<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Editorial advisory board</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The principal contradiction and its evolution in the new era of the socialism society with Chinese characteristics: from the perspective of the Marxist political economy methodology</td>
<td>Xinghua Wei</td>
</tr>
<tr>
<td>13</td>
<td>The major innovations of Chinese economic development theories in the new era</td>
<td>Yinxing Hong</td>
</tr>
<tr>
<td>30</td>
<td>Combining Marxism and China’s practices for the development of a socialist political economy with Chinese characteristics</td>
<td>Wei Liu</td>
</tr>
<tr>
<td>45</td>
<td>Nationality and internationality of the Socialist Political Economy with Chinese Characteristics</td>
<td>Jinju Pang</td>
</tr>
<tr>
<td>55</td>
<td>Economic theory innovation and China’s development practice</td>
<td>Taiyan Huang</td>
</tr>
<tr>
<td>67</td>
<td>On the organic combination of public ownership and market economy</td>
<td>Yu Zhang</td>
</tr>
<tr>
<td>84</td>
<td>The fiscal system of China under the New Normal: trends and changes</td>
<td>Peiyong Gao and Jiang Zhen</td>
</tr>
<tr>
<td>100</td>
<td>Determinants of China’s structural change during the reform era</td>
<td>Kaiming Guo, Jing Hang and Se Yan</td>
</tr>
<tr>
<td>120</td>
<td>Supply-side structural reform and the transformational development of China’s foreign trade</td>
<td>Erzhen Zhang and Xiang Dai</td>
</tr>
<tr>
<td>130</td>
<td>Das Kapital and political economy in the broad sense: a review on Wang Yanan’s research</td>
<td>Lu Jiang and Yang Ge</td>
</tr>
<tr>
<td>136</td>
<td>How does the urban—rural income gap affect the quality of China’s economic growth?</td>
<td>Baoping Ren and Xiaojing Chao</td>
</tr>
</tbody>
</table>
China Political Economy focuses on the crucial theoretical and practical problems China faces in the process of reform, transition, and development. CPE welcomes papers which explore China’s economic transition and development, its differences to western countries and cultures and the influences of China’s economy on the wider global economy.

The target audience of the journal are economic scholars; government officials and entrepreneurs who are interested in China’s economic problems. The journal serves as a platform for scholars sharing ideas, a reference for governors making decisions and a source for entrepreneurs generating innovative concepts.

The research areas that the journal will focus include China’s Economic System Reform, China’s Macro-economy, Industry Organization, Financial and Capital Market, Enterprise Strategies and Behaviours.

Guidelines for authors can be found at: www.emeraldgrouppublishing.com/services/publishing/cpe/authors.htm

Ren Baoping  
Northwest University, China

Shen Kunrong  
Nanjing University, China

Tian Guoqiang  
Shanghai University of Finance and Economics, China

Zhang Yu  
Renmin University of China, China

© School of Economics, Nanjing University

Emerald Publishing Limited  
Howard House, Wagon Lane, Bingley BD16 1WA, United Kingdom  
Tel +44 (0) 1274 777700; Fax +44 (0) 1274 785201  
E-mail emerald@emeraldinsight.com

For more information about Emerald’s regional offices please go to http://www.emeraldgrouppublishing.com/offices

Emerald is a trading name of Emerald Publishing Limited

Printed by CPI Group (UK) Ltd, Croydon, CR0 4YY
MISSION STATEMENT

China Political Economy is a new international academic journal founded by the School of Economics at Nanjing University, China. The inaugural issue will be published in June 2018.

Political economy, especially socialist political economy, represents mainstream economic thought in China. Every step of progress in China’s economic reform and its opening-up over the past forty years is derived from the intellectual accomplishments of major theoretical studies in the field of socialist political economy. A thorough understanding of Chinese political economy would thus enable us to understand accurately the course of China’s economic reform and future development. Entering the new era of growth, Chinese political economists bear the historical mission to establish socialist political economy as a significant academic discipline with distinctive Chinese characteristics. Therefore, the study of new ideas and thoughts in the political economy of Chinese socialism makes it possible to identify emerging trends in China’s economic development in the new era.

The journal China Political Economy aims to provide a global outlook and an open-minded forum for the study of critical issues in economic theories and practices, arising from the emerging course of China’s economic reform, transition and growth. It will present readers throughout the world with the development of and innovative research in economic studies in China’s new era, recording and reviewing the theoretical contributions made by Chinese economists.

The journal will focus on themes featuring China’s concerns on the global stage while being inclusive with the unique positioning of Chinese views. The critiques and analysis presented will be deeply rooted in China’s realities while drawing on international experience, examine history with an eye to contemporary issues, and take in the fate of mankind while turning an intelligent face toward the future. The contributors and editors of China Political Economy will strive to develop the journal into a world-class academic periodical with a distinct Chinese style and ways of thinking to enhance the development of Chinese economics and further introduce it to international academic circles. The journal will help the world better understand China, especially its growth and openness, and make contributions with a distinctly Chinese perspective to the progress of our globally interconnected human community.

We welcome high-quality manuscripts submitted by both Chinese and overseas scholars, representing outstanding and well-documented research outcomes. Articles published in the journal are selected through a fair and rigorous peer-reviewing process. Submissions must be original and theory-oriented, reflecting current academic trends while providing in-depth studies and insightful analyses of China’s economic realities that shed light on the country’s unique challenges.

The journal will contain featured articles and forums on topics such as theoretical research on political economy, reform and development of the Chinese economic system, macroeconomic operations in China, and studies of business organizations, finance and capital markets, enterprise strategy and corporate behaviors as well as the relationship between China’s economic opening-up and the global economy.

While published in English, the journal will accept manuscripts submitted in Chinese or English. For accepted Chinese-language manuscripts, the editorial board will render professional translations into English so that Chinese scholars can share their findings and arguments with readers throughout the international academic arena.
The principal contradiction and its evolution in the new era of the socialism society with Chinese characteristics

From the perspective of the Marxist political economy methodology

Xinghua Wei
School of Economics, Renmin University of China, Beijing, China

Abstract
Purpose — Marx suggested that it is infeasible and wrong to arrange the economic categories according to the order by which they have worked in history. Their order is determined by their interrelationship in the modern bourgeois society, which is in contrast to their natural sequence or that which is in accordance with the course of history. Sometimes, a logical sequence is precisely opposite to the historical sequence. There are many efforts to be done in the study of China’s economic and social issues with Marxist logical and historical methods. The paper aims to discuss these issues.

Design/methodology/approach — When reading Das Kapital, we can clearly see the historical materialism methods. Another method of Marxist political economics is the scientific abstract method.

Findings — This is based on the new development idea to carry out scientific and technological innovation and change the focus of development from quantity to quality. With regard to the supply side structural reform as the main focus, people’s ever-growing demand for a better life can be satisfied and the higher level dynamic supply–demand balance can be kept.

Originality/value — In fact, measures to remedy unbalanced and inadequate development of the social principal contradiction have been plainly indicated in the report delivered at the 19th National Congress of the Communist Party of China. This is based on the new development idea to carry out scientific and technological innovation and change the focus of development from quantity to quality.

Keywords — Political economy, Historical materialism, The new era of socialism with Chinese characteristics, The principal social contradiction

Paper type — Research paper

1. The methodology in the Marxist political economy

The political economy methods are crucial components of the Marxist political economy and they are keys to the door of this scientific theory system. The thinking methods of the dialectical materialism and the historical materialism, as well as the scientific abstract methods are demonstrated in Das Kapital and Marx’s other books on economics. When reading Das Kapital, we can clearly see the historical materialism methods. In the preface to the first edition of Volume 1 of this book, Marx stated, “To prevent possible misunderstanding, a word. I paint the capitalist and the landlord in no sense couleur de rose [i.e. seen through rose-tinted glasses]” (Marx and Engels, 2009). What is the reason for this statement? What may cause possible misunderstandings? At that time, there were different...
factions among workers who joined labor movements. Some petty bourgeois socialists did not regard the existence and development of the capitalist exploitation system as a historical necessity of social development, but cursed the capitalists due to their lack of rationality. Engels stated in his book review on the first volume of *Das Kapital* that Lassalle’s socialism only lies to revile capitalists. This shows a divergence of opinions. Marx has clearly pointed out the historical necessity of the capitalist production stage (Marx and Engels, 1982). This book explains in depth the class antagonistic relationship in which the capital exploits the surplus value of labors, but it did not insult and condemn capitalists. Marx stated, “My standpoint, from which the evolution of the economic formation of society is viewed as a process of natural history, can less than any other make the individual responsible for relations […]” (Marx and Engels, 2009). In other words, since the emergence and development of capitalism are an objective and inevitable historical process, capitalists and landowners in capitalist countries should not be accountable for the exploitation of labor. The Communist Manifesto also affirmed the revolutionary role of the bourgeoisie in their anti-feudalism and their historical role in developing their productive force. Another statement in *Das Kapital* said that methods used by the capitalists in extracting surplus labor are of their own traits and are more progressive than that of slavery and feudalism. There are three points covering its superiority. First, methods used by the capitalists for extracting surplus labor are good for the development of productivity. Second, it is conducive to the development of social relations, which not only means the improvement of capitalist productive relations but also the emergence of new relations in capitalism. Marx described the new capitalist shareholding system and the workers’ cooperatives as the aufheben of capitalism within the capitalist system and regarded the shareholding system as a transition point toward socialism. Today, new social relations have been further developed in the contemporary capitalist countries and some new phenomena that Marx has not foreseen have appeared. Capitalism witnessed by Marx was unplanned. After the Second World War, many capitalist countries were also engaged in economic planning, shortened labor time, and established a more systematic social security system. From Marx’s point of view, these new developments are not going further from socialism but closer to it. It can be said that there is further aufheben of capitalism in the emerging capitalist system and it is the new transition points toward socialism. These are explanations of Marx’s two points about capitalist advantages on social productivity and social relations. The third merit is that it can provide social conditions for the new social system. The growth of capitalism has provided socialism with materials and social conditions. Compared with exploitation systems such as slavery and feudalism, in the view of historical materialism, capitalists still exploit surplus value but it is more progressive than in old systems. However, some scholars have misinterpreted viewpoints of historical materialism. They believe that if some social systems, including exploitation systems, are inevitable and determined by the conditions of productivity at that time, they are reasonable, fair, and just. This is wrong. The true content of historical materialism should be understood. Marxism holds that moral principles cannot be used to illustrate the course of social and historical development. The system of exploitation is not a result of the exploiting class’ lack of ideas such as morality, justice, fairness, but it is a historical inevitability, which is in line with the law of economic development. It can only be explained by one law that productivity determines production relations, and production relations adapt to the development of productive forces. However, the exploiting class and their scholars consider the system to be reasonable and fair natively. Some scholars who claim to be Marxists regard this defensive view as a Marxist opinion. In Chinese theoretical circles, there are many misunderstandings on the viewpoints of Marxist historical materialism.

As is known, Marxist historical materialism regards the development of social history as a natural historical process that is objective and inevitable. Moral principles cannot be used
to explain the existence and changes of certain social systems or to explain the emergence of the exploiting system. Exploiting a system’s emergence is a necessary course and it is not due to the lack of moral principles. Under different systems and in different historical eras, different classes have their own standards for fairness and value. In a slave society, even Aristotle, a famous scholar, believed that the slave system was reasonable and fair, let alone the slave-owner class. Under the capitalist regime, bourgeoisie and its defense scholars certainly consider their system to be the most reasonable and fairest one. Even some working class people think the capitalist system is reasonable and fair because it is the capitalist who feeds them. Each ruling class has its own principle of fairness, which will become the dominant view of its society. However, the exploiting class ideology and principles of fairness cannot be regarded as those of Marxism. They must be clearly separated. Marx praised capitalism for its development of productivity and its progress compared with slavery and feudalism while he also exposed the essence of the capitalist exploitation system, especially the brutal exploitation system from over a century before. When discussing the primitive accumulation of capital, the enclosure movement in British history must be remembered. Capitalists drove out farmers, turning their land into pastures and forcing these landless farmers to become wage-earners. Primitive capital accumulation is written in history with blood and fire. Marx and Engels never said that the system of capitalist exploitation is reasonable, fair, or just. Instead, they hold a critical attitude on it. However, some scholars in China publicize bourgeoisie’s defense viewpoints that were criticized by Marx and Engels, proclaiming them as Marxist historical materialism. Once, Engels bitterly attacked this point and he said, modern capitalists are like slave owners and feudal masters, relying on the possession of other people’s unpaid labor to make a fortune. In this way, the possessing class’s polemic that the modern social system is fair, justice, and equal lost its final foothold (Marx and Engels, 2012). Lenin refuted the revisionists for their belief that capitalism was progressing, therefore “it is senseless to accuse it of greed and cruelty.” “We say: capital devours you, will devour the Persians, will devour everyone and go on devouring until you overthrow it. That is the truth. And we do not forget to add: except through the growth of capitalism there is no guarantee of victory over it” (Lenin, 1990). This issue involves how to understand the polarization arisen in China and why it occurs. Scholars’ opinions are diverse. Some say that it is because of corruption and monopoly, and others think that it is due to urban-rural disparities, regional disparities and industrial disparities. Liu Guoguang, Cheng Enfu and Wu Xiangong believe the reason is that the ratio of private ownership to economy exceeds that of public ownership. In fact, billionaires are strong private entrepreneurs. There are also Chinese scholars who not only deny the exploitation of capitalism, but also claim that workers exploit capitalists when they earn high wages. They say day is night.

Another method of Marxist political economics is the scientific abstract method. “In the analysis of economic forms, moreover, neither microscopes nor chemical reagents are of use. The force of abstraction must replace both.” said Marx in the preface of the Das Kapital, Volume 1 (Marx and Engels, 2009). Economic issues and economic forms cannot be studied in laboratories like natural science but must be researched through the force of abstraction. Does the force of abstraction equate to the abstract method? Many scholars answer “yes.” They, including some famous Soviet scholars, misinterpret these two concepts. They think political science, which is totally different from natural science, can only be studied with the abstract method, and cannot be researched in laboratories, while natural science is not researched with abstract method but in laboratories. This is inaccurate. Scientific abstraction includes two aspects. When we study natural science, scientific abstraction should also be used in laboratories. However, political economy cannot be researched in laboratories. It can only be researched by using the force of abstraction. What is the force of abstraction? It is the abstraction of thought, logic and another kinds of scientific abstraction. For example, the surplus value is the abstraction of profit, interest and rent, and the value is the abstraction
of exchange value or the price. These abstractions are neither from experiments nor from chemical reagents, but are abstracted by Marx with his force of abstraction – in other words, the force of abstraction of logical thinking. Leortief, a distinguished Soviet Economist, saw the force of abstraction and abstract method as the same. In Leortief’s work Objects and Methods of Political Economics, translated to Chinese in 1950s, he said that as in all social sciences, political economics cannot be studied with experiments like physics and chemistry but with abstract method instead. This indicates that natural science is researched in laboratories and does not need an abstract method. Actually, it does. For example, Aristotle, a famous Scholar, misunderstood the phenomenon as the essence while studying falling objects. He thought when objects of different weights fell from a high altitude, their falling speeds would be different. He believed a law that the falling speeds of iron and rock were fast while that of paper and feather were slow. This concept was proven to be false and later scholars redressed his remark. Galileo put forward a different point of view: if there was no air resistance, what would happen? If a vacuum environment was created, the falling speeds of all objects would be the same. So the abstract method is to extract the most essential kernel without factors that are non-essential, interfering and complicated. Both natural and social science need the abstract method, namely, the scientific abstraction. The difference is that microscopes and chemical reagents can be used to study natural science in the laboratory. However, only the force of abstraction, in other words, the logical abstraction can be used to study political economics.

There is another question concerned with methods. In studies of political economics, including that from the USSR in the past, historical method and logic method can be applied. There was a popular opinion believing that Engels had said that these two methods were equal to each other. That is to say, where history begins, theoretical logic commences. This point of view is not comprehensive and it does not fully comply with Engels’ statement. From Marx’s works, it can be seen that he used both historical and logical methods. In some places, he unified these two methods but he emphasized more on the logical method. From the perspective of the historical development, there have been commercial capital and loan capital in the slave societies and the feudal society. The commercial capital and loan capital emerged before capitalist industrial capital. However, the logical structure in Marx’s Das Kapital is not based on the ancient commercial capital or loan capital but based on the industrial capital. As for theoretical logic, industrial capital is the “light” that illuminates all things in the capitalistic world. With industrial capital, there is the capitalist system. However sometimes, historical methods are also used by Marx. For example, on the nature and functions of currency, he began from the analysis of currency’s development and individual value forms to the emergence of currency forms. Sometimes, he unified historical and logical methods. For example, in the instance of the relationship between commodities and capitalism, the view based on historical methods is that the development of a commodity economy is the historical premise of capitalism. At the beginning of Chapter 4, Volume 1 of Das Kapital, it is said that, “The circulation of commodities is the starting point of capital. The production of commodities, their circulation, and that more developed form of their circulation called commerce, these form the historical ground-work from which it rises” (Marx and Engels, 2009). However this book also focuses on logic methods when discussing the relationship between commodities and capitalism. Commodities are cells of the capitalist economy, and all capitalist economic relations must be achieved through the relations of the commodity market. Moreover, through the analysis of commodities, Marxist labor value theory, which is the theoretical foundation of the surplus value theory, was established. In order to truly grasp Marx’s intentions, we must learn Marxist economy comprehensively and systematically. Marx suggested that it is infeasible and wrong to arrange the economic categories according to the order by which they have worked in history. Their order is determined by their interrelationship in the modern bourgeois society, which is in contrast
to their natural sequence or that which is in accordance with the course of history. Sometimes, a logical sequence is precisely opposite to the historical sequence. There are many efforts to be done in the study of China’s economic and social issues with Marxist logical and historical methods.

2. The application of Marxist political economic method: taking the research of income distribution as an example

What we have long advocated on the principle of distribution is the “efficiency first and fairness in consideration,” and then it is further stated that efficiency should be emphasized in the primary distribution and fairness should be emphasized in redistribution. That is to say, in the primary distribution of socialism, efficiency is emphasized and fairness is devalued. I do not agree with this opinion which is popular in academics. Promoting productivity is the fundamental task of a socialist society. Besides this, Deng Xiaoping also focused on eradicating exploitation, eliminating polarization, and gradually achieving common prosperity, which is the essence of socialism. In the “leftist” era, China neglected the development of productivity, criticizing that promoting the development of productivity was a productivity-only theory; China did not pay attention to the improvement of people’s living standards and advocated poor socialism. Deng proposed the essence of socialism on this issue, which correctly inherited and developed Marx and Engels’ theories. This paper calls for not only attaching importance to production efficiency, but also paying attention to fair distribution and unifying the distributive justice and efficiency. Later, given the ever-increasing trend of polarization between rich and poor, Marxist Scholars such as Liu Guoguang proposed that the balance of efficiency and fairness should be tilted toward fairness. The original formulation finally was changed. Polarization is caused by inequitable distribution. When this situation exists in society, what are the consequences if we do not consider distributive justice seriously? Can socialism not attend to distributive justice? So at the 17th session, China shifted its direction, proposing that it should deal with the relationship between efficiency and fairness in both primary distribution and redistribution. Efficiency and fairness are both important. China should unite them but focus on fairness during redistribution. It seems that there is an agreement about this affair, but there are two questions that need Marxist political economics scholars’ attention. First, although the original formulation of efficiency and fairness was adjusted at the 17th session, the unity of equality and efficiency is still placed in the distribution field. That is to say, the principle of socialist distribution is to unify efficiency and fairness. For primary distribution, China should balance efficiency and fairness while for redistribution China should focus more on fairness. However, the question is what is efficiency? This refers to production efficiency or labor efficiency. Has anyone mentioned anything about distribution efficiency? No. There is only fair or unfair, reasonable or unreasonable in distribution. Efficiency is an issue of production so we should not consider it during distribution because it is illogical. The rich–poor polarization is a result of unfair distribution. How can fairness be disregarded in primary distribution? Second, some scholars do not agree that “efficiency first and fairness in consideration” considering such polarization. Some considered it to be true in the beginning because this proposition was used to counter egalitarianism; however, later gave it up when polarization emerged. I argue that it was wrong from the very beginning. “Efficiency first and fairness in consideration” is the opinion of right-wing scholars in western countries. They put efficiency in the first place, regardless of fairness in primary distribution. In western countries, left-wing scholars, neutral scholars and some governments even do not accept this point of view while China has introduced it as a principle of the socialist distribution. Does this refute egalitarianism? This understanding is wrong. Does egalitarianism equate to distribution justice? If the importance of fairness is discounted during primary distribution, does it really mean fighting against egalitarianism?
If yes, you have misread egalitarianism as distribution justice. In reality, egalitarianism is unequal distribution. It is obviously unfair that regardless of how good or bad and how much work the workers do, their gains are the same. Under such circumstances, people who work poorly and less earn the wages that should go to those who work hard and more. Distribution according to work is fair because it can promote efficiency, production efficiency or labor efficiency, but not distribution efficiency. It can make the “cake” bigger, improving people’s living standards. Therefore, some Marxist scholars suggest that in order to oppose egalitarianism, it is possible to emphasize efficiency prior to fairness in the initial stages, but it should not be insisted upon when polarization of wealth appears. In that instance, distributive justice should be emphasized.

3. Analyses of the different interpretations on the evolution of the principal social contradictions in China presented in the report delivered at the 19th National Congress of the Communist Party of China

The report delivered at the 19th National Congress of the Communist Party of China proposed a series of new concepts indicating that socialism with Chinese characteristics had crossed the threshold into a new era. The principal contradiction in the new era is the contradiction between unbalanced and inadequate development as well as people’s ever-growing needs for a better life. This is a major theoretical issue of Marxist political economy. However, there are some theoretical matters of right and wrong that need to be discerned in the theoretical academia.

To begin with, the author has read an article which said that the development of any society must go through different historical periods and the principal contradiction in different historical periods will be transformed. This can be interpreted as the change of China’s principal contradiction is because of the different stages it has experienced during its socialism development. This kind of argument is worth exploring. Why? Let us use the capitalism social system as a lens to analyze the reasons. Capitalism has experienced different periods. By now, having entered the capitalism society from the sixteenth century, western countries have developed over five to six hundred years, which can be divided into several different historical stages. In Das Kapital, Marx divided the capitalist social development course into three stages but in fact some western countries have progressed into the fourth or the fifth stage. Even in the case of Marx’s definition, the capitalism principal contradiction has not been transformed with the change in development stages. It can be said that the principal contradiction of the capitalism society, or of any society, is between productivity and production relations, but various societies have various manifestations. In the capitalism society, economically, it is the contradiction between the socialization of production and capitalist private processes; politically, it is the contradiction between bourgeoisie and proletariat. This is the principal contradiction of the capitalism. Despite having gone through several historical stages, the capitalism society did not have a transformation in the principal contradiction during every period. The contradiction between the socialization of production and private processes always exists and the only difference is its acuteness. It has triggered a cyclical economic crisis but the principal contradiction has not been transformed. Therefore, not all societies have different principal contradictions in different social stages. After the founding of the People’s Republic of China in 1949, the reason for adjusting the statement or the judgment of China’s principal contradiction comes from the uniqueness, complexity and tortuousness of its historical process.

Second, what are the principal features of the evolution of the social principal contradiction in the new era? In the past, the two principal contradictions before and after the progression were often mutually antagonistic and exclusive. However, the principal contradiction proposed at the 19th National Congress of the Communist Party of China
develops, inhabits and broadens the previous one. Both sides of the contention have been improved. Meeting people’s growing material and cultural needs is to solve the problem of food and clothing, and it is on the demand side at a low level. The low productivity is the backward supply side. Today’s principal contradiction shares an abstract common point with the former – China’s production and social supply cannot satisfy its people. What has been changed is the specific connotation. The demand used to be the low-end demand for daily consumer goods and the social production is absolutely backward. Currently, the demand that has been extended and broadened people’s needs for better quality of life, no longer the basic needs for food and clothing. Now, China’s productivity is no longer lagging behind. In terms of gross domestic production (GDP), China has maintained its position as the world’s second largest economy. The report delivered at the 19th National Congress of the Communist Party of China has shown that “in many areas our production capacity leads the world.” Therefore, the level and quality of the supply side that meets people’s needs have also been improved substantially. However, compared with developed countries, and the full-scale modernization that China will eventually achieve, the nation’s productivity is still lagged behind. So as for people’s needs for a better life, the supply remains inadequate and unbalanced. It should be made clear that the unbalanced and inadequate development is relative to people’s ever-growing needs for a better life. While China’s productivity has developed rapidly, it is still not sufficient for the nation’s demands. There are still a supply–demand imbalance and inadequate supply. Moreover, the needs to be met for the people to live better lives are no longer limited to material and cultural life. Their demands for democracy, rule of law, fairness, justice, security, and ecology are also increasing. Blue sky, green mountains and clean water, a beautiful environment and a safe life are wanted by all.

