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

Guoqiang Tian

Abstract: China's economic growth has been declining continuously and rapidly since 2011. It dropped to 6.7% in 2016, down more than 3% from nearly 10% of average growth rate during 1979-2010. As for its causes, there are two different interpretations among Chinese economists. One side, including Justin Yifu Lin, attributes the causes that are mainly external and cyclical. The other side, including me, believes the deceleration to the delay in the implementation of deep institutional reforms. An inclusive economy under the governance arrangement respecting the rule of law is essential for sustaining economic prosperity. China must further enhance economic inclusiveness, and promote its transformation into an efficiency-driven and innovation-driven economy through comprehensive marketization reforms. Meanwhile, it should build a limited government that is capable, accountable, effective and welfare-enhancing, leading towards the desired governance featuring the principle of the rule of law.

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

I. Introduction

The topic of session is important. China has made significant achievements in economic development over its four decades of economic reform and opening-up. However, it also faces problems of unbalanced, inadequate, and unsustainable development of the economy, society, culture, and ecology. One of serious symptoms is the rapid and continuous decline of growth rate since 2011. The average growth rate

[1]This paper is based on a debate and discussion between the author and Professor Justin Yifu Lin on 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.

in the past 30 years is close to 10%, and it has rapidly fallen below 10%, 9%, 8% and even 7%, with an average deceleration 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 at Shanghai University of Finance and Economics. Such a continuous deceleration to a rate less than 7% is abnormal. Since the reform and opening up, similar situations only occurred in special circumstances during the late 1980s and early 1990s. While we should not blindly pursue a high speed of growth, we must understand the causes of rapid deceleration. Economic development, after all, is the core solution to major social conflicts. It is thus necessary to figure out the causes, and adopt direct solutions.

I agree with some views of Justin Yifu Lin. For instance, the potential growth rate would be higher than 6%. However, we have different views on such issues as whether the government's role in the economy is limited or not, whether selective industrial policy or deep institutional reform is more important to China's economic development, and what are the underlying causes of growth deceleration. We differ sharply in interpreting the causes of deceleration. Many people, including Lin, believe they come from short-term, cyclical, external, and industrial factors. They hence suggest adopting short-term fiscal and monetary policies, and selective industrial policies. This point, along with government position and industrial policies, is the main controversy between Lin and me in the past two years. Some other people argue that there is a long-term cause and the new status quo 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 on the causes and countermeasures. According to the law of diminishing marginal productivity, China's economic growth has already exhibited a downward trend. Deceleration, nevertheless, should be a slow process – neither too fast nor too dramatic. It is abnormal to decline more than 3% in just a few years. Of course, I am not as optimistic as Justin Lin about China's economic growth rate. In 2008, he claimed that China could still grow with an over 8% annual growth rate for the coming 20 years. He is probably overoptimistic, and I think a growth rate of around 7% in nest five to eight years is possible. It is indeed technically possible to achieve an annual growth rate of over 8% in the next decade. In China, any single goal could be reached due to the government's unusually strong power of mobilization. The growth rate can reach 8% or even 10% if the government truly strives for it. The problem, however, is whether such a highly extensive and investment-driven economic growth is optimal, and whether it will cause greater risks.

In my opinion, institutional factors are far more crucial than any external and cyclical factors. There are two fundamental causes. One is the delay in transforming the driving force of economic growth. Any economic entity, from a developing economy to a developed economy, must go through three stages: from being factor-driven, to be efficiency-driven, and finally to be innovation-driven. The other one is the delay in establishing an inclusive modern economic system, which is due to the imbalanced and immature governance structure over the past few decades in China. As such, the delay in institutional reform is the mian underlying cause of the continuous and rapid growth deceleration. Deepening reforms will greatly reduce institutional barriers and costs, and will motivate individuals to work so diligently and creatively as to enhance efficiency and foster innovation. As China is still developing, it is highly possible that the economy will maintain a growth rate of over 7% in the next five to eight years. Of course, as social-economic stability and risk control are of the most priority importance, regardless of the causes, it is necessary to combine short-term policy countermeasures with medium and long-term governance reforms.

II. Causes of the Deceleration of China's Economic Growth: Institutional Factors vs External and Cyclical Factors

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

As mentioned above, Lin and among others believe in short-term factors that are cyclical, external, and industrial structure factors. Countermeasures he proposes are short-term fiscal, monetary, and selective industrial policies. He (2014, 2016) expressed his ideas in papers, and talked them in detail at this meeting. He advocates adopting “some counter-cyclical measures to stabilize economic growth”.

Although the growth deceleration is correlated with some external and cyclical factors, the major issue facing the China in transition is still the delay in transforming the driving force of economic growth and in building a modern market system. The former refers to the transformation from being factor-driven to be efficiency-driven and innovation-driven growth, while the latter refers to the unbalanced and inadequate development, behind which is the problem of an imbalanced governance structure. These two factors form the underlying institutional cause that makes China’s real economic growth slower than its potential growth. I demonstrate this point in three claims.

