Deceleration of China's Economic Growth: Causes and Countermeasures[1]

Guoqiang Tian

Abstract: China's economic growth has been declining continuously at a rapid rate since 2011. It dropped to 6.7% in 2016 by more than 3% from nearly 10% average growth rate during 1979-2010. As for its causes, there are different interpretations among Chinese economists. One of the interpretations, which is held by some scholars including Justin Yifu Lin, is that external and cyclical factors are the main causes for the decline. The author disagrees with this viewpoint and holds that the root cause of economic deceleration is the delayed adoption of deep institutional reforms. An inclusive economy and state coercive capacity are two essential ingredients for sustaining economic prosperity. China must further enhance economic inclusiveness, and accelerate its transition into an efficiency-driven and innovation-driven economy through deepened comprehensive marketization reforms. Meanwhile, it should build a limited government that is capable, accountable, effective and caring, with strengthening the rule of law.

Keywords: China's Economic Growth; Causes and Countermeasures; Deep Institutional Reforms

JEL Classification：O1, E6, P3

I. Introduction

China has made significant achievements in economic development over its four decades of reform and opening-up. However, it also faces problems concerning the

[1] This paper is based on a debate and discussion between the author and Professor Justin Yifu Lin in the special session titled "The Causes and Countermeasures of China's Economic Growth Deceleration" at the Third Winter Camp on New Structural Economics at Peking University on December 19, 2017.

unbalanced, inadequate, and unsustainable development of the economy, society, culture, and ecology. One of the serious symptoms is the rapid and continuous decline of growth rate since 2011. The average growth rate, which was close to 10% in the past 30 years, has rapidly fallen below 10%, 9%, 8% and even 7%, with an average deceleration rate of over 3%. It declined from 10.4% in 2010 to 6.7% in 2016. The risk of further deceleration still exists, as shown by a quantitative analysis of the China Macroeconomic Analysis and Forecast Model by Shanghai University of Finance and Economics. Such a continuous deceleration to a rate less than 7% is abnormal. Since the reform and opening-up, this only occurred under the special circumstances during the late 1980s and early 1990s. While we shall not blindly pursue a high rate of economic growth, we should clearly understand the causes of rapid deceleration. After all, economic development is the core solution to major social conflicts. It is thus necessary to figure out the underlying causes, and adopt countermeasures accordingly.

I agree with some views of Justin Yifu Lin. For instance, the potential growth rate should be higher than 6%. However, we differ in the observation of such issues as whether government should be oriented towards a limited government or not, whether selective industrial policy or deep institutional reform is more important to China's economic development, and what the underlying causes of growth deceleration are. In particular, our interpretations of the causes of deceleration are quite different. Many scholars, including Lin, believe economic deceleration is the consequence of short-term, cyclical, external, and industrial factors. Hence, they suggest adopting short-term fiscal and monetary policies, and selective industrial policies. This, along with what kind of the role of government and industrial policies, are the main debates between Lin and myself over the past two years.

Some other scholars attribute this to long-term causes and argue that the new normal is brought about by the deceleration of the potential growth rate, so neither short-term measures nor institutional reforms are necessary. I agree with Lin on the point that potential growth has not slowed down dramatically, although we differ greatly in the causes and countermeasures. According to the law of diminishing

marginal productivity, China's economic growth rate is already exhibiting a downward trend. Nevertheless, the deceleration should be a slow process – neither too fast nor too large in magnitude. It is abnormal for growth to decline by more than 3% in just a few years. Of course, I am not as optimistic as Lin about China's economic growth rate, who claimed in 2008 that China's economy could still grow by over 8% annually for the coming 20 years. Lin is probably overoptimistic, but I believe a growth rate of around 7% in the next five to eight years is possible. It is also technically possible to achieve an annual growth rate of over 8% in the next decade if the government would really want to do it. In China, any single goal can be achieved due to the government's unusually strong power of mobilization. The growth rate can reach 8% or even 10% if the government makes it the top priority. The problem, however, is whether such a highly extensive and investment-driven economic growth mode is suitable, and whether it will bring greater risks.

I maintain that institutional factors are far more crucial than external and cyclical factors. There are two fundamental reasons for this. One is the delay in the transition of driving force of economic growth. Any economy must go through three stages from being factor-driven to being efficiency-driven and further innovation-driven to grow from a developing economy to a developed economy. The other reason is the delay in establishing an inclusive modern economic system due to the imbalanced and immature governance structure over the past few decades in China. As such, lagged institutional reform is the main underlying cause of the continuous and rapid growth deceleration. Deepening reforms will greatly reduce institutional barriers and costs, and motivate individuals to work diligently and creatively, thus enhancing efficiency and fostering innovation. As China is still at the developing stage, it is highly possible that the economy maintains a growth rate of over 7% in the next five to eight years. Of course, as social-economic stability and risk control are important priorities, whatever the causes of growth deceleration, it is necessary to combine short-term policy countermeasures with medium and long-term governance reforms.

II. Causes of China's Economic Growth Deceleration: Institutional Factors vs

External and Cyclical Factors

Are the main causes of growth deceleration institutional factors, i.e., the delay in institutional reform, or external and cyclical factors? Although Lin and I use similar data and charts on economic growth, our conclusions differ a lot.

As mentioned above, Lin and some others attribute the deceleration to short-term cyclical, external, and industrial structure factors, and thereby propose short-term fiscal, monetary, and selective industrial policies as countermeasures. Lin (2014, 2016) expressed such views, and further elaborated on them at this meeting. He advocates adopting "some counter-cyclical measures to stabilize economic growth".

