

## **The Logic of Long-term Growth of China: From New Normal to Supply-side Reform**

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### **Abstract**

Unlike most scholars, who believe that “new normal” means a decline on China’s economic growth rate, we argue that the interpretation of the “new normal” has more comprehensive meanings. China had experienced a reduction of about 2% in its annual growth rate in the seven-year period before 2007 compared to the same period after 2007, which signalled a slight slowdown but not a severe recession. In the long run, the economic fluctuation is still in the normal range accounting for the scale effect of China as a major economy. Furthermore, expanding Internet penetration becomes a new catalyst for growth. But on the other hand, economic distortions are concealed during the high growth period which have surfaced to constrain growth, among which the distortion of the relative factor prices could be used to explain the slowdown of the economic growth. The problem of dual track of the factor prices stemming from the institutional settings should be paid more attention on. The changing of the relative factor prices is the core variable to optimize resources allocation when a country develops from a lower level to a higher level. The way to reduce these distortions including resources misallocation is the reform of the supply-side in the “new normal”.

**Keywords:** *new normal, economic slowdown, relative factor prices, supply-side reform*

### **1. Overview**

The Chinese economy has experienced an average 10% growth from 1978 to 2007. This long high growth period seemed to have been interrupted by the shock of the global financial crisis in 2008 as China had to react through economic restructuring. Some concealed economic distortions in the high-growth phase emerged to the surface when Chinese economic growth slowed down. Economic growth shifting to a sub-high gear is accepted as the new economic development stage or so called “new normal” officially defined by President Xi Jinping.

On May 2014, President Xi Jinping enunciated the concept of “new normal” which he regarded positively as a strategic opportunity. At the opening ceremony of the APEC Business Leaders Summit in November of the same year, President Xi elaborated on the “new normal” formally with three features such as lower growth rate, economic restructuring and innovation-driven growth. A month later, in December, at the Economic Work Conference of 2014, Xi provided a comprehensive explanation of “new normal” and expanded its notable features from three to nine (Guo, 2016).

The nine changes now occurring in China are as follows. First, consumption demand becomes more diversified. Second, investment is switched to new areas with new techniques, products, industries and business modes. Third, China’s exports and balance of payments now reflects both inflow of foreign capital and outflow of domestic capital synchronously. Fourth, novel industry organizations are characterized by miniaturization, artificial intelligence and specialization. Fifth, economic growth depends more on human capital and technical progress than on the quantity of physical inputs. Sixth, market competition has transformed from quantity-oriented to quality-oriented. Seventh, resource and environmental constraints require changing the way of economic development and emphasizing more on environmental friendly and sustainable development. Eighth, various types of hidden risks gradually emerge in line with economic slowdown, but remain under control. Ninth, the mode of macro-control has to change from demand stimulus to balancing the relationship between supply and demand; a more scientific mode of macro-control labelled supply-side reform or supply-side structure reform. Hence, given these characteristics of China’s development in current stage, also fitting the trends of the world economy, the “new normal” in nature reflects the aspects of Chinese economic restructuring. To capitalize on the logic of China’s long-term growth, policy makers should recognize and adapt to the “new normal”, then take proactive action in the new development stage. These are the basic tasks of China’s economic development in the current and coming periods.

In theoretical terms, what is the nature of the “new normal”? Why do these changes happen and what is the difference between the “new normal” and the old one? Under the circumstances of the “new normal”, what have changed, and what have not? What is the logic that links the “new normal” to the supply-side reforms in China? This paper tries to answer these challenging questions.

The following parts are organized as follows. Section 2 discusses the main performances and some stylized facts of Chinese economic slowdown in the long run. Section 3 explains why and how Chinese economic growth slows down in pace with restructuring process after the crisis shock occurred. The paper intends to show that economic scale plays an important role in

the process of recovery which is fuelled up by Internet penetration. Section 4 focuses on the nature of the “new normal”. Rapid change of relative factor prices when a country transits from the low-level development to the high-level maybe the key to understand the logic of long-term growth. The argument that the relative comparative advantages hold constant may not be correct and could mislead the country slipping into the “middle-income trap”<sup>1</sup>. Dynamic comparative advantages are from the flexible price system without any distortion. Hence, the distortion of the relative factor prices is the Achilles heel of high-growth and may arise from some institutional problems. Section 5 points out that the supply-side reform is to reduce the distortions by the forces which come from the market. Resources can be re-allocated or utilized more efficiently under a real signal of the factor prices changing without any disturbance. The reduction of the distortion is also part of the process of economic reconstruction and in line with the spirit of the supply-side reform. Section 6 is the conclusion.

In addition, this article also adheres to the theoretical framework of development economics, tracking the stylized facts on growth to the changes in structure and even to the problematic institutions, which can be explained by the “Iceberg Model”<sup>2</sup>.

## 2. The New Normal and Economic Slowdown

Once the idea of “new normal” was formed into a shape, most academic research focused on the topic of growth rate falling, which is also a concern of the central government. China’s economic growth rate dropped from 14.2% in 2007, after a slight recovery in 2010, and sharply fell to 6.7% in 2016, less than half of that in 2007. Incidentally, China had experienced a five-year super-high growth from 2003 to 2007 when the growth rate was over 10% in each year, benefiting from further opening to the outside and plunging into the globalization.

How can the process of economic slowdown in China after 2008 be explained? There are at least four hypotheses about when and why fast-growing economics slow down significantly, which may help to understand the Chinese economy in the “new normal”.

