

To Achieve the Goals of China's 11th Five-Year Plan through Reforms

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Abstract

By investigating the causes of China's major economic problems, this paper discusses how to make the goals of the 11th five-year plan self-enforcing. The self-enforcing mechanism can only be achieved in a fully working market economy. Hence, the efforts in the period of the 11th five-year plan should focus on how to perfect China's market economic system through reforms. The major economic targets the Chinese government set in the 11th five-year plan include: (i) shifting to a high efficiency growth model; (ii) upgrading and optimizing the industrial structure; (iii) developing the rural economy; (iv) increasing the efficiency of resources allocation, and building a conserving society; (v) balancing the spatial development; (vi) improving public services, and etc. According to the analysis of the paper, the core reforms yet to be finished include: (i) governmental reforms; (ii) opening the monopolistic state sectors; (iii) the SOEs reform; (iv) financial and fiscal reforms; (v) the other reforms, including reforms on rural land, residence registration, education, public health, social security, employment, and etc. These reforms are not only essential for realizing the targets of the 11th five-year plan, but also essential for China's long-term economic development.

Key words: The 11th Five-Year Plan, Reforms, China, Chinese Economy

Statement: This paper only reflects the author's viewpoints, does not necessarily represent the perspectives of the Development Research Center of the State Council of PRC.

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Yongsheng Zhang*

1. Introduction

The five-year plan was the major instrument for the Chinese government to manage the economy in the era of planned economy. Before 1978, the industrialization, urbanization, and almost all economic activities in China were led by the government through planning. The plan was strictly implemented through different levels of governments. After the reforms started in 1978, China continues to make the five-year plan. However, the five-year plan itself has been gradually evolved into a suggestive program from command, especially in the 11th five-year plan (from 2006 to 2010).

The 11th five-year plan is substantially different from the ones in planned economy. *Firstly*, the 11th five-year plan is no longer instruction and is more like a blueprint made by the government. While in the era of planned economy, the plan was instruction, and must be obeyed by all levels of governments and firms (all are public firms). The Chinese name of the 11th five-year plan was changed from “*Ji Hua*” to “*Gui Hua*”. The former means a blueprint but the latter means a strict plan. *Secondly*, most of targets of the 11th five-year plan are supposed to be executed by market forces rather than by the government like before. *Thirdly*, as the share of the state economy keeps decreasing and the private economy increasing and becomes dominant, it is actually impossible for the government to implement the five-year plan like before.

The economic performance in the market economy is the result of the interactions of competitive market forces and is then Pareto optimal. Hence, the objectives of the 11th five-year plan must be in line with the results of the interactions of market forces. If that is the case, then the objectives of the 11th five-year plan should be self-enforcing as long as the market economic system works well. Otherwise, the economic objectives are not optimal objective, and cannot be automatically realized in the market.

Hence, there are two related problems with China's 11th five-year plan. One is whether the objectives of the five-year plan are optimal in line with the results of market competition. Another is whether China's market economic system fully works. In section II of this paper, we will review the objectives of China's 11th five-year plan to see if they are consistent with the market economy. In section III, we analyze the challenges to achieving the goals of China's 11th five-year plan, focusing on the root problems. In section IV, we discuss what reforms yet to be undertaken to

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make the goals of the five-year plan self-enforcing. In section V, we discuss the prospect of China's 11th five-year plan, and of the economic development as well. The last section is concluding remarks.

2 The Major Goals of China's 11th Five-Year Plan

Following the brief introduction of the major economic goals of China's 11th five year plan, this section further addresses another two questions. One is the reason why China set the goals in the 11th five-year plan. Another is how feasible for China to achieve the goals.

2.1 The Major Goals of China's 11th Five Year Plan

In addition to maintain high economic growth and macroeconomic stability, the major economic targets the Chinese government set in the 11th five year plan include: (i) shifting to an efficient growth model, (ii) upgrading and optimizing the industrial structure; (iii) developing the rural economy through the so-called new village campaign; (iv) increasing the efficiency of resources allocation; (v) achieving balanced spatial development; (vi) improving public services, and etc(NPC, 2006). In fact, all the targets are interdependent and the realization relies on the advance of the reforms.

Quantitatively, there are two catalogues of target indicators. One is of expected indicators, which are the indicators only *expected* to be achieved. Another is of compulsory indicators, which are the indicators *have to* be achieved (see Table 1). In the past, all indicators in the five-year plan were compulsory that have to be executed. By contrast, in the 11th five-year plan the compulsory indicators only focus on public affairs, i.e. population control, ecology, pollution, and etc., while all economic indicators are expected.

To set two types of indicators in the 11th five-year plan is a reflection of the significant changes in China. Firstly, the government is shifting its role and drawing a clear dividing line between the government and the market. The government is now trying to confine itself in public affairs rather than economic activities. Secondly, the government-led growth is shifting to the market-led growth. All economic growth indicators in the 11th five-year plan are no longer compulsory. The market, other than the government, is playing the leading role in economic development.

Table 1 The Major Social and Economic Indicators in the 11th Five Year Plan

(E: Expected Indicators; C: Compulsory Indicators)

	Indicators	2005	2010	Increase Rates(%)	Type
I. Economic growth	1.GDP	18.2	26.1	7.5	E
	2.Per capita GDP	13985	19270	6.6	E
II.Economic structure	3.Share of service value- added	40.3	43.3	[3]	E
	4.Share of service employment	31.3	35.3	[4]	E
	5.R&D investment of GDP	1.3	2	[0.7]	E
	6.Urbanization level	43	47	[4]	E

III. Population, resources & environment	7.National population(10 thousand)	130756	136000	<0.8%	C
	8.Decrease of energy consumption unit GDP(%)			[20]	C
	9.Unit water consumption of industrial value-added(%)			[30]	C
	10.Coefficient of irrigation efficiency	0.45	0.5	[0.05]	E
	11.Utilization rate of Industrial waste(%)	55.8	60	[4.2]	E
	12.Farm land(hundred million hectare)	1.22	1.2	-0.3	C
	13.Decrease of pollutant(%)			[10]	C
	14.Forest coverage(%)	18.2	20	[1.8]	C
IV. Public service & people's life	15.Average education duration(year)	8.5	9	[0.5]	E
	16.Coverage of urban pension system (hundred million)	1.74	2.23	5.1	C
	17.coverage of rural cooperative medicare system(%)	23.5	>80	>[56.5]	C
	18.Increment of urban employment in 5 years			[4500]	E
	19.Rural-urban migrants in 5 years			[4500]	E
	20.Urban unemployment rate	4.2	5		E
	21.Per capita income in city	10493	13390	5	E
	22.Per capita income in country	3255	4150	5	E

Sources: *The 11th Five-Year Plan of National Economy and Social Development of People's Republic of China . Approved by the Forth Plenary of People's Congress, 2006*

Note: [] means accumulated number in five years.