Although the growth deceleration may be correlated with some external and cyclical factors, as a transition economy, China faces the major issue of delay in the transition of economic drive and to a modern economic system. The former means the transition from factor-driven to efficiency-driven and innovation-driven growth, while the latter refers to the unbalanced and inadequate development, behind which lies an imbalanced governance structure. These two factors form the deep-seated institutional reasons that make China's actual economic growth slower than its potential growth. Demonstration is given in the following from economic theory, quantitative analysis and historical comparison.

Argument 1: Some cyclical and external factors do exist, but they are not the fundamental causes.

In recent years, the external factors causing China's continuous growth deceleration have not been significant. Facing this round of global financial crisis, economies all over the world were impacted by external economic environment and experienced a deceleration process. Figure 1 shows the economic growth of the top seven economies, including five developed countries and two developing countries of China and India (comparable to each other). Since 2011, the growth rates of all these countries but China have begun to rise or fluctuate upward toward their balanced growth rates, while China is the only economy that has been exhibiting a consistent decline in economic growth. If external factors are the main causes, why have other

economies been recovering? Even India is almost back on its balanced growth track.

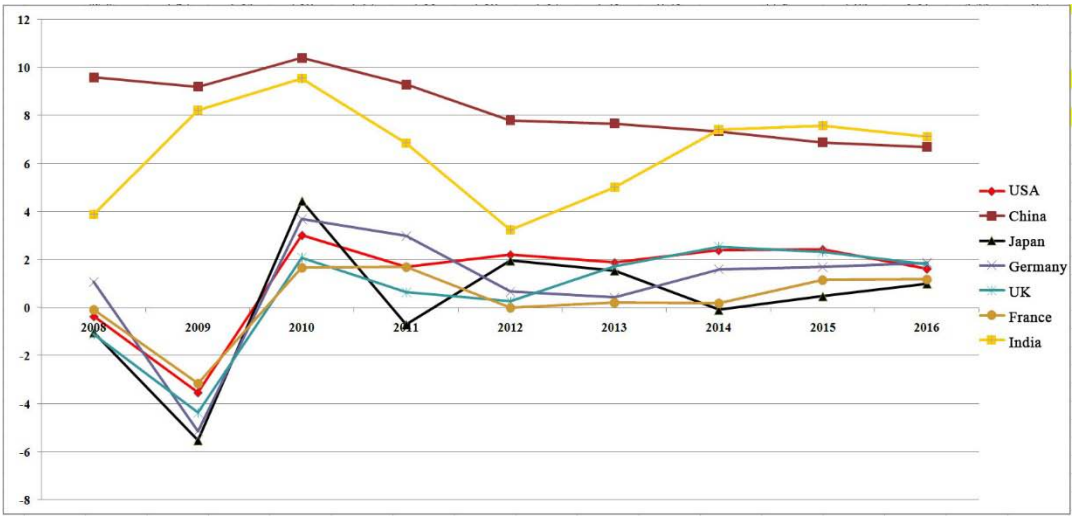

Fig. 1: Economic Growth Rates of the World's Top Seven Economies since 2008

Data Source: World Bank

Lin argues that the slowdown in economic growth in China is largely led by the pressure of external economic decline. However, similar pressure also existed during certain periods before this global economic and financial crisis, such as the 1998 Asian financial crisis and the 2008 global economic and financial crisis. Nevertheless, China's economy rebounded within a single year. Why was there no sharp decline as it did after 2011?

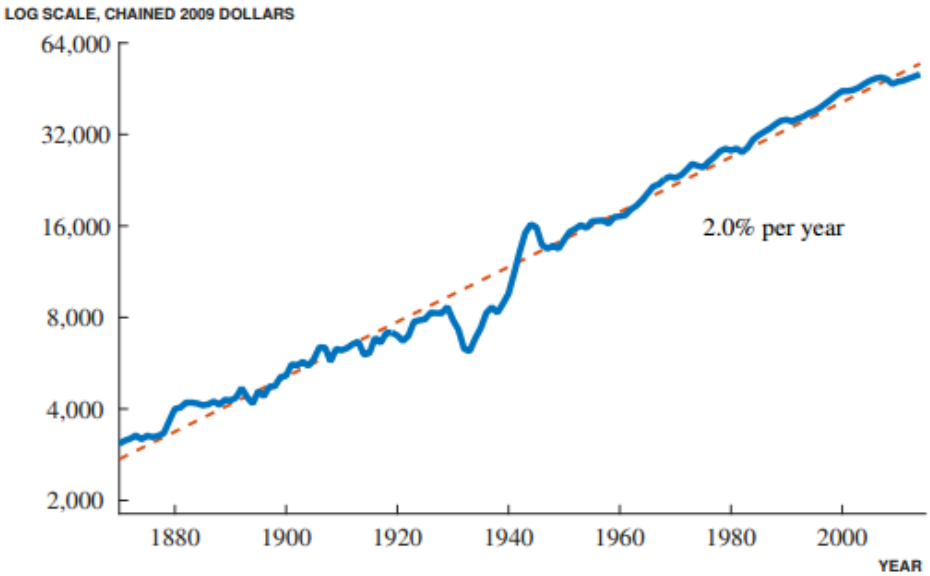

Fig. 2: GDP per Capita in the US

Source: Figure 1 in Jones (2015)

As for balanced economic growth rate around the world, Jones (2015) showed that the average annual per capita income growth in developed countries over the past 150 years is less than 2%. Even adding an average annual population growth rate of about 0.5%, the economic growth rate is at most 2.5%. For instance, as shown in Fig. 2, the balanced economic growth rate in the United States is around 2%. Considering the average population growth rate of about 0.5%, the balanced growth rate in the US is thus about 2.5%. Therefore, the growth of developed countries has basically recovered.

Why has China's economic growth rate been dropping continuously from 10% down to below 7% in just a few years? Although there exist external and cyclical factors, they are not the main causes. This is one of the major differences between Lin and myself when it comes to how to analyze and interpret this issue.