Third, when did the new era and the transformation of the social principal contradiction begin? Obviously, this did not start at the 19th National Congress of the Communist Party of China, but from the 18th National Congress of the Communist Party of China. Judging from the documents of the 19th National Congress of the Communist Party of China, the new era began with the 18th National Congress of the Communist Party of China, while the report delivered at the 19th National Congress of the Communist Party of China highlighted achievements of the previous five years. However, in the new era, the starting point cannot be defined because it is a gradual process. The development of productivity is a continuous course so a single point in time cannot divide it into stages. It is strategically and generally said that the transformation began with the 18th National Congress of the Communist Party of China. In fact, the principal contradiction started to evolve before the 18th National Congress of the Communist Party of China but this is not a starting point either. Development and changes are linked and interconnected, and so is the evolution of social principal contradiction in the new era. The progression mentioned in the 19th National Congress of the Communist Party of China actually happened long before it. This was not just noticed at the session. Before that, the central committee had been aware of the change of the connotation of the principal contradiction. The supply side structural reform put forward by the central committee before the 19th National Congress of the Communist Party of China has shown that we have realized that our supply side structure and demand side structure are unbalanced.

Thanks to the rapid development during the past 40 years of the reform and opening up, China has eradicated the long-existing shortage economy, changing from a seller’s market to a buyer’s market. In the past, China embraced the shortage economy, but now, excess and deficiency coexist: low-end and low-quality products are unmarketable while high-end and high-quality goods are insufficient. Wealthy Chinese people travel abroad, purchasing high-grade and luxury goods. As foreign media reports, more than 40 percent of the world’s luxury goods are bought by Chinese people. A lot of purchasing power flow overseas.
What does this situation mean? It means that China’s high-end and high-quality goods are insufficient and the new and high-level supply–demand imbalance has emerged. Although China can produce some high-level supplies, people cannot be satisfied adequately. Under this condition, the central committee proposed the supply side structural reform as they have recognized the change in the connotation of the principal contradiction. However, at that time, it had not been established formally that the social principal contradiction had evolved. The judgment of the evolution of the principal contradiction is a momentous issue both theoretically and practically, so it cannot be determined easily. How to express the principal contradiction after its evolution? This should be considered carefully and stated rationally. Comrade Xi Jinping’s speech delivered on July 26 indicated that the new era and the evolution of the principal contradiction would be elaborated on at the 19th National Congress of the Communist Party of China. He stressed that the basic situation of China – that our country is still and will long remain in the primary stage of socialism – has not changed, and that China’s international status as the world’s largest developing country has not changed. Meanwhile, he particularly advised that China should see the continuous development of socialism with Chinese characteristics, especially its “continuous change.” “Unchanged” and “continuously changed” were both mentioned. Xi Jinping used an analysis method known as “the unification of the two-aspect theory and the emphasis-on theory.” For example, the report delivered at the 19th National Congress of the Communist Party of China showed China’s enormous accomplishments in the past five years as well as its shortages and the difficulties it was encountering. It talked about China’s challenges and inadequate development. It used emphasis-on theory to focus on China’s achievements and two-aspect theory to pay attention to its backwardness. The report delivered at the 19th National Congress of the Communist Party of China showed that the basic dimension of the Chinese context, the primary stage of socialism and China’s international status as world’s largest developing country have not changed while China has entered a new era and its principal contradiction has evolved. Some may ask, are they contradictory? The answer is “no!” What is the basis for saying that the basic situation of China has not changed? It is that China’s socialism primary stage should go through a hundred years. During these years, China should achieve overall modernization. At first, China must build a moderately prosperous society in a basic manner, then in an all-round way and finally realize modernization comprehensively. China’s goal and tasks at the primary stage have not yet been accomplished, so it must continue to develop. From this perspective, China is still at the primary stage. The main economic characteristics of the primary stage of socialism are public ownership as the main body, and various types of ownership economy developing together; distribution according to work as the main body, and various distribution modes coexist. This has to be maintained for a hundred years. This is the other basis for the unchanged basic situation of China. In other words, the basic economic system at the socialism primary stage should be maintained for a hundred years. The above two bases can prove that China is still at the primary stage of socialism. In addition, there is foundation for saying that China’s international status as the world’s largest developing country has not changed. While our productivity has greatly developed, the problem of food and clothing for more than 1bn people has been solved, and we have become the second largest economy. In 2015, according to Comrade Xi Jinping, China’s per capita GDP was only equal to two-thirds of the world’s average per capita or one-seventh of the USA. China still has tens of millions of people who live in poverty and need the minimum living security. The problem of food and clothing is not solved completely, so China is still the world’s largest developing country. Besides the unchanged conditions, it can also be seen that with the rapid development of China’s productivity, the people’s income levels and living standards have significantly improved, and the demand structure has changed greatly, but China’s supply cannot fulfill it. This demonstrates that there has been new demand side and new
supply side, which have caused the evolution of the principal contradiction of the society. Therefore, although the basic dimension of the Chinese context and the international status of China have not changed, its principal contradiction has been adjusted.

The fourth question is also a key point. Many newspapers and magazines are now propagating the evolution of the principal contradiction in the new era, but their interpretations are different. Some of them are incorrect. It is easy to understand the connotation of the contradiction’s supply side, but how to accurately comprehend the unbalanced and inadequate development of the demand side? Academic interpretations mainly focus on disparities between urban and rural, between regions and in income distribution. But as far as I am concerned, there is an imbalance and insufficiency to meet people’s needs for a better life. Namely, it is the imbalance between high-end, high-quality supply and demand, which means supplies cannot fully satisfy people’s demands for a better quality of life. The unbalanced and inadequate development should not be taken in isolation, or it will be misunderstood. There are several reasons for saying this.

First of all, currently, people’s growing needs for a better life is the result of the rapid production development in the past 40 years of the reform and opening up, as well as the expansion and upgrade in the production supply. However, under the circumstances that the demand structure has been substantially changed and improved, China’s production and supply structure have not responded in a timely manner, and high-end and high-quality supplies are not enough. As a result, the new unbalance between upgraded and broadened demand for a better life and the production supply was formed. Without the ever-growing demand side that is an important aspect of the new principal contradiction, it is unreasonable to talk about the imbalance and inadequacy. There were and are many kinds of imbalanced development such as urban–rural disparities and regional gaps. In the future, they may be eased but will not be eliminated. This is an old issue and it does not have any inner connection with the evolution of the principal contradiction.

Second, the urban–rural disparities are not an example for the imbalance and inadequacy stated in the report delivered at the 19th National Congress of the Communist Party of China. Comrade Xi Jinping did not talk about it then or on other occasions. The first part of the report, “The past five years: our work and historic change” mainly discussed China’s great achievements in the previous five years and “many inadequacies in our work” as well. This section addressed seven shortcomings, all separated by semicolons. At the beginning, it pointed out, “Some acute problems caused by unbalanced and inadequate development await solutions; and the quality and effect of development are not what they should be. China’s overall productive forces have significantly improved and in many areas our production capacity leads the world.” However, many experts and scholars still think that China’s productivity is lagging far behind the world. Using original tools, urban–rural
disparities, regional disparities and industrial imbalance are irrelevant to the imbalance and inadequacy of the principal contradiction.

Fourth, according to the report, “We must recognize that the evolution of the principal contradiction facing the Chinese society represents a historic shift that affects the overall situation and that creates many new demands for the work of the Party and the country. Building on continued efforts to sustain development, we must devote great energy to address development’s imbalances and inadequacies, and push hard to improve the quality and effect of development.” Xi Jinping paid great attention to this section, not only emphasizing “must recognize” but also repeatedly mentioning this explanation on other occasions. At the seminar attended by the delegation from Guizhou Province, Xi said that we should grasp and fully understand the new thesis of the new era as well as features of the evolution of the principal contradiction. Besides this, he further stressed, “The evolution of the principal contradiction facing Chinese society represents a historic shift that affects the whole landscape and that creates many new demands for the work of the Party and the country. Thoroughly implementing the new development theory, we must devote great energy to address development’s imbalances and inadequacies, and better meet people’s ever-growing demand.” He suggested us to thoroughly understand the new features of the social principal contradiction. The new features of principal contradiction transformation include the new features of the demand side, i.e., not only the upgrade of demand level but also the expansion of demand content, and the new feature of the unbalanced and inadequate supply side. The new feature in this area is by no means the imbalance between urban and rural areas, and in income distribution that has long existed in history. This feature is that the high-level and advanced supply side is underdeveloped so it cannot be balanced with the improved demand side. Furthermore, this can be seen more clearly having noted that Comrade Xi Jinping has repeatedly emphasized that this historic evolution is concerned with the overall situation. However, the urban–rural disparity and regional disparities are not.

Fifth, no matter whether before or after the evolution, the social principal contradiction is always being understood from the respect of the whole society. The former principal contradiction sees absolute backwardness in productivity and absolute poverty in the people as an overall condition. Before the 13th National Congress of the Communist Party of China, some regions and industries have developed rapidly, some new startups had been established and some people’s income and living standards had been upgraded. Yet, the principal contradiction of the whole society at that time was not yet altered. In the same way, today, China also focuses on the whole society to discuss the principal contradiction. Although there are still relatively backward regions and rural areas, and there are still disparities between rich and poor, these do not affect the judgments on the social principal contradiction.

Sixth, from the perspective of economic activities and people’s life, Chinese people want better and safer foods. This requires rural areas’ help, but their supplies are not sufficient until now. Do urban–rural disparities or regional disparities explain the unbalanced and inadequate development from this regard? To deal with the unbalances and inadequacies of the social principal contradiction, China should pay attention to the supply side structural reform, focusing development on quality over quantity. The supply side structural reform should also be implemented in rural areas. In accordance with the increased social demand, the supply structure should also be adjusted accordingly. For instance, if people want high-quality and better tasting fruits, the supply must be innovated.

Seventh, at the current stage of economic and social development, the proportion of expenditures on food for the majority of residents in China has decreased, while that on modern high-end consumer goods has increased. Chinese people buy large quantities of high-end and luxury goods, or products which are more novel, diversified, of higher quality
and security abroad. Can urban–rural disparities demonstrate that China cannot provide enough of these kinds of products?

Eighth, China needs lots of ball pens. Several years ago, Premier Li Keqiang revealed that China cannot produce the beads used for ball pen manufacturing. All Chinese people need good ball pens, but the little bead used for ball pen have to be imported because we are unable to produce the special and premium steel that is required for manufacturing. Can urban–rural disparities be used to interpret this situation? Now, this problem has been resolved. This kind of steel can be produced by TISCO, Taiyuan, a city in central China, which previously lagged behind cities in the eastern regions but has now settled the imbalance and inadequacy on this issue.

Ninth, people’s demands for better lives have extended to democracy, rule of law, fairness, justice, security and environment. These aspects certainly cannot be explained by disparities between urban and rural or income distributions. In underdeveloped mountain areas, the sky is bluer, the water is cleaner, the pollution is less, the air is fresher and the safety factor may be higher than that of city. Therefore, the unbalances and inadequacies should not be mentioned without the precondition of satisfying the people’s ever-increasing and high-level demands.

Tenth, the contradiction between unbalanced and inadequate development and the people’s ever-growing needs for a better life should be understood. What people need are not expensive cars, big houses or luxury goods, but “access to childcare, education, employment, medical services, elderly care, housing, and social assistance”, as well as “social fairness and justice.” There is shortage on the issue of people’s livelihood and China should make it up for development. The imbalances and inadequacies in this aspect are about areas and regions all around the country.

In fact, measures to remedy unbalanced and inadequate development of the social principal contradiction have been plainly indicated in the report delivered at the 19th National Congress of the Communist Party of China. This is based on the new development idea to carry out scientific and technological innovation and change the focus of development from quantity to quality. With regard to the supply side structural reform as the main focus, people’s ever-growing demand for a better life can be satisfied and the higher level dynamic supply–demand balance can be kept. China can never expect to deal with the imbalanced and inadequate issues by eradicating urban–rural disparity, regional disparity and income distribution disparity, which have never been achieved in the past. That is unreasonable.

References

About the author
Xinghua Wei (1925), male, native of Wutai, Shanxi, is First-Class Honorary Professor of Renmin University of China and a Researcher of Collaborative Innovation Center for China, whose main area of research is the Marxist economics. Xinghua Wei can be contacted at: HUANGGT@PKU.EDU.CN

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
The major innovations of Chinese economic development theories in the new era

Yinxing Hong
Nanjing University, Nanjing, China

Abstract
Purpose – At present, the Chinese economy has entered the “new normal” phase with the transformation of development stages from the low-income to the middle-income ones. Accordingly, there appear a series of innovations in development theories. Innovations involve creative destructions. Therefore, innovative development theories at the present stage either deny the prevailing principles of development economics, or deny the theories that once effectively guided development at the low-income stage, or even sublate some of the development policies which were propelled and proved effective at the beginning of the reform and opening-up. The fundamental reason is that, as the development stages evolve, there occur new development tasks, new periodical characteristics and new laws of development. The paper aims to discuss these issues.

Design/methodology/approach – Any development theory from abroad will find it difficult to correctly guide and clarify development problems in a socialist country, such as the huge population and the extreme imbalance between the urban and the rural and among regional developments.

Findings – In conclusion, China, as a large world economy, has made innovations in its economic development theory, which indicates that it intends to perfect itself rather than seek hegemony. As the world’s second largest economy, China should adapt to the transformation and further free people’s minds instead of adhering to the old patterns of thinking. It should think over the path of development for a great world economy from the historical starting point of a large world economy and find development strategies to transform itself from a large economy to a great economy, so as to realize the dream of the Chinese nation to build a powerful country.

Originality/value – Only political economy studies both the relations of production and the productive forces, and only a theory combining both can correctly guide China’s economic development, which especially needs to be promoted by taking advantage of socialist economic system. Therefore, the first and foremost principle for a socialist political economy with Chinese characteristics is to insist on liberating and developing productive forces.

Keywords Chinese economic development

Paper type Research paper
solved without the analysis of the relations of production. Only political economy studies both the relations of production and the productive forces, and only a theory combining both can correctly guide China's economic development, which especially needs to be promoted by taking advantage of socialist economic system. Therefore, the first and foremost principle for socialist political economy with Chinese characteristics is to insist on liberating and developing productive forces.

Since the reform and opening-up, the major theoretic contributions to economic development from socialist political economy with Chinese characteristics can be summarized from the following aspects. First, the theory of socialist modernization with Chinese characteristics, the theory of an all-round construction of a moderately prosperous society, and the theory of integrating the development of new industrialization, IT application, urbanization and agricultural modernization; second, the theory of economic development mode and its transformation; third, the theory of science and technology as the first productive force; fourth, the theories about the scientific outlook on development, new industrialization, urbanization and so on. These are the theoretic contributions of the socialist political economy with Chinese characteristics promoted by the practices of the reform and opening-up. Since the 18th National Congress of the CPC, a series of major contributions have been further made by development theories, including: first, the economic "new normal" phase theory; second, the innovation-driven economic development theory; third, five new visions for development; fourth, the theory that lucid waters and lush mountains are invaluable assets and the ecological civilization theory; and fifth, the theory of supply-side structural reform.

At present, the Chinese economy has entered the "new normal" phase with the transformation of development stages from the low-income to the middle-income ones. Accordingly, there appear a series of innovations in development theories. Innovations involve creative destructions. Therefore, innovative development theories at the present stage either deny the prevailing principles of development economics, or deny the theories that once effectively guided development at the low-income stage, or even sublate some of the development policies which were propelled and proved effective at the beginning of the reform and opening-up. The fundamental reason is that, as the development stages evolve, there occur new development tasks, new periodical characteristics and new laws of development.

1. The change of disciplinary tasks from guiding economic take-off to guiding modernization

Development economics, which originated in the 1940s, takes former colonial and semi-colonial countries as its research targets. These newly independent countries were faced with the tasks of eliminating poverty, promoting development, establishing an autonomous industry system and realizing economic take-off, so the then development economics was aimed at getting rid of poverty and pushing economic development and take-off. Objectively speaking, this type of development economics did once make positive guiding effects on China's economic development, including: establishing catching-up and overpassing strategies for boosting GDP, supporting economic growth at high accumulation and high investment rates, transferring surplus agricultural labor force, realizing urbanization and industrialization, following developed countries to make innovations in science, technology and industry, relying on the radiations of the core in the core-periphery circle, participating in the international division of labor based on comparative advantage and implementing export-oriented foreign policies and so on. These mentioned theories have once guided economic development policies in developing countries, including China, for a rather long time. Meanwhile, these theories have also worked as theoretic bases for traditional economic development mode, giving a positive guidance for China's transformation from a low-income country to a middle-income one.
Since the year of 2010, China has ranked second in the world by GDP and become the world’s largest exporter of goods, the largest foreign exchange reserve country and the world’s second largest manufacturing country. This indicates that China has made major progresses in its status in the world economy, and more importantly, the construction of China’s modernization has entered a new historic starting point. First of all, with the apparent improvement in the people’s living conditions, the poverty-stricken population has conspicuously declined. Second, the proportion of agriculture has descended to 10.1 percent while that of industry has risen to 46.8 percent; besides, the rate of urbanization has reached beyond 50 percent. This means that China has transformed itself from an agricultural country to an industrial one. The all-round construction of a moderately prosperous society to be accomplished soon has marked the take-off of the Chinese economy and the beginning of China’s modernization. At this new historic starting point, economic development theories need to innovate themselves to guide the economy. Namely, the development economics needs to shift its focus from eliminating poverty to bringing affluence to people, and from guiding economictake-off to guiding modernization.

As China’s total amount of GDP ranks second in the world, its GDP per capita reached $5,414 in 2011. This marks China becoming one of the middle-income countries, which requires its economic development theories to account for the process and law of a country’s development from a middle-income stage to a high-income one. A middle-income country is confronted with the biggest risk of the “middle-income trap.” This trap mainly indicates: first, as a country develops from a low-income stage to a middle-income one, it has no competitive advantages either over the low-income country in terms of salary or over the wealthy country in terms of sophisticated technology research and development; second, in the process of reaching high-income level, it is difficult to get rid of the original low-income development pattern; third, the contradictions accumulated at the low-income stage due to the rapid economic development promoted by the original growth mechanism and development pattern will experience concentrated outbreak at the middle-income stage. The poignant social contradictions arising therefrom may seriously hinder economy from sustainable development, and the economy may easily slip into drastic fluctuation or stagnation and be long stuck at the middle-income stage.

It is crucial to provide theoretical guidance for jumping over the “middle-income trap” at the new starting point of the middle-income stage. It mainly involves three aspects. First, the economic development modes need transformation. The development mode originally used in the transforming process from the low-income stage to the middle-income stage should no longer be adopted at the middle-income stage. The goal should be to compete with the wealthy countries in terms of sophisticated technology research and development. The second is to make people affluent. Enriching people at the middle-income stage not only means increasing people’s incomes, but also involves the following two aspects. On one hand, inhabitants’ family properties should witness apparent increases and their incomes increase correspondingly; on the other hand, inhabitants should share more public wealth, especially the enlarged cover of social welfare and the equal access to the basic public services both in the urban and rural areas. Third, efficient growth should shift to equitable growth, overcoming social contradictions based on the principles of equity and justice and gradually realizing the goal of common prosperity. The above mentioned have become the innovative contents of the economic development theories at the middle-income stage.

2. The shift of development engine from overseas demand to domestic demand
In the existing development economics textbooks and development theories, it is generally believed that foreign trade and foreign investment are the major economic development engines for developing countries. Compared to the past closed economy model, the open economy model, export orientation and a heavy introduction of foreign capital have been working as engines to
motivate China’s economic development. At present, China’s development engine needs to shift from the outward to the inward due to the following two major reasons. First, a change has occurred in terms of international market circumstances. Export-orientated development strategy constructs the industrial and trade structure and makes the international competition strategies according to the demands of exports, which are dependent upon the international market. The 2008 world financial crisis hit the open economy directly and till now the world economy is still in recession, making a great increase in the demands of exports impossible. From 2013 to 2017, the annual average contribution rate of the final consumption expenditures was 56.2 percent, and that of gross capital formation was 43.8 percent while that of the net exports of goods and services was nearly zero. This of course is merely on the surface and could have only a temporary impact. More importantly, the open economy based on the existing opening-up strategy is weakening its impetus for economic growth, which might have a long-term impact. Its main indicators are as follows. The international production overcapacity of many of China’s exports (especially those labor-intensive products) has become increasingly serious; due to the increase in land and labor cost, both the competitiveness of the exports and the appeal of foreign investments in manufacturing are in decline; due to protectionism and de-globalization trends prevailing in some developed countries represented by the USA, international trade frictions became increasingly frequent. All of these indicate that the export-oriented development strategy is hard to sustain.

Second, the status of Chinese market has risen. The globalized economy is structured with the center and the peripheral, so the developed countries such as the USA, Germany and Japan have been the center of the world economy for a long term. China as a developing country stood in the peripheral all along, but since it rose to the world’s second largest economy, China has been moving from the peripheral to the center. The so-called center here refers to the economic growth center within a certain area of the world on one hand, and on the other hand to the facts that Chinese market has leaped into the front rank of the world market in terms of its total scale and that it will become an innovation center of the market. The increasing international impact of the Chinese market implies that it has become and is becoming an important world market, which indicates that entering Chinese market means as well entering the world market. The economy based on domestic demand has lower transaction costs due to the shorter market distances and the more convenient channels for information acquisition and so on.

Third, the demands made by imbalances among regional developments need coordination. For a rather long time, China’s export-oriented economy has merely been promoted along the coastal areas. The economy driven by overseas market demand has only pulled development in these coastal areas while the large central and western areas at the margin of the export-oriented economy can gain impetus neither from overseas demand, nor from the eastern areas due to their overseas targets. Therefore, there has been a further increase in the regional gap. At the present middle-income stage, not only have the eastern coastal areas already integrated into globalization obtained powerful development capacities, the central and western areas will also surely provide tremendous domestic demand and development opportunities due to their own intense demand for development and the coordinated efforts made to balance the eastern and western areas.

As the export-oriented economy can no longer serve as the engine for China’s development at the present stage, domestic demand for economic development is becoming a new engine. Joseph E. Stiglitz points out in the 1990s that “as its economy grows and as the global economic environment changes, China will no longer be able to rely as fully on the export- and FDI-oriented model that has so far driven its reform-era growth. At the same time, China faces the challenge of continuing to improve resource allocation and productivity.” To cope with the challenges, China has to “make the domestic economy the engine of growth and equity Stiglitz (1999).”
The strategy that domestic economy works as the engine of growth is based on the expansion of domestic demand as the strategic focus of economic development. The expansion of domestic demand refers to the investment demand and consumer demand fueled by domestic economic development. The commitments to construct an all-round moderately prosperous society and to realize modernization will yield tremendous demands, mainly involving the following four aspects. First, with the widespread rapid increase in the people’s incomes, consumer demand will become a strategic focus to expand domestic demand; second, with the process of urbanization and the integration of urban and rural areas, both investment demand and consumer demand will constitute a large-scale domestic demand; third, with the transformation and upgrading of domestic industrial structure, striving in particular to develop the emerging industries on the same start line of innovation with developed countries will not only enhance supply capacity, but also serve as an important aspect of expanding domestic demand; fourth, solving the problem of regional imbalances will produce multi-layered domestic demand. All the expanded domestic demand will directly promote the overall scale of the Chinese market to join the front rank of the world market. The domestically driven economy as an engine provides an impetus for development no less powerful than the export-oriented economy. The engine of growth shifting from outward to inward by no means implies returning to the closed economy, but turning to the open economy at a higher level with higher efficiency.

3. The adjustment of pulling forces from investment demand to consumer demand

The domestic demand to pull economic growth includes investment demand and consumer demand. For a long time, the existing growth pattern in developing countries including China has been greatly influenced by the Harrod–Domar Model, which aims at increasing GDP and driving economic growth through investment. The long-existing rapid economic growth in China has been fundamentally on heavy investments. Therefore, Chinese national income distribution has long been in the pattern of high accumulation with low consumption. At the current stage of economic development, the mode of heavy deposits supporting heavy investments should not continue. Besides, the production overcapacity yielded by investment-driven production has led to an apparent decline in growth efficiency, and the drive of investment has even grown to be mainly responsible for the big economic fluctuations, which means the investment-driven economy in China has come to its end, unable to realize the goal of sustainable economic growth.

As China steps into the middle-income stage, an important aspect of transforming economic development modes is to shift its major driving forces from investment and export mainly adopted at the low-income stage to the coordinated efforts of consumption, investment and export with a special focus on consumption. The significance of making this shift lies in increasing the contribution rate of consumption to economic growth and thus promoting the latter’s efficiency and quality.