First, the *economic convergence hypothesis* argues that when a country’s GDP per capita reaches round US\$17,000 in year-2005 constant international prices, or 58% of that in the leading country, its growth rate downshifts by at least 2 percentage points (Eichengreen et al., 2011). But in 2008, Chinese GDP per capita reached only US\$7,145 in year-2005 constant international prices, one sixth of that in US, the technology frontier country, using the data from Penn World Tables (PWT Version 8.1<sup>3</sup>). So this hypothesis hardly explains the China case.

Second, the *external shocks hypothesis* attributes the slowdown to the influence of the global financial crisis in 2008. This seems reasonable because China's exports had experienced a precipitous drop in the eastern coastal areas. The ratio of export dependence had dropped from 85% to 65% in Guangdong province and from 40% to 30% in Fujian province temporarily. Both provinces are located in the southeast coastal area. But why does such a decline was sustained for so long and resulted in an L-shaped economic development pattern and which kind of mechanism can better account for the missing of the recovery? Thus, the shocks hypothesis can explain why the slowdown happened but cannot explain why the slowdown was sustained for so long.

Third, the *world business cycle theory* argues that the recession inside China is subjected to the "bad climate" outside China. International organizations like IMF had lowered their economic growth forecasts in recent years. According to the "World Economy Outlook" published by IMF in April 2015, the growth rate forecast for 2016 is down from 2.6% to 2.4% in the US, flat in Euro area, and 0.5% in Japan, much lower than expected, combined with mild growth in emerging economies. World business cycle theory seems to work because almost all the developed countries and most developing countries are suffering growth slowdown. However, with the deepening integration of the Chinese economy into the world economy, China has become the second largest economy in the world and its outward foreign direct investment (OFDI) is now ranked among the top three in the world. With its economic weight increasing, China should be able to influence the world more than be influenced by it as China used to be. Even in the slower growth years, China is still the locomotive of the world economy especially among the emerging economies. Why couldn't China grow anti-cyclically under its new strategies such as "innovation-driven" and "Belt and Road Initiative"? China could and should be the pioneer to recovery.

Fourth, the *growth accounting framework* shows that if the output uses technology and human capital, together with traditional inputs, Chinese-style high growth can benefit from large investment, high total factor productivity (TFP), demographic dividend and low labour cost advantages since opening-up. Perkins and Rawski (2008) showed that the growth rate of the Chinese economy reached 9.5% from 1978-2005, when capital grew by 9.6%, contributing to 44.7% of GDP growth, labour grew by 2.7% contributing to 16.2% of GDP growth, and TFP grew by 3.8% contributing to 40.1% of GDP growth. After 2008, traditional competitive advantages began to shrink while new competitive advantages had not emerged, making investment more difficult. For example, most capital appear to escape from the real economy to the virtual economy in the recession because of low investment return in the real industry. Private investment also suffered a lot, attaining 3.9%

growth in the first five months of 2016, much lower than expected. But this hypothesis relies too much on the technical and data analysis, which leaves the economic mechanism and dynamic analysis behind. It also does not tell us what mechanism inhibits the new economic momentum from springing out<sup>4</sup>. An analogous hypothesis paid much attention on TFP and contributes the economy slowdown to TFP decreasing (Li, 2013). But we are supposed to open the black box of TFP, not to replace the economic growth with TFP.

All these hypotheses have caught some typical features and stylized facts of the “new normal” from some aspects, but not completely and constitutionally. Our viewpoint is that the economy’s slowdown cannot portray the full context of the “new normal”. If we pay too much attention to the growth rate, any policy response will naturally gravitate towards a strategy of maintaining growth, instead of considering economic restructuring and institutional strengthening, that may actually leave the economy worse off.

### 3. China’s Economic Growth in the Long Run

In this paper, we believe that the current slowdown is not severe as China’s economic growth still fluctuates near the lower bound of the normal range.

#### 3.1. Definition and Criterion of the Economic Slowdown

According to Hausmann, Pritchett and Rodrik (HPR in brief) (2005), GDP growth slowdown should satisfy three conditions.

- (1)  $g_{t-n,t} \geq 3.5\%$
- (2)  $\Delta g_t = g_{t,t+n} - g_{t-n,t} \geq 2\%$
- (3)  $y_t > 10,000$

where the growth rate  $g_{t-n,t}$  is the least squares growth rate of  $y$  (per capita GDP in 2005 constant US\$) from year  $t-n$  to  $t$ ,  $\Delta g_t$  is on behalf of the *change* in the growth rate at time  $t$ , equal to the difference between  $g_{t,t+n}$  and  $g_{t-n,t}$ , representing the least squares growth rate from year  $t$  to  $t+n$  and from year  $t-n$  to  $t$  respectively. Condition (1) means that the growth is rapid before the slowdown occurs. Condition (2) measures the extent of the slowdown and it identifies a growth slowdown with a decline in the seven-year average growth rate by at least 2 percentage points, shaped the normal fluctuation rate for growth. Condition (3) limits slowdown to cases in which per capita GDP is greater than 10,000 in 2005 constant US\$. Following HPR (2005), we set several values to the parameters and take  $n = 7$  and  $t = 2007$  as the benchmark.

**Table 1** Growth Changes Before and After the Crisis

$t$	$n$	$g_{t-n,t}$ %	$g_{t,t+n}$ %	$\Delta g$ %	$y_t$
2007	7	8.590	6.489	2.101	US\$7079
2007	5	8.885	6.284	2.601	US\$7079
2008	7	8.383	6.738	1.645	US\$7260
2008	5	8.249	6.835	1.414	US\$7260

Data on per capital incomes before 2011 are from Penn World Tables Version 8.1. Per capita incomes from 2012-2015 are calculated based on annual growth of per capita GDP from World Bank database.