Are cyclical factors the main causes? That does not seem to be the case either. It is difficult to judge the effects of cyclical factors over a short period of time, so it would be clearer to see by a panoramic view over China's 40 years of reform and opening-up. Figure 3 shows that the recent growth deceleration is the longest one since reform and opening-up. It has persisted for 10 years since 2007, and is unusual compared with other major economies that have basically recovered to balanced growth. China reversed the deceleration last time by joining WTO. What is the remedy this time?

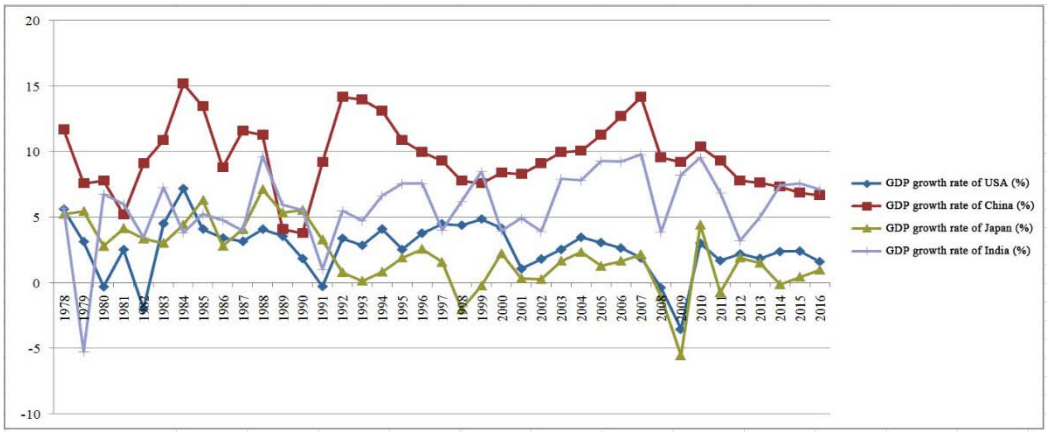

Fig. 3: Economic Growth Rates of China, USA, Japan and India since 1978

Data Source: World Bank

No matter what the causes are, cyclically fluctuating or external factors, the continuous and rapid growth deceleration has sustained for nearly 10 years, dropping to a rate lower than 7% – an unprecedented case since reform and opening-up. Of course, economic growth had been lower than 6% in the past (such as after the political turmoil of 1989), but it rebounded quickly within a year or two. However, it has not been the case this time, while other economies have recovered to balanced growth. Economic cycles fall into three categories of long-term, short-term, and medium-term cycles. How to sustain a long-term economic cycle? The answer is deepening reform and institutional improvements. In an improved institutional environment, China's economy can certainly be better. We never require the best. The best is simply the ideal benchmark. However, only by learning from and comparing with the best can China make improvements. As other developed economies have regained balanced growth whereas China continues to decline, here arises the question why an economic cycle has not yet run its course after 10 years? While other countries have all been improving significantly, why has China as an open economy not done so? I cannot regard external and cyclical factors as the main causes of China's growth deceleration.

Argument 2: The delay in institutional reform is the fundamental cause of growth deceleration.

The explanation why the other six economies have recovered while China did not may be analogous to influenza. Why do some people catch it while others do not? Although people breathe the same air, those who catch the influenza may have poorer physical conditions. The delay in institutional reform blights the "physical conditions" of China's economy. In this sense, even under external impact, it could recover quickly if the internal quality was good enough. If we have to rank institutional, external and cyclical factors in terms of importance, institutional factors would be at the top. Ultimately, the key lies in improving the underlying institutional environment.

Specifically speaking, I hold the view that both the economic factor and delayed institutional reform are relevant to growth deceleration, whereas Lin denies the delay

in reform as a major factor. In his view, compared with the economic environment in the 1980s and 1990s, there should be less institutional and systematic distortions, and hence Lin thinks we should not blame the delay in reform and institutional obstacles for the economic downturn. While this sounds reasonable, Lin has actually confused the concepts of "total" and "marginal" return. This is not difficult to explain. The huge marginal return of reform and opening-up dividend (or reform dividend) induced by market-oriented decentralization of power in the early and medium periods has brought about rapid growth. Although the overall economic environment has improved, the marginal returns of reform dividend will diminish significantly towards the binding boundaries of institutional constraints if the reform is not further deepened. As such, neither economic efficiency nor potential productivity and total factor productivity can be improved, which leads to continuous economic deceleration.

Early in 2015, I stated in a paper titled "China's Transition of Development Drive and Construction of Institutional Governance in its New Economic Stage" that the continuous and rapid deceleration can be attributed to the following five factors: (1) diminishing factor-driven dividend; (2) depleting government-led driving force; (3) unsustainable development mode in which state-owned enterprises (SOEs hereafter) with over-capacity squeeze private sectors; (4) severe inaction in government administration; (5) misunderstandings of the "new normal". More than two years have passed, and these five factors persist due to the lack of deep institutional reform at the root. Social conflicts become increasingly severe and development remains unbalanced and inadequate, putting China's real economy into plight. Let me elaborate.

1. Due to diminishing marginal returns and decreasing factor dividend, the growth trend has moved downward. It is not sustainable to drive growth by factors, especially by investment. Figure 4 shows that the decline of revenue driven by fiscal policies or capital investment increase will accelerate, which results in high capital investments with low returns.