The economic growth driven by the expansion of consumer demand is essentially oriented toward increasing people’s incomes and their consumption levels, which embodies the adjustment of the target of economic development from simply pursuing an increase in GDP to pursuing people’s affluence and well-being. The purpose of socialist production to meet people’s ever-increasing material and cultural needs to its maximum, which is always highlighted by the political economy theory, will be fully achieved in this consumption-driven economic growth.

Compared to investment demand, consumer demand in China at the present stage has more potential for increases. In terms of the scale of consumer demand, the population of more than 1.3bn undoubtedly constitutes a tremendous potential, but there exists an even bigger potential in terms of the structure of consumer demand. First, with respect to the age
structure, the aging society and the great proportion of children would both decrease deposits but might increase consumption. Second, with respect to the income structure, there will be a growing proportion of middle-income population with vigorous demands especially for products and services provided by upgraded industries. Third, compared to the markets in developed countries, the consumer demand in the emerging markets would be stronger. For instance, in China, the demand for cars, housing and information services has grown from scratch explosively.

The precondition of consumption-driven economic growth is to drive consumption and the primary task is fostering consumption capacity. The factors affecting consumption capacity are income, employment and social security system. For the purpose of socialist production, the fundamental ways to raise people’s consumption capacity are as follows: increasing the residents’ income; maintaining high employment rate; full coverage of social security; increasing the consumption ratio in macro-distribution of national revenue and changing the condition of high accumulation with low consumption; enlarging and expanding to the majority the proportion of middle-income population. Consequently, economic growth will be fueled by the increase of residents’ consumption level.

At the present stage, the innovation in consumption formats has made a remarkable effect on stimulating consumption and consumption growth. Especially when China steps into the middle-income stage and its middle-income population has reached 0.3bn, the mid- and high-level consumption arising from that will become a new driver for development. For instance, such new consumption formats as information consumption, green consumption, housing, tourism and leisure, education, cultural activities and sports, elderly care, health care and household services grow obviously faster than the traditional ones. Especially with the aid of the internet-plus platform, the internet consumption and the sharing economy are expanding consumption fields both in width and depth. Consuming is becoming smarter, greener, healthier and safer, which embodies the optimization of consumption mode and meanwhile motivates the optimization of production mode.

The development in the service industry is pushing for an increase in consumer demand. Service and consumption are mutually dependent. The expansion of service consumption can help upgrade the consumption structure. Informationization, standardization and intensification in the service industry can not only expand consumer demand, but also promote consumption level.

Of course, the shift from investment-driven to consumption-drive by no means substitutes consumption for investment. Turning to consumption is a goal, but it needs time because the investment-driven economy still has sustaining power. Especially when the macro-economy is going downhill, the economy still needs investments as a driving force to rebound in the short term.

4. The shift of the reform focus from the demand-side to the supply-side
China's economic development requires the coordinated contributions of the demand-side and the supply-side. The degree of their contributions is related to their systems, and reform provides impetuses for them to realize their potential. The market-oriented reform in China since 1978 has in effect been a demand-side reform, involving the elimination of the mandatory plan and the shift to the market economy. The stimulated demand-side impetuses thus stimulated include micro and macro ones. The micro impetus mainly refers to the pressures from market selection, including market demand and market competition. The macro impetus refers to the economic growth driven by consumption, investment and export in coordination and the fiscal and monetary policy adopted by the state in macroeconomic control, be it tight, expansionary or neutral, which would influence the total amount of demands. After more than 30 years of reform, the demand-side needs to perfect the management of demand. Based on this, China's economic reform should shift its focus from the demand-side to the supply-side.
The problems of the supply-side are usually problems with the structure, which is a common weakness in developing countries. Problems of the supply-side that involve structure, technology and efficiency have long existed in developing countries and can be solved neither by turning to the market economy automatically, nor by adjusting the demand-side. The structural problems of the supply-side in China are symptomized by the coexistence of the insufficiency of effective supply and the excess of ineffective capacity. This structural contradiction of supply-side is the feature of a particular stage of economic development: supply cannot adjust itself to the updated consumer demand at the new middle-income stage. At this new stage, on the one hand, the residents’ basic living needs are satisfied and the consumer demands are transformed and upgraded to healthier, safer, cleaner and higher level; on the other hand, the supply of products and services still remain at the low-income stage, characterized by the pursuit of quantities at the expense of qualities and the production for its own sake. The above mentioned structural problems need to be solved through reforming the supply-side.

The supply-side structural reform involves cutting overcapacity, reducing excess inventory, deleveraging, lowering costs and strengthening areas of weakness. The reform is aimed at increasing the efforts of structural reform, modifying factor allocation, expanding effective supply, strengthening the adaptability and flexibility of supply structure and increasing total factor productivity. Specifically speaking, there are three reform targets.

First, seek the driving force of economic growth on the supply-side. The supply factors influencing the potential economic growth rate include investment, technology, structure and efficiency and so on. The present-stage recession of the supply-side drivers only refers to the recession of supply capacity on the part of material resources and low-cost labors, while there are other potential supply-side drivers, such as innovation, structural adjustment and efficiency promotion, all being driving forces of economic growth. There is enormous room for increasing total factor productivity in particular.

Second, establish a long-term mechanism for effective supply. The insufficiency of effective supply is actually a structural shortage, as the present supply structure involving both product structure and supply quality cannot adapt to demand. Meanwhile, low-level and ineffective capacity takes up resources and results in inventory and overstock. Establishing a long-term mechanism for effective supply involves cultivating entrepreneurship to promote industrial optimization and upgrade, raising the technological level of products through scientific innovation, fostering craftsmanship, establishing refined governance system and culture, strengthening quality control and remodeling delicacy culture, keeping order in the market, strengthening and improving the market regulatory system, adopting severe penalties for serious violations, strengthening the construction of credit system and creating trustworthy brands.

Third, liberate enterprise vitality. One crucial principle of socialist political economy with Chinese characteristics is to keep all participants motivated, which should also be a major principle for supply-side structural reform. At present, enterprises in the real economy are shouldered with “three mountains”: high taxes and fees, high interests and heavy burdens. The enterprises have capacities but no benefits, and so many of them become “zombie enterprises.” Reform is actually to handle in the process of national income allocation the interests among the state, enterprises and workers with a highlight on the interests of enterprises for they are the primary economic cells. On one hand, workers should share both the benefits of enterprise development and the risks of business. If an enterprise closes or cuts down employment due to the employment burdens beyond its affordability, it is still the workers who pay the price in the end. On the other hand, government should share part of its national profits with enterprises for one must first give in order to take. If the burden on the enterprises is eased, then the economic cells will be activated and the national income increased. Therefore, while in previous times, the governmental reform focuses on
eliminating the authority approval, at present it should focus on eliminating and reducing various taxes and fees imposed on enterprises.

After more than two years of supply-side reform that focus mainly on cutting overcapacity and reducing excess inventory, China should deepen the supply-side structural reform by giving priority to improving the quality of supply system and fostering new driving forces of growth, that is, fostering new growth points and growth drivers in the areas of medium-high end consumption, innovation, green and low-carbon economy, sharing economy, modern supply chains and human capital services.

5. The change of principles for growth: from efficient growth to inclusive growth

In development theories, growth principles involve pursuit of equity and efficiency, embodied in the distribution of growth achievements since the two aspects can only be balanced but not simultaneously achieved. There thus comes the issue of priority. At the low-income stage, China released a major policy to give priority to efficiency for economic growth, proposing to permit a part of people to get rich first and emphasizing distribution according to the contributions of production factors. This efficiency growth mode, consistent with investment-driven economic growth mode at the period, made a positive and apparent effect on increasing efficiency and motivating development factors, but meanwhile had another increasingly distinct effect, that is, inevitable inequity in distribution based on the efficiency principle.

After China stepped into middle-income stage, efficiency growth and its according major policies should not continue for the following reasons. First, the expansion of income gap resulting from more than 30 years of efficiency growth has reached the summit of Kuznets inverse U-shaped curve. Second, income gap can promote efficiency but once the gap expands to a certain extent, it may damage efficiency. Economic growth is likely to encounter resistance from a large low-income community. Third, if stuck in “middle-income trap,” China will most probably be faced with social contradictions resulting from increasingly expanding income gap. Under such circumstances, efficiency growth can no longer support the further increase of efficiency while inclusive growth might make it.

General Secretary Xi Jinping proposed the vision of inclusive growth in globalization at the G20 Hangzhou Summit with an intention to establish the awareness of building a community for all humankind with shared future, to reduce inequality and imbalance in global development and to make people in all countries equally share the benefits of the world economic growth. It is evident that inclusive growth has extensive connotations, including sustainable development and collective development. Its essential connotation is to share economic growth equally and reasonably and to narrow the income distribution gap. In China, a socialist country, inclusive growth has to meet the requirement of promoting social equity and justice. After implementing more than thirty years the major policies to permit a part of people to get rich first, China needs to make the majority wealthy through the rich helping the poor so that people can equally and reasonably share the benefits of growth and thereby new driving forces of economic growth can be created.

The shift of focus from giving priority to efficiency with due consideration to equity to promoting social equity and justice is not intended to even income, but to keep fair in aspects of opportunities, rights and rules in the growth process. It is especially important to address the problem of unfair distribution caused by unequal rights, which involves three aspects. First, handle the issue of abusing power for personal gains through adopting strict anti-corruption measures; second, handle the issue of seeking high income through monopoly positions; and third, handle the issue of bigger income gap due to unfair distribution of assets.

Inclusive growth needs to target the issue of low income particularly. At present, the number of low-income people is not small. Most of them have become middle-income and
their consumer demand produces an enormous driving force for economic growth. The solution is to reform and improve the national income distribution system including the following aspects.

First, raise the proportion of labor pay in primary distribution. Since the reform, the first rich have generally been capital owners and enterprise operators depending on assets income and business income. Thereby, the gap between labor income and non-labor income has been distinctly growing. Given the increasingly growing income gap, primary distribution should not only highlight efficiency, but balance equity and efficiency as well. The proposal of raising the proportion of labor pay in primary distribution is made on the ground that labor-based earnings should be raised in step with increases in labor productivity.

Second, give more attention to equity in redistribution. The government takes inescapable responsibilities for fair distribution. The government can raise the proportion of residents’ income in national income distribution through sharing part of its national benefits with the residents. Besides, it can promote equity and justice by improving the public fiscal system in the following two aspects. For one thing, the government should ensure the equitable access to basic public services and bridge the huge gap between different regional areas and between the urban and the rural areas in terms of the basic public services such as basic medical care, primary education, public transportation and public health with an emphasis on ensuring rural residents in underdeveloped areas the same access to the basic public services with urban residents in developed areas. For another, the government should refine the social security system covering both urban and rural residents. At present, there exists a big gap between urban and rural residents in terms of social security like medical care and elderly care. Farmers have no access to the social security enjoyed by urban residents. Especially when farmers lose their land for various reasons and consequently lose their land security, they will have more intense demand for social security. Building the social security system covering both urban and rural residents should give priority to finance.

At present, the major cause of the growing income gap does not lie in the labor income gap, but in property (non-labor production factor) gap resulting from all kinds of production factors participating in income distribution. The polarization of property distribution should be prevented in a socialist environment. It is impossible for inclusive growth to discourage production factors from participating in distribution in order to prevent the property gap. Inclusive growth involves reforming the system of private property formation and handling the issue of unfair property distribution, including the following three aspects. First, construct an equity system of private property formation in aspects like opportunities, rights and rules; second, create conditions for residents to earn more property income from real estates (i.e. housing) and personal properties (i.e. stock shares), and create more opportunities for residents to earn properties through their own efforts fairly, such as making innovations and starting businesses; and third, residents’ properties and incomes should be protected by the Law.

Obviously, the turn to inclusive growth embodies the promotion of China’s economic development capacity and finds new driving forces for China’s economic development at a new level. People support development on the condition of sharing its fruits, and social harmony, based on equity, can reduce social friction in the process of development.

6. The change of growth path from depending on the investments of material resources to being driven by innovation

China’s economic development has long remained at the factor-driven and investment-driven stage, characterized by mainly depending on the investments of material resources to drive economic growth, the same with the economic growth model in development economics. In this model, economic growth is the function of investment factors like capital, labor and land.
Though technology is included later on, it only functions as an exogenous variable and residual value. Only when a new economy and its corresponding growth theory occurred in the USA in the 1980s did there appear a theory of endogenous growth dependent on knowledge capital and human capital.

China has long relied on the investments of material resources to drive economic growth, but once it enters the middle-income stage, the contradictions will soon become prominent in the following two aspects. First, in terms of factors as driving forces, the under-investment of material resources has been approaching its ceiling, and the supply of cheap labor force coming from agricultural surplus labor has evidently decreased. Second, in terms of investments as driving forces, it is based on high accumulation and low consumption. Entering the middle-income stage, Chinese people are not likely to bear low incomes in the long term. The fundamental solution to this contradiction is to turn to an innovation-driven stage.

The concept of innovation is rarely used in existing development economics, but in modern times, without adopting the concept and theory of scientific and technological innovation, it is difficult to summarize the characteristics of modern economic growth, especially the characteristics of scientific and technological innovation reflected by the combination of knowledge innovation and technological innovation. The original technological progress took enterprise innovation as its primary source for technological innovation. Basically, enterprises proposed innovation needs and programs according to the market orientation, so the technological innovation was led by enterprises. The new scientific and technological revolution starting from the end of the last century and the new economy and knowledge economy resulted from it are characterized by the speed-up transfer from new technology to real productivity. The new scientific findings directly promote technological progress, and, in particular, the new scientific and technological breakthroughs directly promote innovation in industries like new materials, biotech and new energy. This mode of scientific and technological progress takes scientific findings as its primary source. Against this background, the essence of innovation-driven economic growth is transferring scientific and technological achievements into productivity.

The turn to innovation for driving economic growth should avoid the following-up theory prevailing in developing countries, which believes that developing countries lag behind developed countries in science, technology and economy, and they cannot step onto the same starting line with their developed counterparts in technological progress, so they have to adopt follow-up strategies to develop their high technology and new industries through imitation and introduction. This following-up theory is commonly seen in nearly all development economics textbooks. The pattern of technological progress promoted through following developed countries mainly involves OEM processing and technological imitation, which is virtually a radiation of foreign innovative technology into China with its source of innovation abroad. The new technologies adopted are actually mature ones abroad with core and crucial technology outside China. So the introduction of innovation can at best bridge the international gap but cannot change the status of lagging behind.

As the world's second largest economy, China should and can innovate its pattern of technological progress. In the past, China missed several industrial revolutionaries due to the low development level and so on, but at present, the world is flat, and due to the interaction between economic globalization and scientific globalization, network and informationization ensures every country an equitable access to new science and technology as well as industrial revolution. Especially after the 2008 world financial crisis, the world will greet new science and technology and industrial revolution. China shall never miss this opportunity.

As a large world economy, China has already qualified itself for standing on the same starting line of innovation with other developed countries. China has obtained the same opportunity with its counterparts to develop new industries. For one thing, the international gaps in scientific research works at the present stage are smaller than those in scientific and
technological industries and besides, science and knowledge travels across the globe faster than technology. Therefore, the interaction and combination between science and technology as well as the innovation through the joint efforts of enterprises, universities and research institutes can be promoted in various fields by the latest science and technology in the world, and meanwhile, the translation from science and technology into productivity can also be sped up. For another, a large economy can achieve great missions by focusing on certain priorities. China can take advantage of the “whole nation” system, thus being capable of making major breakthroughs in certain fields through focused mass investments. Under such circumstances, the route of advancing Chinese science and technology can turn from the pattern of following-up to the pattern of leading. Some key fields can even make big transitions and other fields catch up with and even go ahead of the international level, thus occupying the commanding point of the world science and technology, especially through the deep integration of the internet, big data, artificial intelligence and real economy.

Innovation as a driving force has become both a route for economic growth and an objective for transforming economic growth mode. The present prevailing economic growth mode is changing from extensive to intensive. The intensive growth mode basically means intensively using material factor and increasing the efficiency of factor use. Although the intensive economic growth mode involves the effect of technological progress, it is still stuck with the framework of promoting economic growth through the material factor. Innovation-driven growth mode is different. According to its definition, it not only handles the issue of efficiency, but more importantly, utilizes intangible factors to make new combinations among all factors. It is the application and spread of scientific and technological advances to production and business for the first time, thus creating new growth factors. Consequently, innovation-driven growth mode is of higher standards and of higher level than intensive growth mode and can best reflect the characteristics of economic development at a new stage.

7. The change of development strategy from imbalance to balance
There is a division between balance strategy and imbalance strategy in development economics. The balance strategy believes that developing countries are not well equipped with capitals and other resources to promote growth in all aspects when faced with structural constraints in economic development, so it is impossible for them to obtain balanced development. Therefore, investment has to be poured into some of the selected sectors and areas while other sectors and areas have to gradually develop themselves by taking advantage of the external economy and connecting effects brought by growth in the above selected sectors and areas. In reality, the strategy is reflected by the imbalanced investments in industries and areas.

Since the reform and opening-up, China has virtually adopted the imbalance strategy to permit a part of people to get rich first so as to fully mobilize the development potentials in advantaged areas and industries in collaboration with marketization. First, China promotes urbanization and industrialization with the urban and industry given priority to the rural and agriculture. Second, China implements various regional development strategies, like coastal development strategy. Third, China adopts some preferential tax policies for some enterprises. All these strategies and policies are successful in bringing out fully the development potentials in all aspects, breaking the ceiling of development in a rather short time and realizing a leaping development. Nevertheless, when this imbalance has developed to a certain point, problems of serious imbalance occur and its weaknesses show up. These include: the coexistence of overcapacity and the lack of effective supply in terms of the industrial structure; the lagging behind of agricultural modernization in terms of industrial and agricultural relations; the lagging behind of rural development in terms of urban–rural relations; the prominent issues of poverty in the central and western regions in terms of the regional structure; and the severe ecological damages in terms of the relations between
growth and ecology; the lagging behind of social development in terms of the relationship between economic development and social development.

Stepping into the middle-income stage, China, faced with the imbalance of national economy, needs to turn to coordinated development in time. The imbalance strategy adopted at the low-income stage should not be allowed to continue, and besides, the balance strategy should be implemented to make up for the weaknesses. Otherwise, it is difficult to build an all-round moderately prosperous society, let alone step into a high-income stage.

The Marxist social reproduction theory can be concluded as a coordinated development theory. The two categories of balance strategies demand proportionate development based on overall coordination among sectors. The path of modernization with Chinese characteristics created by China’s economic development is a path of balanced development integrating industrialization, IT application, urbanization and agricultural modernization. The all-round moderately prosperous society should benefit all people and involve the coordinated development among economy, society, culture, politics and ecology.

The balance strategy should be implemented based on the vision for coordinated development, achieving balance among industrial structure, urban and rural structure, regional structure and the according development strategy. This includes the coordinated efforts for economic growth made by the three driving forces: consumption, investment and exports and the three industries. Aiming at the existing unbalanced economic development, China should address weaknesses based on the idea of coordinated development from the following three aspects. First, address the weakness in agricultural modernization to promote for the simultaneous developments of new industrialization, informatization, urbanization and agricultural modernization; second, address the weakness of regional poverty to promote for the coordinated developments of urban and rural regions; third, address the weakness in social development to promote for coordinated economic and social development; and fourth, address the weakness in ecological civilization to promote for sustainable development.

8. Modernization of the dual structure: from non-agricultural support to direct target with respect to the development of agriculture, rural areas, and farmers

The traditional route to avoid the dual structure is pointed out by the Lewis model: a large quantity of agricultural surplus labor transfers to modern industry while the latter expands its capital accumulation until all the agricultural surplus labor is transferred; then at this turning point, industry should support agriculture for its technological transformation. According to the Lewis model, agricultural modernization can be realized on the condition that its surplus labor is assimilated into modern industry and industry in turn supports agricultural technological transformation. In other words, agriculture is modernized through industrialization.

Since the 1980s, China has kept supporting rural enterprises to promote industrialization and urbanization in rural areas, creating a path that drives the development of agriculture, rural areas and farmers with non-agricultural support, that is, addressing problems in rural regions through de-agriculturalization, urbanization and labor transfer. The effects are evident in the following three aspects. First, industrialization is sped up and China has transformed itself from an agricultural country to a rising industrial one; second, urbanization is sped up and China has entered the middle stage of urbanization; third, the developments of agriculture, rural areas and farmers are at a much higher level. However, the developments of agriculture, rural areas and farmers are simply driven by non-agricultural developments and they cannot catch up with the latter’s speed, so the gaps between the urban and the rural, between industry and agriculture are not narrowed, but instead enlarged.

Modernization with a priority to industrialization cannot avoid the consequence of a relative lagging behind of agricultural modernization. Now, the developments of agriculture,
rural areas and farmers are the weakness of the integrated development of industrialization, informationization, urbanization and agricultural modernization. As Comrade Xi Jinping points out, even though the ratio of urbanization reaches over 70 percent, there are still 400–500m people in rural areas, so the rural areas should never become bleak or left-behind places or hometowns in memory. Agricultural modernization and the construction of new rural areas should go hand in hand with urbanization, so that they can reinforce each other. The developments of agriculture, rural areas and farmers represented by agricultural modernization should be strengthened in order to achieve the first centenary goals[1]. Therefore, the path in terms of the developments of agriculture, rural areas and farmers should turn from non-agricultural support to direct target. The developments of agriculture, rural areas and farmers should be the object and emphasis of modernization.

Agricultural modernization, namely, developing modern agriculture, involves the following three aspects. First, the old mode of production and business operation should be fundamentally reformed to increase the productivity of labor, capital, land and total factor so as to raise farmers’ income. Second, agriculture is the base of national economy, so its modernization should meet the increasing demand for quantities and qualities of farm products in the process of social modernization. Third, the agricultural system should be innovated, involving reforming the agricultural operation system, strengthening agricultural systematization, reforming the rural land system and the distribution system of farm products and so on.

Modernization of farmers is aimed at training professional farmers of new kinds. According to Theodore W. Schultz’s theory, the existing production factors in agriculture have been effectively used, so new production factors need to be introduced for reform. The factors needed are science, technology and human resources. Developing modern agriculture should not simply rely on farmers mainly consisting of women and elderly people left behind in rural areas, but on professional farmers of new kinds trained through the investment of human capital. The farmers engaging in agriculture should receive education of modern culture and embrace the atmosphere of modern market economy. The realization of agricultural modernization should rely on knowledgeable and innovative farmers on qualified scientific researchers and technicians and on insightful public administrators and entrepreneurs.

The dual urban and rural structure refers to the coexistence of modern cities and underdeveloped rural areas, consistent with weak agriculture. The large and disperse rural areas are underdeveloped in terms of infrastructure, education, culture and medical treatment facilities, and farmers in rural areas have no access to modern lifestyle and civilization enjoyed by city inhabitants. The basic path to overcome the dual urban and rural structure is to realize urbanization. The path of urbanization created through practice in China referred to the entering of agricultural labor force into cities and towns, while the present urbanization reverses the previous one in extending the impetus and factors of city development first to towns and in turn to rural areas, fundamentally changing the underdeveloped situation of rural areas. This is the urbanization of city factors. The past urbanization required rural workers to join cities while the present urbanization requires the urban development factors to go outside of cities. The city factors and lifestyles extend to rural areas, which can be taken as a way of integrated development of urban and rural areas.

The integrated development of urban and rural areas is not intended to eliminate the latter, nor to eliminate agriculture, but to achieve an integrated development of the urban and rural areas while retaining their respective characteristics. It is not intended to lower the status of the urban status to adapt to the rural situation, but to raise the status of the rural, to bridge the gap between the urban and the rural in terms of economic and social development, to remove the structural barriers against the flow of factors and to form industrial divisions and distributions based on the inherent characteristics of the industries
inside both urban and rural areas. The urban and rural areas are on equal footing and in mutual permeation and integration in terms of economic, social and cultural development. The integrated development of urban and rural areas involves the integrated development in five aspects: city and countryside planning, employment services, social security, public services and city management.

The integrated development of urban and rural areas needs to transform towns into cities, that is, to make them function as cities, with the implication to strengthen the functions of industrial development, public services, employment and population aggregation in small and medium cities and small towns.

People are at the core of urbanization. That is to say, farmers become city residents and enjoy urban civilization. There are two paths to realize it. First, speed up the reform of the household registration system take well-ordered steps to make people moving out of rural areas city residents, and try to make basic urban public services accessible to all permanent residents. Second, make opportunities and facilities provided for city residents accessible to rural areas and towns, expand the opportunities of employment in towns, locate high-quality education, culture and medical facilities in rural areas and towns and increase supplies of public products and facilities for rural areas, and especially for towns. As a result, farmers can share various rights with city residents without moving to the cities.

