateral order has started to disintegrate, and new ideas for global governance are continually emerging. The Belt and Road Initiative launched by China, and its gradual institutionalization, can be seen as a representative example of international order-building.

[14]Zakaria (2019).

[15]The IUCN Red List of Threatened Species 2018: https://www.iucnredlist.org.

The US: A superpower in decline

Charles Calomiris[16] writes that the 2008 financial crisis in some senses reveals how ossified US systems have become, and the severity of the damage that this inflexibility can cause. In the US, financial crises and credit scarcity are not distributed purely randomly. They are the result of political competition and negotiation. The banking system is the outcome of political horse-trading. The interests of various stakeholders in the political process determine how banking policy is shaped, including all aspects from the issuing of banking licenses to the parameters of branches, the allocation of credit, regulatory arrangements and banking relationships.

In *America, Compromised,*[17] Lawrence Lessig is concerned not with assigning blame to the villains, but with how American institutions foster corruption and ultimately lead the country to harmful outcomes. He sees institutions in the financial, legal, media, healthcare, and research sectors as all being corroded by the wrong standards and incentives. They in turn corrode other industries. The problem is not always the selfish behavior of specific actors.

Steven Brill argues that, "The First Amendment became a tool for the wealthy to put a thumb on the scales of democracy. America's rightly celebrated dedication to due process was used as an instrument to block government from enforcing job-safety rules, holding corporate criminals accountable and otherwise protecting the unprotected. Election reforms meant to enhance democracy wound up undercutting democracy. Ingenious financial and legal engineering turned our economy from an engine of long-term growth and shared prosperity into a casino with only a few big winners…lobbyists were able to get riders or exemptions worth billions inserted into [almost all] legislation… the country [has been split] into two classes: the protected and the unprotected. The protected overmatched, overran and paralyzed the government. The unprotected were left even further behind…voter turnout…and respect for basic institutions, especially the government—are far below what they were…For adults in their 30 s, the chance of earning more than their parents dropped to 50% from 90% 40 years ago."[18]

Nepotism is also much more widespread in the US than is commonly imagined. An article in *The Economist*[19] reported that the son of a state governor had 600 times as much chance as a male baby boomer of becoming a governor; the son of a senator was 8,500 times more likely to become a senator than an ordinary person.

Many signs show that the US is on the way to becoming a high welfare state. A large majority of Americans support increased welfare spending. If the health insurance that is not currently paid for by the government were added on, then total US government expenditures would amount to 48% of the country's GDP—virtually the same level as Sweden, the poster child of European welfare states. Many worry that this could put a permanent squeeze on America's capacity for growth. Despite

---

[16]Calomiris (2014).

[17]Lessig (2018).

[18]Brill (2018).

[19]Cover Story (2015).

the recent run of 122 straight months of positive GDP growth—breaking the previous record set between 1991 and 2001—in all that time the country has only expanded by 25%. This is far lower than the 43% total growth achieved over the previous long run.

Increasing tension: Confinement and countermeasures

"Power politics" traditionally refers to the jockeying of major powers for advantage, sometimes including ruthless subjugation of the other country even at one's own expense. Many of the reasons for the secular changes occurring today can be boiled down to one: China is swiftly developing its own high-tech industries. But at the very least, China-US relations have not yet begun a new cold war. During the cold war, the US's posture towards the Soviet Union was isolation and containment. To the greatest extent possible, it avoided any trade or private engagement with the Soviet Union and its allies. Ultimately, this forced the Soviet Union into a spiral of inefficiency so that it stifled itself.

During the cold war and for the following decade or more, America's policy toward China was of engagement. At its core was the aim of drawing China into the America-dominated international system, to induce it to take on certain obligations, and thus to influence China itself. Though there are now voices in America calling for a disengagement with China, and ultimately a new policy of containment, the US would find it almost impossible to truly isolate China. And in fact, it has no need to do so. It would be impossible because isolating China would require coordinated action by all of the world's major economies and a large number of the developing ones. And it is unnecessary because the threat posed by China toward the US and other developed nations comes from the possibility of overtaking them in high-tech sectors, not from low-end competition.