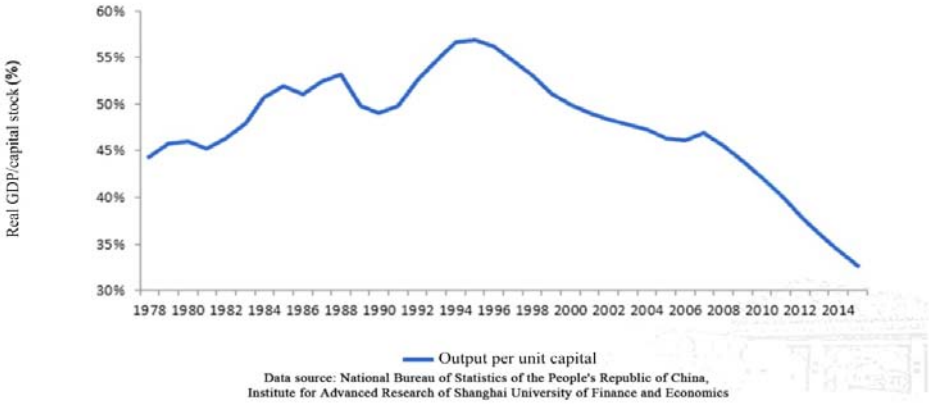

Fig. 4: Significant Decline in Marginal Returns of Capital

2. Government-led driving force is depleting and endogenous growth is weak. Due to the mismatch between financial authority and administration power at the local level, local governments are incentivized to intervene in the economy to grab a larger share of fiscal revenue. This distortion results in overcapacity, inefficiency, rent-seeking and unsustainable economic growth. Meanwhile, as shown in Figure 5, land finance has also gone through an unprecedented expansion, boosting the rapid rise of housing prices, stimulating the influx of speculative funds, and squeezing the real economy.

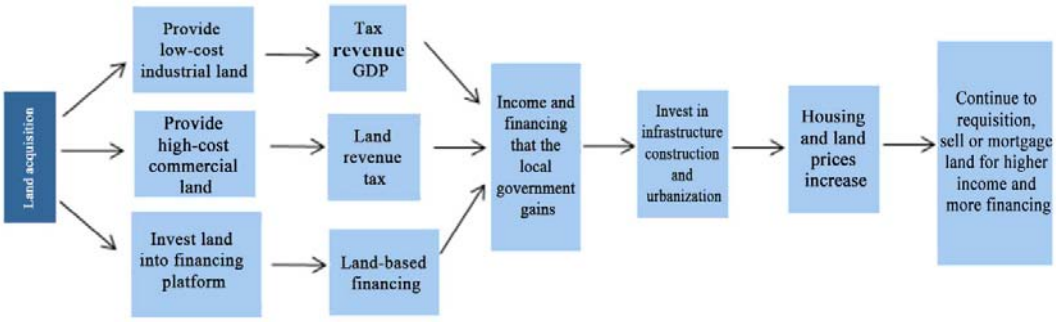

Fig. 5: Land Finance in China

Data Source: Zhou (2016)

The above two points are what Lin and I mainly disagree regarding the causes of sharp deceleration, and are the main reason why we have such different countermeasures. While our views on the third point also vary, we have common ground on the overcapacity of state-owned-enterprises (SOEs). To be specific:

3. Overcapacity of SOEs squeezes the private economy and hurts economic vitality. It is the fundamental cause of large reduction in private investment, i.e., SOEs have crowded out private enterprises in many areas. Lin has only talked about the overcapacity of SOEs, and did not mention whether this has squeezed the private economy and hurt economic vitality. Economic growth data of provinces in recent years shows a common trend that the greater the proportion of state-owned economy and the weaker the private economy was, the slower the economic growth would be. Such provinces suffer a faster growth deceleration, as seen in Liaoning, Heilongjiang, Jilin, and Shanxi. Taking advantage of easier access to energy, financial and other resources, SOEs often take up too many factors of production. By contrast, micro, small and medium-sized private enterprises are facing problems such as high financing and production costs, which have severely impeded their development. The absence of a healthy competitive mechanism has led to inefficiency and reduced economic vitality and momentum. The private sector lacks social financing and investment confidence. In fact, the substantial decline of investment in private sector is the root cause of China's investment decline.

The above are three economic causes. Even with an initial 10% annual growth rate, as the marginal returns of reform are diminishing, China approaches the tightening constraint boundaries of institutional obstacles. This in turn leads to continuous economic decline. Although Figure 6 shows there has been no significant decrease in the employed population ratio, it is expected to decline sharply in the near future. There has already been an obvious decrease in marginal returns of capital. This means it is unsustainable to rely solely on increasing investment of factors such as capital and labor. Hence, economic growth rate cannot be sustained above 8% by relying solely on government investment. Even if that does happen, it would be highly inefficient and resource-intensive. The fundamental problem of the depletion of government-led driving force is that land sales contribute significantly to local government finance. As shown in Figure 5, firstly, local governments provide low-cost land for industrial and manufacturing use and promote economic development through tax revenue. Secondly, they provide high-price land for commercial use and obtain local finance. Thirdly, they use land as mortgage, which is unsustainable. Government should play its role in case of market failure, rather than intervene in the market directly. However, as the government is development-oriented rather than service-oriented, it does not fulfill this role, resulting in major problems in

areas such as livelihood, retirement, healthcare, housing and education. Eventually, precautionary savings are excessive and consumption motives are greatly suppressed.