In conclusion, agricultural modernization should give priority to the modernization of the quality of agricultural products based on scientific and technological progress; the modernization of rural areas should focus on the modernization of rural life and rural living environment based on the integrated urban–rural development; the modernization of farmers should emphasize making farmers city residents on the basis of urbanization. To promote the modernization of agriculture, rural areas and farmers on this high level, new types of industry–agriculture and urban–rural relations should be built based on the promotion of agriculture by industry, the support of rural development by urban areas, the reciprocity between agriculture and industry and the integration between the urban and the rural.

9. The change of China’s status in globalization: from merging in with comparative advantages to taking the lead with competitive advantage

In the past 30 years of reform and opening-up, China actually integrated itself into globalization with its comparative advantage in resource endowments. The effects were evident in the way that foreign-invested enterprises brought in the global value chains of high-tech products. On the chains, China’s labor cost, land cost and infrastructure were combined with foreign capital, technology and management so that it rapidly integrated itself into global network of production, becoming a world factory and globe-wide, low-cost manufacturing base. Although Chinese enterprises were at the low end of the global value chains with high outputs but low profits, they did share the benefits of economic globalization, the biggest of which was undertaking the transfer of advanced manufacturing through the global value chains. Chinese enterprises have notably improved their own science, technology and industrialization through learning-by-doing, imitation and innovation, and digestion, absorption and re-innovation.

After 30 years of open economy in China, today, when it comes to the opening-up strategies, one should both acknowledge the benefits of the comparative advantage in resource endowments embedded into the global value chains and prevent the potential risk of being stuck in the trap of low-end comparative advantage. Participating in international division of labor and trade based on the comparative advantage in resources endowment and attracting foreign investment by making use of labor, land and environment resources would certainly help gain a certain amount of benefits in trade and investment, but it cannot change China’s dependence on the economic technology and market of the developed
countries, nor can it narrow the gap in the economic technology between China and the
developed countries.

Based on the analysis of the additional value of comparative advantage, it is believed
that China’s gross manufacturing products rank first in the world, but a large number of
industries still remain at the medium and low-end of the global value chains and the parts
of high-tech products manufactured in China stay at the low-end of value chains. Most of the
core technologies and key technological links do not belong to China. There are few
creations from China and most of the brands are from abroad. There is a big gap of
additional value between low-end manufacturing (processing and assembling) and medium
and high-end manufacturing. China’s role in the global value chains that relies on
comparative advantage can no longer match the overall status its economy has achieved.

Based on the analysis of resource endowments, it is believed that the comparative
advantage in them no longer exists. The additional value achieved at the low-end value
chain is essentially low, much lower in recent years when there arise new circumstances
such as the short supply of labor and land, the significant increase of cost and the more
strict environmental standards. This means that labor, resources and environment no longer
have the comparative advantages. As the price of labor and land increases, the additional
value would further decrease. Besides, the advantage of scale at the medium and low-end of
the global value chains no longer exists; that is, no matter how much labor is poured into the
low-end links, scale economy could not be achieved. This is the situation where hard work
brings no affluence and high outputs bring low profits.

Based on the analysis of international competitiveness of manufacturing products, it is
believed that China has become a large world manufacturing country, but among its
manufacturing products, few are created domestically. The comparative advantage in labor
and natural resources is based on low prices, but with the decreasing abundance of these
factors, the relative labor price and productivity will no longer have a comparative
advantage, nor will the relative land price and productivity. If China intends to transform
itself from a large world economy to a great world economy, it should seek trade benefits not
simply by relying on the comparative advantage in labor and natural resources, but by
bringing capital and technology into full play at a higher level in a larger scope so as to
quickly bridge the technological gap with the developed countries.

Based on the situational analysis of globalization, the past globalization was dominated
by developed American and European countries, which reaped the most benefits from it.
Since the 2008 world financial crisis and the subsequent American and European sovereign
debt crisis, American and European economies have long remained in recession and
stagnation and consequently slowed down the overall world economic growth. Alongside
the economic recession, these countries represented by the USA promote reindustrialization
and protectionism, especially the US-preferential investment and trade policy implemented
by the Trump administration. These policies are essentially anti-globalization. Conversely,
China, as the world’s second largest economy, takes the successive role of promoting
globalization. In the past, China embedded itself into globalization with its comparative
advantage in resource endowments, while at present it promotes globalization through
participation in the global economic governance, which means participating in and taking
the lead in the formulation and refinement of international economic regulations.

China’s opening-up strategy needs to change from comparative advantage to competitive
advantage due to its changing status in economic globalization. Why competitive advantage?
What are its differences from comparative advantages? The differences are as follows. First,
the theory of comparative advantage, believed by people for over a century, is essentially a
guidance for enterprises to participate in national trade and division of labor. However, under
the circumstances of today’s economic globalization, the theory of competitive advantage
raises the concept of comparative advantage to the national level, taking nation as an
economic unit. Competitive advantage refers mainly to national opening-up strategies without rejecting enterprises’ participation in international competition with their comparative advantage. Second, traditional theories of trade tend to take cost and product differences as conditions of trade, highlighting the comparative advantage of developing countries in labor and natural resources, while the theory of competitive advantage tends to give priority to technological progress and innovation, focusing on fostering a new advantage with core competitiveness in technology, trademark, quality and services. Third, the traditional theory of comparative advantage is based on the condition of national resource endowments while the theory of competitive advantage is based on the question of whether the industry of a nation possesses competitive advantage over its competitors. Fourth, the role of a country’s industries in the global value chains embodies its scientific and industrial competitiveness. China’s science and technology in the past remained at a developing stage, following developed countries, and consequently at the low-end of the global value chains. In contrast, at present, China’s scientific and technological innovation steps into the stage of keeping pace with the developed countries and even taking the lead. Accordingly, Chinese enterprises have promoted their role in the global value chains with an attempt to take the lead by means of expanding to the upper-stream parts of the industry chain like R&D and design, extending to the lower-stream parts of the chain like logistics, brands, sales channel and updating the low-end processing and assembling link to the component manufacturing link with higher demand of technology and quality and higher additional value.

Consequently, the essential path to seeking competitive advantage is to promote the upgrade of domestic industrial structures by means of scientific and technological innovation with a special focus on developing emerging industries at the same level with the developed countries, thus forming industrial structures with competitive advantage over world-class competitors. This embodies the endogenous characteristic of growth and the driving characteristic of innovation. On the surface, it looks like the turn from exogenous pull to endogenous development, but actually the international competitiveness of Chinese industries is promoted through scientific and industrial innovation, an endogenous innovation that supports opening-up.

An innovation-driven economy in pursuit of competitive advantage does not exclude an open economy for it needs opening-up to support innovation. Today’s international economy is led by the flow of factors, especially that of innovation factors, which cannot be gained domestically but can be obtained from abroad through opening-up to the world. Due to historic reasons and different development levels, advanced innovation resources are still mainly located in developed countries. Therefore, the open economy at a new stage should give priority to the introduction of innovation factor. Growth as the focus of development in the past was essentially promoted by capital while other factors like technology and management basically followed capital, so accordingly, the open economy took advantage of international resources (foreign advanced technology and management) by introducing foreign capital. Nowadays, the priority of development is given to innovation, all various innovation factors follow talents, so accordingly, it is necessary to introduce high-end innovative talents and thus take advantage of other international innovation factors in order to develop innovation-driven economy.

In conclusion, China, as a large world economy, has made innovations in its economic development theory, which indicates that it intends to perfect itself rather than seek hegemony. As the world’s second largest economy, China should adapt to the transformation and further free people’s minds instead of adhering to the old patterns of thinking. It should think over the path of development for a great world economy from the historical starting point of a large world economy and find development strategies to transform itself from a large economy to a great economy, so as to realize the dream of the Chinese nation to build a powerful country.
Note
1. There are two centenary goals. The first refers to completing the building of an all-round moderately prosperous society by the time the Communist Party of China celebrates its centenary in 2021, and the second refers to turning the People's Republic of China into a modern socialist country that is prosperous, strong, democratic, culturally advanced, and harmonious by the time it celebrates its centenary in 2049. (translator’s note).

Reference

Further reading

Corresponding author
Yinxing Hong can be contacted at: yinxing@nju.edu.cn
Combining Marxism and China’s practices for the development of a socialist political economy with Chinese characteristics

Wei Liu
Renmin University, Beijing, China

Abstract
Purpose – The socialist construction with Chinese characteristics must be based on history and reality. According to the requirements of liberation and development of productivity, efforts must be made to reform and improve the production relations, as well as continually consolidate the socialist system with Chinese characteristics. The purpose of this paper is to prove the necessity and superiority of a socialist system through China’s modernization achievements.

Design/methodology/approach – Marxist political economics is a critical legacy from classical economics. Its core question is also social production and distribution, which is epitomized in the labor theory of value and the theory of surplus value.

Findings – Regarding the significant principles that must be followed, these speeches summarized the logical system and prominent features of the socialist political system in the new normal from several significant and interrelated aspects such as basic methods, core propositions, main tasks and fundamental goals.

Originality/value – The socialist system with Chinese characteristics will gradually appear through further research and prove its superiority. How can a socialist system with Chinese characteristics innovate and develop? Does the system have a future? Is there any historical necessity for the socialist system to replace the capitalist system in human history? These are the questions that need urgent answers and in-depth exploration.

Keywords Political economy, Socialism with Chinese characteristics

Paper type Research paper

Developing China’s economy according to the principles of Marxist political economy and enriching modern Marxist political economics in China’s Socialist economic practice are the bases for developing a socialist political economy with Chinese characteristics.

1. Political economy and China’s development
Political economy studies the operating laws of economic institutions, including Marxist political economy which focuses on the origin, development and death of production mode (the capitalist mode of production in a narrow sense and various historical social production modes in a broader sense). By using a historical perspective and the methodology of historical and dialectical materialism, it also explores the operating laws of production relations in the contradictory movement between productivity and production relations. The aim is to keep creating and improving institutional conditions to liberate and develop social productivity. Therefore, the study of political economy, especially the Marxist political economy, is necessary as long as the social relations of production and its contradictory movement with productivity exist.
“Economy” in ancient Greek means household or manor management. The word “economy” in *Oeconomicus* or *Economics* by Xenophon refers to manor management. In 1615, the merchant scholar Antoine de Montchretien first put forward the concept of a “political economy” in *Économie politique – Au Roi et à la Reine-mère du Roi*, in which the “economy” was expanded from household management to national administration and later gradually became a theme in British classical economics. The category of political economy was used as a theoretical theme in both *Elements of Political Economy* by James Mill and *On the Principles of Political Economy and Taxation* by David Ricardo. According to definitions by classical economists like John Stuart Mill, political economy studies the nature, production and distribution law of wealth, and the factors related to production and distribution such as institution, society, moral and human nature. Based on this definition, *The Wealth of Nations* by the classical economist Adam Smith is the epitome of the study of political economy, causing Adam Smith to represent classical economics. *The Principles of Economics* by Marshall was published in 1890, in which “political economy” was “economics.” In contemporary western economics, the “economics” and “political economy” were the main study area. The category of political economy, used at times, is limited to two cases: one is the “new political economy,” which investigates political behaviors by using the methods of neoclassical economics such as election; and the other is “international political economy,” which studies the mutual relation between politics and economy (Liu, 2015). The *New Palgrave Dictionary of Economics* considers that in the twentieth century, “economics” and “political economy” have become essentially synonymous, but their emphases are different and their connotations have changed. “Political economics” is no longer the mainstream principle of the economic theory of the bourgeoisie.

Such change is found on the basis of ideological and economic history. Political economics focuses on social production relations, where the basic proposition is the nature of the social production and distribution relations. Therefore, value theory and the relative distribution issue have become the core. Classical economics as represented by Adam Smith actually changes to political economics. Its fundamentals lie in value theory and relative income theory, attempting to reveal the historical rationality, superiority and inevitability of the capitalist mode of production through this research. During the initial period of classical political economy studies, the capitalist mode of production, as the emerging mode opposed to the feudalistic mode of production, was not recognized by the public. The bourgeoisie, the representative of the mode, did not gain a stable or dominant position. The productivity basis, which the Capitalist production mode relied, had not been established (as the industrial revolution came after the bourgeois revolution) and the historical advantages of the capitalist system in liberating and developing productivity had not fully shown. Therefore, it required bourgeois scholars including philosophers, lawyers, sociologists, politicians, historians and economists to argue and analyze the same proposition: the necessity and rationality of the capitalist system.

Consequently, areas such as justice, fairness, liberty, human nature, human rights, contract and value became the shared focus of capitalist humanities and social sciences at that time. How did the economists prove the necessity and rationality of the capitalist mode of production? The first step was to prove its equality and fairness, where the economic relationship is reflected in the underlying market principle of exchange of equal value. Therefore, value production and relative distribution theories served as critical topics of bourgeois economics at that time. From the labor theory of value in classical economics to the cost-of-production theory of value (or Adding-up Theory) proposed by Jean-Baptiste Say in 1840 and then systematized by John Stuart Mill, to the utility theory of value in 1870 after the marginalist revolution, the dominance of the value theories was continuously developing in the ideological history of the bourgeois economy. However, the fundamental purposes were to prove the rationality, necessity and superiority of the capitalist system by developing and improving the value theory. At the end of the nineteenth century, the equilibrium price theory
(partial equilibrium) in neoclassical economics represented by Marshall replaced other value theories. Correspondingly, political economy became known as economics, of which the fundamental problem no longer focused on the classical economics’ value theory; the theory of value production and distribution, in demonstrating the rationality and necessity of the capitalist system. Economics, with equilibrium price theory as its core, explored how to maximize profit with the same capital by using a capitalist system as well as how to utilize capitalism. Equilibrium price is the optimum of profit maximization (extremum) of capital, thereby finding the equilibrium position for the extremum (i.e. how to maximize the profit or utility) became the fundamental problem of economics. Fundamental causes of price theory replacing value theory appears as the core proposition. First, with regard to methodology, bourgeois scholars, without Marxist historical materialism, are unable to research the rule of paradoxical movement of production relations based on productivity development tendency. While denying feudalism and asserting the historical trend of capitalism replacing feudalism, capitalist scholars, based on the requirements of advanced productivity of capitalist class, prove the rationality and necessity of capitalism. However, they do not acknowledge the historical limitations and inevitable death of the capitalist system on the basis of the fundamental trend of productivity development. Therefore, as the contradiction between the capitalist system and productivity development gradually appears, it is impossible for them to continue to scientifically or deeply analyze the objective movement law of the capitalist production relation. Second, at the end of the nineteenth century, with material conditions (large machine industries) for the capitalist system, it would inevitably replace feudalism. The bourgeoisie, as the ruling class, did not need to prove the rationality and necessity of capitalism. Instead, they needed to analyze how to use this system to maximize the profits of capital. The bourgeoisie did not need to show why capitalism was needed but how to utilize capitalism. They also did not need to examine what kind of defects the production modes have, what kind of constraints are imposed on the development of productivity, and what kind of historical changes are needed. The bourgeoisie believed that the capitalist system was fundamentally perfect and should continue perpetually. Therefore, “political economics” that studies the paradoxical movement of production relations, value production and distribution nature made way for “economics,” which fundamentally focuses on issues such as equilibrium price, extremum position and conditions involved. Classical economics evolved from tradition into orthodox economics[1].

Marxist economic theory actually refers to political economics. The subtitle of Marx’s representative work *Das Kapital* is the “A Critique of Political Economy,” indicating a study into capitalist production relations. As stated in the preface, “In this work I have to examine the capitalist mode of production, and the conditions of production and exchange corresponding to that mode” (Marx and Engels, 2012a), “and it is the ultimate aim of this work, to lay bare the economic law of motion of modern society” (Marx and Engels, 2012b).

In the French edition of *Das Kapital*, the capitalist mode of production, as the object of study, is further clarified as the “capitalist system” to avoid mixing nature and society modes of production. Meanwhile, “it is a peculiar mode of production, specifically defined by historical development; that it, like any other definite mode of production, is conditioned upon a certain stage of social productivity and upon the historically developed form of the forces of production” (Marx and Engels, 1974). In a broad sense, the political economy, studying the movement of production relations in all human societies, includes the movement law of production mode in primitive society, slave society, feudal society, capitalist society and communist society[2].

Marxist political economics is a critical legacy from classical economics. Its core question is also social production and distribution, which is epitomized in the labor theory of value and the theory of surplus value. The Marxist labor theory of value scientifically proves the fundamental contradiction between labor and capital and indicates that labor is the only
source of value, laying a foundation of theory and morality for the theory of surplus value. The theory of surplus value by Marx analyzes how capital takes possession of labor free of charge. With historical materialism methods, it proves the historical necessity of the capitalist system's birth, development, death and replacement by communism – a new system that represents the development demands of new productivity. Criticizing the capitalist system, this theory predicts the production modes featured in historical logic and theoretical logic in the future ideal society.

Both the bourgeois political economy in the rising period of history and the Marxist political economy representing the fundamental interests of the proletariat take the social production relations and their movements as the object of research and defend their class's interests and social production mode. This is the fundamental attribute and characteristic of political economy. The socialist construction with Chinese characteristics must be based on history and reality. According to the requirements of liberation and development of productivity, efforts must be made to reform and improve the production relations, as well as continually consolidate the socialist system with Chinese characteristics. The aim is to prove the necessity and superiority of a socialist system through China’s modernization achievements. Especially during the period of reform and development, the Chinese socialist system is undergoing continuous reforms and improvements, and its productivity base is still falling behind. The material basis, on which the socialist system surpasses the capitalist productivity, is still being built. The socialist system with Chinese characteristics will gradually appear through further research and prove its superiority. How can a socialist system with Chinese characteristics innovate and develop? Does the system have a future? Is there any historical necessity for the socialist system to replace the capitalist system in human history? These are the questions that require us to make significant efforts in both theory and practice. The study of these propositions constitutes the fundamental questions that contemporary Chinese Marxist political economics, especially a socialist political economy with Chinese characteristics, must answer. Therefore, China's development practice needs a socialist political economy with Chinese characteristics (Liu, 2015).

2. Political economy and China’s self-confidence in development
The report of the 18th National Congress of the Communist Party of China stressed that China must build up confidence in its route, theory and system, which reflects a lack of self-confidence. China was once confident in its cultural tradition, which was based on the cultural self-confidence of a strong agricultural feudal empire. As the only uninterrupted civilization among the three ancient civilizations of humankind, the Chinese civilization, originating from the Yellow River civilization, has been continuous. At the beginning of the nineteenth century, the capitalist commercial revolution had taken place and the industrial revolution started in the West. However, China's economic scale (GDP) was still ranked first in the world, reaching over 32 percent. The Chinese civilization was more glorious than the European Mediterranean civilization during the long history of agricultural civilization[3]. However, after the Western capitalist revolution, the Chinese traditional civilization was defeated by Western modern industrial civilization with the First Opium War (1840) as the turning point. This was the beginning of China’s modern history of humiliation characterized by enduring impoverishment and debility as well as foreign invasions. Its history of humiliation caused a sense of cultural inferiority, including the lack of confidence in theories.

Economics emerged in China as a subject at the beginning of twentieth century. It was borrowed from the West, because advanced economic theories cannot develop locally under backward economic conditions, especially in semi-feudal and semi-colonial societies. In order to eliminate backwardness, the advanced systems and paths taken by Western civilizations were then followed by the Chinese. The economic theories originating from the
Western capitalist industrial civilization were introduced into China as a science. Yan Fu translated Adam Smith’s *The Wealth of Nations*, which marked the point when Western classical economics began to enter China. Chen Qixiu, Guo Dali and Wang Ya’han translated Karl Marx’s *Das Kapital*, which began the dissemination of Marxist economics in China. However, Western capitalist orthodox economics still dominated. Around the 1920s, some famous Chinese universities successively established Departments of Economics. However, their curriculum systems were essentially a copy of the economic system of Western universities. The concepts of learning were also inherited from traditional Western economics. This continued to the beginning of the 1950s after the establishment of the PRC.

From 1952, the curriculums for economics in China’s universities replaced the traditional Western capitalist economics with the Soviet Union’s academic system. Most of the colleges and universities canceled Western economics courses and fired their corresponding except for few universities such as Peking University and Wuhan University. They were replaced by the Marxist economic theory that had changed and was interpreted by the Soviet Union. On this basis, the economics teaching system was constructed. Such replacement also reflected the lack of confidence in theory, which is attributed to theoretical dependence based on backwards economic development.

For the twentieth century, economics has successively followed Western bourgeois economics and Marxist economics in China. At first, it followed the academic traditions of the orthodox economics of the Western bourgeoisie and constructed the discipline on this foundation. It then followed the Marxist economics based on the Stalinist model. This reflects the lack of the awareness and confidence in economic theories. Mao Zedong, in the practice of leading socialist construction, made significant efforts to explore socialist routes, institutions and thoughts, and theories featuring Chinese characteristics. He also reflected on the development and construction of political economy and related teaching programs. However, the long-neglected and lagging economy did not make the theoretical reflection on political economy successful and persuasive[4].

China’s confidence in economics is originated from the significant success of reforms and opening up. These practices posed challenges to economic theories and raised historical claims. Political economics has made considerable progress in China in the course of responding to these challenges and claims, which has fed back to China’s practice significantly. The unprecedented achievements of China’s economic development have supported China’s confidence in the continuous development of a socialist political economy with Chinese characteristics. The continually emerging contradictions and problems of the socialist cause construction lead to historical demands for economics, thereby promoting its continuous development. Solving this series of contradictions and problems has become the fundamental criterion for testing the socialist political and economic development with Chinese characteristics. As Deng Xiaoping stated at the “Decision of the Economic System Reform” on the Third Plenary Session of the 12th Central Committee, “The first draft of political economy is a combination of Marxist basic principles with socialist practice with Chinese characteristics” (Xiaoping, 1993). The historical practice of China’s socialist economic development creates essential conditions for enriching and developing a modern Marxist political economy, and bringing new demands for the development of a Marxist political economy in China. Since the 18th CPC National Congress, the Party Central Committee, with Xi Jinping as its General Secretary, emphasized the application and development of the Marxist political economy in China. It also stressed on the use of political economics to summarize and direct socialist reforms with Chinese characteristics. In July 2014, Xi Jinping, at the panel discussion on economic conditions, stressed that the party committees and governments at all levels must learn how to make good use of political economics, consciously understand and better follow the laws of economic development. The aim is to improve the ability to promote reform and opening up, socioeconomic
advancement, and development quality and efficiency. While chairing the 28th among the members of the Political Bureau of CPC in November 2015, the General Secretary Xi Jinping stressed again that China must, on the basis of national realities, reveal new characteristics and laws, upgrade and summarize regular achievements in China’s economic development and keep exploring the frontier of Marxist political economics. At the Central Economic Working Conference in December 2015, he emphasized the insistence on the major principles of a socialist political economy with Chinese characteristics. This series of speeches related to political economy by Xi Jinping forms a continually deepening logical system through the following successive propositions: learning and using political economics, systematic economic theories and insistence on the major principles of the socialist political economy. It has shown the confidence in China’s reform and opening up and constructing the theory system. Particularly, regarding the significant principles that must be followed, these speeches summarized the logical system and prominent features of the socialist political system in the new normal from several significant and interrelated aspects such as basic methods, core propositions, main tasks and fundamental goals[5].

3. The history conception and methodology of socialist political economy with Chinese characteristics under the new normal: the basic principle of liberating and developing productivity

(1) Adhering to liberating and developing productivity is the requirement for the historical conception and basic method of Marxist historical materialism and dialectical materialism, and the Party’s fundamental requirements in the primary stages of socialism. It is also the basic approach and principle of developing and applying the socialist political economy with Chinese characteristics. Political economics studies the movement law of social production relations, which can only be revealed in the contradiction between productivity and production relations. The movement law of production relations derives from the historical requirements on the productivity growth and its changes. First, the functions of socialist political economy with Chinese characteristics are to learn about the evolution and movement features of production relations by analyzing the historical paradoxical movement of productivity and the production relations, as well as to keep adjusting and improving the production relations, and liberating and developing productivity based on the historical requirements of productivity growth. Otherwise, the socialist political economy with Chinese characteristics will have neither scientific methods and correct value orientation, nor the necessity of existence and development. Second, the historical inevitability and superiority of socialism with Chinese characteristics can only be proved by emancipating and developing China’s productivity and surpassing the modern capitalist economic development level. Otherwise, the socialist system with Chinese characteristics will have neither sufficient historical basis nor confidence in route, theory, institution and culture. Third, the essence of the socialist system with Chinese characteristics lies in liberating and developing productivity. This is determined by the basic national realities and major paradoxical movement in the primary stage of socialism, which requires us to focus on economic construction and adhere to the general layout and scientific outlook on development during the stage. Otherwise, China will deviate from the realities and the socialist essential requirements.