2.2 Why Did China Set the Goals?

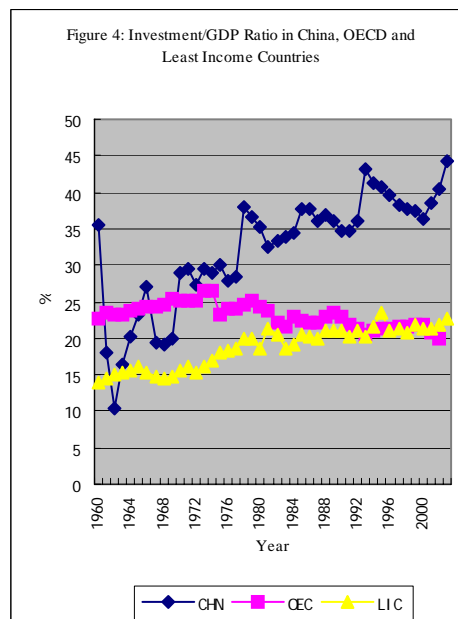
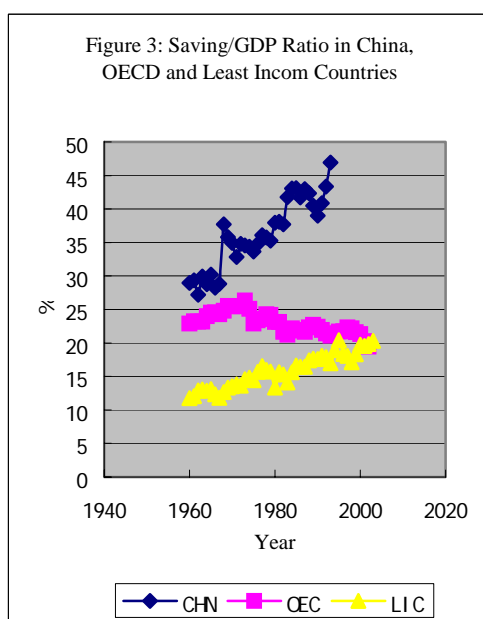
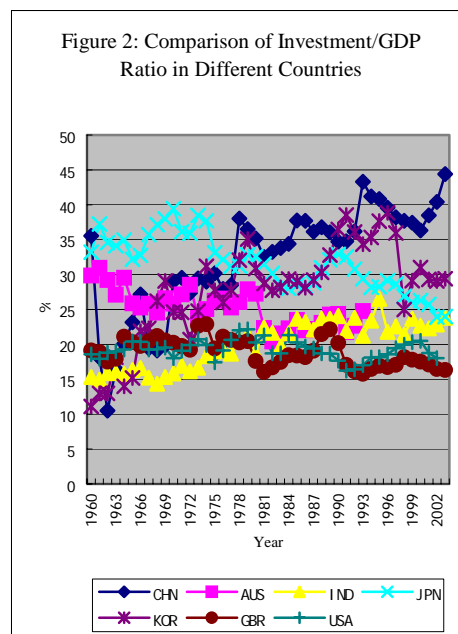
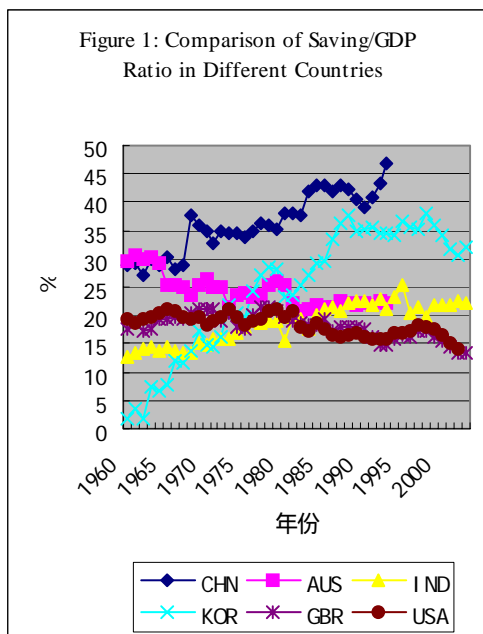
Why does the Chinese government pay so much attention on the six fields in the 11th five year plan? The short answer is that the problems in those fields are the most serious and important problems related to the long term sustainability of China's economic development.

2.2.1 Shifting to an Efficient Growth Model

A fact, paralleling with 9.5 percent of high annual growth rate over the past three decades, is that China's high growth has mainly been driven by high investments, and its efficiency is quite low. The low output-input ratio means that China's growth is not very sustainable in the long term. We use two types of indicators, i.e. (i) saving rate & investment rate, and (ii) incremental capital-output ratio(ICOR), as proxies to measure the efficiency of the Chinese economy.

As we can see from Figures 1 and 2, China's saving and investment rates are not only much higher than its developed counterparts, such as Australia, Japan, Korea, the UK, and the US, but also higher than some developing country, such as India. Note that a higher value of the two indicators does not necessarily mean a low efficiency, since (i) the saving and investment rates are also dependent on the development levels of a country. It is not unusual if China's investment rate is higher than that of the developed countries. (ii) the rates are not only determined by the efficiency

of growth, but also by the preference, population and age structure, industrial structure, culture and etc of a country. Nonetheless, since the two rates in China are also higher than the least developed countries (see Figures 3 and 4), we can then safely conclude that China's high growth is mainly driven by the inefficient high investments(Zhang, 2005a).



Sources: World Development Indicators database.

Next we use another indicator, incremental capital-output ratio (ICOR), to measure the efficiency of China's high growth. ICOR is the result of using real GDP growth rate to divide the investment rate. It is one of the most common indicators to evaluate the efficiency of investment. For instance, if investment rate is 40.5% and GDP growth rate is 8%, then ICOR is $(40.5\%)/(8\%)=5.1$. The smaller the value of ICOR is, the more efficient of the investment is. Note that it is problematic if

compare the ICORs of two countries at different development stages, since the lower value of ICOR in the less developed country more reflects the lower productivity, rather than the result of inefficiency in terms of Pareto optimum. Therefore, we compare the ICOR values of mainland China, Japan(1961-1970), Korea(1981-1990), and Taiwan(1981-1990) at their high growth periods. From Table 2 we can see that China's ICOR is much higher than that of Japan, Korea, and Taiwan. It means that the efficiency of the Chinese economy is less efficient than that of the latter(Kwan, 2004).

Table 2 ICOR during the High Growth Periods in China, Japan, Korea and Taiwan.

Countries/year		Investment/GDP(%) A	GDP Growth Rate(%) b	ICOR(=a/b)
China	1991-1995	39.6	11.6	3.4
	1996-2000	37.6	8.4	4.5
	2001-2003	40.5	8.0	5.1
	1991-2003	39.1	9.5	4.1
Japan: 1961-1970		32.6	10.2	3.2
Korea: 1981-1990		29.6	9.2	3.2
Taiwan: 1981-1990		21.9	8.0	2.7

Source: Kwan(2004)

2.2.2 Upgrading and Optimizing the Industrial Structure;

China's unreasonable industrial structure is a big problem, which is characterized by the repeated low level investments in different regions, low competitiveness of state-owned enterprises(SOEs), overcapacities in various industries, and etc. According to the evidences documented by Lu(2006), the situations of overcapacities in many industries are really very serious(see Table 3).