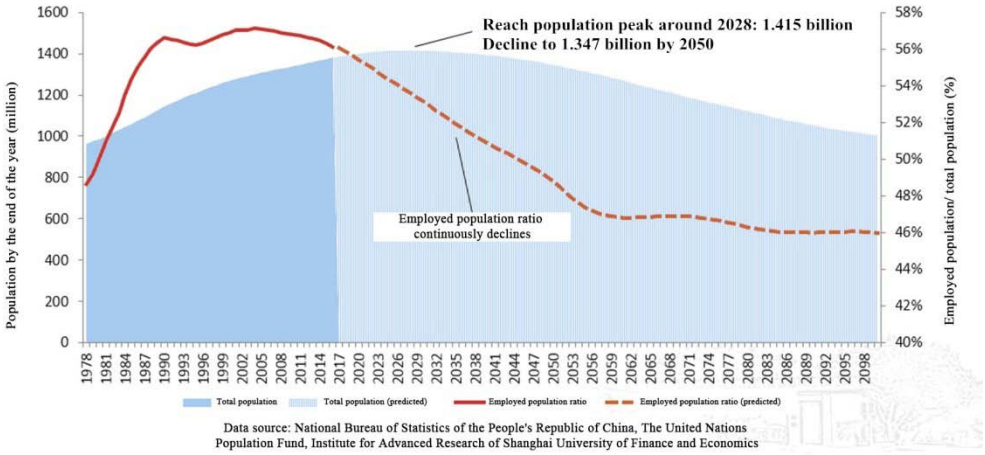

Fig. 6: Continuous Decline in the Proportion of Employed Population in China

4. The government loses sight of its objectives, leading to inaction or slow implementation of policies. The government is heavily involved in economic activities, while permits and licenses still characterize the inseparable political-commercial relationship. Excessive government intervention has distorted market incentives, resulting in inadequate government role in cases of market failure. Government still has too much power in administrative approval and market access, so there is a long way to go for a capable, accountable, effective, caring and limited government oriented towards maintenance and service. The efficiency of government departments (regardless of whether the matter at hand lies within their responsibility) is crucial for development, including economic development. Once the enthusiasm of government officials is negatively affected, the growth momentum will be weakened, which will further aggravate the plight of real economy.

5. There are two misunderstandings of the “new normal” in China. One is that it is normal to have a rapid deceleration in economic growth. That is actually not the case. Any developing economy that has not achieved balanced growth can have a relatively high growth rate. China’s economy is still at the developing stage, like a rising rocket, a plane at take-off or a growing young man. It is not the same as a plane

already flying or an adult who has stopped growing. Many people compare its growth rate with those of developed countries and conclude that it is doing pretty well. Due to differing benchmarks, it is a misleading comparison, though China's economic growth will eventually slow down. The paper presented by Xiaodong Zhu shows that more serious deceleration would occur, and deepening reform is the solution. I agree with this view. As will be analyzed below, deepening the reform or not will make a big difference.

Another misunderstanding is that the causes of economic deceleration lie mainly in external, cyclical factors and the industrial structure discussed above. As such, their solution is to implement short-term fiscal and monetary policies and selective industrial policies. However, this is highly likely to result in excessive government intervention and a more distorted economic structure.

The five causes discussed above can be further summarized as three structural imbalances: 1) imbalance in economic structure (demand, industry, market structure, imbalance between the virtual and real economy, and delayed transition of development drive); 2) imbalance in institutional structure (over-emphasis on government versus under-emphasis on market, over-emphasis on enriching the state versus under-emphasis on enriching the people, and over-emphasis on development versus under-emphasis on service; inappropriate path of development); 3) imbalance in governance structure (severe wealth inequality, weak consensus on further reform, oversimplified and crude governance, increasing social conflicts, deterioration of ecological environment, large gap between central decision-making and local/departmental implementation, and failure of governance principles).

These structural imbalances have brought about serious problems along with remarkable achievements, leading to huge institutional transaction costs. Within such an institutional environment, it is difficult to further motivate individual efforts and innovation. This has resulted in unbalanced, inadequate, and unsustainable economic and social development and the failure to improve total-factor/potential productivity, efficiency and innovation. The roles of short-term stimulation of fiscal and monetary policies and selective industrial policies are limited in face of institutional obstacles,

and stimulus policies will only have temporary and superficial effects.

Argument 3: Whether reform is carried out and in place matters a lot for economic growth.

The potential economic growth rate can be achieved by a transition from factor-driven to efficiency-driven and innovation-driven development, and by a deep institutional reform from economic liberalization to marketization and privatization. Whether such a reform is carried out makes a big difference. For example, at the beginning of the 1980s, Deng Xiaoping stated that in terms of economic development, China's GDP would quadruple by the end of the 20th century. To achieve this goal, China's annual GDP would have to grow from 4% to over 7%. Such a high figure seemed impossible back then. However, China did better than the intended target by making the transformation from a planned economy to a market-oriented economy and implementing reform and opening-up policy. This is a conclusion that has been repeatedly tested and verified through practice in China. The result of quantitative analysis shows that future economic growth and development will follow a similar path.

Cheremukhin et al. (2015) analyzed the factors contributing to China's economic growth from 1953 to 2012. They forecasted the economic growth for 2012-2050 by using the "wedge method", identifying the areas which were the most curved. Predictions and comparisons are based on the contribution of each factor before and after the reform and opening-up. The conclusion is that reform has played a vital role in China's economic growth. As shown in Table 1, the predicted annual growth rate presents a gap of about 3% during 2012-2024, while the gap has been over 4% in the 30-plus years before and after the reform and opening-up (Cheremukhin et al. 2015). The China Macroeconomic Analysis and Forecast project of the Institute for Advanced Research at Shanghai University of Finance and Economics made the same prediction. Two dimensions of reform have exerted a significantly positive impact on economic growth: urban-rural reform and SOE reform.

Table 1: Comparison of Expected Growth Rates along Different Development Paths

	2012-2024	2024-2036	2036-2050
Along the development path after reform and opening-up	7.8%	5.2%	3.6%
Along the development path before reform and opening-up	5%	4.6%	3.9%

Facing these institutional obstacles to economic growth, short-term fiscal and monetary policies stimulus and selective industrial policies are not completely ineffective or unnecessary, but their effects are limited, short-term, and have many side effects. If the five causes mentioned above are not properly addressed, the economy shall continue to fluctuate as the policies tighten or loosen. It will fall into a cycle of "decentralization-economic chaos-centralization-stagnation", a phenomenon that we have repeatedly witnessed in the past few decades. The breakthrough will only be achieved by promoting quality, efficiency, and driving-force reforms, raising total-factor productivity, and establishing a modern economic system. China needs a comprehensive package which integrates reform, development, stability, innovation, and governance. While short- and medium-term policies and transitional institutional arrangements are needed, it is more essential to deepen the reform of long-term governance so as to eventually establish a limited government which is capable, accountable, effective and caring, and achieve modernization of state governance.