(2) Persisting in the principles of liberating and developing productivity is the key to correctly understand the reform and practice, the basic motivation for reform and the fundamental standard of assessing reform. There is no doubt that reform is an
important part of the practice of socialism with Chinese characteristics and the significant impetus for socialist cause. Therefore, the experience summary of reform practice undoubtedly forms an important content for the socialist political economy with Chinese characteristics. Guiding the reform in China, as the basic mission of the political economy, raises history requirements for itself. We must adhere to emancipating and developing productivity in order to correctly understand the reform. First, the reform, whose aim is to reform production relations and innovate institutions, can be only motivated by productivity liberation and development. Otherwise, the reforms will deviate from the essence and basis of socialism. China must not blindly reform by divorcing from the requirements of productivity development in the primary stage but it must dare to reform in the face of the system drawbacks and policy loopholes that restrict and hinder productivity development. Second, according to the requirements of productivity development, the reform must be interpreted as the changes in production relations and the eliminations of institutional defects that constrain and hinder its development. Otherwise, it will be hard to grasp the essence and mission of the reform. The essence of reform cannot be simplified into marketization under the privatization described in the “Washington Consensus,” and the essence of production relations cannot be ignored. The necessity of a basic economic system and economic operating reform cannot be neglected. The Chinese socialist system is characterized by the domination of public ownership with other types of ownership developing simultaneously and the market-oriented resource allocation, which is also the objective requirement for liberating and developing productivity. Third, liberating and developing productivity should be taken as the basic criterion for testing and assessing reform achievements. The progress of reform cannot be made at the cost of reducing productivity. This is the demand of China’s backward productivity for making development, and the important experience that differentiates China’s reform from that of other countries. The performance of reform cannot be assessed by subjectivism, Western mainstream values or conservative doctrines. It should be assessed by the basic standard of liberating and developing productivity. All the reforms and improvements of production relations should take productivity liberation and development as a fundamental feature. This is the basic viewpoint of Marxist historical materialism and gives China confidence in its economic reform and development.

Over the past 30 years of reform and opening up, China’s total GDP has increased. From 1978 to 2015, it has increased 29 times to around RMB 67.7 trillion (over $11 trillion), and its global total has raised from 1.8 to around 14 percent. Such a growth rate is equivalent to that of the USA from 6.29 to about 60 percent. China’s economy has climbed from the 10th place to the second place (2010). Per capita GDP has undergone three phases: poverty line at the beginning of the reform and opening up (1978), subsistence level (1998) and middle income (2010). The per capita GDP was about RMB 50,000 (about $8,000) in 2015. The growth rate is equivalent to that of the USA from 1.8 to about 14 percent. (During the same period, the US population grew by about 42.7 percent from 220to 314m. China’s population increased from over 900m to around 1.37bn, an increase of about 41.2 percent). Most of the transitional countries including developing countries in Latin America and the former planned economy countries have promoted transitions in line with the “Washington Consensus,” which, however, caused lower growth rate and higher instability compared with that before the 1970s. Most of these countries even experienced severe economic recession (Yifu, 2012).

Meanwhile, China’s rapid economic growth was accompanied by changes in quality. On the one hand, the economic structure has been improved, with the proportion of agricultural labor decreasing from 70.5 (72 percent for low income countries) to about 30 percent
(the average level of middle-income countries), the proportion of production value declining from over 28 to about 9 percent; and the employment proportion of second industry growing from 17.4 to about 30 percent. Hoffmann rate has also seen profound changes, and it is estimated that the new industrialization will be achieved in 2020. The proportion of tertiary industry employment has grown from 12.1 to over 35 percent, and its production value has exceeded the second industry with a proportion from 23 to above 50 percent. These changes in structure also indicate the quality improvement of structures in the course of rapid economic growth since the reform and opening up. On the other hand, the quality improvement can only be explained by efficiency promotion, which can only be achieved by innovative functions including technological innovation and institutional innovation. Fundamentally, innovation can only be explained with reforms. Despite many contradictions and deficiencies, the reform and opening up have indeed liberated and promoted productivity growth (Liu and Zhang, 2013).

4. The core propositions of the socialist political economy with Chinese characteristics under the new normal: adhering to the direction of socialist market economic reform

The vital mission of socialist political economics with Chinese characteristics is to guide socialist economic reform with Chinese characteristics. The ideological and theoretical vitality of political economics lies in summarizing the reform experience and forming a systematic theory:

(1) The essence of socialist economic reform with Chinese characteristics is the socialist public ownership and market economic mechanisms. This is the fundamental feature of China’s socialist market economy reform and the breakthrough of traditional Marxist economic theories and reform practice. This is also an essential proposition that the socialist political economy with Chinese characteristics needs to study, summarize and develop, which is unprecedented. First, the public ownership and market economic mechanism is negated by two traditions. One tradition is that of Western orthodox economics, which says that only capitalist private ownership can establish the market economic mechanism. Classical economics, modern western orthodox economics, the debate between Lange and Mises at the beginning of the 20th century, Washington Consensus and post-Washington Consensus all follow this tradition by first negating the possibility of combining socialist public ownership with market economy mechanisms, then doubting the efficiency of socialist resource allocation, and finally saying no to socialism. The other tradition is Marxist theory. From the perspective of Marx, market mechanism cannot only be combined with capitalist private ownership. It can neither be integrated with non-capitalist private ownership nor the public ownership of any forms. Therefore, in the communist society assumed by Marx, the means of production is jointly possessed by the whole society, and private ownership of all types has been eliminated. Correspondingly, social connections and social reproduction among people no longer require indirect transactions and are coordinated by direct social unification plans instead. In the works of classical Marxist writers, whether concerning the theoretical logic of political economy or the orientation of historical values, markets, commodities, prices and transactions cannot and should not exist in an ideal communist society featured by common possession. Therefore, the theories and practice that aim at combining public ownership and market mechanism are the negation of western orthodox economics and the breakthrough of the traditional Marxist theories. Second, it is the theory and practice breakthrough of institutional transition in planned economy countries. After the theory and practice of Stalin.
centrally planned economy established its dominance, corresponding countries have carried out multiple reforms in the 1950s in response to the defects. From the social ownership reform by workers’ autonomy in Yugoslavia, to Kosygin’s reform and Liberman’s market socialism in the Soviet Union, and from Lange’s simulated market mechanism to the Wtodzimier Brus’s and Ota Sik’s decentralized reform mode, all of these attempted to introduce market competition mechanisms without changes in the structure and form of the public ownership of the socialist means of production, and thereby gain the resource allocation efficiency of market competition and fair system under the public ownership system. However, they did not achieve success in both theory and practice. Therefore, after the 1980s, to enhance market competition efficiency, they abandoned public ownership and applied the mixed ownership that gives dominance to the market economy mechanism (Liu and Fang, 2016). China’s economic reform has always been combining the primary public-owned system with market economic mechanism playing a decisive role in resource allocation. It was a significant breakthrough for the economic transitions in the past. Third, the challenge facing socialist economic reform with Chinese characteristics is how to balance public ownership and market mechanism. On the one hand, market mechanism has basic requirements for ownership of means of production. Namely, the ownership without some essential features and natures can hardly meet the requirements. Market exchange mechanism is essentially a historical movement form of the ownership of means of production. On the other hand, how can the structure and the fulfilling way for the reform of ownership of social production of means guarantee the dominance of public ownership and simultaneously adapt to the basic demands of the market mechanism? This involves how to keep the fundamental nature of public ownership while meeting the necessary requirements from the market economic mechanism.

(2) The primary task of economic operational mechanism reform plays a decisive role in resource allocation. The key to fulfilling the task is to properly handle the relationship between the government and the market from the economic structure level. First, we must be aware that the market’s decisive role in resource allocation is the primary task of deepening economic system reform. On the one hand, efforts must be made to promote the process of marketization from goods to factors, from the real economy to finance, and from building the market system to improving the market orders. On the other hand, it is necessary to transform government function and improve government intervention so as to address the social development issues market failure. Second, China must be aware that the market’s decisive role in resource allocation comes from the historical experience of the reform and opening up in the past several decades. At the beginning of the reform and opening up, China was challenged by the failures of establishing the market economic mechanism under the socialist public ownership at the theoretical and practical level. With the deepening of the reform, China first broke the opposition between socialism and market economy, and proposed that market regulation is necessary for the socialist economy. Moreover, the 12th CPC National Congress formally put forward the planned economy as the primary form with market regulation as a supplement, which broke through their fundamental opposition. The 13th CPC National Congress recognized that planning economy and market forces are both applicable in China’s society and socialist economy should be a combination of planned economy and market regulation, which further overcame the limitation of “main-supplement theory” and proposed the integration of planned economy and market regulation. The 14th CPC National Congress further specified the reform goal of establishing a
relatively perfect socialist market economic system. Moreover, the decision of comprehensively deepening the economic system reform, raised at the fifth plenary session of the 18th Central Committee and the 18th CPC National Congress, put forward that the key to the economic system reform is to handle the relationship between the government and the market, and let the market play a decisive role in resource allocation. The focus of the reform is to deepen and improve the market mechanism so as to address the problems such as the incomplete market system, irregular market regulations, extensive government intervention and government function deficiency. The aim is to solve the problems caused by market failure and government failure at the same time.

The essential feature of China’s economic reform and transformation is to promote the transition of the socialist market economy with Chinese characteristics in the combination of ownership reforms with market mechanisms, not to separate the ownership and market mechanisms, but to push forward the reform through the combination of essential systems and operating mechanisms. Concerning the ownership reform, the Chinese government recognized individual economy for the first time at the 12th CPC National Congress and admitted that the private economy was a necessary and beneficial supplement to the socialist public ownership economy at the 13th CPC National Congress. It set out the goals of the reform of the socialist market economy system at the 14th CPC National Congress. The 15th CPC National Congress recognized the public ownership economy as the primary economic system combined with diversified forms of ownership economy in the primary stage. Since the 16th CPC National Congress of the People’s Republic of China, the “two unwavering” has repeatedly been emphasized, and the reform of the mixed ownership system was emphasized after the 18th CPC National Congress. As a result, socialist ownership structure featured by the organic unity of public ownership economy as the mainstay and economy with different types of ownership has constantly been improved. Based on this, the socialist market economy mechanism with Chinese characteristics has gradually formed.

(3) The difficulty in the reform of the socialist market economy is to improve the market economic order and its quality. The market economic orders include the internal competition orders and the external environmental orders. Internal competition order mainly contains two aspects. One is the enterprise ownership system, and the other is the market price system. The former is the subject order of market competition, which determines who the competitors are. The latter is the transaction order in the market competition, which is about how to compete. External environmental orders also mainly cover two aspects. One is the legal order of the market competition, and the other is the moral order. The former involves legal system construction and legality spirit promotion. A market economy must be ruled by laws, whose fundamental competition orders need a law system to safeguard. The effectiveness and authority of the legal system are based on the spirit of legality. Moreover, its effectiveness depends on the sufficiency of the rule of law, the respect and awareness by the public, and especially the legal restraint on the public power and constraint on the legislator’s power. The latter is about the understanding of market competition from a moral and spiritual level, which involves transforming traditional morality with loyalty as its core to contemporary moral order with integrity as its core. It also involves the combination of national traditional and the contemporary global cultural, and avoids falling into the trap of anarchy with morality. Therefore, this is of significant meaning.
5. The primary task of a socialist political economy with Chinese characteristics under the new normal: how to mobilize all powers

In actuality, the problem that political economy addresses is to resolve various contradictions occurring in the course of socioeconomic development, and to research how to manage the conflicts at the lowest cost so as to overcome the obstacles of productivity development and liberation. This is the core of politics. As Mao Zedong said, the aim of politics is to have more supporters and fewer opponents. The socialist political economy with Chinese characteristics explores how to support socialism, and how to increase the power to liberate and develop productivity while reducing resistance. It is fundamental to mobilize all powers:

(1) The unification of motivation and restriction is both an underlying issue of arising enthusiasm and a unique transition problem faced by our country. Essentially, reform is the institutional reform of rights, liabilities and benefits. The primary principle of the institutional reform is the integration of three elements. This is one of the significant problems that the socialist political economy with Chinese characteristics needs to focus on. Especially for the managers of state-owned enterprises, the rights, liabilities and benefits must be coordinated in nature and degree. Endowed with leadership powers, the managers must assume corresponding risk responsibilities stipulated by the institution while exercising leadership. Otherwise, the managers do not have the prerogative to maintain leadership. At the same time, after assuming the corresponding responsibilities, the leaders must be rewarded with benefits. If not, it is a negation of their talents, and is the separation of right, responsibility, and benefit, because this will lead to the evasion of responsibilities by those with power, and inability to obtain deserved benefits for the leaders who have assumed responsibilities. Consequently, it will cause inefficiency and disorder. The rights without responsibility restriction will lead to disorder and assuming responsibilities without benefits will lead to inefficiency. This mainly applies to corporate governance structure.

(2) Giving full play to the initiative of both the central and local authorities is one of the specific problems for a socialist political economy with Chinese characteristics. China is a vast country with noticeable regional differences. Therefore, even during the early days of New China, China’s economic system was different from the Soviet Union’s planned economic system that China had copied. The Soviet Union’s planned economic system used vertical management by the central departments directly. The local governments at all levels did not have much independence on right, responsibility and economic benefit, and centralization was clear. China, however, combined vertical centralized management with local administrations at all levels. While the central departments manage vertically, local governments can also be independent economically. This is favorable for mobilizing the initiative of both the central and local authorities. It, however, can also lead to power struggles between the central and local authorities. For a long time, the aim of economic restructuring and policy evolution was to ease this contradiction. This largely involves a governmental governance structure.

(3) Efforts must be made to remove the obstacles of reform. One of the goals of mobilizing all powers should include removing various obstacles. This is the Chinese experience in the socialist political economy with Chinese characteristics that need to be and can be summed up, and the Chinese wisdom that is provided to enrich contemporary Chinese Marxist political economics. Analysis from the perspective of the socialist political economy with Chinese characteristics is
needed in many aspects, including the coordination of the relations among reform, development and stability, the handling of the relationship between incremental reforms and stock adjustments, the balance between the feasibility and the necessity for reform, the unification of development priorities and the overall situation, and the convergence of short-term goals and long-term policies. Reforms and development since 1978 have provided a practical basis for summarizing the experience of the socialist political economy with Chinese characteristics. These are both critical experiences in the practice of reform and development, and essential parts of the system of the socialist political economy with Chinese characteristics.

Concerning the relation between government reform and enterprise reform, the focus of the reform was switched from enterprise reform to government function transformation. In enterprise reform, the emphasis was gradually shifted from the relation of distribution (such as decentralization and interest concessions, replacement of profits by taxes and contracting systems) to enterprise ownerships (such as stock systems and other modern enterprise systems). Regarding the relationship between reform and development of state-owned enterprises and the development of township enterprises, the latter, in incremental reforms, promoted the reform of state-owned enterprises. In price reform, the dual pricing system has gradually changed into the entire price system. Concerning the relationship between different regions, the establishment of special administrative zones has played a role in leading other regions all over China. These experiences all derive from China’s reform and development, which also provides Chinese wisdom for the further development of the Marxist political economy of contemporary China.

(4) Shared prosperity is the fundamental interest principle for mobilizing initiative. Becoming prosperous first through certain people and regions is the objective requirement of China’s economic development and fundamental national condition. Realizing prosperity for all is an essential demand of socialism with Chinese characteristics and an important principle of a socialist political economy with Chinese characteristics. To realize the abovementioned, it is necessary to adhere to and improve the primary socialist distribution system on the basis of the underlying system of the Chinese socialist market economy. On the basis of the principle of socialist distribution according to work, China must coordinate all relations and apply the incentive mechanisms based on contributions, factors and total factor productivity. With respect to the initial distribution among the government, enterprises and laborers, the distribution structure among regions, urban and rural areas, and industries, and the income gap between urban and rural residents, China must coordinate its system, mechanism and policy, and unify efficiency and fairness, and more effectively reflect the concept of “sharing” on the basis of promoting development. In actuality, sharing the achievements of reform and development is not only a manifestation of the principles of socialist fairness and justice but also an essential assurance for improving efficiency. Otherwise, it will be neither fair nor efficient.

6. The primary targets of a socialist political economy with Chinese characteristics under the new normal: avoiding the middle-income trap
The fundamental purpose of upholding and applying socialist political economics with Chinese characteristics is to promote socioeconomic development. Under the historical conditions and at this stage of the new normal economy, it is essential to use the scientific
analysis methods of the socialist political economics with Chinese characteristics to explore how China’s economy can avoid the middle-income trap:

(1) The middle-income trap is an objective historical phenomenon in the economic development. On the one hand, the middle-income trap was universal in developing countries after the Second World War. Only 15 of the 116 developing countries have avoided the middle-income trap after the Second World War. Many countries in Latin America, East Asia, West Asia and North Africa failed because of various factors. On the other hand, the background of the middle-income trap is the fundamental change in the conditions of supply and demand after economic development when entering the middle-income stage. As costs on the supply side increase sharply while the demand is sluggish, no country can avoid the middle-income trap if it does not veer from the traditional development pattern. From the supply side, the total costs of the national economy will have an overall increase. If the development mode does not evolve from previous models of relying on the low-cost factor motivated by its input to the mode of promoting growth by increasing the factor efficiency and total factor productivity, it is likely to cause severe stagnation due to unsustainable long-term growth and short-term imbalance. In terms of the demands in the course of middle-income development, if human capital accumulation is ignored and lags behind physical capital expansion for a long term, investment growth will not be achieved because of weak innovation ability, lack of investment opportunity and the room for industrial upgrading even if there is plenty of capital and savings. With regard to consumer demands, if the rationality of income distribution is neglected in development, the income gap will grow significantly and the average propensity to consume will decrease, thus leading to relative even absolute weaker consumer demands compared to that under economic expansion. If China does not fundamentally improve the level of innovation and social equality, it will inevitably lead to long-term recession and crisis. In politics, copying Western democratization and promising high welfare for voters without considering the history and reality will cause anti-driving mechanism, high financial deficit, and political and economic deadlock.

(2) The underlying reason for the middle-income trap is a deviation from the development concept, especially insufficient innovation in technology and institution. It is also caused by slowed transformation of development models, development imbalance and discordance between equality and efficiency. First, the inadequate transformation of development mode is caused by poor technological innovation and difficulties in upgrading of an industrial structure due to the lack of competitiveness. The second reason is the slowed economic system innovation, imbalance between government and market, inefficient market competitiveness, incomplete orders, injustice, more government intervention, market failure that equate to lack of governance and lack of motivation guarantee for fair competition. The third reason is a legal system: lack of protection for private rights in the market economy competition as well as insufficient constraint and specification on the public power of the government. This will cause rent allocation fundamentally from the principle of market efficiency as resources are allocated according to seeking intensity without efficiency and fairness.

(3) For China’s socialist construction, the key to avoiding the middle-income trap is to strive to change the mode of development, and to transform the economic development from mainly relying on the volume of factor to efficiency promotion. Therefore, China must implement new concepts in the course of development: innovation,
coordination, environmental awareness, openness and sharing. Implementing new
development concepts is the overall strategy for understanding the new form, adapting
to the new form, guiding the new form, overcoming development difficulties, avoiding
the middle-income trap and achieving an all-round well-off society. The effective
implementation of the overall strategy needs institutional conditions created by
comprehensively deepening reform. First, efforts must be made to comprehensively
depth the reform of the economic system and handle the relationship between the
government and the market in order to guarantee the market’s decisive role in the
resource allocation and the government’s leading role in macro-control, market failure
field, and achieving long-term social development goals. Second, we must
comprehensively promote the rule of law, and boost the construction of socialist
democracy and rule of law with Chinese characteristics so as to form a governance
pattern with the country, society and government under the rule of law and to
gradually improve the democracy and legal system with Chinese characteristics.
Deepening economic reform needs and can only rely on the Party’s strong leadership,
whose goal is to establish a complete socialist market economic system while achieving
the goal of building a well-off society in an all-round way. Promoting the rule of law
also needs and can only rely on the Party’s strong leadership, whose goal is to establish
strong legislation by 2020 while continually promoting the construction of a socialist
country under the rule of law. Therefore, comprehensively strengthening the Party’s
internal discipline has become the logical starting point for China’s modernization
process at this stage.

The five major development concepts under the new normal proposed by the Party Central
Committee with Comrade Xi Jinping as the General Secretary are the keys to avoiding the
middle-income trap and maintaining the sustainable development of China’s social
productivity, and significantly contribute to the economic theory development of political
economy practices. Furthermore, a four-pronged comprehensive strategy is the primary
institutional guarantee for the implementation of new development concepts and the
systematic improvement of the practical experience of China’s development. China’s
socialist economic development needs the guidance of a socialist political economy with
Chinese characteristics, while its socialist economic practices also further develop
contemporary Chinese Marxist political economics.

Notes
1. Marx took this as the transformation from the classical economics to vulgar economics.
2. Dividing social production modes into five types is a significant contribution made by Marx and
also the most lucid analysis of human history. Lewis H. Morgan, a western scholar, classifies
society of different periods into Savagery, Barbarism and Civilization in his work “Ancient
Society.” Chinese ideologists divide it into three periods: ancient times, medieval times and recent
times. However, both these classifications are rough and inaccurate.
3. According to statistical data, before the sixteenth century, there were about 300 significant
 technological inventions affecting human life, 175 of which were made by Chinese (Zhongquan,
2013). According to statistics from historian Madison, in 1820, China’s GDP accounted for
32.9 percent of the global total, Western European countries made up 23.6 percent, and the USA
and Japan, respectively, accounted for 1.8 and 3 percent (Maddison, 2003, p. 261).
4. Mao Zedong drew lessons from China’s socialist economic construction and wrote famous works
such as On the Ten Major Relationships. He also studied Soviet political economics textbooks and
took reading notes. Generally, these were more critical rather than constructive and stressed social
relations reform by divorcing from the objective demands of productivity development.
References

Corresponding author
Wei Liu can be contacted at: ZENGBINGJIAN2003@RUC.EDU.CN

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Nationality and internationality of the Socialist Political Economy with Chinese Characteristics

Jinju Pang
Collaborative Innovation Center for China Economy, Political Economics Research Center, Nankai University, Tianjin City, China

Abstract

Purpose – As the crystallization of Chinese wisdom and the shared wealth of all humanity, the Socialist Political Economy with Chinese Characteristics (SPECC) not only reveals the specific traits of SPECC but also indicates the general rules of the global economic development, showing both nationality and internationality. The paper aims to discuss this issue.

Design/methodology/approach – Being aware of the nationality of the SPECC is of great importance. It requires to integrate the basic Marxist principles with the realities of China, and meanwhile draw lessons from, not just simply copy, the strengths of other countries. The authors must adhere to the basic principles of the SPECC.

Findings – From the perspective of past practices, the SPECC has not only provided theoretical guidance for China’s reform and development, but has also given references to some countries, especially developing countries under reform and transition.

Originality/value – SPECC should be based on China’s conditions and practices, absorb China’s traditional cultural essences, draw lessons from other nations’ positive theoretical and practical results, propose theoretical viewpoints independently and initially, and construct a distinct academic system and discourse system. In this way, China would work to develop the characteristics and advantages of the SPECC, and contribute Chinese wisdom to the development and improvement of world economics and economics theories.

Keywords Nationality, Internationality, Socialist Political Economy with Chinese Characteristics (SPECC), Innovation and development

Paper type Research paper

The Socialist Political Economy with Chinese Characteristics (SPECC) was formed until Marxism was disseminated in China and undergone further development. It has been researched for a long time throughout the period of new democratic revolution, the period of socialist economic construction and the recent period of reforms and opening up. As the crystallization of Chinese wisdom and the shared wealth of all humanity, the SPECC not only reveals its specific traits, but also indicates the general rules of the global economic development, showing both nationality and internationality.

1. The latest phase in the development of Marxist political economics

“The contemporary Chinese philosophy and social sciences originate from Marxism spreading in China and are gradually developing under the guidance of Marxism” (Jimping, 2016). With it, grows the SPECC.

Before Marxism was disseminated in China, Marxist political economics had gone through two stages. The first stage was the foundation of Marxist political economics conducted by Marx and Engels. Marxism provided rich political economics theories since it

© Economic Research Journal. Published in China Political Economy. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licenses/by/4.0/legalcode. Originally published in Simplified Chinese in Economic Research Journal.
was founded. A series of new economic theories were proposed in *The Economic and Philosophic Manuscripts of 1844* (Karl Marx), *The German Ideology* (Karl Marx & Frederick Engels) and *The Poverty of Philosophy* (Karl Marx), including the theoretical foundation in his later works, *Das Kapital* (Marx and Engels, 2009c) (Karl Marx) is generally recognized as the showpiece of Marxist political economics that comprehensively expressing the thoughts of Marxist political economics. However, the classic works of Marxist political economics are not confined to *Das Kapital*. There are several other works with great guiding significance, such as his *Communist Manifesto, Preface to A Critique of Political Economy, Introduction to A Critique of Political Economy, Anti-Duhring and Socialism: Utopian and Scientific*, containing valuable principles for political economics. These principles can be summarized as follows. First is the primary position. To focus on people and represent the fundamental interests of most people is the basic position of Marxist political economics. Second are the primary methods. Dialectical materialism and historical materialism are the fundamental world outlook and methodology of Marxist political economics. The third is the general rule of commodity economy and socialized production. This includes the labor theory of value, the theory of division of labor, labor productivity theory, commodity production and commodity exchange theory, price and value law theory, currency theory and the law of money circulation as well as the theory of real economy and virtual economy. Fourth are the theories derived from the analysis of the capitalist economy. These theories, based on the labor theory of value, focus on revealing the law and theory of the law of surplus values and its production and distribution theory, capital accumulation theory, the theory of capital cycle and turnover as well as social capital reproduction, the theory of monopoly and competition, and the crisis of capitalism. Fifth are the theories concluded by predicting the future communist social science according to the law of human development on the basis of capitalism analysis, covering social ownership of the means of production, distribution according to labor, the proportional sharing principle and scheduled production organization. Except for the fourth, all of the other theories listed above can play a direct guiding role in contemporary China. If we ignore the capitalist production relations, then the fourth one is also of essential guiding significance to today’s socialist market economy and economic reform and construction. This is the fundamental reason why we should adhere to the guidance of Marxism through the advancement of the SPECC.