The vital core of US policy toward China is to continue to enjoy the benefits of having China fill out the low end of the value chain in global manufacturing, while preventing China from catching up in high-tech sectors, particularly in digital technologies. This fundamental policy towards China can be described in a single, simple word: confinement.[20]

There are two goals to the confinement policy: One is to use international rules to limit China's ability to act in high-tech sectors; the other is to lock China into global supply chains in a low-value position, and to maintain or even widen the technological gap between China and the US. The US's frequent application of its own internal law to its trade partners is motivated mainly by the fact that the current multilateral system is not constraining China as America would like it to. The most obvious example is the 301 Report[21] publish by the US Trade Representative in March 2018. This report focused entirely on technology-related questions, including alleged issues of technology theft, forced technology transfer, and intellectual property protection. The same objective motivated the joint statement issued by the US, Europe, and

[20]Zhang and Feng (2018).

[21]Refer to: https://ustr.gov/issue-areas/enforcement/section-301-investigations/tariff-actions.

Japan calling for a reform of WTO rules, and demanded for transparency from the Chinese government on subsidies.

As *Bloomberg News* reported on May 26, 2019, under the headline *Tech Cold War Will Force World to Choose,*[22] "the digital Iron Curtain will force political leaders to decide whether they're Team China or Team America." In a word, the tussle between the US and China, as they attempt to confine and break each other's bonds, has become a modern form of Thucydides' trap, and the rest of the world is already feeling the impact.

Constants Hold True Amid Secular Change

Change always contains constants within it; constancy holds the seeds of change. The explosion of the very first atomic bomb instantly changed the course of human history. In *Why the West Rules—For Now,*[23] Ian Morris observes that neither great individuals nor bungling idiots can change the course of history. At most they can accelerate or slow the turning of its wheels. But in the period after 1945, political leaders were able to change history. In the past, the consequences of any human error would be the decline or collapse of some community. Now we had the capacity to make errors that would bring about the end of our species.

Since that moment, we have remained firmly in the nuclear age. The Stockholm International Peace Research Institute (SIPRI) estimates that there are now over 15,850 nuclear warheads[24] in the world. The US and Russia have about 6,550 and 6,850, respectively. This is sufficient to destroy all of humanity ten times over, and means that humankind continues to live in the shadow of death. And the continued existence of nuclear weapons places a hard upper limit on any conflict between the US, Russia, and China, because all-out war between nuclear powers would undoubtedly result in the destruction of humanity.

Another constant that has remained unchanged is that interdependence between nations is at an all-time historical high. This interdependence is seen in the high levels of national specialization and the deep trade links spanning the globe. In an article titled *Five Myths about Globalization,*[25] Steven Altman offers evidence of globalization—measured based on flows of trade, capital, information and people—rose to a record high in 2017. The world is bound closely together in global chains of supply and value. While it is still true that the "systems integrators"[26] who occupy the very highest rungs of the value chain are still mainly to be found in North America, Europe, and Japan, the cost of disengagement between the major developed and developing nations has risen to a level that the world cannot afford. The benefits of trade to every nation have helped dampen the inevitable public and political backlash

[22]Culpan (2019), https://www.bloomberg.com/opinion/articles/2019-05-20/huawei-supply-freeze-points-to-u-s-china-tech-cold-war.

[23]Morris (2011).

[24]SIPRI Yearbook 2018, https://www.sipri.org/yearbook/2018. Besides the U.S. and Russia, France has listed No. 3 with 300.

[25]Altman (2019).

[26]Nolan (2013).

within each country, and are canceling out any anti-globalization effect. Overall, there has been no reversal of globalization; at most a temporary hiccup in its progress. Economic globalization is a major historical process, and it does not always proceed forward serenely and smoothly. Its path is inevitably winding and bumpy. The Trump administration, with its unilateralism, protectionism, and hectoring tone, is just one manifestation of globalization's twists and turns.