Table 3: The State of China's Overcapacity in different Industries

Industries	Overcapacity
1. Iron & Steel	250 million tons overcapacity in 2010
2.Coal & Mine	400 million tons overcapacity in 2010
3.Power	The capacity will increase to 1 billion KW in 2010 and there will be overcapacity.
4. Aluminium	The capacity will reach 13 million tons in 2010 and the overcapacity will be very serious.
5. Cement	There is 20% overcapacity in 2005.
6.Ferroalloy	There is more than 50% overcapacity.
7.carbonic-chemistry	24% overcapacity in 2006
8.copper smeltery	The capacity will reach 2.05 million tons in 2007 and then most of the firms will have no materials to smelt.
9.calcium carbide	The current capacity is two times of the actual demand.
10.texture	Mainly relies on the exports to utilize the capacity.
11.automobile	The current capacity is 3 million vehicles, more than the actual demand.

Sources: Made according to Lu(2006).

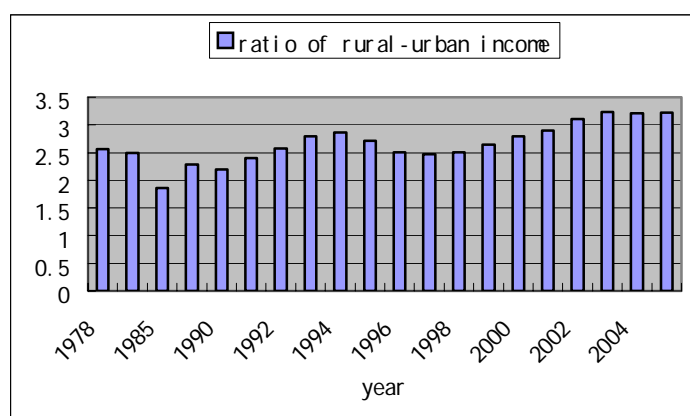
The issue of China's industrial overcapacity is complicated. Firstly, if only take into account the competitive capacities of an industry, it might not be too great. Nonetheless, if take into account all capacities, then it is too great. Hence, the current industrial structure is actually a mixture of the competitive modern firms and the backward traditional firms need to be eliminated. The latter are mainly SOEs. Secondly, for some particular industries, it is hard to conclude that their production capabilities are too great, since the real demand in the future is hard to be predicated. Given the Chinese economy is so dynamic, it is not always reliable to make such conclusions. Market should play an essential role for deciding the optimal capacity and industrial structure. Anyway, it is undoubted that China's industrial structure is not efficient and needs to be greatly upgraded.

2.2.3 Developing the Rural Economy through the New Village Campaign

Roughly, there are three stages in terms of the rural-urban gap in China. The first stage is before the reforms in 1978. The gap increased mainly because the government used price scissors to accumulate capital to pursue the state-led industrialization. The second stage is from 1978 till around 1990. The gap decreased because the household responsibility reform(HRR) in agriculture trigged in 1978. The third stage is from 1990 to present, during the period the gap increases in general, with up and down in some years. The major reason is because the hidden problems have emerged after the potentiality of HRR been released.

The household responsibility reform in 1978 triggered China's reforms, and greatly improved China's agricultural production, rural economy, and farmer's income, which are jointly called "SanNong" (means "three agriculture-related issues", since all three words start from *Nong* in the Chinese). However, the *SanNong* problems have become very serious since the 1990s. One of the striking problems is the increasing rural-urban income gap (see Figure 5).

Figure 5: The Rural-Urban Income Gap: 1978-2006



Note: This figure just provides a general picture of the rural-urban gap. The value on the y-axis is the ratio of urban per capita income in relative to rural per capita income.

Source: NBS(2006, p. 347)

Given China is a huge country and the farmer accounts for 70 percent of the population in China,

the *SanNong* problem will not only result in unbalanced rural-urban relationship, but also cause very serious economic and social consequences if it cannot be appropriately solved. Realizing the seriousness of the issue, the Chinese government puts the *SanNong* issue on the top agenda in the 11th five-year plan. The major measures in the 11th five-year plan are to stage a so-called *new village campaign*, and to citizenize the rural-urban migrants (farmer workers) by removing the institutional barriers from accessing the city. The measures of the new village campaign include: (a) Developing the modern agriculture; (b) Increasing the farmer's income. (c) Improving the village's appearance. (d) Training the new-type farmer. (e) Increasing the inputs to agriculture and rural areas. (f) Deepening the reforms in the country.

2.2.4 Increasing the Efficiency of Resources Allocation and Build a Conserving Society

After three decades rapid growth at averagely 9.5 percent of annual rate, China's GDP is the 4th largest, and its international trade is the 3rd largest in the world by 2005. Accordingly, the demand for energy increases very quickly, especially China's economy is still not efficient enough. The low efficiency means that it needs relatively more energy to maintain the high growth. According to the statistics of China's Custom, the imports of crude coal, crude oil, and refined oil increased by 51.0%, 15.6%, and 16.1% respectively in the first half of 2006. In addition to the energy problem, China's high growth is also somehow achieved at the price of environmental deterioration. Therefore, the government proposed to build a conserving and environment-friendly economy in the 11th five-year plan.

The energy consumption of unit GDP, also called energy intensity (EI), is a proxy to measure the efficiency of energy consumption. The value of the EI is achieved by using the GDP to divide the energy consumption (usually converted to ton standard coal). For international comparison, there are two methods to measure the EI: one is to use nominal exchange rate, and another is to use PPP. As we can see from Table 4, China's energy intensity is much higher than its developed counterparts in terms of nominal exchange. The results calculated according to PPP are less worse, but the results are controversial. Anyway, it is undoubted that China's energy problem is a crucial problem for the sustainable growth. There are two ways to solve the problem. One is reduce the energy intensity through improving the economic efficiency. Another is to explore and secure the supply of energy in the world market.

Table 4: Energy intensity in different Countries
(Ton standard coal/million US Dollars)

	1990		2000	
	Nominal exchange	PPP	Nominal exchange	PPP
China	2417	521	1274	276
US	423	414	364	357
EU	236	270	214	244
Japan	127	221	131	230
Russia	--	--	2422	765
India	924	194	889	187

OECD	296	329	274	299
Non-OECD	1023	--	816	--
World Average	423	--	377	--

Note: The current price of US Dollar in 1985 is used.