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

In recent years, the external factors affecting the continuous growth deceleration have not been significant. In the wake of the global financial crisis, all economies were impacted by the global economic environment and experienced a deceleration process. Fig. 1 shows the growth paths of top seven economies, including developing countries like China and India that are comparable and five developed countries. Since 2011, they all but China have begun to rise or fluctuate upward toward the balanced growth rates. China is the only one that has been consistently declining 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 path.

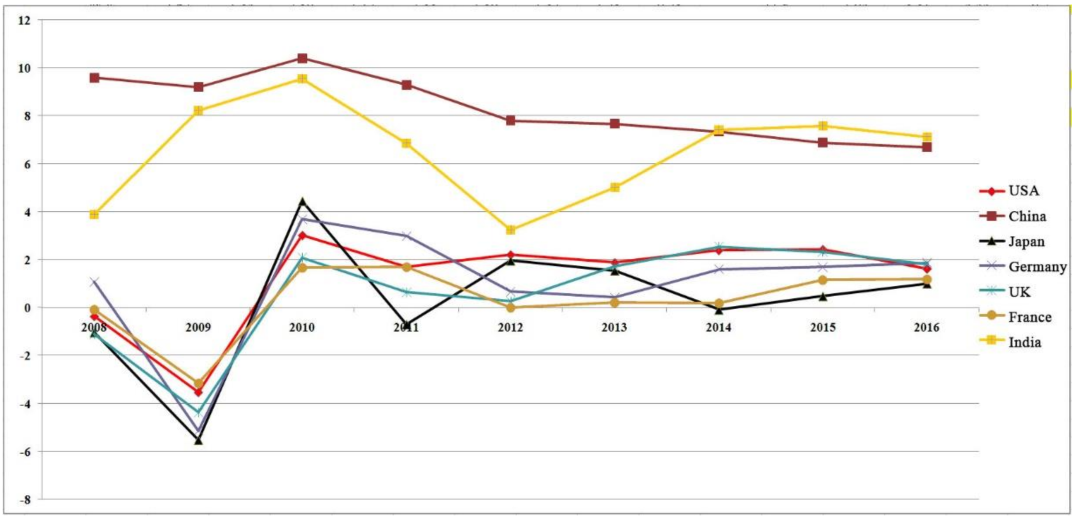

Fig. 1: Economic Growth in the World's Top Seven Economies Since 2008

Data source: World Bank.

Professor Lin claims that China has been mianly under pressure due to external economic deceleration. But, China was also under pressure during certain periods before the global economic crisis, such as the period during the 1998 Asian financial crisis and that right after the 2008 global economic crisis. Nevertheless, China's economy rebounded within a single year. Why did it not decline sharply as it did after 2011? Hence the causes suggested by Lin likely do not hold.

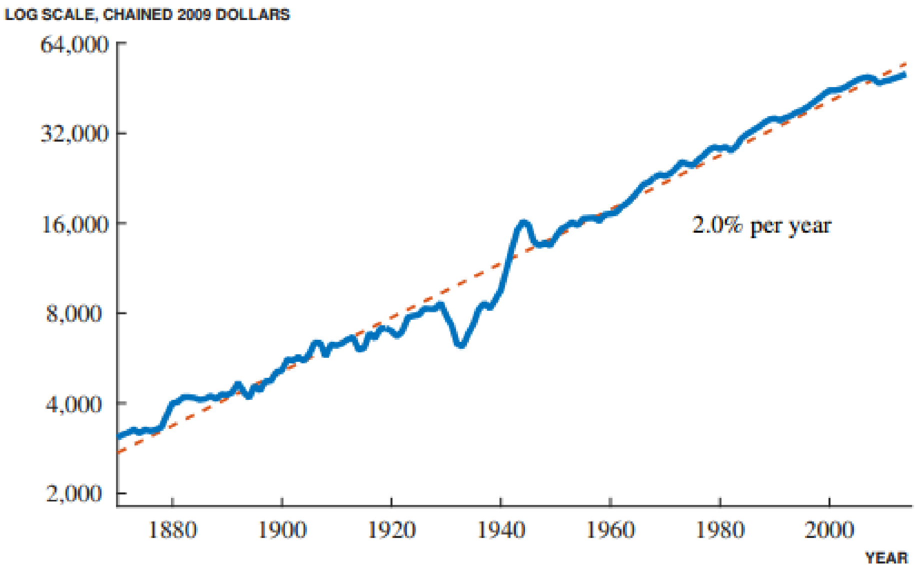

Fig. 2: GDP Per Capita in the US

Source: Figure 1 in Jones (2015).

As for balanced economic growth around the world, Jones (2015) shows that the average annual income growth per capita 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 growth rate is 2.5% at most. For instance, as shown in Fig. 2, the balanced economic growth rate in the United States is around 2%. Considering that the average population growth is 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? I think, although external and cyclical factors exist, they are not the main causes. This is one of the main significant disagreements between Lin and me in spotting symptoms and finding causes.

Are cyclical factors the main cause? They do not seem so either. It is difficult to judge the effects of cyclical factors over a short period of time. It would be much easier when viewed in the horizon of China's 40 years of reform and opening up. Fig. 3 shows that the most recent stint of growth deceleration is the longest one since enforcing 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 the balanced growth path. China reversed the deceleration last time by joining WTO, what can it do for this time?