It should be pointed out that market-oriented reform does not have to be radical. Due to various constraints in China, it is likely to be a gradual process. We should clearly distinguish between the goal and the process to achieve something. The goal is firm, but the process may be revised with different transitional institutional arrangements.

III. Countermeasures: Deep Institutional Reform is the Key to Benign Development

Based on the above analysis, how can China achieve sustained growth and

benign development? The solution is to deepen the reform to remove institutional obstacles and combine short-term policies with medium and long-term governance reforms. There are three major tasks to deepen institutional reform. The first task is to establish an inclusive modern economic system; the second one is to strengthen the rule of law and state executive capacity; the third task is to establish good social norms and order under a harmonious and effective social governance system. The first two tasks are crucial for achieving sustainable economic growth, which will be the focus of following discussion. The third point is also an indispensable link in modern state governance system.

Acemoglu and Robinson (2012) emphasized the importance of an inclusive economic system to economic growth. While I agree with this view, I also believe that it is only a necessary condition. Without an inclusive market mechanism, an extractive economy will certainly be unsustainable. Looking back at China's history, the Rule of Wen and Jing in the Western Han dynasty, the Flourishing Kaiyuan Reign Period and Zhenguan Reign of Taizong in the Tang dynasty, and the Flourishing Kang-Qian Age in the Qing dynasty all happened when the emperors adopted relatively inclusive economic policies to reduce corvée labor and taxes and promoted economic growth. Acemoglu and Robinson (2012) also believed it should hold true only for countries where the political system is free and democratic. I, however, do not fully agree with this view even if only economic growth is considered. China had been a feudal society for more than two thousand years, and for the most part it led the world in gross output and GDP until the nineteenth century, but the feudal dynasties were by no means democratic, nor were their governance based on the rule of law. They relied on hierarchical authority and the coercive power of government.

In today's world, the capitalist system in the United States and the socialist system in China are similar in one respect: both have strong state executive capacity. In addition, their economic systems are relatively inclusive (the case being so with China only after the reform). As a result, they are among the largest economic and political powers in the world. China has made great achievements in the past few decades, which strongly supports the statements of Deng Xiaoping: "development is

the absolute principle" and "stability is the overriding priority". In general, for most of the past two thousand years, China was one of the richest countries in the world thanks to a good balance between economy and the state. However, the feudal dynasties did not solve the stability issue or achieve long-lasting peace and order. Frequent changes from one dynasty to the next resulted in huge losses in property and population. Such a feudal system was not a success in the real sense. As such, political reform is necessary for China.

Both economic inclusiveness and the enforcement of the rule of law are a demonstration of state executive capacity, which manifests itself in two ways: implementability and state coercive capacity. In the mechanism design theory, Hurwicz (1972, 1979) treated the "implementability" as being equivalent to incentive compatibility, a type of soft executive power that respects reasonable human desires economically. By contrast, coercive power is a type of hard executive power. If "the carrot and the stick" strategy can be used in an inclusive and harmonious society, namely, enlightening individuals with reason, incentivizing them with benefits and treating them with empathy, then almost sufficient conditions for the success of a country will be obtained. To sum up, an inclusive economic system with incentive compatibility and an authoritative government are necessary conditions for benign development and the overall success of a country. This logic may help to explain the success of a country and a dynasty at any time in history regardless of what country it is. No country has ever succeeded if either of these two prerequisites is absent. Therefore, China's sustainable economic growth and benign development depend on promoting reforms in the following two aspects.

3.1. Further enhancing economic inclusiveness and promoting the transition to efficiency-driven and innovation-driven development

Facing the future, China should establish a modern economic system that allows the market to play a decisive role in resource allocation, promote the transition from factor-driven to efficiency-driven and innovation-driven economic development, and enhance total factor productivity via quality, efficiency, and driving-force reforms.

Efficiency-driven development is the foundation of innovation-driven development. To achieve efficiency-driven development, market should play a decisive role in resource allocation and government must have a positive influence. Reform is complicated but it can start in the following three areas: private economy, financial market and land market. To invigorate these areas, private enterprises should be encouraged to take advantage of their strengths and innovative drive, finance should be promoted to better serve the real economy, and distortions in land and other factor markets should be addressed. In brief, they boil down to the equal treatment of private enterprises, liberalization and integration of the financial market, and marketization of land circulation.

Regardless of whether economic development is driven by efficiency or innovation, it is built on the decisive role played by the market and the key role played by entrepreneurs. While many scholars may realize the importance of entrepreneurs and entrepreneurship, they might not fully recognize the significance of underlying institutions that breed entrepreneurs and entrepreneurship. Innovation and development need institutional support. Entrepreneurs and entrepreneurship do not appear by chance, and institutional innovation provides them with strong support. Entrepreneurship is derivative and superficial, and it must be built on a basic meta-institution and requires a good institutional environment as a prerequisite. For example, entrepreneurs and entrepreneurship barely emerge in SOEs. Even though all private enterprises pursue profits, their willingness to innovate depends on the basic market system, which should be a level playing field for competition with no detrimental interferences from the government.

Technological innovations operate on the basis of institutional innovations. These two kinds of innovations are like an action-reaction pair. A good institution can reduce the transaction costs of innovation, create conditions for cooperation, provide incentives for innovation, and facilitate the internalization of the benefits of innovation. One goal of constructing a technological innovation system is to promote the interaction and cooperation among innovative elements. Indeed, Baumol (1990) extended Schumpeter’s innovation theory and argued that innovation and

entrepreneurship depend on institutional choice, and are therefore endogenous variables. If the rule of game that affects the choice of entrepreneurial behaviors is abnormal or destructive, then innovation and entrepreneurship cannot reach its full potential.