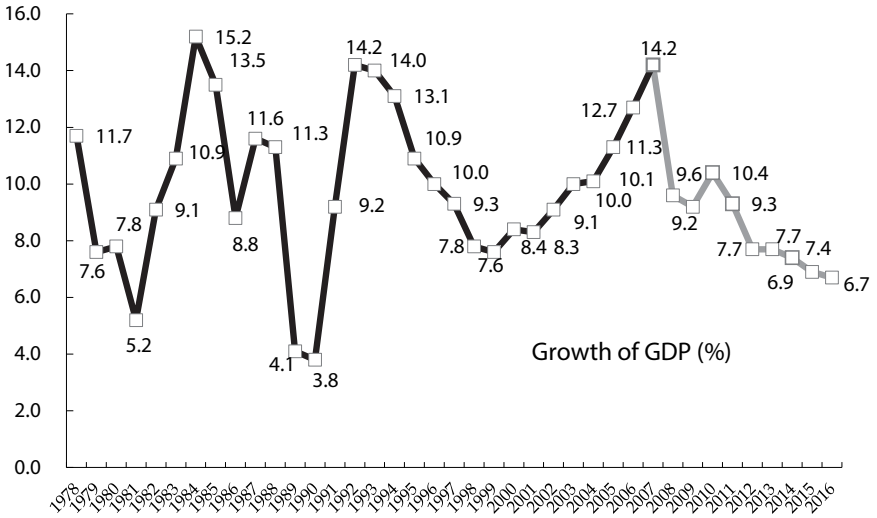
From Table 1, condition (1) is clearly satisfied. Condition (2) also holds for the difference in growth that is a bit more than 2% when  $t$  is 2007 regardless of  $n$ . Condition (3) is not satisfied but it does not matter. But this result is not concrete when  $t$  moves to 2008. Comprehensively speaking, that China is suffering a heavy economic slowdown has been shown to be not statistically robust<sup>5</sup>. If we shorten the duration of the shock, the economic slowdown will become more serious and vice versa.

### 3.2. Economic Fluctuations in the Long Run

When we look back to 1978, the beginning of the reform and opening up, there are three and a half small business cycles in that period determined by peaks and troughs (Figure 1). The first cycle is from 1978 to 1984 lasting nearly 6 years, second from 1984 to 1992 for 8 years, third from 1992 to 2007 for 15 years and now we are in the first half of the fourth business cycle. It is obvious that the growth rate has changed more slightly and the business cycles lasted longer after 1992 due to effective counter-cyclical policies. The growth rate in 2016 is 6.7%, below the previous lowest point of 7.6% in 1999 when the Chinese economy was affected by the Asian Financial Crisis, but still above some extreme lower growth rates such as that in 1989 (4.1%) and in 1990 (3.8%). In the long run, Chinese growth rates move up and down within a normal range between 6% and 14%. By calculation, there are 39 dots of growth rates altogether from 1978-2016 and 33 are within that range, accounting for 84.6%. Furthermore, the expectation of the growth rate of 2017 is 6.55%, also within that range.

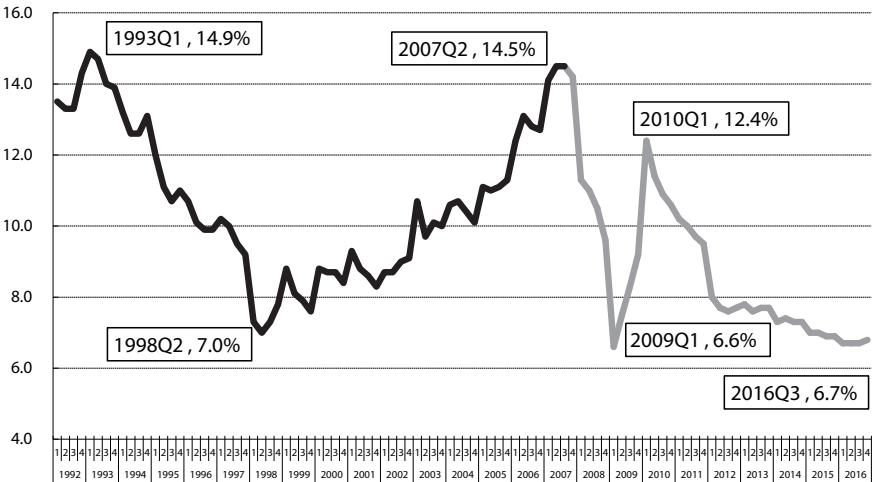
When we look at the quarterly frequency data in detail from 1992 to 2016, there is a complete business cycle from 1993Q1 to 2007Q2 (Figure 2). Since then, the global financial crisis began and China has turn into another development track under the external shock. It is clear that the down slope from 2010-2016 was much like that in 1993-1998 which started with an

**Figure 1** China's GDP Growth Rate from 1978-2016



Source: National Bureau of Statistics of China.

**Figure 2** China's Growth Rate Volatility by Quarterly Data from 1992Q1-2016Q4



Source: National Bureau of Statistics of China.

overheated economy following a series of reforms implemented by Premier Zhu Rongji. It is very interesting to have a comparison between these two periods because the declining ranges of the economic growth are much alike. The cause of the decline in the mid-1990s was to relieve high inflation and to avoid a dramatic slowdown in growth rate. Reforms were in the fields of price system, financial development, labour market and the relationship between the government and SOEs at that time. The growth during the period looked like U-shaped, with the downward segment bottoming out when China adopted more liberal foreign policies and integrated deeper into the world economy to reflect its entry into the WTO in 2001. In contrast, the cause of the decline this time is the global financial crisis which began in 2008 and became more severe because of excess production capacity around the world. It is marked by deflation showing a recession of the real economy. The trail of the growth rate is much like a combination of V+L-shapes symbolizing a rough recovery because it may be much harder to resolve the excess production capacity with traditional macro policies.