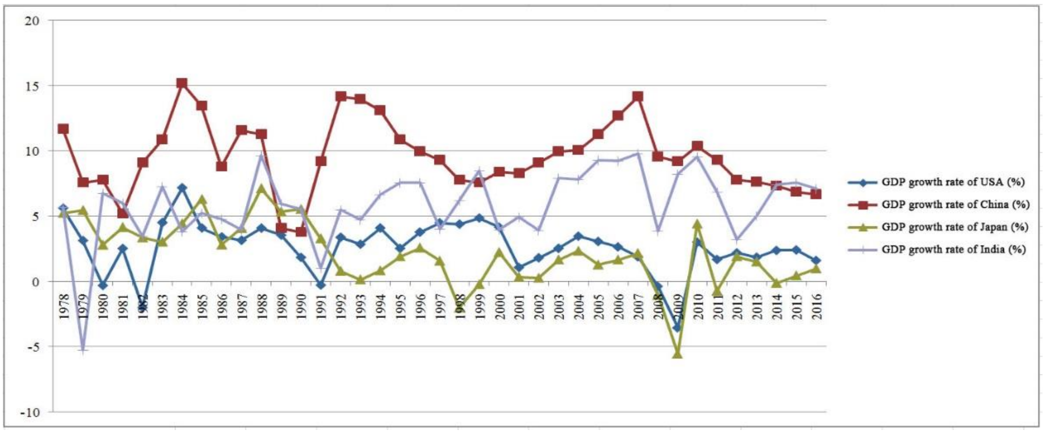

Fig. 3: Economic Growth of China, the USA, Japan, and India Since 1978

Data source: World Bank.

No matter China's economy is cyclically fluctuating or subject to external factors, the continuous and rapid growth deceleration has sustained for nearly 10 years, reaching a rate below 7% – an unprecedented situation since the reform and opening up. Of course, economic growth had been lower than 6% in the past (such as the period after the political turmoil of 1989), but it recovered shortly, in a year or two. However, it has not done so this time, while other economies have recovered to balanced growth. As is well known, economic cycle falls into three categories: long-term, short-term, and medium-term. What can we rely on to sustain a long-term economic cycle? The answer is deepening the reform and improving the institution. In an improved institutional environment, the economy can certainly do better. We never say that China ought to be the best. The best is simply an ideal benchmark. However, we can improve by learning from and comparing ourselves with the best. We all see that other developed economies recovered back on the balanced growth path, while China continues to decline. Is not it weird that after 10 years an economic cycle has not yet run its course? Other countries have improved significantly, why has not China, an open economy, done so? That is why I do not think the external and cyclical factors as the main causes.

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

The other six economies have recovered, why has not China recovered yet? The explanation 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 quality" of China's economy. In this sense, even if it was impacted by external factors, it could recover quickly if its internal quality is good enough. If we have to rank the institutional, external and cyclical factors in terms of importance, institutional factor would be the top one. Ultimately, the key is to improve the underlying institutional environment.

As for the cause of the growth deceleration, Lin and I hold quite different views. I think both the economic factor and the delay in institutional reform be relevant, whereas he denies the delay in reform as the major cause. In his view, compared with the economic environment in the 1980s and 1990s, there should be less systematic distortions, if not more so, and hence it does not make sense to blame the delay in reform and institutional obstacles for the economic downturn. This sounds plausible. However, he has confused the concepts of "total effect" and "marginal effect". In fact, it is not hard to explain. The marginal benefit of the reform and opening-up dividend (or reform dividend in short) induced by the market-oriented decentralization of power in the early and medium-term periods is so significant as to bring about rapid growth. Although the overall economic environment has been improved, the marginal benefit of the reform dividend will diminish significantly if the reform is not further deepened. The boundaries of the institutional barriers will be close to binding, whereby neither economic efficiency, potential productivity, nor total factor productivity can be improved, leading toward continuous economic deceleration.

Early in 2015, I pointed out in a paper entitled "China's Transformation of Driving Force for Development and Construction of Institutional Governance in its New Economic Stage" that the continuous deceleration is caused by the five factors. (1) Factor-driven dividend is deteriorating. (2) Government-led driving force is depleting. (3) The development model in which state-owned enterprises (SOEs hereafter) with over-capacity squeeze private sectors is unsustainable. (4) Severe shirking behavior widely exists in the government administration. (5) There are misunderstandings of the "new normal". Two years have passed, and these five factors persist due to the lack of deep reforms. Institutional problems retarding China's economic development have not been resolved from the root. Social conflicts become more severe and development is unbalanced and inadequate, leading China's real economy to be in plight.

1. The marginal product of factors has been diminishing, and the factor-driven dividend has caused the growth trend to move downward. It is not sustainable to drive growth by factors, especially by investment. Fig. 4 shows that the decline of the revenue will accelerate if we merely rely on fiscal policies and the increase of capital investment, resulting in high capital investments with low returns.