Market competition and enterprise innovation are inseparable. Indeed, competition results in profit decline. The fiercer the competition becomes, the faster the corporate profits decline. This provides enterprises with strong incentives to innovate for the sake of survival. Innovating enterprises may gain a monopoly position that generates monopoly profits, which will attract more enterprises to participate in the competition. Thus, the cycle of "competition → innovation → monopoly profit → competition" is formed. Through this dynamic game, market maintains its vitality and further leads to economic development and social welfare. It is private enterprises, rather than SOEs, that are the main body of innovation, especially regarding technological innovation. Hence, the key to the transition to innovation-driven development is the thriving development of the private economy. Tian (2000, 2001) argued that the final stage in the stable transition of China's economy is the reform of privatization, which is a prerequisite for balanced, adequate and sustainable economic development. Indeed, the success rate of innovation is lower than 5%; no SOEs dare to take such a risk.

In general, a fundamental meta-system (such as the establishment of modern market system) conducive to innovation is of key importance. China should try to form an institutionalized and positive feedback mechanism in economic sphere, which guarantees the incentive to innovate for enterprises. To be more specific, a desirable institutional environment should include well-defined property rights, a healthy market environment, and various incentive-compatible mechanisms. The government should make effective institutional arrangements and establish supporting mechanisms. Meanwhile, in different stages of the transition process, changes due to interactive accumulation in earlier stages might take place in political, economic, social, cultural and institutional environments, so we should not regard them as fixed. Therefore, the new institutions should be designed in accordance with changes in the

institutional environment. It should be flexible and specific in terms of time, place, people and situation, rather than relying on pure imagination or disregarding the changing circumstances. Evolution and design can thus form a dynamic coupling.

3.2. Respecting and promoting the rule of law in governance, and establishing a limited government that is capable, accountable, effective, and caring

The socio-economic development of China requires a healthy market economy, good social norms, and a properly-positioned government in particular. Constrained by information asymmetry, government cannot take care of everything by itself, and hence must have a reasonable and proper definition of its role. I recently proposed that the government should aim to be a limited government that is capable, accountable, effective and caring, playing its role of maintenance and service. Briefly speaking, **"capable" mainly refers to the government's capacity to execute, "accountable" means that the government should take on responsibilities within its scope of duty, and "effective" refers to the efficacy and efficiency of government administration. These three points are the key to well handling the relationship between government and market, with the orientation of building an efficient market. Being "caring" is about properly addressing the relationship between government and society.**

A "limited" government requires letting the market play its role where it functions well, and letting the government play its role only in cases of market failure or malfunction. The government must clearly identify its sphere of governance. Many scholars oppose the idea of a limited government and further believe that its boundary of governance would be unlimited. This will result in more severe man-made market failures, and prevent the market from playing a proper role. The over-emphasis on the role of government fails to fully realize the potential dangers. The basic meaning of a limited government is that the market should play a decisive role as long as it runs properly. Only when the market fails or functions improperly, due to the under-playing or over-playing of government role, should the government step in. Therefore, the governance scope of a limited government should be confined to the

complementary role of maintenance and service.

However, the connotations and boundaries of maintenance and service need to be defined according to specific institutional environments, which might be significantly different. People have various misunderstandings regarding the concept of a limited government and simply interpret it as the role of "night watchman" as described in Friedrich Hayek's *The Constitution of Liberty* (1960) under any circumstances. To clarify such misunderstandings, it should be noted that the specific functions, contents and extent of maintenance and service from a limited government can be varied in different stages of development and different institutional environments. For example, in the most ideal case, the boundary of a limited government is the smallest and the government plays the role of a "night watchman". However, even western developed countries have not been the "night-watchman" states. For developing economies, especially for transition economies such as China that is still in the process of establishing a modern market system, the market is not yet mature and efficient due to two types of failures: one is the market failure as defined in standard economics textbooks, and the government fails to step in; the other is man-made market failure caused by government distortions, and the government fails to withdraw from intervening. In neither case can an efficient market come into being.

As such, government usually needs to play a bigger, better, and more executive role than a "night watchman". For instance, it is the government that initiates and leads reform, establishes and improves a modern market system conducive to economic development, entrepreneurship and innovation, provides industrial policies (also known as functional industrial policies) to improve the function of market, and gives special policy support to some emerging and basic industries (moderately selective industrial policies). This is because a developing country or a transition economy has not yet formed an efficient market. Thus, the government should play a more active role in providing maintenance and service, and this duty should be fulfilled through the establishment of institutions rather than through direct intervention in the economy. As such, limited governments – especially one for a transition economy and a government that serves as a "night watchman" – might

differ a lot from one another. Though they all play the role of maintenance and service, they vary greatly in terms of connotation, goal, target, and intensity.

Despite the differences in economic environments and development stages, and hence variations in the substance and scope of limited governments, the role of maintenance and service is something they all have in common. **The government should be "accountable" and "capable" whenever it should step in.** It shall build strong state capacity, that is, the executive capacity to ensure that the will and goals of the state can be converted into actual results. The executive capacity and authority of the government are also important for the benign development of economy and society. **Executive capacity can be reflected in two ways.** One is by an incentive-compatible system with inherent incentives. It is a self-enforcing, flexible (as with "carrot" policies), and implementable economic institutional arrangement, which mainly covers economic institutions such as a benign market institution. The other comes from government authority, which is guaranteed and driven by coercive power. It is reflected through strict adherence to the rule of law, enforcement of rules, regulations, and policies, and the government's strong role in maintenance (such as protecting social order, free choice and property rights of individuals) and service. This is also a major factor that determines economic development. Apart from the economic reform that has streamlined administration, delegated power and provided various incentive mechanisms, another important reason for the great achievements of China's economic reform is that the government has strong executive capacity. This represents the government's governing capacity, which guarantees political and social stability as well as the smooth implementation of government policies.