### ***3.3. Scale Effect in the Economy***

In fact, no economic textbook would argue that 6% or 7% is an abnormally low growth rate. It is believed that the growth rate now appears low because China has enjoyed a much higher growth rate nearly or over 10% after the 1980s for more than three decades. In our opinion, 6-7% is still a much higher growth rate, second only to the rate experienced by catch-up growth (Quan, 2015). The world growth rate is only 3%-3.5% on average and 3.21% in the US from 1948 to 2016, 1.60% in the euro area from 1995 to 2016 and 1.33% in Germany, a leading country in the EU, from 1992 to 2016 (data from trading economics).

Furthermore, the same growth rate may represent different increments of economic scale at different development periods. In terms of the absolute growth increments, 6.7% growth in 2016 is much larger than 12.7% growth in 2006 (Table 2). Nevertheless, it is subtle and much difficult to make a distinction between economic convergence and growth reduction without theoretical analysis.

Unlike Japan, South Korea and most other Asian emerging countries witnessed a slowing growth rate when GDP per capita reached US\$7,500, China definitely has a larger territory and more space to absorb the influence caused by shocks from outside. From the view of quantitative analysis before and after the financial crisis, we calculate the growth of consumption patterns in different regions in China, which are relevant to the individual welfare directly. It is found that the eastern coastal region suffered a decline of about 3.73% in the growth rate of non-food consumption, followed by



**Table 2** Increment in GDP from 2005 to 2016

<i>Year</i>	<i>Growth rate (%)</i>	<i>Increment in GDP</i>	<i>Year</i>	<i>Growth rate (%)</i>	<i>Increment in GDP</i>
2005	11.3	446.63	2011	9.3	708.30
2006	12.7	554.28	2012	7.7	644.97
2007	14.2	698.46	2013	7.7	687.11
2008	9.6	544.86	2014	7.4	693.22
2009	9.2	579.23	2015	6.9	703.07
2010	10.4	714.57	2016	6.7	729.80

Note: Increments in GDP are calculated in billion RMB based on 1978 constant price.

**Table 3** Growth Rate of Non-food Consumption for China and its Regions

<i>Regions</i>	<i>Growth rate of non-food consumption (%)</i>		<i>Difference Pd2% – Pd1%</i>
	<i>Pd1:2001Q1-2007Q4</i>	<i>Pd2:2008Q1-2012Q4</i>	
Whole Country	8.68	7.65	-1.03
North	9.28	6.91	-2.37
Northeast	10.77	9.56	-1.21
Eastern Coastal	10.24	6.51	-3.73
Central	8.56	7.58	-0.98
Southwest	6.96	8.75	1.79
Northwest	6.45	8.62	2.17

Source: Li (2016) p. 212.

North and Northeast regions by declines of 2.37% and 1.21% respectively. Nevertheless, non-food consumption grew faster than before in the Southwest and Northwest region, increasing by 1.79% and 2.17% respectively (Table 3). That is to say, the influence of financial crisis on the western region is rather weaker than the eastern coast areas.

Regional divergence intensified not only in consumption and welfare but also in investment and industrial development since 2008. Industrial shift from eastern area to western area gave the Chinese economy more space to absorb the negative influences caused by the exogenous shock. The industries coming from eastern coast areas have brought employment and development opportunities to western regions, especially in the fields of infrastructure constructions and transportation facilities, which will help China to keep the advantage of a large economy during the “new normal”. Hence, large

economic scale is helpful in blocking the transmission mechanism of the crisis and the population mobility between different regions will act as a balancer for growth.

### **3.4. New Power in the New Normal**

Another argument suggests that it is hard to evaluate the modest magnitude of the growth deceleration because the GDP growth rate is likely to be underestimated as the new economy emerging with the rapid penetration of the Internet is out of the current statistics. The new economy, full of energy, characterized by higher R&D and human capital inputs and a high share of services with information technology, is distinguished from the traditional drivers of growth, which paid much attention on factor quantities. As part of the new economy, “internet plus”, networking, big data, cloud computing and other emerging formats, involving customized manufacturing, and intelligent manufacturing, are regarded as the factors to accelerate the growth rate.

From scattered reports from the National Bureau of Statistics, the high technology manufacturing industry has experienced a growth of 9.8% in the first five months of 2016, 3.8% higher than that of traditional manufacturing industries, especially in the fields of aviation and aerospace equipment, chemical production, electronics and communications, pharmaceutical manufacturing (Xu, 2016; Table 4). New services have also achieved impressive performance, with online retail sales among the growth leaders in services (Table 4).

The trade-off between the new economy and traditional economy represents two opposing powers of growth. If the new economy dominates, the growth rate will rise. And if the traditional one dominates, the growth

**Table 4** Growth Rate of New Economy in China from January to May, 2016

<i>Industries</i>	<i>Growth rate (%)</i>
High technology manufacturing	9.8
– Aviation and aerospace	28.0
– Chemical production	20.9
– Electronics and communications	11.4
– Pharmaceutical manufacturing	10.2
Online retail sales	27.7
– Non-service	25.9
– Service	36.0

Source: Xu (2016), speech on “New economy: the challenges of government statistics”.

rate will fall. Now, the question is how to convert the new economy skeptics to allow the new economy to absorb more production factors and be more efficient. It should be remembered that growth is determined not only by the amount of inputs but also by resource allocation. Unfortunately, the size of the new economy is hard to estimate, bringing challenges to the government's department of statistics, including defining the basic concept, investigation method, GDP accounting principles and price index methodology.