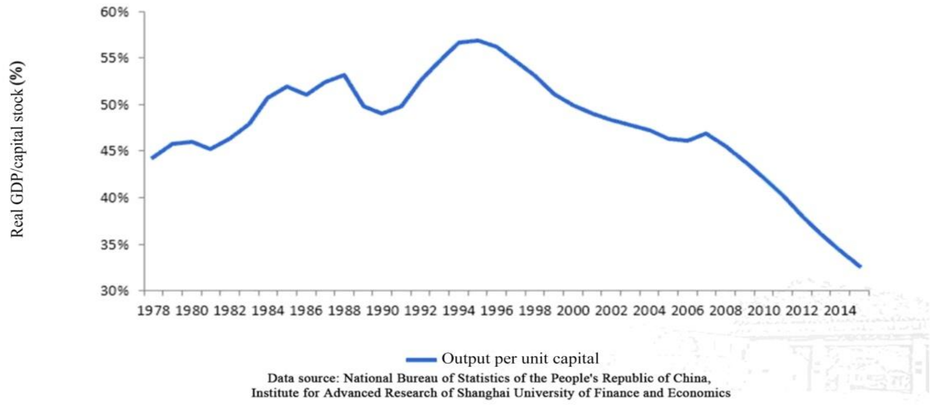

Fig. 4: Significant Decline in Marginal Return of Capital

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

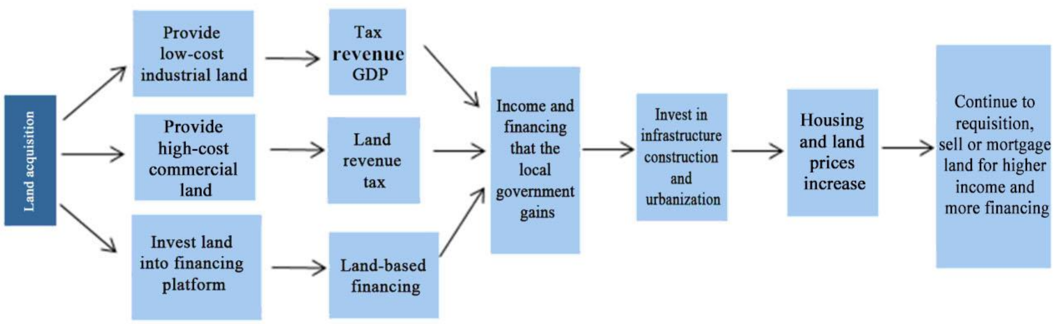

Fig. 5: Land Finance in China

Data source: See Zhou (2016).

The above two points, as two causes of the sharp deceleration, are that Justin Lin and I disagree over, and account for why we give different countermeasures. In terms of the third cause, my opinion is different from that of Lin either. To be specific:

3. Overcapacity of SOEs squeezes the private economy and hurts economic vitality. It is the fundamental cause of the large reduction in private investment, i.e., SOEs crowded out private enterprises in many areas. I do not know whether Lin agrees with this conclusion. He only talked about the overcapacity of SOEs, and did not say that this squeezed the private economy and thus hurt economic vitality. Economic growth data of various provinces in recent years shows that the greater the proportion of the state-owned economy, the weaker the private economy and the slower the economic growth. Such provinces suffer a faster growth deceleration, as seen in Liaoning, Heilongjiang, Jilin, and Shanxi. Taking advantage of easier accesses to energy and financial resources, SOEs often take too much factors of production. By contrast, small and medium-sized private enterprises are facing such problems as high financing costs and high production costs. Their development is severely impeded and there is no healthy market competition mechanism, leading to inefficiency and reduced economic vitality. They lack social financing and investment confidence. In fact, the substantial decline of investment from private sectors is the root cause of China's investment decline.