Another period is when Marxist political economics inherited and developed with Lenin as the core. Following Marx and Engels, Lenin *et al.* inherited and developed Marxist political economics. His most significant achievement was that he revealed the essence of capitalism after it entered the phase of state monopoly, and conducted a preliminary exploration on socialist economic construction after the establishment of the socialist economic system. His significant showpieces include *Imperialism: The Highest Stage of Capitalism, On Grain Taxes* and the *New Economic Policy and the Tasks of the Political Education Departments*.

The salvos of the October Revolution brought us Marxism–Leninism. After Marxism was introduced into China, the development of Marxist political economics experienced two stages of changes. One is when the Chinese communists represented by Mao Zedong led the Chinese people to inherit and develop the Marxist political economy. This stage includes the exploration of the social economy of the new democratic society, the economy during the transition from new democracy to socialism and the economic construction from the establishment of the socialist economic system to the period of reform and opening up. Mao Zedong Thought, the first great achievement of the Marxist Chinization, was formed during this period and included theories in political economics, such as the new democratic economic theory, fundamental and principal socialist contradictions, overall consideration and integrated balance, coordinative development based on agriculture and led by light and heavy industry. Seminal works include Mao Zedong’s *On New Democracy, On the Ten Major Relationships* and *On the Correct Handling of Contradictions among People*. 
The other period is from the reform and opening up to the present, when the Chinese communists, with Deng Xiaoping, Jiang Zemin, Hu Jintao and Xi Jinping as the representatives, have led the Chinese people in the incorporation and development of the Marxist political economics, including the exploration of the nature of socialism and the development stages of socialism, the primary socialist economic system as well as the distribution system. This also focuses on the relationship between the government and the market against the background of the socialist market economy, and the exploration of the economic reform theory, the development theory, the opening up theory and the macro-control theory, thus forming another theoretical system of socialism with Chinese characteristics which embraces theories of Marxist political economics. For example, studies include the socialism essence theory, people-centered theory, analysis of primary stage of socialist and primary socialist economic system. It works to realize social fairness, justice, shared prosperity and the advancement of the socialist market economy, in a way that enables the market to take a decisive role in resource allocation and the government to function better. It also involves comprehensive deepening reform, enterprise reform, macroeconomic operation and control, green development with opening and innovation, the “new normal” of China’s economy, the balance between the new industrialization, informatization, urbanization and agricultural modernization, and how to make the most use of domestic and international markets and resources. These theoretical achievements are of great importance for them to keep pace with the conditions of contemporary China, not only effectively guiding the reform and practice of China’s economic development, but also opening up a new era for Marxist political economics (Xi, 2015b).

Concerning the dissemination, study, inheritance and development of the Marxist political economy in China, Chinese intellectuals have played an irreplaceable and vital role during the new democratic revolution and the period of reform and opening up of socialist construction. Their achievements in the economic theory, such as the monographs and textbooks, have brought about an instrumental effect on China’s revolutionary reform and economical construction, and are the valuable wealth of China (Zhuoyuan et al., 2015)[1]. Whether through the lens of historical development or its contents, the SPECC can be regarded as the combination of the basic principles of Marxist political economics and the practices of contemporary China. Besides, it draws lessons from the outstanding achievements in Chinese history as well as the world’s leading civilizations. As an up-to-date Chinized product of Marxist political economics, the SPECC marks a new era for Marxist political economics.

2. The nationality of SPECC
Nationality here means the Chinese characteristics and Chinese national features corresponding to the international theory. From the perspective of philosophy, it represents the particularities corresponding to generality.

The national features of the SPECC, on the one hand, lie in its basic position, standpoint, methods and forms, compared with non-socialist countries. On the other hand, it reveals the underlying theoretical view and forms in comparison with other socialist countries as well as the future society envisaged by Marx and Engels. The SPECC’s national features, in its basic position, standpoint, methods and forms, depend on the Chinese primary economic system, practices and unique history during its development.

In terms of basic positions, standpoints and methods, the SPECC has its distinctive national characteristics. It focuses on people and is committed to the fundamental interests of most people and applies two methodologies of dialectical materialism and historical materialism to reveal the productive level, and the corresponding production relations and exchange relations in the period of the primary stage of socialist. It studies the stipulation of the underlying economic system and distribution system in the primary stage of socialist and analyzes the compatibility between the socialist market economy and the public economy as well as its operational mechanism and economic system. Furthermore, it also
analyzes the state-owned enterprise reform and the relationship between the government and the market to achieve a development characterized by innovation, coordination which is friendly to the environment, opening and sharing. All of these cannot be found in the economics of non-socialist countries and distinguish China from them. Even in some socialist countries, some theories in the SPECC are not applicable, such as the theory of primary stage of socialist, the theory of socialist market economy and its system, the theory of rural reform based on household responsibility system, the new urbanization theory with Chinese characteristics and the theory of targeted poverty reduction. Some cannot even be found in the classic works of Marx and Engels. The above presents the distinctive nationality and particularity of the contemporary SPECC, which makes it irreplaceable by any other economics in the world.

The nationality of the SPECC as mentioned above is ultimately determined by China’s unique economic system and practices. First of all, there is no denying the fact that China is a socialist country and is still in the primary stage of socialism. Compared with the resource allocation system of the capitalist economy in western developed countries, the SPECC puts its emphasis on the economic law in socialist China, specifically the primary stage of socialism in contemporary China. Rooted in China’s history, the essence of socialism with Chinese characteristics is Scientific Socialism, reflecting the people’s wills and proactively following the developing trend of contemporary China. Socialism with Chinese characteristics complies with all the fundamental requirements of scientific socialism: the goal is to achieve communism, and the ultimate aim is to realize humanity’s liberation through comprehensive development. In this connection, it perseveres in the underlying economic and distribution system with public ownership as the mainstay along with some diverse forms of ownership jointly developing. It seeks to liberate and develop productive forces, alleviate the polarization between the rich and poor, and eliminate exploitation, to achieve shared prosperity. It adheres to the guidance of China’s Communist Party and sticks to the “rule of law,” in ways that achieve harmony, innovation, coordination of the society, as well as an environment friendly, open and shared development. As Xi Jinping stressed in November 2012 at China’s 1st CPC Central Political Bureau of collective learning: “Socialism with Chinese characteristics consists of a path, theory, and system. The path is a way to reach the goal, the theory offers a guide to action, and the system provides a fundamental guarantee. All three serve the great cause of building Socialism with Chinese Characteristics” (Jinping, 2014).

Second, China’s unique history and its original culture are also instrumental factors for the SPECC to be differentiated from other countries in terms of nationality. China has a large population while its productivity is not well developed, with its per capita GDP ranking at around 80 in the world. Moreover, there is the disequilibrium of regional and urban–rural development currently in China. It is an unprecedented fact in the world, especially in the history of China, a great developing country, to transform from a planned economic system to a socialist market economic system, from a closed and semi-closed state to an open state, and from backward production to modernization. This is unmatched by any other country. As an ancient country with thousands of years of civilization and history, China’s brilliant economic developments throughout history, especially in terms of agricultural civilization, have long been on the leading level throughout the world. Even in terms of opening up degree, China has also previously led the world. During the reign of Emperor Wu of Han (156–87 BC), Zhang Qian went on a mission to the Western Regions and opened up the Silk Road in 139 BC; in the early Ming dynasty (1368–1644 AD), Zheng He embarked on his first voyage to the Western Ocean to open up the navigation route in 1405 AD. The invention of the compass and its application in navigation brought about a historic contribution to economic globalization. However, due to the decline of the feudal system and the intrusion of foreign enemies in modern history, China was reduced to a semi-colonial
and semi-feudal society, with the economy left lagging behind and the people under constant oppression. Despite tremendous hardships and invasions, the New China was founded, and we took to the cause of an independent path of reform and opening up as well as modernization. Diligence, bravery and perseverance are the inherent qualities of the Chinese nation. During thousands of years of economic development, there have been large numbers of economic ideas with Chinese characteristics, embodying the knowledge and wisdom accumulated by Chinese people for thousands of years. The Chinese traditional culture offers unique conditions, advantages and rich nourishment for the development of the SPECC.

From the development history of political economics, it first studies some specific stages of individual countries and then presents the nationality of each country. Engels once pointed out that, “The conditions under which men produce and exchange goods vary from country to country, and within each country again from generation to generation. Political economy, therefore, cannot be the same for all countries and for all historical epochs.” “Political economy is therefore essentially a historical science. It deals with historically sensitive materials, that is, constantly changing; it must first investigate the special laws of each individual stage in the evolution of production and exchange [...]” (Marx and Engels, 2009b). What Engels has pointed out here actually means that political economy could only be presented at a country (national) level at first.

With the existence of the said distinctiveness and nationality, we must enhance the study on the rich practices of contemporary China, summarize the experience through reform and opening up as well as the socialist modernization, in an effort to reveal its regularity and further improve the SPECC’s theoretical system. In addition, it is required to deeply probe the economic thoughts implied in the traditional Chinese culture, as it seeks to adapt China’s outstanding economic thoughts to the contemporary economic thoughts, to coordinate with the development of modern economic development, to disseminate the economic thoughts with contemporary values and to strengthen the construction of political economy with Chinese characteristics and in Chinese styles. This is our sacred mission given to us by history.

Being aware of the nationality of the SPECC is of great importance. It requires us to integrate the basic Marxist principles with the realities of China, and meanwhile draw lessons from, not just simply copy, the strengths of other countries. We must adhere to the basic principles of the SPECC.

Most scholars are clear about the national features of the SPECC. However, some people think that there is only one kind of the economics – modern Western economics. They think the SPECC is of no significance. This denies the nationality of the SPECC as well as the necessity of the construction of the SPECC. From the perspective of philosophy, it denies the rule that generality exists in particularity. Through the lens of economics, it holds the view that mainstream economics in Western developed countries can take the place of the SPECC. Taking a look at history and the practice of the contemporary world, we could easily conclude that no major country could become influential in the world if they simply copied theories from other countries without developing their own independent fundamental theory. However, in today’s world, most countries that took the Western mainstream theory as the core in their transitions have ended up in economic crisis, collapse and stagnation. The survivors, which have made stable progress and hence accelerated the development in the transition, have all implemented the dual-track system that is considered to be the worst by Western mainstream theories (Lin, 2016), which offers much food for thought.

3. The internationality of the SPECC
Internationality refers to the international features corresponding to the national features. From the perspective of philosophy, it represents generality corresponding to particularity.
The internationality of the SPECC consists of the worldwide economic theoretical generality of universal human values included in the nationality of the SPECC, and the worldwide sharing of each nation’s theories and experiences.

Apart from China’s underlying economic systems and the distribution system, the SPECC also shares some common elements with other economic theories in resource allocation, socialized production, the operation of the market economy and economic development. These generalities contain the following five aspects.

First, the SPECC contains the common values pursued by humanity. The SPECC focuses on the people’s benefits and takes the people’s liberation and comprehensive development as its fundamental goal. As a starting point for economic development, it is also committed to improving people’s well-being and promoting their all-round development, reflecting humanity’s common pursuit of better quality of life. Furthermore, the SPECC is committed to alleviating poverty and the polarization between the rich and poor, steadily advancing toward shared prosperity. Alleviating poverty and polarization is one of the prominent issues faced by contemporary human beings, and resolving these issues is a common pursuit of humanity.

Second, the SPECC reveals the general rules of the market economy, socialized production and resource allocation. Based on the analysis of resource allocation and socialist market economy, the SPECC reveals the law of value, law of money circulation as well as the regularity of the market mechanism such as price mechanism, supply and demand mechanism, and competition mechanism. Based on the research for socialized production, it also reveals the general rules, for example, the rules of labor time saving, proportionate distribution of labor time, social reproduction theory and the rule of the human–environment coordination, which are not unique to a socialist economy but common in all economic forms that develop a market economy and socialized production.

Third, the SPECC reveals the general rules of the economic modernization of developing countries that are economically backward. The SPECC also reveals the generality of the modernization in other developing countries in the analysis of the particularity of China’s modernization. For example, they emphasize on economic construction and focus on the liberation and enhancement of productive forces. Also, they seek to give priority to draw lessons from the experience of developed countries, to attach importance to technology and innovation, the optimization and adjustment of economic and industrial structure, and to narrow urban and rural gaps as well as the dual structure differences, in an effort to combine industrialization with informatization. Besides, the SPECC adheres to social harmony, innovation, coordination, and green and open and shared development, continuously tackling the problems on the path of economic construction, and carrying forward new economic development, which reflects the advancement of human history.

Fourth, the SPECC reveals the general rule of economic transition that includes the transformation of the economic system and the economic development model. In the analysis of particularity in China’s economic system reform and the transformation of the economic model, the SPECC also involves the generality of the economic system and economic development mode in transitioning economy countries. For instance, they attach importance to the primary and decisive role of the market in resource allocation, the function of government and the transformation from extensive economic development mode to an intensive mode. They also focus on the relationship between stability, reform and development, as well as national governance according to law.

Fifth, the SPECC reveals the general rules of the open economy against the background of economic globalization. Keeping pace with modern times, the SPECC gives importance to analyzing the positive and negative effects of economic globalization. It opposes trade protection, advocates an open strategy with mutual benefit and further develops an open economy, in an effort to strive for peaceful development, mutual benefit and reciprocity.
Furthermore, it actively participates in the global economic governance and takes an active part in the formation of a global-shared destiny, which reflects humanity’s shared aspiration to develop a peaceful and equal world.

However, compared with the understanding of the nationality and particularity of the SPECC, the research on its internationality and generality is still insufficient. In today’s world, where economic globalization keeps pace with the times and peace, and development has become a major theme, it is difficult for a country to keep itself out of global affairs. It is impossible for any economic theories developed in isolation to be used in practice, let alone to contribute to human development. Emphasizing the significance of internationality and generality of the SPECC indicates that the contemporary SPECC, as a part of human civilization, not only belongs to China but the world as well. We respect the choices of other countries in terms of systems and theories. On the other hand, all countries worldwide can share their experiences with each other. The SPECC is supposed to embrace openness and hence bring about more significant contributions to the development of world civilization and humanity’s collective progress.

From the perspective of past practices, the SPECC has not only provided theoretical guidance for China’s reform and development but has also given references to some countries, especially developing countries under reform and transition.

First and foremost, the SPECC gives enlightenment on how developing countries can promote theoretical innovation and economic development under current circumstances. The theoretical innovation of the SPECC is the outcome of ideological emancipation, significantly promoting the liberation of human thoughts. Under the guidance of the SPECC, the practice of China’s reform and opening up as well as modernization considerably further the advancement of productive forces. Therefore, it is firmly believed that many developing countries and emerging economies would succeed in the same way China did. For instance, China has made the transition from a low-income country to a middle-income country under the guidance of the SPECC. At present, it is also making efforts to develop into a high-income country and to build a moderately prosperous society in an all-round manner. All of these experiences could be regarded as a reference for developing countries to leapfrog the middle-income trap.

On the other hand, the SPECC is still enlightening for countries under transition. From the traditional planned economic system to the socialist market economic system, from a closed and half-closed economy to an open economy and from an extensive economic model to an intensive model, China’s transition is lauded as a marked success around the world. Regardless of the underlying economic system, China has been progressing steadily on the road of transition, from the rural to urban reform, from the coastal opening to comprehensive opening and from experimentation to popularization. It combines the stable reform and development with theories and focuses on scientific and technological innovation and structural adjustment as well as domestic and foreign markets and resources, providing a strong reference point for other transitioning countries.

Additionally, the SPECC is also enlightening for developed countries. In today’s world, modern science and technology, especially the internet and information technology, are developing rapidly along with the continually expanding economic globalization, resulting in the formation of a global village. Since 2008’s world financial crisis, every country has been stepping up their independent development strategies, promoting innovation and transformation, transforming the economic development mode and adjusting the economic structure, in an effort to open up a new development space. However, the world economy is in a dilemma, in need of in-depth adjustment. Various risks still exist, such as low growth, low inflation, low demand, high level of unemployment, high debt, as well as bubble economy. The primary economic trend is likely to challenge previous policy orientations, and the uncertainty of the economic environment remains prominent. The emerging
security issues, such as energy security, food security and global challenges to climate changes, are all on the rise (Xi, 2015a). The world is facing many great challenges and problems but, at the same time, is a community with a shared destiny. Under the guidance of the SPECC, the practice of China’s reform and opening up and modernization has made significant contributions to the world’s peaceful development, and win–win cooperation. China’s measures conform to the common international practices that are beneficial to humanity’s development and the multilateral communication.

4. Drawing lessons from the experience of other countries and internationalizing economics
By clarifying its particularity of nationality and internationality, we could lay the theoretical foundation for the Chinization and internationalization of the SPECC.

Xi Jinping said that emphasizing nationality does not mean rejecting the academic research results of other countries, but to enable the SPECC to keep pace with the development requirements of contemporary China and the world through multiple comparisons, critique, assimilation and distillation. National issues belong to the whole world. If we can tackle national issues, it will be easy to solve international problems; if we sum up the experience of China’s practice, it will be easier to provide a theoretical basis to solve international problems. This is the development law of the transition from particularity to generality (Jinping, 2016).

It is acknowledged that different countries have different histories and different national features. They take different courses and embrace different cultures, as well as their economic development. However, they have accumulated their own experiences and advantages through the long-term development. The market economy and modernization in some developed Western countries, in particular, have set a precedent and developed to a higher level than ours. The bourgeoisie, during its rule, has created “more massive and more colossal productive forces than all the preceding generations combined” (Marx and Engels, 2012). Based on such practices, Western economics therefore includes some scientific theories. After carefully studying these scientific theories, we should conduct some evaluations in national practice to be explicitly aware of what suits our national conditions and what does not. It is beneficial for us to apply those scientific and suitable theories in our practice and introduce them into the SPECC.

Western economics was ostracized in China before the reform and opening up. However, we have been carefully studying and hence drawing lessons from Western economics since then. There is no doubt that Western economics is, after all, based on its primary economic system. First of all, it reflects the nationality and particularity of economic theories in Western developed countries to a large extent. Therefore, it is necessary to carry out the analysis based on the actual situation of our nation, but not to just copy it without any evaluation. Moreover, we cannot take it as the only criterion or the fundamental guidance for China’s reform and opening up.

The process of mutual learning is the process of internationalization. After Engels clarified the particularities of political economy, he also pointed out that a political economy can “establish the few quite general laws which hold good for production and exchange in general” (Marx and Engels, 2009a), after it conducted the primary study on the specific rules of production and exchange in a specific country during a designated period. This is the most important theoretical basis for economic internationalization. With the economic globalization tuning into a global trend, the internationalization of economics will also become a trend. The mission of the internationalization of economics is to reveal humanity’s common pursuit of value and interests. It also seeks to bring to light the “few quite general laws which hold good for production and exchange in general” in the process of economic development and interaction. The first issue is the shared economic problems, and challenges humanity must solve in the process of economic globalization. It is understood that various economics should contribute to solving these problems and hence improving and developing in the process.
The internationalization of the SPECC not only means to learn from other countries’ economics that includes “general laws which hold good for production and exchange in general.” It also means to disseminate China’s economics around the world to enable “general laws which hold good for production and exchange in general,” contributing to the prosperity and development of the world. In the past, some people gave priority to the idea that the meaning of internationalization was to learn economics from the Western countries or to publish articles abroad. During the initial stage of reform and opening up, such ideas were somewhat acceptable. However, in today’s world, it seems that we miss the essence of internationalization and are only concerned with the externals. Most of us are just blindly worshiping, instead of building our confidence in our theories. The foundation of economics is to practice, and its vitality is to seek truth from facts and keep pace with the times. The essence of economic internationalization is to rely on the practice of contemporary China, establish new economic theories, and bring the SPECC to the world, in an effort to promote people’s common development. This is also the responsibility of every scholar of economics. Today, we should turn hopes into realities and work determinedly for this cause.

5. Making exploitation and innovation to offer Chinese wisdom for global economics

Whether to focus on the nationality or the internationality, the key lies in innovation. For the SPECC, China is required to develop its own subjectivity and creativity, in a way that spread its national identity and lets the world recognize its subjectivity and creativity. Following the footstep of other countries could neither develop the SPECC nor tackle the practical issues of China. Many scholars, who have studied or given lectures overseas, may personally attest that in a Western developed country, talking about Western economics is no different than showing off incompetence in the presence of an expert. However, if we could discuss the theory and practice of China’s reform and modernization by disseminating China’s stories and methods in a popular way internationally, we might be favored by foreigners. What foreigners want to know is the secret of China’s practice and independent theories leading to our rapid development, rather than the Western mainstream economics they are already familiar with. Therefore, the SPECC should set forth on the practical conditions of China, propose theoretical viewpoints, independently and originally, and construct a corresponding academic system as well as a discourse to show the whole world the necessity of the SPECC.

The eternal theme of the SPECC’s development is to maintain its theoretical vitality through constant innovation, and practice always requires changing. While China’s economic development has entered a new normal where deepening all-round reform is critical, many new problems emerge. In this regard, it is a must “to reveal new features and rules and refine achievements of economic development and practice based on our national realities. What is more, we must turn experience from practice into systematic doctrines and keep exploring new boundaries of Marxist political economics in contemporary China” (Xi, 2015b). Only in this way can we offer Chinese wisdom such as theoretical guidance and support for global development.

It is required to raise awareness and focus on the significant issues in reform, opening up and modernization, and conduct the systematic study and in-depth interpretation of major fundamental theories in the process of the SPECC’s development. Practice is the inexhaustible source of theories. The development of China’s economic reform and modernization provides vitality, momentum and potentials for theoretical innovation. That is to say, we ought to recognize where new problems emerge and propose feasible solutions, in an effort to draw up more distinctive and refined theories through the practice of reform and modernization. This is the main purpose of SPECC’s development, and also our sacred mission as required by China’s history. The SPECC ought to generate new contributions to today’s world.
Note
1. For academic theories, see Zhuoyuan et al. (2015).

References
Xi (2015b), “Xi Jinping stressed at Chinese 28th CPC Central Political Bureau of Collective Learning: to develop contemporary Marxist political economic with Chinese characteristics should be based on China’s actual conditions and practices”, People’s Daily, November 25, p. 1.

Corresponding author
Jinju Pang can be contacted at: jjpang@nankai.edu.cn
Economic theory innovation and China’s development practice

Taiyan Huang
Institute of China’s Economic Reform and Development, Minzu University of China, Beijing, China

Abstract

Purpose – The purpose of this paper is to promote the theoretical innovation of socialist economics with Chinese characteristics in these areas.

Design/methodology/approach – We must “excavate new materials, discover new problems, propose new ideas, and construct new theories from the practice of China’s reform and development.”

Findings – Giving full play to the government’s role in realizing optimal allocation of resources required for the public economy to better exert its control, influence and guidance, and at least assume the following three responsibilities. The first is to iron out the economic cycle. The second is to lead the industry to upgrade. The third is to ensure national economic security.

Originality/value – Some deep-rooted issues still need to be further studied in order to establish the scientific and practical nature of the socialist economics with Chinese characteristics. For instance, why is the theory of a socialist economy with Chinese characteristics summarized from the development practice in China a scientific theory?

Keywords Economic theory, System of socialism with Chinese characteristics, New practice, New theory, New system, Theoretical value

Paper type Research paper

1. Introduction

As General Secretary Xi Jinping (2015) stated at the 28th Group Learning Conference of the Political Bureau of the CPC Central Committee on the principles and methodology of Marxist political economics: “Our work must be based on China’s specific conditions and development practices. We must uncover new rules and new laws, refine and summarize a series of results of our economic development, turn the practical experiences into the systematic economic theories so as to continuously explore the new realm of contemporary Chinese Marxist Political Economics.” In his speech at the symposium on philosophy and social sciences, General Secretary Xi Jinping further commented: “Only when we take China’s actual conditions as the starting point, develop theories with subjectivity and originality, and build a discipline system, academic system, and discourse system with our own Chinese characteristics, can the China’s philosophy and social sciences be of their own characteristics and advantages.” General Secretary Xi Jinping’s series of speeches point out the following directions and principles for constructing a theoretical system for socialist economics with Chinese characteristics: First, theories must come from practice, so that they can explain the actual phenomena; second, new theories should guide new practice and solve new problems encountered in development; and third, new theories must have both Chinese characteristics and global values.