**4. Relative Factor Prices and Resource Misallocations**

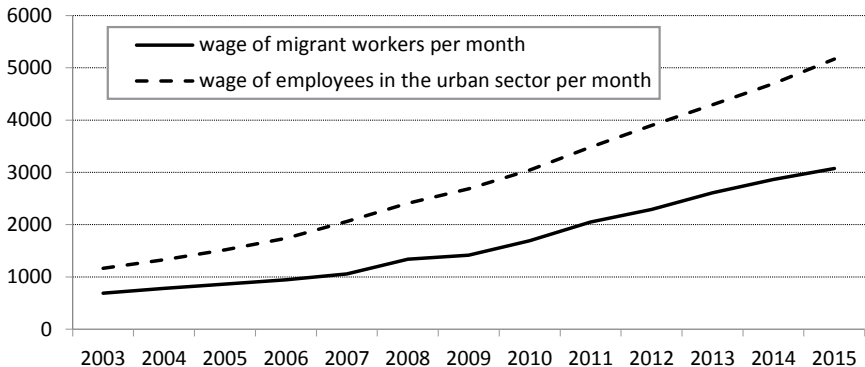
Literally speaking, “new normal” means a certain condition that did not appear before, but appears now and will continue to last in the next period. Within the development of an economy, changes in relative factor prices become more important and it is the key to understanding the meanings of China’s “new normal” and the logic of long-term growth.

**4.1. Labour Costs Increasing and Capital Costs Decreasing**

Labour costs in the manufacturing sector are rising, but capital costs are declining compared to the early period of the reform and opening, leading to the changing of the relative factor prices.

Two obvious examples illustrate the rapid growth of labour cost. The first example comes from the wages of migrant workers, more than 277 million people, and a main source of low labour cost advantage of China. The wage of migrant workers has experienced a rapid increase from 690RMB per month in 2003 to 3072RMB per month in 2015, at over 10% annually, with the pace of the wage increase of employees in the urban sector much higher than the growth of labour productivity in manufactory (Figure 3).

**Figure 3** Wage Growth of Migrant Workers from 2003 to 2015



Source: National Bureau of Statistics of China and Lu (2012).

Another example comes from the minimum wage. A minimum wage is the lowest remuneration that employers may legally pay to workers and it is also a hard constraint for the SMEs in the low-end labour market. China has implemented a minimum wage adjustment system since 1993. Shanghai, one of China's modern metropolises, has experienced adjustments of minimum wage every or every other year, from 210 RMB per month in 1993 to 2190 RMB per month in 2016 (Table 5), with a nominal annual growth rate of 10.4% before the global financial crisis and 11.2% after that. Even though the fast increasing minimum wage compresses the profit of the SMEs in the labour-intensive industries and services gradually, it seems reasonable that the ratio of minimum wage (MW) and social average wage (SAW) keeps around 30-35%, which shows that the social average wage in Shanghai is also increasing quickly.

On the other hand, with the rise of economic development, the cost of capital becomes much cheaper than before. Looking at the official nominal loan interest rate, the price of capital is moving in the opposite direction with the labour cost. We may be facing an era of lowest loan interest rate since the mid-1990s. The one-year loan interest rate is about 4.35%, less than half what it was 20 years ago (Figure 4).

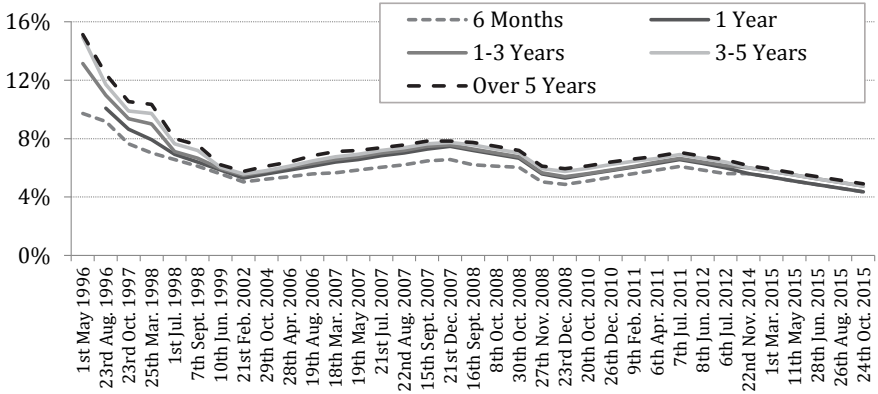
**Table 5** Adjustment of Minimum Wage in Shanghai from 1993 to 2016

Time to Apply	1/6/1993	1/7/1994	1/4/1995	1/4/1996	1/4/1997
MW per Month, RMB	210	220	270	300	315
Ratio of MW and SAW %	44.60	35.67	34.92	33.76	33.09
Time to Apply	1/4/1998	1/4/1999	1/7/1999	1/12/2000	1/7/2001
MW per Month, RMB	325	370	423	445	490
Ratio of MW and SAW %	32.34	31.38	35.88	34.63	33.10
Time to Apply	1/7/2002	1/7/2003	1/7/2004	1/7/2005	1/9/2006
MW per Month, RMB	535	570	635	690	750
Ratio of MW and SAW %	32.97	30.87	31.23	30.87	30.44
Time to Apply	1/9/2007	1/4/2008	1/4/2009	1/4/2010	1/4/2011
MW per Month, RMB	840	960	960	1120	1280
Ratio of MW and SAW %	29.04	29.16	26.92	28.74	29.56
Time to Apply	1/4/2012	1/4/2013	1/4/2014	1/4/2015	1/4/2016
MW per Month, RMB	1450	1620	1820	2020	2190
Ratio of MW and SAW %	30.91	32.17	33.39	34.01	33.83

Note: MW and SAW are abbreviations for minimum wage and social average wage respectively.