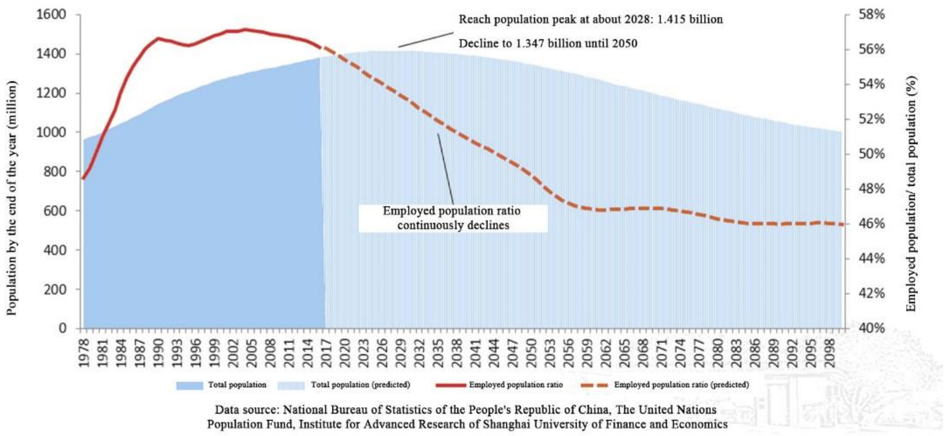

Fig. 6: The Proportion of Employed Population in China Continues to Decline

The first three are economic causes. Even with an initial 10% annual growth rate, as the marginal return of the reform is diminishing, it approaches the boundaries constrained by institutional obstacles, and these constraints are tightening. This in turn leads to continuous economic decline. Although Fig. 6 shows that there has not been a significant decrease in the marginal population of labor force, it is expected to decline sharply in the near future. There has been an obvious decline in marginal product of capital. This shows that it is unsustainable to rely solely on increasing investments of such factors as capital and labor. As such, I do not think economic growth rate be maintained above 8% by relying solely on government investment. Even if it happens, it will 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 financing. As shown in Fig. 5, firstly, they provide low-cost land for industrial and manufacturing use and promote economic development through tax revenue. Secondly, they provide land for commercial and business facilities at high prices and obtain local finance. Thirdly, they use land as mortgage, which is unsustainable. Government should play its role in case of market failure, but not intervening market directly. However, as the government is development-oriented rather than service-oriented, it does not fulfill its role, resulting in major problems in very high saving rate and social welfare as such raising children, senior care, health care, housing, and education. Eventually, precautionary savings are excessive and consumption motives are greatly suppressed.

4. The government lacks goal management, leading to official inaction and shirking of responsibility. The government is closely connected with the economy, and political and commercial relations are inseparable. Once the government lacks goal management, it will seriously affect economy. Indeed, conducting projects and approving documents are two of the government's major tasks. Excessive government intervention has distorted market incentives, resulting in government failures without being able to correct market failures. The government still has too much power in approving procedures, projects, and the market access to economic activities. There is a long way to go before transforming its function to be maintaining market principles and be a service-oriented limited government. The efficiency of government (regardless of whether the affairs are within their functions and duties) is crucial for development, including economic development. Once the enthusiasm of government officials is negatively affected, the growth momentum will be weakened, further aggravating the plight of the real economy.

I would like to emphasize that here a limited government is defined as being service-oriented and dedicated to maintain market principles. However, the meaning and boundary of protections and services need to be defined and clarified according to institutional environments. There might be significant differences. For example, even western developed countries have not been the "night-watchman" governments as described in Friedrich Hayek's book entitled *The Constitution of Liberty* (1960). China, as a transitional country, is still in the process of establishing a modern market system. The government thus should play a more positive role in incentivizing individuals, implementing appropriate macro policies, and guaranteeing market efficiency.

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. It is actually not. Any developing economy that has not achieved balanced growth can have a relatively high growth rate. China's economy is still a developing one, like a rising rocket, a plane at take-off and a young man that is growing up. It is not the same as the balanced flying status 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 different benchmarks, it is a wrong comparison, though China's economic growth will eventually slowdown. The paper presented by Xiaodong Zhu at this session claims that more deceleration will occur, and deepening reform is the solution. I hold exactly the same view. As I will analyze in what follows, whether we deepen the reform or not makes a big difference.

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

The five causes can be further summarized into three structural imbalances: 1) imbalance in the economic structure (demand, industry, market structure, imbalance between the virtual and real economy, and delay in transforming the driving force of development); 2) imbalance in the institutional structure (overemphasizing government function while underemphasizing market function, resulting in overemphasizing national income while underemphasizing household income, and overemphasizing growth while underemphasizing service, the logic of development is misleading); 3) imbalance in the governance structure (the seriou wealth inequality, weak consensus on further reform, governance in an oversimplified and crude way, an increase of social conflicts, deterioration of the ecological environment, the big gap between central decision-making and local/departmental implementation, and the failure of governance logic).

These three structural imbalances have brought about serious problems, raising institutional transaction costs. Within such institutional environment, it is difficult to further motivate individual efforts and innovations. This has resulted in unbalanced, inadequate, and unsustainable economic and social development and the failure to further improve total-factor/potential productivity. The roles of short-term stimulation of fiscal and monetary policies and selective industrial policies are limited, and stimulus policies are only palliative against these institutional obstacles.

Claim 3: Whether the reform is carried out and in place matter 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 can be adopted makes a big difference, which was evidenced in China. At the beginning of 1980, 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 must grow from 4% to over 7% for twenty years. Such a high goal seemed impossible back then at all. However, institutional reform is magic, the goal was exceeded. By making the shift from a command economy to a market-oriented economy, China went far beyond this goal. This is a conclusion that has been tested and verified by practice repeatedly in China. The results of quantitative analyses tell us there will be a similar story about future economic growth and development.

Cheremukhin, et al. (2015) analyzed the factors contributing to China's economic growth from 1953 to 2012 in their 2015 NBER working paper entitled "The Economy of People's Republic of China from 1953". They forecast the economic growth during 2012-2050 by using the "wedge method", identifying the areas with most distortions. Predictions and comparisons are based on the contribution of each factor before and after the reform and opening-up. The conclusion is that the reform has contributed a lot to China's economic growth. As shown in Table 1, the annual growth rate might show a gap of almost 3% during 2012-2024, and over 4% in the 30 years before and after the reform and opening-up. The macro-economic project conducted by the Institute for Advanced Research at Shanghai University of Finance and Economics made the same prediction. Two dimensions of reform have a significantly positive impact on economic growth: one is the urban-rural reform and the other is SOE reform.