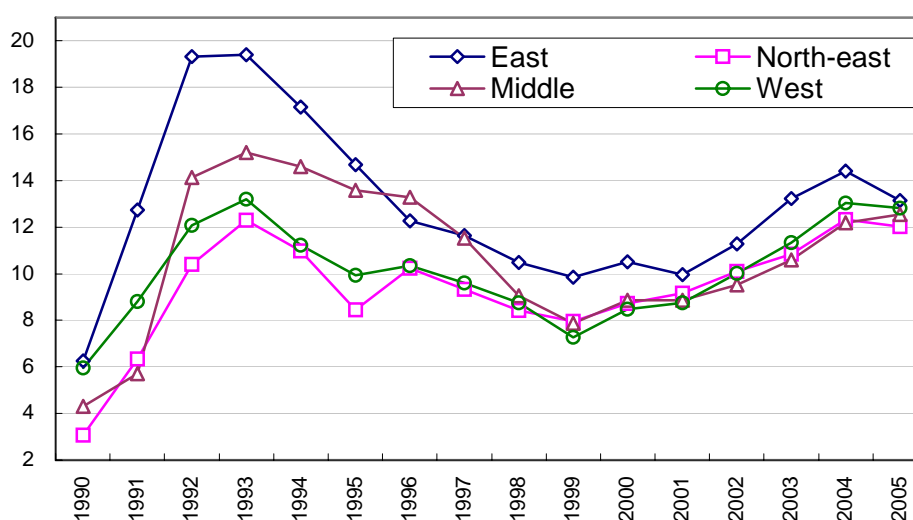
Sources: *Statistics Book of Japan's Energy and Economy*, by Japan Institute of Energy Economy. Recited from Chen(2004).

2.2.5 Balancing the Spatial Development

A striking phenomenon of China's economic development is the spatial unbalance. Due to their geographic advantages, especially that GongDong, ShenZhen are adjoining to Hongkong and Macao, and Fujian is closed to Taiwan, the coastal regions were first opened up to the outside world. Thanks to the early opening-up, the economy of the coastal areas of south-east China is also the most developed areas in China. By contrast, the vast inland regions of middle China, especially the western regions, are much lagging behind.

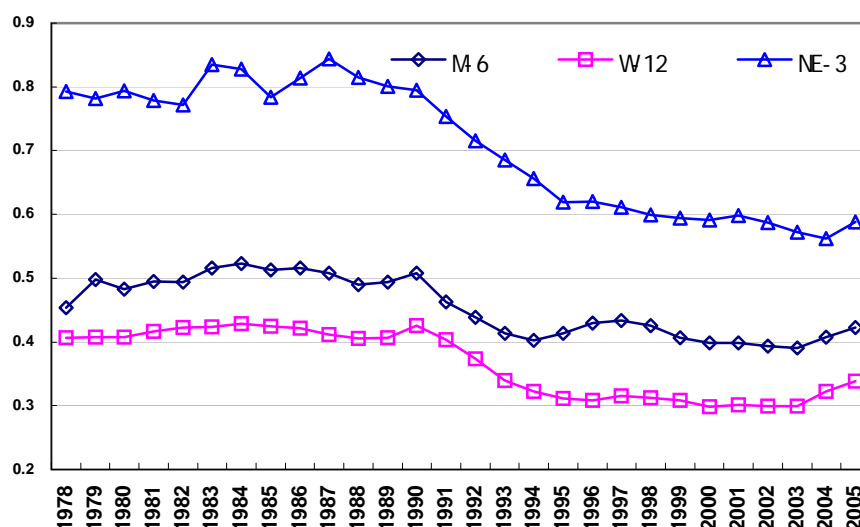
According to Feng and Xuan(2006), the GDP growth rates of the four regions(i.e. East 10 provinces; Middle 6 provinces; West 12 province; North-east 3 provinces) are converging since 2004. Nonetheless, the spatial gap of GDP continues to enlarge (see Figure 6 & 7). Anyway, the situation of spatial unbalance has got effectively improved after the Chinese government adopted the intensive strategic measures to promote the development of the western region, the industrial north-east region, and the middle region in 2000, 2003, and 2006, respectively.

Figure 6 GDP Growth Rates of the Four Regions During 1990-2004



Source: Feng and Xuan(2006), Figure 2.

Figure 7 The Comparison of GDP of the Four Regions from 1978-2005



Note: (a) M-6: 6 provinces in the middle; W-12: 12 provinces in the west; NE-3 provinces in the north-east. (b) The numbers in the y-axis are the relative values compared to the GDP of the 10 provinces in the east of China.

Source: Feng and Xuan (2006), Figure 6.

Given China is such a huge country, it is not easy to achieve the balanced development indeed. The backward regions in China are the west region, north-east industrial base, and the middle of China. The problems in the three regions are different. For the western regions, due to their relatively insolated geographic disadvantage, it is not very surprise that their development is lagging behind in China. If their transport can be greatly improved with the supports from the central government and the market mechanism can be effectively introduced, it is with big potentiality for economic development. For the industrial north-east, the biggest problem is not the geographic disadvantage but institutional barriers since the inefficient state economy has the dominant share in the region. With the heavy heritage of planned economy, it is particularly hard for the region to achieve the transition toward market economy. Now the biggest problem for the north-east is how to solve the problems of the SOEs, and to develop the private economy by speeding up the market-oriented reforms. For the middle region, the economic development is not so backward. Its biggest problem is how to get more supports from the central government in terms of fiscal transfer payments and policy supports.

2.2.6 Improving the Public Services

China's public services have been insufficient, especially in the planned economy. Particularly, the local governments did not have strong incentive and sufficient fiscal capability to improve the public services. The number of GDP was the most important key performance indicator(KPI). Accordingly, the local officials care the GDP number most, and ignore the demands of local citizen for public services.

Firstly, the overall public services are quite poor in China. The most serious problems receiving most complaints from the people are in three fields: health care, education, infrastructure such as water, electricity, streets and roads, and etc. Since the government not only has responsibility to provide public services, but also needs to be fully engaged in the economic development (especially before), the public resources can be used in public services is insufficient. Consequently, the public services can never be good and sufficient (see Table 5).

Secondly, the unbalance of public service in different regions is very serious. Since the fiscal capabilities in different regions are very different, the levels of public services the citizen in different regions received vary sharply. For the per capita governmental expenditure on education in 2005, the highest (Shanghai) is 6 times of the lowest (Sichuan); on public health, the highest (Beijing) is 11 times of the lowest (Hunan); on the social security, the highest (Shanghai) is 6.85 times of the lowest (Zhejiang); on the city maintenance, the highest(Tianjin) is 31.7 times of the lowest(Tibet). See Table 5.

As China shifts to the market economy, the needs for better public services greatly increased. The problem of public services becomes a central problem needs the government to deal with. In 2002, the Chinese government raised the concept of scientific development according to which the government should be service-oriented (CPC, 2003). Latterly, the concept was further included in the 11th five-year plan(NPC, 2006). It is a very significant progress for the Chinese government to shift its focus to public service.