Source: Shanghai Municipal Human Resources and Social Security Bureau.

**Figure 4** Loan Interest Rate Adjustment from 1996 to 2015



Source: People’s Bank of China.

At the same time, changes in relative factor prices can also constrain future development. Beyond all doubt, after the rapid growth in the nearly past four decades, China has changed from a country with abundant low-cost labour and lack of capital to a country with substantial capital and lack of intelligence or high-level labour. The economic structure is supposed to be reconstructed based on these changing stylized facts.

#### 4.2. Labour Misallocation between *Manufactury and Services*

The changes of relative factor prices can trigger a series of chain reactions if correctly perceived. First, rational entrepreneurs will tend to use relatively cheaper factors (capital) to replace the relatively more expensive factors (labour). Such kind of calculation has been described by Karl Marx as “machine replacing manual labour”. Thus in this sense, innovation is a kind of endogenous behaviour and rational reaction by those who have the entrepreneurial spirit, facing the relative factor price changes.

Second, labour is supposed to be crowded out from manufacturing to services or from the low-level industries to high-level industries. However, the reemployment transfer channels between manufacturing and services or low-level and high-level industries are not smooth in China. Only about 10% of industrial workers can shift from manufacturing to services freely, due to the lack of education and skills, leading to mismatch of labour skills. Briefly speaking, redundant workers in the low-end labour market cannot easily change to be knowledge workers that new industries need in urgent.

One reason for the difficulty in the transfer of workers from manufacturing to services is the fast economic growth that compresses the transition into a very short period. Therefore, the workers do not have enough time

**Table 6** Change of Economic Structure between China and US

Country	Year	Added Value Ratio of Service	Period
China	1997	35.0%	N.A.
	2015	50.5%	18
United States	1890s	38.0%	N.A.
	1947	53.0%	48-58
	2009	77.4%	62

Source: National Bureau of Statistics of China; US Bureau of Economic Analysis.

to acquire the knowledge and mindset needed. China took only 18 years to increase the added value of the tertiary industry from 35% of GDP in 1997 to 50.5% in 2015. By way of contrast, the United States took nearly half a century to complete this process<sup>6</sup> (Table 6), allowing enough long time for its workers to acquire new knowledge from one generation to the next. But in China, this process was compressed within one generation. Therefore, it is reasonable to deduce that a large number of industrial workers would be unemployed in the process of economic restructuring from manufacturing dominated to service dominated. In short, the unemployment rate will rise with the pace of industry upgrading in such a short time.

However, Zhang (2016), using China's Urban Household Survey data, showed that labour-force participation in China actually increased slightly after 2008, as the proportion of workers exiting the labour market decreased. It was found that China's urban investigation unemployment rate, at 10.7%, was quite high in 2005 and it had dropped over the last decade, reaching 7% in 2012. That puts the annual average for the period of 2005-2012 at 8.5%. This phenomenon is against the deduction and makes a hint on the contention that the Chinese labour market experienced severe misallocations of its labour force.

Of late, evidence of dislocation did emerge. "Zombie enterprises" most of which were state-owned enterprises (SOEs) illustrate the misallocation in the labour market. These enterprises absorbed a large number of the redundant labour, with the help of the soft budget constrain, causing overcapacity and bearing the huge social costs of unemployment, which can partly explain the coexistence of a shrinking growth rate and growing employment rate.

### ***4.3. Capital Misallocation and Dual Track Financial System***

When we talk about the dual track of Chinese economy, it used to refer to the dual track of commodity prices in the economic transition and reform. The price of planned commodity is determined by the government while

the price of additional outputs is decided by the market. This mechanism can be shown to be Pareto-efficient (Lau et al., 2000). After economic transition, both tracks of prices had been merged in the middle of the 1990s. In consistent with the strategy of gradual reform, the dual price track now still exists implicitly in the factor prices of which the reform has postponed at the beginning and leads to the distortions and misallocations in the process of economic transition. New dual tracks come up and become almost the first important part in the “new normal” because the relative factor prices are changing and dual tracks partly increase the price stickiness and incur losses on the economic restructure. So the reform on the dual price track in the factor of production can relief the economy from the distortions and misallocations and release more institutional bonus in the “new normal”.

Taking the dual track of the financial system for example, it means different prices of capital for different enterprises (He and Wang, 2012; Ji et al., 2016). Due to regulation of the loan interest rate and credit rating, there are at least two financial markets. One is the officially regulated financial market and the other is the unregulated financial market. Most resources from the official financial market flow to the SOEs (Cull and Xu, 2003) while most non-SOEs take loans from the unregulated financial market (Allen et al., 2005). According to the “2014 China Wealth Management Report: Prospects and Strategies” published by CreditEase and SEEC Research Institute, about 1.66 million households borrowed from private lenders to the tune of 750 billion RMB and at an average annual interest rate of 36.2%, 8 to 9 times the loan interest rate on the official markets. Ji et al. (2016) believed that the interest rate under the official track is below the market equilibrium and intended to reduce the cost of lending to the SOEs. But the interest rate in the unregulated track is so much above the market equilibrium. The dual track financial system is harmful to economic restructuring because it renders arbitrage not only possible but also likely, and with political power wielded by interest groups benefiting from this arrangement, transition costs will rise and any reform will be resisted.