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

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

Facing these institutional obstacles to economic growth, while short-term fiscal and monetary stimuli and selective industrial policies are not completely ineffective and unnecessary, their effects are limited, and stimulus policies are only palliative. If the above five causes and misunderstandings are not solved, then the economy shall continue to fluctuate as the policy tightens or loosens. It actually falls into a cycle between economic chaos whenever loosening interventions and economic failures whenever tightening interventions, a bad phenomenon repeatedly seen in the past few decades. The fundamental breakthrough comes from promoting quality, efficiency, and driving- force reforms, raising total-factor productivity, and establishing a modern economic system. China needs a comprehensive package unifying reform, development, stability, innovation, and governance. While short- and medium-term policies and transitional institutional arrangements are in need, it is more essential to deepen the reform of long-term governance so as to eventually establish a limited government thought to be capable, accountable, effective, and welfare-enhancing, and achieve modernization in state governance.

In particular, one should not interpret the marketization-oriented reforms emphasized here as any radical reforms. To accomplish something, we should distinguish clearly between the goal and the process. The goal is unwavering, but the process may be revised with implementing alternative transitional institutional arrangements.

III. Deep Institutional Reform as the Key to Benign Development

Based on the above analysis, how can China achieve sustained growth and benign development? The solution is to deepen reforms to remove institutional obstacles and combine short-term policies with long-term governance reforms. Deep institutional reforms have three major goals. The first one is to establish an inclusive modern economic system. The second one is to strengthen the rule of law and the state coercive capability. The third one is to establish good social norms and a good social order under a harmonious and effective social governance system. The first two are crucial for achieving sustainable economic growth, which will be the focus of our discussion in the next part of the paper. The third point is also an indispensable part of the modern state governance system.

Acemoglu and Robinson (2012) emphasized the importance of an inclusive economic system to economic growth. I agree with this view, but an inclusive economic system is only a necessary condition. If a country implements an extractive other than inclusive market mechanism, its economy will certainly be unsustainable. Looking back into China’s history, the Rule of Wen and Jing in the Western Han dynasty, the Flourishing Kaiyuan Reign Period and Zhengguan Reign of Taizong in Tang dynasty, and the Kang-Qian Flourishing Age in Qing dynasty all happened when the emperors adopted relatively inclusive economic policies to reduce corvée labor and taxes. Acemoglu and Robinson believe it should hold true only for the democratic and free countries in terms of political system. I, however, cannot completely agree with this view if just in term of economic growth. China had been a feudal society for more than two thousand years, and it topped the world in gross output and GDP for most of the time until nineteenth century, but the feudal dynasties were by no means democratic, nor were their governance based on the rule of law. They relied on top-down authority and coercive ability of the 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 nation coercive capability. In addition, their economic systems are relatively inclusive (China is so only after reform). They, as a result, are among the largest economic and political powers in the world. China has made great achievements in the past decades, which serves as a strong proof of the guidance of Deng Xiaoping: “development is the fundamental principle” and “stability is the top priority”. In general, for the most of the past two thousand years, China was one of the richest countries in the world thanks to a good balance between the economy and the state. Of course, China’s feudal dynasties did not solve the stability issue and achieve long-lasting peace and stability. Constant changes of dynasties resulted in huge losses of property and population of the Chinese people. We, therefore, cannot claim that such a feudal system was really a success. In this sense, political reform is necessary for China.

Both economic inclusiveness and the enforcement of the rule of law are a demonstration of a country’s implementability. In the mechanism design theory proposed by Hurwicz (1972, 1979), the “implementability” is treated as being equivalent to incentive compatibility. It may be interpreted as a soft implementation respecting reasonable human desires. By contrast, coercive capacity is rigid implementability, which is measured in terms of respecting the principle of rule of law. If “the carrot and the stick” strategy can be used in combination with an inclusive and harmonious society, namely enlightening people with reasoning, incentivizing people with benefit and treating people with empathy, then almost sufficient conditions for the success of a country are obtained. In sum, an inclusive economic system subject to incentive compatibility and an authoritative government under the principle of rule of law are the necessary conditions for benign socio-economic development and the overall success of a country. This logic may help to explain the success of a country and a dynasty at all times and all over the world. Basically no country has succeeded if either of these two prerequisites is absent. Therefore, the sustainable growth and benign socio-economic development of China depends on promoting reforms in the following two aspects.

3.1. Further enhancing economic inclusiveness and promoting a shift towards efficiency-driven and innovation-driven development

Looking ahead to the future, China should establish a modern economic system that allows the market to play a decisive role in resource allocation, promote the transformation of the economy from being factor-driven to be efficiency-driven and innovation-driven, and raise total factor productivity via boosting quality, efficiency, and driving-force reforms. Efficiency-driven development is the foundation of innovation-driven development. To achieve efficiency-driven development, the market should play a decisive role in resource allocation and the government should perform reasonably well. Reform can be complicated but we can start from such sectors as the private economy, financial market and land market. To invigorate these sectors, private enterprises should be encouraged to exploit their great advantages and motivation in innovation, and issues including factor-market distortions call for urgent attention. Specifically, what truly matter are the equal treatment to private enterprises, the liberalization of financial market, and the marketization of land sales.