Table 5: The Equality of the Per Capita Governmental Expenditures on Public Services(2005)

A: Per Capita Governmental Expenditure(yuan); B: Of the Average Level of the Nation(x100%)

	Education		Public Health		Social Security		City Maintenance	
	A	B	A	B	A	B	A	B
Beijing	949.7	3.326	427.2	5.49.5	163.4	1.350	343.2	3.556
Tianjin	644.3	2.257	182.0	2.341	356.7	2.947	498.7	5.168
Hebei	249.2	0.873	65.9	0.847	105.9	0.875	67.3	0.698
Shanxi	304.6	1.067	84.0	1.081	167.3	1.383	86.1	0.892
Inner Momngolia	329.7	1.155	87.5	1.125	136.1	1.124	158.5	1.642
Liaoning	337.0	1.180	81.4	1.047	391.1	3.231	188.1	1.949
Jilin	273.1	0.956	76.3	0.981	386.3	3.192	76.2	0.790
Heilongjiang	279.1	0.978	73.4	0.944	287.6	2.377	84.6	0.877
Shanghai	1028.9	3.603	293.3	3.772	405.4	3.350	486.3	5.039
Jiangsu	345.8	1.211	100.5	1.293	85.3	0.705	209.6	2.172
Zhejiang	473.1	1.657	132.6	1.705	59.1	0.489	156.1	1.618
Anhui	192.1	0.673	41.9	0.526	79.2	0.655	35.6	0.369
Fujian	315.7	1.106	73.4	0.944	29.1	0.240	47.0	0.487
Jiangxi	204.1	0.715	50.7	0.652	91.3	0.754	65.0	0.674

Shandong	269.2	0.943	58.9	0.757	63.6	0.526	127.7	1.323
Henan	199.9	0.700	44.6	0.574	72.5	0.599	39.1	0.405
Hubei	208.2	0.729	54.6	0.702	124.6	1.030	46.7	0.484
Hunan	194.6	0.682	38.7	0.498	132.9	1.098	60.8	0.630
Guangdong	358.4	1.255	89.7	1.153	42.9	0.354	115.6	1.198
Guangxi	226.1	0.792	55.8	0.718	66.4	0.549	50.9	0.528
Hainan	293.1	1.026	78.9	1.015	141.8	1.172	67.2	0.696
Chongqing	216.9	0.760	54.3	0.698	154.2	1.274	134.3	1.392
Sichuan	171.2	0.600	60.4	0.777	98.0	0.810	37.8	0.392
Guizhou	250.7	0.878	69.3	0.891	68.0	0.562	34.7	0.360
Yunnan	275.3	0.964	100.9	1.297	65.4	0.540	60.6	0.628
Tibet	738.4	2.586	257.6	3.313	175.2	1.447	15.7	0.163
Shaanxi	267.1	0.935	58.4	0.751	205.9	1.702	65.7	0.681
Gansu	260.4	0.912	68.8	0.885	183.3	1.515	43.3	0.449
Qinghai	374.1	1.310	163.2	2.099	251.1	2.074	35.4	0.366
Ningxia	328.1	1.149	90.8	1.168	118.3	0.977	100.6	1.042
Xinjiang	361.8	1.267	128.9	1.659	117.6	0.971	86.8	0.899
National	285.5	1	77.7	1	121.0	1	96.5	1

Source: Recalculated according to *China Statistical Yearbook:2006*, p.101, pp.-295-297.

2.3 How Feasible Are the Goals to be Achieved?

The problems elaborated above have been accumulated over a long time. The Chinese government actually has also been trying to solve them. Nonetheless, since to completely solve the problems does not only rely on determination, but also rely on China's economic capability. After three decades rapid growth, China now has stronger capability to solve the problems. The conditions to tackle the hardest reforms have also become mature in the 11th five-year plan.

Firstly, the period of the 11th five-year plan is the right time to solve the root problems by undertaking the hardest reforms. After three decades gradual reforms, the problems that are easy to be tackled have already been solved, and China has preliminarily established the framework of market economic system. Now it is the time to tackle the hardest root problems.

Secondly, after three decades rapid growth, China's economic capability has been greatly increased. The indices of China's GDP in 2005 is 11.99 times of the GDP in 1978, and the indices of per capita GDP is 8.79 times of 1978 (NBS, 2006, p.60). Therefore, the Chinese government can shift its focus from mainly fighting against poverty to pursuing the social equality and spatial balance in the period of the 11th five-year plan.

3 The Challenges to Achieve the Goals

It is easy to set the goals in response to the issues indeed, but not so easy to achieve the goals since not all the measures will automatically lead toward the goals if the measures are not in line with

the requirements of the market. To solve the problems elaborated above, we need to investigate the root causes why the problems emerged and what the difficulties to realize them are.

3.1 The Challenge to Shift the Growth Model

China's high GDP growth is mainly driven by high investment, which means low-efficiency and resources waste. The reasons why China's growth model is inefficient are as follows.

Firstly, the government-led investments must result in low efficiency. Since the number of GDP is the most important KPI, the government has strong incentive to increase investments, and ignore the demands for public services. Since the government is too powerful in China, it is easy for it to, directly or indirectly, mobilize the resources to increase investments. Hence, the key is to behave the government by shifting its function and limiting its power through the rule of law.

Secondly, the poor performance of SOEs is one of the biggest causes of inefficient growth. Since the managers of SOEs do not have residual claim, they lack of strong incentive to maximize the profits. Meanwhile, the rigid institutional arrangements also make it impossible for the manager to fully explore their ability. Hence, the poor performance of SOEs is unavoidable.

Thirdly, the inefficient SOEs with soft budget constraint can easily access the financial resources, but the efficient private with hard budget constraint can hardly access the financial resources. Since China's financial system was initially designed in the SOEs' interest, there are still many institution barriers for the private firms to access the financial resources. Therefore, the adverse selection is unavoidable.

Fourthly, the SOEs monopoly is a big problem. The sectors with the lowest efficiency are the state monopolistic sectors, such as oil, iron & steel, mining, banking, insurance, telecommunication, automobile, aviation, railway, hospital, education, water and etc. It is the very reason why some of the SOEs, like most oil companies, telecommunication companies, iron & steel companies can make huge profits. If there is free entry and fair competition, then the SOEs can hardly be profitable. In other words, the opportunity cost to make the SOEs profitable is very high. The difficulties to open the monopolistic sectors are mainly from the interest groups, which take the SOEs as the hostage to pursue their own interests.

Fifthly, the underdevelopment of the financial market and the lack of social security lead to the high saving in China. Since the financial and credit market is not well developed, the consumption rate are unable to increase. This results in the high saving rate as well. Meanwhile, due to the underdevelopment of the social security in China, people need to save for the uncertainty in the future. In addition, the reforms in China's high education system have also increased the uncertainty since the college students now need to pay their tuitions. Therefore, the families with children have to save as much as possible for their children's education(Zhang, 2005).

Sixthly, the Chinese firms' overall capability for technological innovation yet to be enhanced. The technological innovation is the result of profit-maximizing activities. If the inventor or

entrepreneur can make fortune in the market through innovation, then they will have strong incentive to innovate. Hence, the strong innovative capability of a country is rooted in its mature market economy. Since most of the innovative activities in China have long been led by the government rather than by the market, its innovative capability is not strong. Hence, the government-led innovation must be shifted to the market-led innovation.

In summary, to shift the low efficient growth model, it involves a series of reforms, including: (a) Reforming the government; (b) Property-right-based SOEs reforms; (c) Reforming the SOEs-biased financial market. (d) Opening the state monopolistic sectors. (e) Reforming the education system, the health & medical care system, and expanding its coverage; (f) Reforming social security system, and etc.