Other factor prices are facing the same problems, only in varying degrees. Sometimes wages and public services are also split into different institutional framework not for the abilities, experiences and contributions the workers possess, but for their identities, such as rural and urban registration.

#### ***4.4. Deterioration of Investment and Over-monetization***

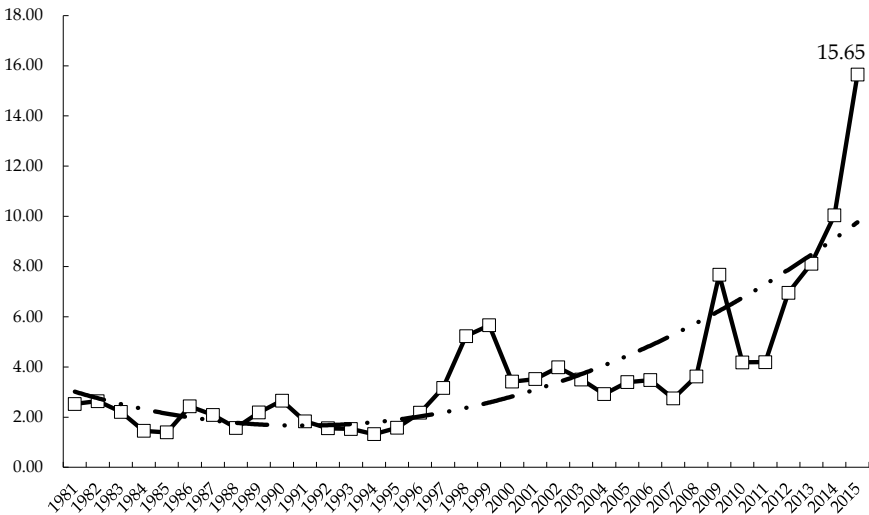
Although the nominal loan interest rate is rather low, the return of investment on the real economy is even lower due to overcapacity, which is perhaps a negative consequence of the 4-trillion-yuan (620 billion US dollars) stimulus

package in 2008. The rationale then was that pouring money into public works, principally infrastructure projects such as highways, railways and airports would create jobs and stimulate demands for construction materials like steel and cement. Wages paid to workers would also have a multiplier effect. But while such kinds of stimulus can keep an economy afloat in times of crisis, it can produce problems such as overcapacity and rising home prices when the crisis is over. In doing so, not much attention would have been paid to investment efficiency while profits are made through price arbitrage from the dual track financial system rather than investing to the real economy.

Thus, the Incremental Capital Output Ratio (ICOR), a vital indicator of investment efficiency, deteriorated rapidly after the financial crisis (Figure 5), reflecting the fact that China’s economy is facing a challenging problem of overcapacity and low efficiency of investment.

All the above has produced different feelings and signals to different groups. It shows a deflation phenomenon with rather low Purchasing Managers’ Index (PMI) and unsold commodities from the perspective of the producers while an inflation fever with increasing housing prices and over-issue of money from the consumer side. It seems contradictory, but really in line with the features of the “new normal”.

**Figure 5** ICOR Reflects the Deterioration of the Investment Efficiency



Source: Calculated by using data from National Bureau of Statistics of China by the authors.



## **5. Supply-side Reform Adapt to the New Normal**

If the inference that the relative factor prices are much more important in the “new normal” is correct, China needs to get rid of the institutional constraints on the relative factor prices so as to reduce the resource misallocations by the enterprises forwardly. Supply-side reform injects new idea to deal with long-term growth and economic restructuring of China’s economy, not in the quantitative sense but in the qualitative sense. Distinct from the strong stimulation measures in the previous years, structural reform aims to solve the misallocation and distortion problems by leveraging the power of the market. It is described as but not limited to “three cuts, one reduction and one improvement”, which is an abbreviation of the central government guidance line to tackle the economic slowdown and includes cutting overcapacity, inventories and high-leverage debt, decreasing the business cost especially by tax reduction and improving processes to overcome weaknesses. These aspects, as a whole, can be considered as “structural” reform because they allow relative factor prices, a kind of market mechanism, to play a decisive role in the resource allocation.

The growing discussion on the supply-side reform in recent years shows that such reform is both crucial and urgent. The further question of who should promote the reform or where the powers of reform has been dealt with by Wu Jinglian, a famous Chinese economist, who pointed out that structural reform should be distinguished from the structural adjustment. To a certain extent, the former is generated by the market while the latter is implemented by the government. Structural reform is not only to adjust the economic structure but also to implement a series of measures to relieve the misallocations of factors and to remove the distortions that impede economic development. Wu (2016) believed that the government should “pull by the nose, but not lift the legs”, meaning that the supply-side reforms should obey the rules of the market and thus take full advantage of the power from the market, while structural adjustment, he indicated, was dominated by the government through some administrative methods. As far as the current stage of China’s economy, excess government interventions are supposed to exit.

According to the findings and analysis in this paper, we believe that structural reform is the right way to diminish the misallocation and boost the growth in the “new normal”, with several dimensions.

First and the most important, the core of the supply-side reforms is to promote the reform on the factor markets in order to merge the dual track and cut down the arbitrage space under the “one price” principle, eliminating the extraction rents of the economic restructuring or diminishing the potential costs of the economic transition. It is necessary to accelerate the marketization process of factors including capital, labour, land and others

for a sensitive factor price mechanism in the context of comprehensively deepening the reform. Besides, it is also wise to promote decentralization of the market and combine the decentralization with management and service together, to create a fair and convenient competitive environment constantly.