In addition, **the government must also be caring for its people, which is about maintaining social harmony. In this regard, it should care about people's livelihood, promote social equity and justice, solve ecological and environmental problems, narrow the wealth gap, and encourage integrity, fraternity, stability, and orderliness.** It is a matter of how to appropriately handle the relationship between government and society. To this end, there should be a transition from a development-oriented government that seeks gains at the expense of the people to an

inclusive government that serves public interest. The government should try its best to minimize its role as an economic man, expand the scope and depth of public services, and correct market failures until there is no “under-playing” of government role. In the economic dimension of public service, government should create a level playing field for enterprises that are the main body of the micro-economy and provide the infrastructures necessary for economic development.

Meanwhile, in the social dimension of public service, government should support social development projects in education, science and technology, culture, social security, public health, and environmental protection through transfer payments and fiscal means, and create a relatively fair starting point for all citizens to participate in market competition. If the government does not truly serve the people, and the public service is not in place to make up for market failure, how can we expect constant support for reform? How can the government claim that the market economy it is building is a good market economy? As mentioned earlier, it is far from sufficient to address only the relationship between government and market. The relationship between government and society is also crucial. We also need to focus on how to guide and form good social norms.

To sum up, the goal of governance reform is to build a limited government that is capable, accountable, effective, and caring. The realization of such a prospect depends on a sophisticated design of the institution. In a three-dimensional comprehensive governance framework embracing government, market and society, government as an institutional arrangement has very strong positive and negative externalities. It can make the market efficient, drive economic reform and development, promote social harmony and achieve development; yet it can also make the market inefficient, cause social conflicts and become a huge resistance. In this sense, the reform of government per se, especially the transformation of government functions, has become a key to and an important breakthrough point for deeper reforms.

IV. Conclusion

At the new historic starting point of the 40th anniversary of reform and

opening-up, it is necessary to review what China has been through and analyze the unbalanced, inadequate, and unsustainable development the country currently faces, especially the prominent problem of persistent rapid deceleration in economic growth. Furthermore, we need to explore paths for future reform. In order to achieve balanced, full and benign development along with sustainable economic growth, China should deepen the institutional reform, establish an inclusive modern economic system, and promote the transition from factor-driven to efficiency- and innovation-driven economic growth (for detailed discussion, see Tian and Chen (2016) and Tian (2017)). Meanwhile, to implement the promising blueprint for reform and development, it is necessary to strengthen state coercive capacity based on the rule of law, executive power and democratic supervision.

Government, market and society correspond respectively to the three basic institutions: governance, incentive mechanisms and social norms. This paper argues that the three subjects need to be dealt with properly within the modern state governance system. Among them, an appropriate role for the government is of utmost importance. Only when a limited government that is capable, accountable, effective, and caring is well in place can the relationship between government and market and between government and society be properly handled, thus contributing to the establishment of a good market economy and positive social norms. An inclusive economic system and government coercive power are prerequisites for benign development. This calls for a comprehensive institutional reform of state governance, market incentives and social norms.

References

Acemoglu D, and Robinson J A (2012). Why Nations Fail: The Origins of Power, Prosperity and Poverty. First Edition. New York: Crown.

Baumol W J (1990). Entrepreneurship: productive, unproductive, and destructive. Journal of Political Economy, 98: 893-921.

Cheremukhin A, Golosov M., Guriev S, Tsyvinski A (2015). The economy of People's Republic of China from 1953. NBER Working Paper No. 21397.

Hayek F A (1960). The Constitution of Liberty. University of Chicago Press.

Hurwicz L (1972). On informational decentralized systems. In: C. B. McGuire and Roy Radner (eds.), Decision and Organization: A Volume in Honor of Jacob Marschak, 297-336. Amsterdam: North-Holland Pub. Co.

Hurwicz L (1979). Socialism and incentives: developing a framework. Journal of Comparative Economics, 3: 207-216.

Jones C I (2015). The facts of economic growth. NBER Working Paper No. 21142.

林毅夫(Lin Justin Yifu) (2014). 中国经济增长的可持续性(Sustainability of China's economic growth). 新金融评论(New Finance Review), 3(4): 57-61.

林毅夫(Lin Justin Yifu) (2016). 中国经济下滑更多的是外部影响(China's economic deceleration is more of an external influence). 上海国资(Capital Shanghai), 4: 58-59.

Tian G (2000). Property rights and the nature of Chinese collective enterprises. Journal of Comparative Economics, 28: 247-268.

Tian G (2001). A theory of ownership arrangements and smooth transition to a free market economy. Journal of Institutional and Theoretical Economics, 157: 380-412.

田国强(Tian Guoqiang) (2017). 改革开放40周年再思考——平衡充分良性发展的制度逻辑(Rethinking on 40 years of reform and opening-up–institutional logic of balanced, full and benign development). 比较(Comparative Studies), 6: 174-198.

田国强，陈旭东(Tian Guoqiang, Chen Xudong) (2016). 中国改革：历史、逻辑和未来(China's Reform: History, Logic and Future). Beijing: CITIC Publishing Group.

田国强，陈旭东(Tian Guoqiang, Chen Xudong) (2015). 中国经济新阶段的发展驱动转型与制度治理建设(The transformation of the driving force for development and the construction of institutional governance at the new stage of China's economic development). 中共中央党校学报(Journal of the Party School of the Central Committee of the C.P.C.), 19(5): 71-81.

周哲(Zhou Zhe) (2016). 土地财政寻路(What's next after land finance). 财经(Caijing Magazine), (31) : 60-64.