3.2 The Challenges to Optimize the Industrial Structure

China's unreasonable industrial structure is mainly the results of planned economy. It was mainly formed by governmental interventions, and not compatible to market economy. Hence, the industrial structure must be upgraded and optimized according to the market. In the process, market must play a leading role.

Firstly, the precondition for the market to fully play its role to optimize the industrial structure is that the government must be shifted to a limited government. It has been proven that if the government is too powerful without check-and-balance, the unreasonable and repeated investments will be unavoidable. Hence, the government must shift its role, and then the government-led development can be shifted to the market-led development.

Secondly, the SOEs problem is the major obstacle to optimize the industrial structure. The SOEs are not real profit-maximizing enterprises. They are unable to self-adjust themselves according to the market competition. If the industrial structure were mainly formed by private investments, then it would be much more efficient. To solve the SOEs problem involves very complicated institutional issues.

Thirdly, there are still many discriminative policies to private enterprises. If there is free entry and fair play between the SOEs and private firms in the market, then the optimal industrial structure can be evolved. Nonetheless, since China is a transitional country and the state economy still plays a very important role, there are still many discriminative policies. Hence, it is essential to remove the barriers to the development of private firms.

Fourthly, China's financial resources allocation system is SOEs-biased. In addition to the fact that it is very hard for the private firms to access the monopolistic state banks, China's capital market is also SOEs-biased. It was very hard for the private firms to raise funds in the capital market before. The situation has not been changed till recent years.

Hence, how China's unreasonable industrial structure be evolved is very complex. To upgrade China's industrial structure, it needs to solve the following problems. (i) Solving the heritage

problems of the planned economy, and speeding up the transition to market economy. (ii) Shifting the government to the limited government. (iii) Restructuring the SOEs to profit-maximizing firms. (iv) Removing all discriminative policies imposed to the private firms, and opening all monopolistic sectors to the private. (v) Restructuring the state banking sectors, as well as the state-economy-biased capital market.

3.3 The Challenges for Solving the Agriculture-related Problems

According to the 11th five-year plan, China will pour huge public resources to boost the rural economy. China's agricultural problems are mostly the heritages of the planned economy. The price scissors and the institutional rural-urban barriers directly resulted in the underdevelopment of the rural economy. The institutional rural-urban barriers include different systems of education, medical care, social security, employment, residence registration system, and etc. In addition, the collectively-owned rural land system is also a barrier for the commercialization of agriculture. Relying on the institutional barriers, China successfully established its state-led manufacture system, at the cost of the underdevelopment of rural economy. By 1978, the agricultural situation was going bankruptcy and China had to trigger the household responsibility reform(HRR). The reform significantly increased the farmer's incentive. More importantly, it liberated the farmer from the land and made the rural-urban migration possible, who becomes the driving force of China's industrialization (see Zhang, 2004a).

However, since the collectively-owned rural land cannot be freely traded, the land resources can not be efficiently re-allocated, and the efficient economic organizations can hardly emerge in the rural area. Also, the tie between the migrants and land has not been completely cut off, and the migrants cannot completely integrate into the city because of the institutional rural-urban barriers. It generates a trade-off between the industrialization and agricultural performance. Because of the trade-off, once the government adopted some favorable agricultural policies, for instance, waiver the agricultural tax in 2003, many migrants then return to their homeland, which results in the shortage of migrant workers and negative impacts to the economy of the migrants-dependent areas.

In summary, to ensure the success of the so-called new village campaign, China needs to establish a virtuous circle between industrialization, labor transfer and agriculture, by focusing on the root problems through reforms. The reforms include: (a) Removing the institutional rural-urban barriers. For instance, unify the systems on *social security, medical care, education, employment, residence registration*, and etc. (b) Further reforming the *rural land system* so that the land can be tradable. (c) Reforming the *intergovernmental transfer system* to build social security for the farmer, and improve the rural infrastructure. (d) Developing the rural financial market.

3.4 The challenges to Build a Resources-Conserving Economy

A mature market economy must be resources-allocation efficient, and therefore must be a conserving economy. For the firm, its objective is to maximize its profits subject to the budget constraints, or minimize its expenditure. For the consumer, her/his objective is to maximize its

utility subject to her/his budget constraint, or minimize her/his expenditure subject to the utility. Hence, market economy must be conserving economy. But why the waste is everywhere in China? A simple answer is that China's market economy is not so mature.

Firstly, the market is distorted and some prices of the natural resources do not reflect their real scarcities. Price is the signal in the market according to which the firm and consumer make decisions. If the market price is distorted, then the price cannot carry the accurate information to the firm and consumer. Secondly, since the SOEs are not real profit-maximizing firms, they do not have strong incentive to conserve resources. Hence, the SOEs must be restructured to the profit-maximizing firms. Thirdly, the property rights of the natural resources sectors are not well-defined. The state system of the sectors makes it hard to increase the efficiency. Fourthly, the energy sectors are dominantly (almost monopolistically) controlled by the SOEs, e.g., electricity sector. If there is free entry, then their private or foreign counterparts will compete with them, and the performance in the sector would then be improved. Fifthly, there are some technical difficulties. For instance, the central household pipeline of heater in the city was designed in the planned economy, and it is technically very hard to precisely charge the consumer according to their usages of heat, which makes the waste unavoidable.

Anyway, conservation is the results of rational behaviors of individuals in the market. The government cannot force the individuals to conserve just for the purpose of energy saving. The governmental interventions may be unreasonable, and by contrast result in inefficiency. Hence, to build a conserving society, China needs to undertake at least the following reforms: (i) Restructuring the SOEs; (ii) Letting the market to determine the price; (iii) Undertaking property rights reforms, especially in sectors of the natural resources. (iv) Opening the state monopolistic public sectors.

3.5 The Challenges to Balance the Spatial Development

After three decades rapid growth, China has the capability to tackle the issue of spatial equality. Though the challenges to the development of different regions are different, there is still a principle to follow, i.e. the market and the government should play their correct roles. Now the biggest challenge to promote the development of the backward regions is how to establish the market development mechanism.

The failures on the attempts to revive China's industrial north-east in the past are worth to be reminded. The year of 2003 is actually not the first time for the central government to arise the issue to revive the industrial north-east. The central government actually paid much attention on it even before. Nonetheless, most of the measures are heavily projects-oriented, while ignoring how to effectively introduce market mechanism in the economy. The government expected to revive the industrial north-east by pouring investments into the regions. It has been proven that it is just not working, and the development needs to rely on the market forces. Hence, how to reform the SOEs in the north-east provinces and consolidate the market economic system is much more essential than the government's investments.

Hence, in the process to promote the development of the regions, the market should play the leading role. Government should mainly focus on equality of public service through intergovernmental transfer payments, and help the backward regions to improve their infrastructures. This principle has been established in the 11th five-year plan. In addition, the central government is to establish a collaborative mechanism between different regions, which is helpful to integrating the national market.

3.5 The Challenges to Improve the Public Services

Firstly, the biggest challenge is how to make the government accountable. In the past, the Chinese government paid most attention on GDP growth, and relatively neglected the public services. In 2002, the Chinese government proposed the objective to build a service-oriented government (CPC, 2003). To achieve the target, the government must shift itself to a limited government and be check-and-balanced first. Otherwise, the government will not have sufficient incentive and pressure to care the needs of the local people. The principle of public finance can only be established in this situation.