Second, it is crucial to optimize the combination of the fiscal and monetary policies to strengthen the macroeconomic regulation and control power. The direction of the reform is to use more fiscal policies, substituting floating-type monetary policy, and carrying out a comprehensive taxes and fees cut. The changes of fiscal policy will give out two results. One is to decrease the costs and tax burdens of the enterprises and to enrich the households and expand the size of the middle-income group. Less cost burden motivates the spirit of the enterprises to do more innovations. And a larger income budget enlarges the feasible consumption set, which promotes the quality of product and industrial output, rendering investment more effective. Another result is to slim the governmental organizations and improve the administrative efficiency through the new fiscal policy in the “new normal”.

Third, it is also very important to continue the opening to market forces, such as reducing excessive protection to SOEs and let the zombie enterprises cut employees, promoting the mixed-ownership reform of SOEs, and reducing the threshold for market access of private capital in the fields of telecommunications, infrastructure, energy, environmental protection, education, culture and other state-owned monopolistic sectors. On the other side, China has been seeking the win-win cooperation in the international communities, especially proposing the Belt and Road Initiative in 2013. Infrastructure along the Belt and Road is going to make more substantial progress in the near future, facilitating trade and people-to-people exchanges.

Fourth, to deal with the potential unemployment in the industry during the transition from manufacturing to services, it is vital to emphasize public education and training for reemployment. The government has the responsibility to augment the supply of workers with the requisite skills in the “new normal”, so that the demographic dividend China currently enjoys can yield a talent bonus. Another way forward is to encourage people to start their own businesses and to make innovations, which will not only create jobs and increase personal incomes, but also improve upwards social mobility and equalization of opportunities.

Last but not least, with the rise of the Internet Plus strategy, the Chinese economy is being elevated to a new level, which calls for new statistical indexes and methods of measuring the scale and structure of the new economy, including E-commerce, internet finance, sharing economy, creative industries and so forth.

It could be expected that some new competitive advantages and underlying growth engines will emerge under the supply-side reforms. That institutional change leads to restructure and reallocation of the economy, following a promising growth rate performance, is the logic of long-term growth of China and other developing countries as well.

## **6. Conclusion**

This paper has tried to account for China's "new normal" from the aspect of the economies of scale and the changing relative factor prices rather than from the perspective of growth deceleration. Economies of scale is a unique advantage of China and the changing relative factor prices is a new challenge for China. In the "new normal", the large scale of the Chinese economy will be unchangeable while the relative factor price will change dramatically. Compared to the beginning of the reform and opening to the outside world in 1978, China has grown from an underdeveloped country to a middle-income country with some areas even more advanced. As a result, China has more capacity to resist exogenous shocks and more ability to recover from a global crisis.

On the other hand, cost of labour is becoming more and more expensive while cost of capital is becoming cheaper and cheaper. The changing relative factor prices is the key to understanding China's economic restructuring. Through the reallocation of the still limited resources, an opportunity has arisen for China to grow from a lower level to a higher level development, and from investment-driven to innovation-driven growth. This will trigger a dynamic evolution of the competitive advantage, from labour to intelligence or from physical capital to human capital. Due to distortions stemming from the inherent institutional settings, relative factor prices cannot change flexibly, which may bring about both market failure and government failure, the impact of which is magnified in times of global depression. This is why we need supply-side reform to eliminate the misallocation of the primary factors like labour and capital.

Supply-side reform represents a new approach to deal with China's long-term growth and economic restructuring, not only in the quantitative aspects but in the qualitative aspects as well. Different from the strong stimulation like monetary incentives in the previous years, supply-side reform aims to solve the misallocations and distortions by leveraging the power of the market. China is expected to carry out a transformation in response to the macro-economic policies to reduce relative factor price distortions. A series of reform measures described as "three cuts, one reduction and one improvement" has been proposed to be the main contents of reform in the "new normal". This involves cutting overcapacities, inventories and high-

leverage debt, reducing business cost especially through tax reduction, and improving processes to deal with weaknesses. It cannot emphasize too much on the importance to protect the entrepreneurial spirit. Besides that, it is also necessary to implement reforms on the factor market, opening-up, education and technological revolution as well. It is expected that new competitive advantages and new growth engines will spring out from such reforms.

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1. The middle income trap is a theorized economic development situation, where a country which attains a certain income (due to given advantages) will get stuck at that level.
2. The Iceberg Model says that the growth performance is just like the part of the iceberg above the sea and determined by the structural elements which are the body of the iceberg under the sea. The shape of the body of the iceberg reflecting the economic structure is also dependent on the temperature of the water. The water refers to the economic institutions framing economic behaviour. In this sense, only the institutions have the ultimate power to drive economic growth.
3. The Penn World Table (PWT) is a set of national-accounts data developed and maintained by scholars at the University of California, Davis and the Groningen Growth Development Centre of the University of Groningen to measure real GDP across countries and over time. Also see <<http://www.rug.nl/ggdc/productivity/pwt/pwt-releases/pwt8.1>>.
4. For example, the mechanism of “clean effect”, generated by the power of the market, will help economic restart at the bottom of the recession.
5. In Russia, the growth rate dropped from 10.886% to 1.962% during seven years before and after 2007, which resulted in 8.924% difference in growth rate, much larger than 2%.
6. A better method to evaluate the development is to use the data of employment in the secondary industry and tertiary industry, but not the data of added value.

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