Looking Back a Century Hence

In a hundred years' time, when historians look back on this particular period of the human experience, they are likely to see this moment of secular change as one step in the rise of the East, particularly China; and one moment in the West's ongoing response led by the US. Two major powers like China and the US, one swiftly rising, one still holding on to a slightly tired superpower status… One grasping for global status to match its strength, the other reluctant to share power with any other state… One driven by the deep social and political traditions of Oriental, the other a product of Western enlightenment and Christian inspiration… It is only natural and normal that two powers such as these should bump heads, rub up against each other, even find themselves in collision and conflict. But from another perspective, we can clearly see that many of the global issues that humanity faces require the world's two biggest powers to work together. These two largest stakeholders in the common affairs of humanity must jointly take responsibility and meet our challenges. And the necessary first step on this path is for both China and the US to apply their wisdom and their courage, and to resolve the misunderstandings, tensions, and conflicts between our great nations.

References

Acemoglu, Daron and Pascual Restrepo. 2018a. *Modelling Automation.* NBER Working Paper 24321, Feb 2018.

Acemoglu, Daron and Pascual Restrepo. 2018b. *Demographics and Automation.* NBER Working Paper 24421, Mar 2018.

Acemoglu, Daron and Pascual Restrepo. 2019. *The Wrong Kind of AI? Artificial Intelligence and the Future of Labor Demand, JEL*, March 2019.

Acemoglu, Daron and Pascual Restrepo. *Automation and New Tasks: How Technology Displaces and Reinstates Labor*. NBER Working Paper 25684.

Allison, Graham. 2017. *Destined for War: Can America and China Escape the Thucydides's Trap?*. Houghton Mifflin Harcourt.

Altman, Steven. 2019. *Five Myths about Globalization.* Washington Post, Feb 12.

Brill, Steven. 2018. *How Baby Boomers Broke America.* The Times, May 28.

Calomiris, Charles. 2014. *Fragile by Design.* Princeton University Press.

Cover Story. 2015. Dynasties: The power of families. *The Economist*, Apr 18.

Culpan, Tim. 2019. *The tech cold war has begun.* https://www.bloomberg.com/opinion/articles/2019-05-20/huawei-supply-freeze-points-to-u-s-china-tech-cold-war.

Farrell, Henry, Abraham L. Newman, and Weaponized Interdependence. 2019. How Global Economic Networks Shape State Coercion. *International Security* 44 (1): 42–79.

Ferguson, Niall. 2017. *The Square and Tower: Networks*. Allen Lane: Hierarchies and the Struggle for Global Power.

Hobsbawm, E. J. 2012. *Nations and Nationalism Since 1780: Programme, Myth, Reality (Canto Classics)* (Chap. 6), 2nd ed. Cambridge University Press.

Huntington, Samuel. 2010. *The Clash of Civilizations and the Remaking of World Order*. Xinhua Publishing House.

Lessig, Lawrence. 2018. *America, Compromised*. University of Chicago Press.

Morris, Ian. 2011. *Why the West Rule—For Now*. CITIC Press Group.

Nolan, Peter. 2013. Is China buying the world? *Polity*.

Nye, Joseph. 2019. *American Soft Power in the Age of Trump*, May 6. https://www.project-syndicate.org/commentary/american-soft-power-decline-under-trump-by-joseph-s-nye-2019-05?barrier=accesspaylog.

O’Neill, Jim. 2018. *Trump’s Economic War of Choice*. Lianhe Zaobao, Dec 15.

Sachs, Jeffrey D. 2018. Trump’s policies will displace the dollar. https://www.project-syndicate.org/commentary/trump-policies-undermining-the-dollar-by-jeffrey-d-sachs-2018-9-3.

Salisbury Plain. 2019. Autonomous weapons and the new laws of war. *The Economists*.

Zhang, Yuyan. 2018. Overcoming the Thucydides’s trap. *World Economic and Politics* 2018(1), 1.

Zhang, Yuyan and Weijiang Feng. 2018. From contact to confinement: Four prospects of the U.S. strategic intention towards China and the bilateral game. *Tsinghua Financial Review* 7.

Zakaria, Fareed. 2019. The self-destruction of American power: Washington squandered the unipolar moment. *Foreign Affairs* 98(4).