Secondly, the inefficient monopolistic SOEs dominate the sectors of the public services. Some sectors of public services, such as water, electricity, education, medical care, and etc., actually could be more efficiently provided by the private enterprises. If open the public services sectors to the private, then the services will be greatly improved. Of course, some of them are not feasible to be provided by the private. For instance, the water in populous areas may be efficiently provided by the private, but in the isolated areas or less populous areas, it is not lucrative to attract private investors. In this case, the government must step in. Anyway, if some public services can be privately provided, then the government will no longer need to invest and subsidize them, and the governmental resources can then be used elsewhere (Zhang, 2004b).

Thirdly, due to the dual top-down arrangements in China(i.e. the higher level government does not only control the chief appointments of the lower governments, but also control its fiscal revenue through transfer payments), the lower governments do not have sufficient bargaining power with the higher government. Therefore, the higher government usually does not transfer sufficient revenues to the lower government, while devolving the expenditure responsibilities to the lower governments as much as possible. This is the reason why most of the local governments lack of sufficient fiscal capability to provide good and sufficient public services. In turn, the local governments have to raise funds through illegal borrowing or extra-charge, which is very harmful to economy (Zhang, 2004b; Zhang, 2005c).

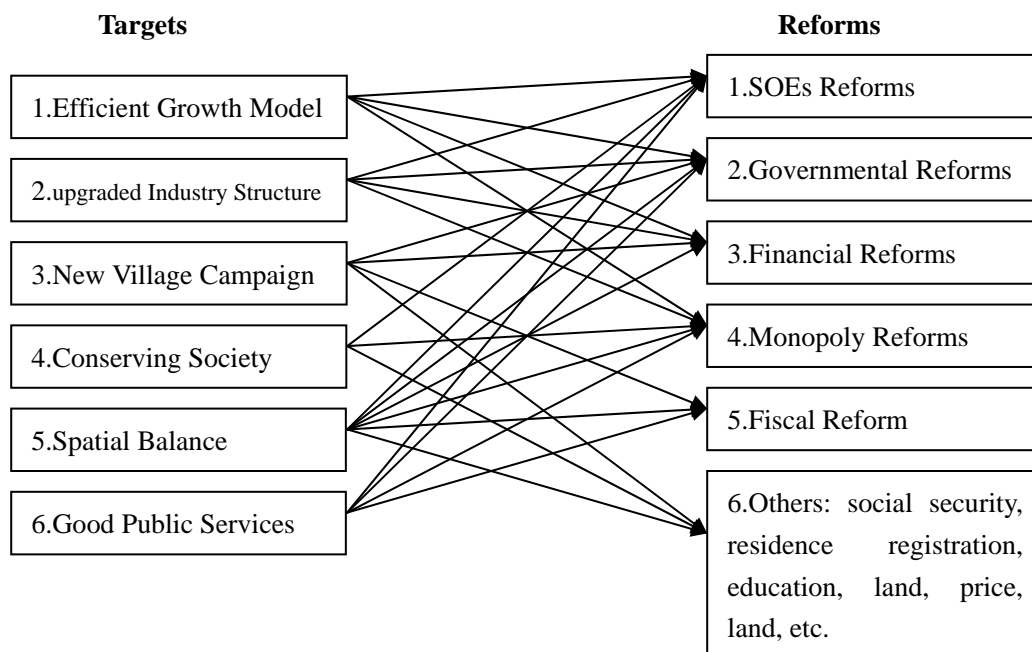
Hence, to improve the public services, China needs to undertake the following reforms at least: (i) governmental reforms, including intergovernmental relationships reforms; (ii) monopolistic sectors reforms. (iii) fiscal system reform, and etc.

4 The Reforms Yet to be Finished to Achieve the Goals

The analysis above can be summarized in Figure 8. For a particular problem, it has some specific

causes. Nonetheless, those specific causes are overlapping, and most of the problems actually share the same causes. The substantive reforms are toward a fully working market economic system, which can provide a self-enforcing mechanism for the targets of the 11th five-year plan.

Figure 8 The Incomplete Relationships between China's Economic Targets and Reforms



4.1 The Reforms of the SOEs in China

The issue of SOEs restructure is a very important issue related to the microeconomic foundation of market economy. Though it might be a cliché to stress the SOEs problem after the reforms have been undertaking for three decades in China, there are still some key points worth to be further clarified.

Firstly, what is the fundamental reason to restructure the SOEs? Most of the literature on the SOEs reforms emphasize the inefficiency problem of the SOEs. Nonetheless, a more fundamental reason to reform the SOEs is to prevent the state opportunism. To ensure the *fair play*, the government should be a just referee in the market and cannot be a player at the same time. Otherwise, the government will pursue its own interests through state opportunism, e.g. governmental monopoly, over regulation, interventions, and etc. Hence, the state assets of the SOEs should be transferred to the public sectors to provide public services, and leave the lucrative sectors to the private firms (Feng, Zhang & Zhang, 2006).

Secondly, how to establish the effective corporate governance in the SOEs? The popular viewpoint is that the SOEs should be restructured to the company with *Diversified* shareholders. This view does not catch the point. To ensure the corporate governance effective, the dominant

shareholder can never be a public enterprise. Otherwise, the effective corporate governance is unlikely to be established. The private investors must hold dominant share in the restructured company to make the restructure works.

Thirdly, the SOEs actually have deviated the initial purpose to serve the interests of all people—their real owners. In China, the SOEs do not pay the profits to the state. By contrast, the government needs to subsidize them, and take their risks (e.g. the state banks). Hence, only some particular interest groups can benefit from the SOEs. If transfer the assets of the SOEs to public sectors or social security, then all people can benefit from the state-owned economy. As the Chinese economy more and more engages to the rest of the world, the competition the SOEs face is getting fiercer. To ensure the competitiveness of the Chinese economy, China needs to be more open-minded on the restructure of the SOEs.

4.2 The Open-up of the Monopolistic Sectors and Deregulation

As analyzed above, if the state plays the role of the player in the market, then the state will definitely pursue its own interests by using its power. The monopoly of the SOEs is a convenient example. Though the private economy grows quickly in China since 1978, it is still quite hard for the private investors to enter many lucrative sectors due to the governmental monopoly or regulation. For instance, telecommunication, aviation, railway, freeway, oil, iron & steel, automobile, hospital, high education, urban utilities, and etc. Though the performances of the SOEs in the fields are quite poor, some of the SOEs are still very profitable just because of monopoly. That means, the opportunity costs of the monopoly for the Chinese economy is very high.

Recognizing the seriousness of the monopoly problem, the government put the reforms of the monopoly on the top agenda. In 2005, the State Council issued a pack of comprehensive policies to support the private economy. According to the policies, the private capital can enter all the monopolistic sectors, i.e. power, telecommunication, aviation, oil and etc. The protection to the private property will be enforced as well.