Since the beginning of opening up to a new realm of contemporary Chinese Marxist political economics, scholars have conducted extensive and in-depth research and have achieved satisfactory results. By reviewing existing literature, we can see that scholars...
reach a consensus on some basic principles. These include: first, the socialist economics with Chinese characteristics must inherit and develop the fundamental theories and methodologies of traditional Marxist economics. For example, Hong Yinxing (2016) inherited Marx’s approach of taking production relations as study object and at the same time innovatively incorporating productivity in the research. Second, the socialist economics with Chinese characteristics is a summarization of the practical experience of reform and development in China. For example, most scholars have identified development as the core element of the socialist economics with Chinese characteristics. Pang Jinju (2016b) described it as developing economy and meeting demands. Zhang Yu believed that the fundamental mission of socialism is to promote productivity and to put development as its top priority. As for the interaction between productivity and production relations, the study shall focus on the details of how to promote productivity (Yu, 2016a). Gu Hailiang (2016) argued that exploring the basic economic system and the economic institutions at the primary stage of socialism should be the main focus of study, combined with integration, development and improvement of the socialism economic system and the market economic system. Hong Yinxing regarded the basic economic system and basic income system as the core content of the socialist political economics with Chinese characteristics (Yinxing, 2016). Liu Wei (2016) identified it as a study of how to maintain the direction of the reform of the socialist market economy. Third, the socialist economic theory with Chinese characteristics should be systematized into a theoretical system. Hong Yinxing (2016) believed that systematizing a series of major theoretical innovations in economic system, economic operation and economic development that lead the great practice of the socialist economic construction with Chinese characteristics into success constitutes a theoretical system of socialist political economics with Chinese characteristics. Liu Wei (2016) built a theoretical system based on the historical perspective, core propositions, major tasks and fundamental goals of the socialist political economics with Chinese characteristics. Zhang Yu (2016b) believed that the socialist political economics with Chinese characteristics should cover the main areas of production, distribution, exchange and consumption of the socialist economy with Chinese characteristics, as well as the basic economic system, basic distribution system, economic institutions, economic development and opening up to the outside world. Fourth, the socialist economics with Chinese characteristics should establish its own discourse system. Most scholars emphasize that socialist economics with Chinese characteristics should be open to learn and draw lessons from the scientific components of both Chinese and foreign theoretical achievements (Liqun, 2016). However, “We must know which one is our first choice between Chinese and foreign economics, and must not regard Western economics as the mainstream and standard” (Peizhao, 2016), and give dominance to Marxist economics (Gang, 2015). At the same time, emphasis is placed on telling Chinese stories in a common language (Huang, 2016a). Zhou Wen believed that China now has foundation and ability to construct a discourse system for the Chinese economy and that China’s development experience constitutes the basic core of the discourse system of the Chinese economy (Wen, 2016). Pang Jinju pointed out that socialist political economics with Chinese characteristics is both national and international. Only by taking China’s actual conditions as the starting point, proposing subjective and original theoretical viewpoints, and building disciplinary systems, academic systems and discourse systems with their own characteristics can the Chinese economy truly form its own characteristics and advantages, and gradually be valued and accepted by the world (Jinju, 2016a).

Although the scholars have reached consensus on some principle issues in advancing the theoretical innovation of the socialist economics with Chinese characteristics, some deep-rooted issues still need to be further studied in order to establish the scientific and practical nature of the socialist economics with Chinese characteristics. For instance, why is the theory of a socialist economy with Chinese characteristics summarized from the
development practice in China a scientific theory? After China has become a middle- or high-income country, when emphasizing the innovation of the theories of economics, why does it call for the development of a new realm of Marxist economics, require the systematic transformation of practical experience into an economic theory and call for socialist economics with Chinese characteristics to develop economics with Chinese contributions? This paper seeks to promote the theoretical innovation of socialist economics with Chinese characteristics in these areas.

2. **Chinese development practice of theoretical innovation**

In order to write *Das Kapital* and to create the study of Marxist political economics, Marx left his hometown in Germany to travel to the UK. The reason was that he wanted to use the most typical British capitalist production system as an example to reveal the laws of capitalist economy. Similarly, today when we construct and innovate the socialist economics with Chinese characteristics, we should also return to Marx in terms of research method. We must “excavate new materials, discover new problems, propose new ideas, and construct new theories from the practice of China’s reform and development” (Jinping, 2016). This is because, so far, only China has created the typical conditions for constructing a theoretical system of socialist economics.

First, China is the best-developed socialist country in the world. In the international context of the Soviet Union’s disintegration and the drastic changes in Eastern Europe in the early 1990s, China continued to adhere to “one center and two basic points” and continued to improve the socialist basic economic system, mechanism and institutions by continuously pushing forward the reform of the socialist market economic system. This was to maintain the vitality of Marxism and the socialist system, contributing huge institutional dividends to economic and social development. This means that China has not followed the “Washington Consensus,” but the “Beijing Consensus.” It has not followed neo-liberalism or western mainstream economics but the guidelines of socialist theories with Chinese characteristics and has come up with a development path utterly different from those of the western capitalist countries.

Second, China has achieved faster growth over a more extended period of time than any other capitalist countries. In the process of advancing industrialization, the UK had the highest average annual economic growth rate of 2.31 percent in 1770–1790, its highest in the twentieth century was 3.54 percent in the 1960s, but only 2.73 percent in 1970–2007. The average annual economic growth rate of the USA was 4.38 percent from 1791 to 1820, 4.46 percent from 1820 to 1860 and 3.39 percent from 1860 to 1913. Japan achieved rapid growth from 1961 to 1973 with an average annual rate of 8.78 percent, from 1974 to 1991 dropping to 4.09 percent, then from 1992 to 2015 only 0.8 percent, which is known as “the lost 20 years.” South Korea achieved an average annual growth of 9.57 percent from 1963 to 1991, but it dropped to 5.68 percent in 1992–2007 and further decreased to 3.11 percent in 2008–2015[1]. China achieved an average annual growth rate of 9 percent in 38 years from 1978 to 2015. Even though downward pressure on China’s economic operation has been increasing since 2012, China has maintained a rapid growth with an annual growth rate of over 7 percent. This demonstrates the institutional superiority of the future society described by Marxist classical writers that enables faster economic growth than capitalism can do.

Third, China has created a “Chinese miracle” in the history of world economic development. Through more than 30 years of rapid growth, China has become the world’s second largest economy, the largest manufacturing country and the largest trading country, making more than 700m people out of poverty to enjoy a better quality of life. According to Madison’s (1997) calculations, China’s GDP accounted for 28.7 percent of the world total in 1820, much higher than the 5.2, 3.1 and 1.8 percent of the UK, Japan and the USA,
respectively, in the same year. However, from 1840 China suffered from a hundred years of humiliation. At the time of the founding of New China, the proportion of China’s GDP to the world had dropped to less than 5 percent. The economic development of New China, especially since the reform and opening up, has enabled China to develop rapidly. In 2015, China’s GDP accounted for 15.5 percent of the world’s total, implying that China was close to the great rejuvenation, which had never been experienced before.

The birth and development of economics are all derived from successful practices. As the most developed country in the world, the USA has formed mainstream economics and its branches in the west. There are numerous Nobel Prize winners in economics. As a post-developed country, Japan has produced a unique industrial economics based on its successful practices. As the largest developing country in the world, China, in its successful development experience, should give birth to and can systematize and upgrade China’s economics that guides developing countries in promoting industrialization, urbanization and modernization[2].

In fact, in the successful practical experience of economic development since the reform and opening up, China has already formed some socialist economic theories with Chinese characteristics, including: the theory of the primary stage of socialism, the underlying economic system theory together with the basic distribution theory in the primary stage of socialism, the theory of taking economic development as the center, the theory of the socialist market economy and the theory of opening up to the outside. Unique Chinese theory, Chinese path, Chinese system and Chinese culture have all been formed, and even the “China model” has been proposed to the world. The great success of Chinese economic development has boosted confidence in the Chinese theory, path, system and culture.

3. **New development practice calls for a new theory**

We are aware that the successful development achieved by our country is still in its early stages, and we have not yet realized the great rejuvenation of our nation. To further boost our confidence in China’s theory, path, institution and culture, it is also necessary to further innovate the socialist economic theories with Chinese characteristics in the new development practices and put forward China’s practice toward a new success.

According to the World Bank Country Classification, the development process of a country can be roughly divided into four stages: from low income to low-middle income, from low-middle income to middle-high income, from middle-high income to high income and from high income to the stage of a developed country. In 2015, China’s per capita GDP reached $8,000, and it has become a middle- and high-income country and is moving toward a high-income country. Past experience in the world economic development shows that many developing countries (regions) can take advantage of low-cost advantages and resource endowments such as cheap natural resources, cheap labor and low-cost environment at the beginning of their own country’s (region’s) development to achieve an economic takeoff. However, when they reach or approach the middle-to-high income threshold, some countries or economies continue to maintain rapid growth, smoothly surpass the “middle-income trap” and turn into high-income countries or economies, such as Japan and South Korea[3]. There are also quite a number of developing countries or economies that experience low economic growth or even stagnation, and fall into the “middle-income trap,” such as Brazil, Argentina and other Latin American countries, as well as the Philippines, Malaysia and other Southeast Asian countries (see Figure 1). Therefore, surpassing the “middle-income trap” has become the biggest challenge facing the middle- and high-income economies.

As shown in Figure 1, when the typical economies are striding over the “middle-income trap” with the per capita GNI around $3,000, economic development of the two types of economies that have crossed over or become trapped in the “middle-income trap” begins to
show significant discrepancy, and thus totally different development trends arise. This shows that the economic development of middle- and high-income economies faces new challenges and has their own unique development rules. Therefore, it is necessary to “listen to the voice of the times, respond to the calls of the times, and earnestly study and resolve major and pressing issues” (Jimping, 2016), explore the particular laws of economic development in the middle- and high-income stage, and promote innovation in economic theories.

According to the experiences and lessons of the two types of economies that have crossed over or become trapped in the “middle-income trap,” the main reasons for falling into the “middle-income trap” are clear. First, there was no timely switch of the development strategy, and there were macro strategic mistakes. Second, the industrial structure had not been transformed and upgraded in a timely manner, and there were “vacuums” in the industries where middle- and high-end ones had not entered, and the low-end ones had been squeezed out, causing industrial investment to drop sharply. Third, no breakthrough had been made in technological innovation, total factor productivity and potential economic growth rate declined, thus the quality of economic growth declined. Fourth, the mode of foreign trade growth had not been transformed in time, and the international competitiveness of products declined. Fifth, income distribution has not achieved fairness and justice, and there was a significant income inequality. Sixth, reforms of institutional mechanisms were not in place, and economic restructuring was severely restricted by the systems and institutions.

Judging from the major problems and potential risks in the current economic development, China has already faced tough challenges of the “middle-income trap,” such as the middle- and low-end industrial structure, insufficient capacity for independent innovation and excessive income inequality. Moreover, from the perspective of the 13 economies that have already crossed the “middle-income trap,” the challenges facing China’s economic development are even greater. First, they all belong to economies with smaller populations and lands. There is no precedent for the realization of a leap in a country like China. Second, most of them have been protected and supported by the USA and other developed countries. On the contrary, China has been subject to various forms of containment. Therefore, whether China can cross the “middle-income trap” has aroused extensive concerns.
In the face of China’s development challenges to cross the “middle-income trap,”
the existing economic theories can hardly provide certain scientific guidance and
policy recommendations.

Privatization and marketization promoted by neo-liberal economics cannot be used to
guide China’s leap across the “middle-income trap.” This is not only because neo-liberal
经济学 is inconsistent with the basic socialist economic system, but also because it is not
 conducive to promoting the development of social productivity in our country. The great
advantage of the basic socialist economic system lies in its ability to create faster and better
development than capitalism. At the level of the promoting productivity, when just taking
into account that China is a latecomer, it can be explained that the theoretical claims of
neo-liberal economics are ineffective for our country to stride over the “middle-income trap.”
In the process of catching up with modernization and industrialization, latecomers can use
the advantages as a latecomer to play the role of the government better and achieve
“compression-style” catch-up development. This is not because the governments of
the latecomers are smarter than those of the developed countries, but because “The country
that is more developed industrially only shows, to the less developed, the image of its own
future” (Marx, 1972). In this way, latecomers can learn from the experiences of the developed
countries, spend less time researching and take fewer economic detours.

Giving full play to the government’s role in realizing optimal allocation of resources
required for the public economy to better exert its control, influence and guidance, and at
least assume the following three responsibilities. The first is to iron out the economic cycle.
In the face of major crises and emergencies, this plays a supporting role in stabilizing
economic growth. For example, in 2016, China faced great pressure from the economic
downturn. In the first three quarters, private investment only increased by 2.5 percent
year-on-year while state-owned enterprise investment increased by 21.1 percent, which has
played a role in steady growth. The second is to lead the industry to upgrade. China’s
economic growth requires: developing the strategic emerging industries, expanding new
space and enhancing new momentum. Strategic emerging industries have high investment
risks and strong externalities. Government guidance can correct for market failures.
During the “Twelfth Five-Year Plan” period, under the active guidance of the government,
China’s strategic emerging industries developed rapidly with the proportion of added
value in GDP rising rapidly from 3 percent in 2010 to 8 percent in 2015, raising GDP growth
by approximately 1.4 percentage points, contributing 70 percent to industrial revenue
growth. The third is to ensure national economic security. Under the background of
economic globalization, national economic security in a certain sense depends on
having a group of world-class large enterprises with international competitiveness. Due to
the short development time and small scale of private enterprises in China, it is necessary
for state-owned enterprises to assume this responsibility. For example, in China, the
number of large enterprises entering the Fortune 500 has increased from 4 in 1999 to
98 in 2016, most of which were state-owned enterprises. Therefore, for those state-owned
enterprises undertaking social responsibilities, it is unfair to evaluate their economic
benefits from the perspective of enterprise efficiency. In fact, Japan, South Korea and
other countries have increased the number of state-owned enterprises in the process of
advancing modernization and industrialization. This shows that even in capitalist countries,
in order to raise productivity more quickly, it is necessary to give a greater role to the
state-owned enterprises.

Development economics, an essential branch of western economics, has also failed to
solve new problems in China’s development. Development economics is intended mainly
to solve the economic development problems faced by a country from the low-income stage to
the middle- and high-income stage. The most well-known theory is due to Lewis. With regard
to the directional nature of his own theory, Lewis (1989b) explicitly stated: “In most countries
which are in the early stage of economic development, their economies are not monistic but dual.” Since its reform and opening up, China’s economic development practice has consciously or unconsciously used Lewis’ dual economic theory, but as China enters the middle- and high-income stage, the economic development needs a series of transformations. First, from the factor-driven to the innovation-driven, it is necessary to regard innovation as the primary driving force for economic development. Second, from uncoordinated development to coordinated development, focus should be put on economic structural adjustments. Third, from unsustainable development to sustainable development, we must place harmony, population, resources and environment as the necessary conditions for development. Fourth, from the emphasis on “bringing in,” one-way opening in the coastal areas to “bringing in” and “going out” along with the all-round opening in the coastal areas and along the borders, the building of a new system of opening up is the only way for prosperity and development. Fifth, from emphasizing that some people and some regions get rich first to shared prosperity, we need to consider the promotion of people’s well-being as the starting point and the objective of development.

Faced with the overall transformation of development momentum, development mode, development path, development conditions and development environment, the theory of development economics shows some limitations. First, it ignores innovation. The dual economic theory established by Lewis in the early days even assumed that technology would remain unchanged. It was assumed that a sound market economy system was in place and that innovation had not been placed at the heart of the economic development. Second, it stresses on non-balanced development strategies. Lewis began to ignore the development of agriculture. John Fei and Ranis, while making up for Lewis’s theoretical flaws and emphasizing the importance of agriculture, only recognized the development of agriculture as a condition of industrialization. Third, there is no emphasis on green development. In order to promote development, developing countries are usually required to make full use of natural endowments and comparative advantages in international trade. Fourth, the opening up to the outside world remains at the initial stage. In order to solve the shortage of capital and technology in developing countries, the primary emphasis is on “bringing in.” Fifth, the distribution of income highlights the distribution of capital, and the labor income is so low only to maintain the level of survival. As Lewis (1989a) explicitly stated, “The central fact of economic development is that income distribution has become more favorable to the savings class” The theoretical shortcomings shown by the dual economic theory at the middle-high income stage are precisely the main reasons that lead developing countries into a “middle-income trap.”

The economic growth theory of mainstream western economics surpasses China’s development stage. Economic growth theory mainly focuses on the economic growth of developed countries. Although some of these theories can be used by developing countries, in general, they do not apply to industrialization, urbanization and modernization, in developing countries. As the famous development economist Gillis et al. (1989) said: “On some major issues of economic development, these economic theories do not provide answers. At most, they provide only partial answers.” This is because the developing countries pursue economic development. Economic development includes not only economic growth, such as the growth of GDP and per capita GDP, but also some wider and more important aspects like the optimization of economic structure, changes in economic systems, improvement of resources and environment, and the fairness of income distribution. Ignoring these will result in growth without development. Therefore, in developing countries, “just measuring growth by economic growth rate is questionable. There are many reasons. GDP cannot tell us anything about distribution, nor can it show how this social welfare system is. Another weakness is that it ignores environmental factors” (Lundahl et al., 2001).
For developing countries which enter the middle- and high-income stage like China, the speed of development is important. However, under the premise of maintaining rapid growth, the optimization of economic structure, economic system, resources and environment, income distribution is more important to guide the economy toward a higher quality, more efficient, more equitable and more sustainable development. The 2016 Central Economic Work Conference pointed out: "Although the prominent contradictions and problems faced by our country’s economic operations are cyclical and aggregate, the root cause is the major structural imbalance" (People’s Daily, 2016). Obviously, in the face of the above historical difficulties in economic development, existing economic growth theory is far from enough.

The socialist economic theories with Chinese characteristics also need innovative development in the context of new situations. The first is the formation of new theories. The Party has summarized and refined socialist economic theories with Chinese characteristics on the basis of its rich experience, which still need to be further innovated in accordance with the new situation in guiding the leap over the “middle-income trap.” The second is to systematize the socialist economic theory with Chinese characteristics. The overall layout of the “Five in One” and the proposal of the “Four Comprehensive” strategic arrangements have meant that China’s economic development has shifted from the key breakthroughs in the past to the overall advancement of the entire economy, and it is, therefore, necessary to coordinate the overall layout of the “Five in One” and to coordinate the promotion of the “Four Comprehensive” strategic arrangement. This involves not only the issue of economic aggregates but also more structural issues. The quality of development is not only determined by economic issues but also by politics, culture, society and ecosystem. The theories that guide the future development of China’s economy must also shift from individual ones to systemic ones and provide an overall solution.

4. A new theoretical system to guide new development practices
For China’s entry into the middle- and high-income stage, facing new challenges that span the “middle-income trap,” it is necessary to make new strategic judgments on the new development stage to avoid major strategic misjudgments; on the other hand, we must propose new ideas, new impetuses, new approaches and new policies that lead the economic development to the new stage in accordance with the new strategic judgments, and form new theories that guide China to stride across the “middle-income trap” and move toward modernization:

(1) The new normal for economic development: Chinese economic development has entered the new normal, which is a significant point in Chinese new stage of economic development. Its primary characteristics are as follows: first, the shift of the economic growth to medium and high speed. Second, the industrial structure has reached the middle and high end. Third, the driving force of factors has turned to innovation. Fourth, urban and rural development have integrated. Fifth, coordinated development of regional economy. Sixth, innovate independently to enter the rank of innovative countries. Seventh, more in-depth and higher level of two-way opening. Eighth, fairer income distribution. Obviously, the issues of concern for the new normal of economic development are entirely different from those in the past. Therefore, the new normal of economic development is a qualitative change in economic development. It requires that in the present and future we should recognize, grasp and use the new normal as the underlying logic for economic work.

(2) A new concept of economic development: in order to adapt to the new normal and adopt the new normal, President Xi Jinping proposed a new concept of innovative, coordinative, green and open development with shared benefits, which provides
solutions to different problems. In response to China’s shift from factor-driven to innovation-driven, it is necessary to place innovation and development at the core of the country’s overall development. In view of the unbalanced, uncoordinated and unsustainable outstanding contradictions and problems that have emerged in China’s economic operations, the coordinated development should be regarded as an inherent requirement for sustained and healthy development. In view of the fact that China’s resource environment is at or near the upper end of its tolerance, green development is required as a necessary condition for sustainable development and an essential embodiment of the people’s pursuit of a better life. In view of the fact that the development of our economy asks for the best use of two markets and two resources, we need to take opening up and development as the only path forward for China’s prosperity. To solve the problem of excessive income gaps in China’s income distribution, it is necessary to regard shared development as the essential requirement of socialism with Chinese characteristics. Therefore, if we want to successfully cross the “middle-income trap” and realize the “Chinese dream,” we must take the new development concept as a fundamental guideline.

(3) New impetus for economic development: under the new normal of economic development, innovation is the primary driving force for development. Innovation is a “four-in-one” innovation system consisting of theoretical innovation, institutional innovation, technological innovation and cultural innovation. This means that while technological innovation is important, innovation is not only technological innovation but also innovations such as economic system reform and emancipation of ideas. In particular, for countries like China in the institutional transition, deepening reforms must be used as a powerful driving force for economic development. Judging from the development experience since China’s reform and opening up, the introduction of each major reform decision has brought about rapid economic development for about five years[4]. Similarly, theoretical innovation is also a powerful driving force for economic development in the new stage. The McKinsey report of October 22, 2015 clearly stated that so far most of China’s innovation work had been relatively easy to carry out, and China had made remarkable achievements in incremental innovation. However, China has made fewer achievements in the more challenging areas of innovation, lacking significant breakthroughs in science or engineering (Overseas Media, 2015). Due to the lack of such breakthroughs, China’s total factor productivity and potential growth rate tend to decline. The acceleration of scientific and technological innovation also depends on institutional innovation, theoretical innovation and cultural innovation to eliminate all ideas, systems and mechanisms that hinder technological innovation. This innovative theory surpasses Schumpeter’s innovation theory and the innovation theory of institutional economics, pushing innovation theory to a new height.

(4) A new approach for economic development: the emergence of a knowledge economy surpassed Lewis’s dual economic theoretical framework of the agricultural and industrial economy and formed the triad economic structure of the agricultural economy, industrial economy and knowledge economy. Therefore, it is necessary to construct a new economic theoretical framework for the interactive development of industrialization, informatization, urbanization and agricultural modernization to replace the traditional dual economic theory. The new path for the development of the three-element economy is: first, the interaction between industrialization and informatization, and the road to a new type of industrialization; second, the interaction between industrialization, informatization and urbanization, and the
road to the new urbanization; third, the interaction between industrialization, informatization and agricultural modernization, and the road to a new type of agricultural modernization; and fourth, the interaction between industrialization, urbanization, agricultural modernization and informatization, which opens up a broader road for rapid information-based development.

(5) New policy for economic development: since the Party’s 18th National Congress, China has initially established an economic policy framework that suits the new normal of economic development. Economic development must be guided by new development concepts, with supply-side structural reform as the main route, and higher quality, more efficient, more equitable and more sustainable development as the direction, in order to enhance the well-being of people and promote overall development. We have steadily progressed toward the direction of shared prosperity as the starting point and destination of economic development, leading a set of economic policy frameworks for sustained and healthy economic development in China.

The systematization of the new normal, new concept, new impetus, new approach and new policy of the economic development into economic theories constitutes a new theoretical system that leads China’s development from the high-middle-income stage to the high-income stage, making up for the theoretical defects or deficiencies of the existing economics at this stage of development. It has opened up a new realm of socialist economic theories with Chinese characteristics.

The further systematization of the socialist economic theories with Chinese characteristics formed before the Party’s 18th National Congress and the above new theories constitutes a new system of socialist economic theories with Chinese characteristics. This mainly includes: first, the research object, that is, the research object decided on the basis of the nature and time mission of the socialist society. We must study not only the relations of production but also the productivity. That is, we must liberate the productive forces through the continuous deepening of the relations of production that are not adapted to the productive forces; we must develop productive forces by studying the operating laws of the productive forces. Second, the logic main principles; the main line of logic determined according to the fundamental contradiction in the primary stage of socialism is development. Third, the theoretical framework, which is centered on the main logic line of development; this explains the concept, category, principle and operating mechanism of the socialist economic theories with Chinese characteristics in terms of development philosophy, development goals, development purposes, development speed, development and transformation, development momentum, development path, development resources, development environment and development systems (Huang, 2016b).