No matter the economic development is driven by innovation, it is based on the decisive role played by the market and the key role played by entrepreneurs. While people may recognize the importance of entrepreneurs and entrepreneurship, they not recognize the underlying institutional basis breeding entrepreneurs and entrepreneurship. Innovation and development need institutional guarantee. Entrepreneurs and entrepreneurship do not appear spontaneously, and institutional innovations provide strong support for the occurrence. Entrepreneurship is a derivative and superficial system, and it must be built on a basic meta-system and requires a good institutional environment as a prerequisite. For example, entrepreneurs and entrepreneurship barely emerge in SOEs. Even though all private enterprises pursue material gains, their willingness on innovation depends on the basic market system, which should be a level playing field with no bad interferences from the government.

Technological innovations are based on institutional innovations. These two kinds of innovations are like an action-reaction pair. A good system can reduce the transaction costs of innovation activities, create conditions for cooperation, provide incentives, 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 innovation elements. Indeed, Baumol (1990) extends Schumpeter's innovation theory and argues that innovation and entrepreneurship depend on institutional environments, and are therefore endogenous variables. If the rule of game that affects the choice of entrepreneurial behaviors is abnormal or destructive, innovation and entrepreneurship can not be given full play.

Market competition and enterprise innovation are inseparable. Indeed, competition results in profit decline. The fiercer the competition, the faster the corporate profit declines. This provides enterprises with strong incentives to innovate for the sake of survival. Innovating enterprises may gain a monopoly position that implies monopoly profits, which will attract more enterprises to participate in the competition. Thus, the repeating cycle of "competition → innovation → monopolistic profits → competition" is formed. Under this dynamic game, the market maintains its vitality, leading to economic development. It is private enterprises, rather than SOEs, that are the main body of innovations, especially of technological innovations. The key to shifting China's economy towards innovation-driven development is thus the thriving development of the private economy. Tian (2000, 2001) showed that the final stage in the smooth transition of China's economy must be a privatization reform, which is a prerequisite for balanced, adequate and sustainable economic development. The success rate of innovation is lower than 5%, and SOEs are not equipped with the courage to take a risk.

In general, a fundamental meta-system, such as the establishment of modern market systems, conducive to innovation is of key importance. China should try to form an institutionalized and benign feedback mechanism in the economy, which guarantees the basic innovation motivation of enterprises. To be more specific, a desired 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 some 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 cannot regard them as fixed. Therefore, the new system should be designed according to change in institutional environment. It should be flexible in terms of time, place, people, and matters. We should never rely on pure imagination with disregarding the changing circumstances. Evolution and design can thus form a dynamic coupling.

3.2. Respect the principle of the rule of law in governance, and build a limited government that should be capable, accountable, effective, and welfare-enhancing

The socio-economic benign development of China requires a healthy market economy, good social norms, and the proper positioning of the government. Indeed, the government is constrained by information asymmetries, and hence it cannot be capable on all matters and thus must have a proper and rational self-positioning. I recently proposed that there should be a limited government that should be capable, accountable, effective and welfare-enhancing, playing a role of maintaining rules and providing public services. Briefly, “capable” mainly refers to the government’s execution ability, “accountable” means that the government should take on its responsibility within its capacity, and “effective” refers to the efficiency of government administration. These three points are the potential solution to handling the relationship between government and market, with the aim of building an efficient market. “Welfare-enhancing” means handling well the relationship between government and society.

The “limited” requirement means letting the existing market do its job where it can do well, and letting the government play its role only when the market cannot do well. The government must clearly identify its scope of governance. Many people oppose the idea of a limited government and believe the governing scope should be unlimited. This will result in bigger and more serious government failures, and will prevent the market from playing a good role. Many people who over-emphasize the role of government fail to fully realize the corresponding dangers. The basic meaning of a limited government is that the market should play a decisive role as long as it can be efficient. Only when the market fails should the government step in. Therefore, the scope of a limited government should be basically confined to the complementary role of maintaining rules and providing public services.

People have various misunderstandings regarding the concept of limited government and simply interpret it as the role of “night watchman” à la Hayek under any circumstances. To avoid such misunderstandings, I should emphasize that the specific functions and contents of the maintenance and service from a limited government can be different in different stages of economic development and across different institutional environments. For example, in the most ideal case, the scope of a limited government is the smallest and the government plays the role of “night watchman”. However, for developing economies, especially for those transition economies, the market is not yet mature 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 the market failure caused by government distortions, and the government fails to withdraw from intervening. In neither case can an efficient market come into being.

The government usually needs to play a bigger, better, and more executive role than does the “night watchman”. For instance, it is the government that initiates and dominates the reform, establishes and improves a market system conducive to economic development, entrepreneurship and innovation, provides industrial policies (also known as functional industrial policies) to improve the market function, and provides special policy support for some emerging industries (moderately-selective industrial policies). The government does so due to the fact that a developing country or a transition economy has not yet formed an efficient market. Then, the government should play a more active role in providing protections and services. Of course, it should fulfill its duty through the establishment of institutions rather than through direct intervention in the economy. As such, limited governments – especially the one in the process of transition and the one that serves as a “night watchman” – might differ a lot from each other. Though they all play the role of providing protection and services, they vary a lot in the connotation, goal, task, and intensity.