Nonetheless, there are still many problems yet to be overcome to have the policies been completely implemented. The biggest problems are: (a) The related laws need to be amended; (b) Many strict regulations still work; (c) The private firms lack of financial channels due to the SOEs-biased financial market; (d) The inappropriate governmental behaviors. There is still a long way to go to completely implement the policies.

4.3 Financial and Fiscal Reforms

The objective of the financial reforms is to make China's financial market more efficient and to better serve the economic development. Specifically, the reforms include: (a) To restructure the state banks to competitive shareholding commercial banks; (b) To restructure the capital market; (c) To establish an efficient financial supervision and regulatory system; (d) To push forward the marketization of interest and foreign exchange; (e) To establish a more effective mechanism to

implement the macroeconomic policies, and etc.

The major objectives of fiscal reforms are two. One is to establish the public finance. The precondition for the public finance is that the government must be a limited government. Hence, the fiscal reform is interdependent with the governmental reforms. Another objective is to establish an efficient intergovernmental relationship, including the effective intergovernmental assignment of revenue and expenditure responsibility, and transfer payments system.

For the intergovernmental relationships, according to Zhang (2004c), the top-down intergovernmental transfer payment is an effective mechanism for the higher government to control the lower government in the western countries with bottom-up democratic election. The expenditure and revenue of each level government can only be matched through the intergovernmental transfer payments. The top-down chief official appointments system and the top-down fiscal arrangements make the intergovernmental relationships unbalanced in China. The lower governments lack of bargaining power in the negotiation of transfer payments. Accordingly, most of the local governments face the problem of fiscal incapability. The ongoing bottom-up election of the local governments in China may provide a solution for the problem.

4.4 Governmental System Reforms.

The governmental reform is the most essential and hardest reform yet to be finished in China. The Chinese government has been shifting its role from the beneficent planner to a limited government since 1978. According to Primer Wen (2005), the focus of the reforms next step in China is to further shift the function of the government. At present the government still charges too much affairs that should not be charged by the government, while many affairs that should be charged by the government have not been satisfactorily done. In other words, the dividing line between the market and government is yet to be clearly drawn.

As for how to define the governmental boundary from market, the fundamental issue is how to establish rule of law, and protect the property rights in China. By doing this, the power of the government can be effectively check-and-balanced. Though there is still a long way to go to finish the governmental reforms, it is good that China has realized the importance to establish a limited government in market economy. As the government shifts its role, it will provide an institutional guarantee for the Chinese economy to completely turn to the market-led development from the government-led development. In the 11th five-year plan, the Chinese government is determined to confine its role on public services.

Another aspect of governmental reforms is the intergovernmental relationships. As indicated above, China is substantially different from its western counterparts in terms of the intergovernmental relationships. Given China is a huge country with 1.3 billion population and unique history, it may be not very wise for China to completely copy the developed market economic countries. Nonetheless, there are still many principles China needs to follow.

4.5. The Other Reforms

The other reforms include rural land system reforms, residence registration system, social security system, employment system, education reforms, and etc. The objective of the reforms is to integrate the rural and the urban, by removing the institutional rural-urban barriers. The core of the reforms on China's rural land system is to well-define the property right, and make it tradable in market. By doing this, the market can play active role in allocating the factors of land, labor, and capital. Meanwhile, the citizenization of the rural-urban migrants requires the reforms on residence registration, social security system, employment system, education system and etc. A unified rural and urban system will become strong driving force to China's development.

In summary, the essential issue is how to improve China's market economic system by speeding up the reforms. After three decades reforms, it is time for China to tackle the hardest reforms in the 11th five-year plan. As long as the market economic system can be completely established in China, the major problems will be solved as well.

5 The Prospect of the Chinese Economic Development

Since China started the reforms and opening-up in 1978, its economy has been rapidly growing at about 9.5 percent of annual rate. China's GDP in 2005 is almost 12 times of the GDP in 1978, and per capita GDP is 9 times of 1978 (NBS, 2006, p.60). It is a big concern for many people whether the growth of the Chinese economy can sustain. To discuss the prospect of the Chinese economy, we need to bear the following points in mind

Firstly, China's transition to market economic system takes time, and cannot be expected to finish overnight. After three decades gradual reforms, all reforms that are relatively easy to be undertaken have been done. Now the unfinished reforms are the hardest and the most essential for China to completely finish the transition. Though the evolution of economic system and political arrangements takes time, one thing is for sure that China's reforms are no longer reversible. Especially, after China's entry into WTO, the Chinese economy is more and more integrated into the rest of the world. The government has to behave according to the international rule and practice.

Secondly, the process of rapid industrialization and urbanization in China will last for a relatively long time. Over the past three decades, China has maintained about 9.5 percent of annual growth rate, and the economic double time is only about 7-8 years. In 2004, China's GDP is US\$ 1.655 billion, and per capita income is only US\$ 1,277. The per capita GDP of the US in 2004 is US\$ 35,583, Japan US\$ 37,862, the UK 29,231, France 27,890, Germany US\$ 35,583. Assume the population and the foreign exchange not change and China maintains 8 percent of annual growth rate, then it takes 3 economic double-times for China to increase its per capita GDP to US\$ 10,000 to catch up the mid-level developed countries. It means that it takes at least 25 years for China to be completely industrialized. Hence, the rapid growth is likely to last 25 years till China finish the process of industrialization and urbanization (Zhang, 2005a).

Thirdly, in terms of the advantages for economic development, very few countries can compare

with China. China is a huge country with an integrated big market, 1.3 billion population, same institution, same language and culture, and etc. As Young(1928) pointed out, the reason why the American economy in the 19th century grew faster than Europe is because the America had an integrated big market, while Europe was separated by different tariffs and rules, which are not good for transactions and economic growth. Hence, the integrated big market and rules in the US is a big advantage for economic growth. The similar story of the economic rise in the history of the US seems happening in China now.

Fourthly, in the global and historic perspectives, it is optimistic to the prospect of China's economic development. There is a clear road map of growth in the world since the modern growth initiated in the Great Britain after the industrial revolution in the 18th century. The modern economic growth, as the results of market economy, first spreads to the European continent from the Great Britain, then to the America, Australia, and Japan, and then "four tigers" in Asia. Now China, India and other Asian countries are the engine of the global economic growth. Eventually, the African economies will catch up. In the view of history, five years is a very short time. In that sense, whether or not every single target of China's 11th five-year plan can be completely achieved is not so important. As long as China continues the reforms toward market economic system, the rise of the Chinese economy is a historic trend.

6 Concluding Remarks

After three decades reforms and opening-up, China's economic capability has stepped up to a new stage. The framework of market economic system has been preliminarily established. It is time for China to pursue the all-round development, and undertake the hardest reforms in the 11th five-year plan. There are two implications with the realization of the 11th five-year plan: not only (i) *achieve* the goals, but also (ii) *efficiently* achieve. Only the market economic system can ensure the goals to be self-enforced in the most efficient way. Hence, the only way to efficiently achieve the goals of China's 11th five-year plan is to fully engage in the reforms, and establish a mature market economic system. By doing this, China's long-term sustainability can also be ensured.

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