Despite of differences in economic environment and development stage, and thus variations in the connotation and scope of a limited government, the role of protecting rules and providing services is common. The government should be also “accountable” and “capable” where it should step in. It should build a strong state capacity. That is, it should be able to transfer the national willpower and goal into actual execution. The implementability and authority of the government are also important for the benign development of the economy and society. Implementability can be reflected in two ways. One is embodied by an incentive-compatible system with inherent incentives. It is a self-enforcing, flexible (as “carrot” policies), and implementable institutional arrangement, which mainly covers economic institutions such as a benign market institution. Another kind of government implementability comes from government authority, which is guaranteed and driven by compulsory power. It exhibits as governing the country based on the rule of law, strictly enforcing rules, regulations, and policies, and playing a good and strict role in protection, such as protecting social order, free choice and property rights, and service, and it is also a major factor determining 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 made in China’s economic reform is that the government has strong coercive power. This shows the government’s governing capacity, and can guarantee political and social stability as well as the smooth implementation of government policies.

In addition, the government must also be welfare-enhancing, which is about 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 handle well the relationship between the government and society. To this end, there must be a shift from the development-oriented government that seeks gains at the people's expense to an inclusive government that serves public interest. The government should try its best to minimize its own role as an economic man, expand the scope and intensity of public services, and correct market failures until there is no missing role. In the economic dimension of public service, the government should create a level playing field for enterprises who are the main body of the micro-economy and provide the infrastructures necessary for economic development.

Meanwhile, in the social dimension of public service, the government should support social development projects in the fields of 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 the citizens to support the reforms in the long run? How can the government claim that the market economy under construction is a good thing? As mentioned earlier, it is far from being enough to only discuss the relationship between the government and the market. The relationship between the government and society is also critical. That is, we also need to focus on how to guide and form good social norms.

To sum up, the goal of governance reform is a limited government that simultaneously should be capable, accountable, effective, and welfare-enhancing. Its realization depends on a sophisticated design of the institution. In a three-dimensional comprehensive governance framework including the government, market and society, the government, as an institutional arrangement, has very strong positive and negative externalities. It can make the market more efficient and be a driving force promoting economic reform and development, and can promote social harmony and achieve benign development; yet it can also make the market inefficient, cause social conflicts and become a huge resistance. In this sense, the reform of governance per se, especially the transformation of government functions, has become the 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 had been through in the past, and to scientifically analyze the unbalanced, inadequate, and unsustainable development the nation faces, especially the prominent problem of the continuous rapid deceleration in economic growth. Furthermore, we need to explore possible paths for future reforms. In order to achieve balanced, adequate and benign development along with sustainable economic growth, China should deepen the institutional reform, establish an inclusive economic system, and promote the shift from factor-driven to efficiency- and innovation-driven economic growth (for detailed discussion, see Tian and Chen (2016) and Tian (2017)). Meanwhile, to promote the implementation of the promising blueprint for reform and development, it is necessary to strengthen state capacity based on the rule of law, executive power and democratic supervision.

Government, market, and society corresponds, respectively, the three basic systems: governance, incentive mechanisms, and social norms. This paper argues that the three subjects need to be dealt with correctly within the modern state governance system. Among them, the proper positioning of the government is of utmost importance. Precisely, only when a limited government that should be capable, accountable, effective, and welfare-enhancing is in place can the relations between government and market and between government and society be properly handled, contributing to the formation of a good market economy as well as good social norms. An inclusive economic system and the government's coercive power are prerequisites for benign development. This calls for a comprehensive 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,* Volume 98, 893-921.

Cheremukhin, A., Golosov, M., Guriev, S., and 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 *Decision and Organization*, Radner, R. and C. B. McGuire, eds., in Honor of J. Marschak, North-Holland, 297-336.

Hurwicz, L. (1979). "Socialism and Incentives: Developing a Framework," *Journal of Comparative Economics,* Volume 3, 207-216.

Jones, C. I. (2015). "The Facts of Economic Growth," NBER Working Paper No. 21142.

Lin, J. Y. (2014). "Sustainability of China's Economic Growth," *New Finance Review*, No. 4, 2014.

Lin, J. Y. (2016). "China's Economic Deceleration is More of an External Influence," *Capital Shanghai (Shanghai Guozi),* No. 4, 2016.

Tian, G. (2000). "Property Rights and the Nature of Chinese Collective Enterprises," *Journal of Comparative Economics*, Volume 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,* Volume 157, 380-412.

Tian, G., (2017). "Rethinking on the 40th Anniversary of Reform and Opening Up - the Institutional Logic of Balanced Full Benign Development," *Comparative Studies (Bijiao Magazine),* Volume 6, 2017.

Tian, G., and Chen, X. (2016). *China's Reform: History, Logic and Future*. Beijing:

CITIC Publishing Group.

Tian, G., and Chen, X. (2015). “China’s Transformation of Driving Force for Development and Construction of Institutional Governance in its New Economic Stage,” *Journal of the Party School of the Central Committee of China Communist Party,* No. 5, 2015.

Zhou, Z. (2016). “Thinking on Land Finance,” *Caijing Magazine*, No. 31, 2016.