It can be seen that the theoretical value of the new system of socialist economic theories with Chinese characteristics lies in various aspects. First, inheriting and developing Marxist economics. For example, identifying the research object of socialist economics with Chinese characteristics as production relations and productivity is the inheritance and development of Marxist economics research object theory; the innovative development in the new development concept is the inheritance and development of the theories that science and technology is productivity by Marx, and that science and technology is the first productive force by Deng Xiaoping; coordinated development has inherited and developed Marx’s two major departmental balance theories, Mao Zedong’s Top Ten Relations, Chen Yun’s Comprehensive Balance Theory and the “Five Balances” scientific development theory. Second, embracing and surpassing the economic development theory of western economies. For example, innovation theory includes Schumpeter’s product innovation, technological innovation, market innovation, resource allocation innovation and organizational
innovation, as well as institutional innovation in institutional economics, and surpasses Schumpeter’s theory that innovation is in the micro field, that is, innovation through entrepreneurs. This also includes innovation at the macro level, such as theoretical innovation, cultural innovation into the innovation system; the triad economic theory of the interactive development of new industrialization, informatization, urbanization and agricultural modernization demonstrates tolerance and transcendence of Lewis’ dual economy theory, as well as of structuralist economics, traditional industrialization theory and urbanization theory. Third, summarizing and refining new theories from China’s successful experiences. For example, the theory of the basic economic system in the primary stage of socialism is a theoretical innovation of the basic socialist economic system based on China’s special national conditions, following the law that productivity determines the relations of production; the theory of socialist market economy unites socialism and market economy creatively and expands the meaning and capacity of the market economy.

The universal value of the new system of socialist economic theories with Chinese characteristics lies in the following: in theory, first, the economic theory that guides the transition from high- and middle-income countries to high-income countries has been constructed through innovation and has solved a theoretical defect of the existing economics in the world. It has also formed a complete economic theory system that can guide the entire process of industrialization, urbanization and modernization of developing countries, contributing Chinese wisdom to the refinement and development of economic theories. Second, it has proposed the new theories of a new concept, new impetus new approach and new policy for economic development. It has embraced and surpassed the existing economic theories and made Chinese contributions to the enrichment and development of the economic theories. In practice, theoretical guidance and policy guidelines have been provided for developing countries, especially those that are still struggling with the "middle-income trap," and will help them to leap over the "middle-income trap" successfully.

Notes
1. All the above information is from the World Bank database.
2. The “China” in the “China Economics” mentioned here is not a geographical concept but a concept of names, representing the theory that guides the developing countries to modernize.
3. According to statistics from the World Bank, between 1960 and 2008, 101 economies entered the middle-income stage successfully, but only 13 economies achieved a leap. They are: Equatorial Guinea, Greece, Hong Kong, Ireland, Israel, Japan, Mauritius, Portugal, Puerto Rico, Singapore, South Korea, Spain and Taiwan.

References


Jinping, X. (2015), “Our work must be based on China’s specific conditions and China’s development practices, and we must developing contemporary Chinese Marxist political economics”, Xinhuanet, November 24.


**Corresponding author**
Taiyan Huang can be contacted at: htaiyan@sina.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
On the organic combination of public ownership and market economy

Yu Zhang
School of Economics, Renmin University of China, Beijing, China

Abstract
Purpose – Since the implementation of reform and opening up, China has made remarkable achievements in terms of economic reform and development. China's path, as well as its experience, has simultaneously gained worldwide concerns. Developing the market economy against the backdrop of socialism brings conclusions from China's achievements, deepens knowledge of China's pathway and builds a socialist political economy with Chinese characteristics. That is the way to realise a basic socialist system, especially with regards to the organic integration of public ownership and market economy. This combination determines the future of socialism with Chinese characteristics and the success or failure of economic restructuring. Therefore, it requires consideration and in-depth study. The paper aims to discuss these issues.

Design/methodology/approach – The goal of economic restructuring is to establish and develop the socialist market economy. Its main content can be summarised in two parts. The first is the relationship between plan and market or government and market. The second is compatibility or combination of public ownership and market economy. The former is one of the superficial problems, relevant to resource allocation method or economic operation mechanism. The latter stems from deep-rooted problems, represented by ownership or the underlying economic system. These two work together to form the organic integrity of socialist market economy where both similarities and contrasts coexist.

Findings – The shared ideal of socialism with Chinese characteristics and the lofty goals of communism will then become empty words. In this sense we can say that, whether we can realise the unity and opposition between public ownership and market economy and better integrate advantages of socialist system with strengths of market economy, will to a large extent determine the future and destiny of the socialist market economy.

Originality/value – As previously mentioned, the relationship between plan and market or government and market are part of resource allocation methods or economic operation mechanism. Compatibility and combination, however, with public ownership and market economy are part of an ownership or basic economic system. Science reveals the nature and developmental law of the socialist market economy. An in-depth study must be conducted on the relationship between public ownership and market economy.

Keywords Socialism, Public ownership, Market economy

Paper type Research paper

Since the implementation of reform and opening up, China has made remarkable achievements in terms of economic reform and development. China's path, as well as its experience, has simultaneously gained worldwide concerns. Developing the market economy against the backdrop of socialism brings conclusions from China's achievements, deepens knowledge of China's pathway and builds a socialist political economy with Chinese characteristics (SPECC). That is the way to realise a basic socialist system, especially with regards to the organic integration of public ownership and market economy. This combination determines the future of socialism with Chinese characteristics and the success or failure of economic restructuring. Therefore, it requires consideration and in-depth study.

JEL Classification — P26, P23

© Economic Research Journal. Published in China Political Economy. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode. Originally published in Simplified Chinese in Economic Research Journal.
1. Two principal lines of socialist market economy development

The goal of economic restructuring is to establish and develop the socialist market economy. Its main content can be summarised in two parts. The first is the relationship between plan and market or government and market. The second is compatibility or combination of public ownership and market economy. The former is one of the superficial problems, relevant to resource allocation method or economic operation mechanism. The latter stems from deep-rooted problems, represented by ownership or the underlying economic system. These two work together to form the organic integrity of socialist market economy where both similarities and contrasts coexist.

Logic is inconsistent with history. The development of the socialist market economy centers on the above mentioned two parts and two principal lines in terms of theory and practice. It evolves from the exterior to the interior and from shallow to deep. Market socialism theory, as summarised by Roemer et al., has undergone five stages of development. The first stage is that socialist economy calculations must resort to the symbols of value rather than a physical unit. The second stage is that appropriate equivalent prices should be obtained through solving complicated equations. The third stage introduces the market and addresses economic imbalances through competition. The fourth stage shows various market-based theories and practices in socialist countries. The fifth stage emerged after the reform failure in the Soviet Union as well as Eastern Europe. The core concept is to seek enterprise institution unifying equity and efficiency (Roemer, 1994). The first four stages for the progress of market socialism theory focus on the relationship between plan and market. From 1960s to 1980s, many such reform theories have been raised by economists in Eastern Europe, including Lange model, Bruce's decentralised model, Ota Sik's free market model coordinated by macro income plan and Kornai's free market model under indirect macro control. That being said, as theory and practice progress, scholars come to realise that little attention paid to this relationship is far from enough for constructing the entire market economy. Whether public owned enterprises are able to and how they adapt to market mechanism are the crucial points, namely the combination between public ownership and market economy. Kornai et al. found that some assumptions could be just fantasies if the perfect competition market-based reform plans failed to deliberate on whether a traditional state-owned system could accommodate them or not. One such example is Oskar Lange's famous theory of stimulated market for a planned economy. It assumes that socialist entrepreneurs virtually behave the same as their private counterparts, but its basis is not fully explained. Thus the assumption ends up with a deficiency in the microeconomic base (Kornai, 1987). As to this problem, Ota Sik et al. proposed neutralised capital. This theory envisages that labourers, as owners of collective capital in public enterprises, engage in business management through democratic autonomy and share profits thereof. In this way, the contradiction existing between labour and capital can be overcome, and economy can embrace democracy and humanity (Sik, 1989a, b). Bruce, however, went in the opposite direction. He put forward socialisation of production materials. He believed that socialist ownership should be social ownership rather than state ownership. This features two basic standards. One goes that the means of production must be used to satisfy social benefits. The other is that the society must dominate its means of production. Of these, the second standard plays a decisive role, whose essence is political democratisation (Bruse, 1989). In short, scholars in the Soviet Union and Eastern Europe delved into the effect of market mechanisms on a socialist economy. They also deliberated on a combination of public ownership and market economy and achieved great success.

In China, exploration of the role of market mechanism started as early as when a socialist system was established. There were two significant discussions from 1956 to 1957 and from 1958 to 1959, respectively. After the reform and opening up, researchers made some breakthroughs on this problem. Theory continued to progress, and recognition kept deepening. The Third Plenary Session of the 11th Central Committee of the Communist Party of China
(CPC) stressed on law of value; the 12th National Congress of the CPC proposed the leading role of planned economy supplemented by market regulation; the Third Plenary Session of the Twelfth Central Committee put forward a planned commodity economy; the 13th National Congress raised a new economic operation mechanism, which, on the whole, affirms that the state regulates market while the market guides enterprises; the economic system and operation mechanism proposed post the Fourth Plenary Session of the Thirteenth Central Committee features a combination of planned economy and market regulation to accommodate the planned commodity economy. At the same time, another principal line for a socialist market economy, namely the combination of public ownership, commodity economy and the market economy, was put forward. Especially when the reform of state-owned enterprises (SOEs) became pivotal in economic restructuring, the system, mechanism and realisation form of public ownership have all been taken more seriously. The Third Plenary Session of the 12th Central Committee of the CPC has put forward that reinforcing the vitality of enterprises, in particular large and medium enterprises, is pivotal in economic restructuring with a city as its priority. Enterprises must become independent economic entities and socialist commodity manufacturers and operators responsible for their own management as well as profits and losses. Report at the 13th National Congress pointed out that enterprises owned by the whole people must be invigorated based on separation of ownership and management right, establishing a basic framework for a planned commodity economy with a focus on transforming enterprise operation mechanism.

The report at the 14th National Congress of the CPC specified the reform goal of the socialist market economy, enabling a historic leap in knowledge on the socialist market economy. The report pointed out that our objective in economic reform was a socialist market economy, in which nature was also summarised in an aspect of a primary system and resource allocation by the report. With regards to the fundamental system, the socialist market economy is combined with a basic socialist system. In terms of resource allocation methods, the socialist market economy system we aim to establish is to enable the market to play a fundamental role in allocating resources under the socialist macro-control. At this point, two aspects and two principal lines of a socialist market economy, namely the relationship between plan and market together with a combination of public ownership and the market economy have all been determined as essential characteristics of the socialist market economy. The Fourth Plenary Session of the 15th National Congress of the CPC specified that reforming SOEs is pivotal in the reform of the entire economic system. To establish and improve the socialist market economy as well as combine public ownership and market economy, the most important point is to bring into being the administrative system and management mechanism for SOEs to adapt to a market economy.

Since the 18th National Congress of the CPC, a new round of reforms aiming at improving the socialist market economy system have been comprehensively launched. The two aspects as well as the principal lines remain very clear. On the one hand, the Party Central Committee pointed out that the core of the economic restructuring is to handle the relationship between government and market, enable the market to play a decisive role in resource allocation and give full play to the government. On the other hand, the Committee emphasised that the underlying economic system of keeping public ownership as the mainstay and allowing diverse forms of ownership to develop side by side serve as an essential pillar for the socialist system with Chinese characteristics and the foundation for the socialist market economy. President Xi Jinping observed that we must remain committed to the direction in reforming the socialist market economy, adhere to dialectics and the doctrine that everything has two aspects, and foster and enhance the combination of basic socialist system and market economy (Jinping, 2015). The above remarks by President Xi fully demonstrate nature of dialectical relationship between two aspects and two principal lines of a socialist market economy.

However, it must be noted that the status and role of the two aspects are different. As previously mentioned, the relationship between plan and market or government and market are part of resource allocation methods or economic operation mechanism.
Compatibility and combination, however, with public ownership and market economy are part of an ownership or basic economic system. Science reveals the nature and developmental law of the socialist market economy. An in-depth study must be conducted on the relationship between public ownership and market economy.

2. Deepening the knowledge on the relationship between public ownership and market economy

At present, what is the particular significance in deepening research into the relationship between public ownership and market economy?

First of all, it is required for adhering to and improving the socialist market economy system. Theoretical logic and practical experience both certify that the combination of public ownership and market economy play a key role in this regard. First, public ownership of the means of production is the basis of the socialist economic system. Our constitution specifies that the building blocks for a socialist economic system of the People’s Republic of China are the socialist public ownership of the means of production, namely ownership by the whole people and collective ownership by the workers. In this sense, the socialist market economy is by no means possible without the combination of public ownership and the market economy. Second, the primary stage of socialism adopts public ownership as the mainstay while allowing diverse forms of ownership to develop side by side. There are commodity exchanges of various natures, such as exchange among private ownership, public ownership as well as the exchange between private and public ownership. Whether the combination between public ownership, a mainstay of a basic economic system, and a market economy is possible and how it happens determines the nature, characteristics and prospects of a socialist market economy to a large extent. Third, there is significant progress made through economic restructuring, the purpose of which, however, remains unfulfilled. A lot of contradictions and problems still exist. On the one hand, the regulatory role of the market mechanism is not in full use. What is worse, the market system is far from sound and factors of production fail to circulate smoothly. Equally, superiorities of labour-based distribution and planned development in public economy are not sufficiently demonstrated. Problems like large income gaps, the absence of master consciousness, overcapacity and serious corruption boil down to an immature and unstable combination of public ownership and market economy.

Second, further research is required to understand China’s practical experience. The Political Bureau of the Central Committee of the CPC organised a collective learning on the fundamental principles and methodologies of Marxist Political Economy on 23 November 2015. President Xi Jinping made particular note that we must reveal new features and rules and refine the achievements of economic development and practice based on our national realities. In addition, we must turn experience from practice into systematic doctrines and keep exploring new boundaries of Marxist political economics in contemporary China. So, what is the most fundamental feature of China’s practical experiences? This is an organic combination of the basic socialist system and the market economy, a combination of public ownership and market economy in particular. This combination, for one thing, allows market mechanism’s sensitivity, incentive effectiveness, and flexible control, which enhances economic vitality; additionally, it must draw on the strengths from the socialist public ownership economy, such as putting the people first, overall consideration, independence as well as co-construction and sharing. Moreover, it must overcome blindness, spontaneity, hysteresis, financial crisis and income disparity in a capitalist market economy. On the one hand, it must commit to public ownership of the socialist economic system, distribution according to labour, regulation through planning, shared prosperity, comprehensive development and other basic principles. On the other hand, it must accommodate to the requirements of the market economic basics, develop the economy with different types of ownership and various allocation methods, allow the
existence of exploitation, expand the role of spontaneous forces, strengthen personal interests and encourage free competition. How to enable organic combination of these two factors with mutual contradiction, transformation and restriction? This is a core issue in China’s economic system reform. Coexistence, struggle of the two conflicting aspects and their integration in the new category belong to the dialectical movement (Engels and Marx, 2012a). The socialist market economy is a vivid reflection of this movement. Theoretically, the combination summarises successful experiences of the socialist market economy, surpassing doctrines of a capitalist market economy building upon private ownership. It is of great significance to the scientific socialism’s development and human progress.

Third, further research is required by a SPECC. Currently, theorists are unclear or even confused about the relationship between public ownership and the market economy. After more than 30 years’ in-depth reform, many opinions regarding economic system restructuring go backward, setting public ownership against the market economy. This is an unforeseen phenomenon. For instance, some believe that the SOEs should withdraw from competition or profitable sections. Instead, they can specialise in public products that are unappealing or inaccessible to private enterprises. Some consider that the large scale and rapid development of SOEs may seize and occupy private enterprises’ development space, making private enterprises fall behind. There is also the opinion that leaders in SOEs cannot be defined as entrepreneurs. In this sense, their payroll is based on the standards set by government officials rather than the market standards. Others, however, object to public ownership set against market economy with reform and develop public ownership under a market economy. They assert that there is no contradiction between public ownership and the market economy. Moreover, the combination of the two in their opinion is well-reasoned with no need to be verified.

The above two contradictory viewpoints share one common premise, namely studying the combination of public ownership and market economy is no longer important. The difference is the former view advocates that developing the so-called true market economy can only be accomplished by full privatisation. It denies the socialist economic system radically. The latter view regards the market economy as neutral with no obsession for socialism or capitalism. Moreover, the public ownership economy should fully adapt to the market economy. This view seems reasonable but is confronted with numerous unresolved problems. For example, why is there a distinction between the socialist market economy and the capitalist market economy since the market economy is neutral? As SOEs are not exclusive leaders under public ownership, how can they make possible independent management and assume sole responsibility for their profits or losses? How can the job market or labour market come into being when labourers are the owners of the means of production? Competition leads to polarisation. How can it be compatible with the nature of shared socialist prosperity? If profit maximisation is the only aim that enterprises pursue, how can the people’s material and cultural needs be met or the socialist objective of production thrive? All these problems can come down to one fundamental issue, which has been specified in Lange’s “Theory of Socialist Economy”, published in 1938. “If the rules for allocating resources to implement competition are the same as those for a rationally guided socialist economy, what is the role of socialism? If the same result can be achieved within the existing system, why should the entire economic system be changed if it is forced to keep its competition standards?” (Lange, 1981). There exists one paradox. If public ownership integrates with the market economy, the meaning of its existence will be lost. If the public ownership is set fully against market economy, the socialist market economy will lose its base for existing. How to resolve this paradox? Problems arise with their solutions. That is true of China’s socialist market economy, which arise and develop in the process of problem-solving. Public ownership and market economy, as a consequence, undergo a historic transformation from opposition to unification.
3. Opposition and unification of public ownership and market economy

To understand the relationship between public ownership and market economy, we must return to the causes and features of commodity relation existence in a socialist public ownership economy. Once society owns means of production, commodity production will be removed. This is a classic theory voiced by Marx and Engels. In *Critique of the Gotha Programme*, however, Marx’s perception in this regard has evolved. He classified the communist society into the advanced and infantile stages and elaborated on the difference between the two. “In a higher phase of communist society, after the enslaving subordination of the individual to the division of labor, and therewith also the antithesis between mental and physical labor, has vanished; after labor has become not only a means of life but life’s prime want; after the productive forces have also increased with the all-round development of the individual, and all the springs of co-operative wealth flow more abundantly – only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banners: From each according to his ability, to each according to his needs” (Engels and Marx, 2012b).

Briefly speaking, public ownership of the socialist society is different from that of the advanced stage. The primary distinction is as below: the former builds on the division of labour, a particular organisation form of labour and technology; the latter, however, is based on the elimination of division of labour and the all-round development of individuals. Due to the existence of the division of labour, workers in a socialist society cannot be associated with means of production merely by the identity of co-owners in this regard, the same as the communist society. They must take labour as their means of living and integrate with public means of subsistence through the role of the labourer to get paid according to their work. The unique structure of socialist public ownership enables co-existence of commodification and non-commodification. That leads to certain contradictions and unification between public ownership and the market economy, which is key to understanding the relationship between the two.

Below is an analysis of the nature and characteristics of socialist public ownership and its relationship with the market economy in terms of property rights structure, distribution system and regulation methods.

**Dual attributes of socialist public ownership**

Commodity exchange is the exchange of ownership. “As a general rule, articles of utility become commodities, only because they are products of the labour of private individuals or groups of individuals who carry on their work independently of each other” (Marx, 2004a). “They must therefore, mutually recognise in each other the rights of private proprietors” (Marx, 2004b). Commodity exchange is based on independent private ownership. In this context, Marx and Engels asserted that once a society possesses the means of production, commodity production will be eliminated. In terms of public ownership’s general attribute, the above inference is logical. Against the backdrop of public ownership, the means of production belongs to all labourers and all people are equal owners. No individual or group can gain special interest through ownership of the means of production. Satisfying the needs of the people has become the sole purpose of social production. In no way can this kind of production relation generate equivalent exchange relations. However, different conclusions can be drawn in terms of the socialist public ownership’s particular structure. Regarding this socialist public ownership, although the means of production are jointly owned by members of the society, equal labour exchange is applied between the labourer and the enterprise. There exist distinct boundaries of interest. Therefore, socialist public ownership does not offer freely accessible public goods according to some scholars. On the contrary, it features clear exclusivity. First, social public property as a whole is exclusive to each individual member of the society. A single member of society is not automatically entitled to ownership and the derived rights because he is one of the public property owners. His possession and employment of the means of production are conditional, that is, the labour that meets the needs of society. Second, “The right of producers is proportional to the labour they supply.”,
“the same principle prevails as in the exchange of commodity equivalents: a given amount of labor in one form is exchanged for an equal amount of labor in another form” (Engels and Marx, 2012c). This principle as well as the producer’s right to be paid according to his work is also one of the exclusive rights. Unlike private ownership of the means of production, this exclusivity is not exclusive to ownership in its essence, but stands for exclusivity of labour in exchange of an equivalent amount of product. This exclusivity in socialist public ownership requires an equal value-based exchange between different enterprises within public ownership. There must be relative independence in production and product allocation in publicly owned enterprises. In this way, national ownership and business operation rights can be separated. That is how a public asset management system can be established with clear property rights, strict protection, smooth circulation, as well as value maintenance and appreciation. This complex structure of public property rights is not only a particular requirement of socialist public ownership, but also conforms to the general development laws of property right system. In fact, the internal property rights structure after the establishment of ownership system is by no means invariable. All the main powers thereof can be centralised, separated, subdivided, restructured and implemented in various combinations according to the subject’s interests, leading to various types of property allocation models (Xuangong, 1998). This also applies to socialist public ownership.

However, this kind of commercial property of public-owned enterprises is only regional, and it is fundamentally different from the overall goods exchange among private producers. In modern economic terms, the public ownership of means of production is a macro rather than a micro concept. The production of publicly owned enterprises features the direct need of the society. Although this society cannot be adjusted through direct planning as conceived by Marx, it is not entirely missing after the implementation of the socialist market economy system. Instead, it proves its existence with hard facts. First, public enterprise production cannot only commit to private interests but must also satisfy the common interests of the society. It cannot merely focus on the efficiency of enterprises in microcosmic aspect (profit maximisation), but must also undertake critical social responsibilities, such as protecting people’s livelihood, safeguarding economic security, implementing macro-control and promoting independent innovation. Second, the management of publicly owned enterprises does not merely mean internal matters but features clear public qualities. As a representative of public ownership, the public asset management bureaus must be granted the right to make big decisions on corporate investment, distribution and personnel. The relevant stakeholders also have the right to monitor business operations so as to ensure that social interests are not taken over by corporate groups. Third, the economic surplus in the distribution of publicly owned enterprises does not belong to any individual or group. It is, in its essence, collectively owned public accumulation. Some of them are turned over in the form of profits and taxes, and some are left for the enterprises to expand and reproduce. The public nature of economic surplus is a concentrated expression of the production data in the distribution relationship.

In the process of integration of public ownership and market economy, a shareholding system is undoubtedly an effective form of realisation. Its role is so important that some people think that the corporate form of shareholding companies makes ownership completely useless. Therefore, demutualization in public-owned enterprises and establishment of corporate governance structure can create a capital market without capitalists. It enables the operation of public capital to be fully separated from the state regulation and control but completely based on the market economy. This kind of perception is reasonable and has been verified to some extent by success stories from SOE reforms. That being said, the viewpoint is one-sided as it only focusses on the public capital’s commercial nature partially but ignores its direct sociality. This sociality determines that public capital operation cannot be built on spontaneous market transactions completely. This is because, in the property relations of public ownership, there are not only horizontal exchange of goods between enterprises but also vertically entrusted multilevel agent relations, which happen between the entire people and the state, the state and
ownership representatives of state-owned capital as well as the representatives of business operations. These vertical agent relations are not equivalent to commodity exchange relations. For example, in terms of the relationship between all members of the society and the state-owned capital management agencies, it is a matter of political system design. In terms of the relationship between state-owned capital management agencies and business operators, it is a matter of ownership and operation right separation. These vertical agent relations require the establishment of a rational macro-control system and a public asset management system. In addition, government behaviours must be scientific and democratic. However, the market mechanism is incapable in this regard. It is a fact that although the socialist basic economic system with public ownership as mainstay has been established and become the guiding principle for China’s economic reform and development, structural change in ownership under market economy depends on market mechanisms to a large extent. Various factors may exert an impact such as market competition, globalisation, and capital flow. In this context, if there is no effective macroeconomic regulation and protection, the basic socialist system with public ownership as its mainstay may well be deconstructed by spontaneous capitalist forces and become a kind of legislative fantasy. At that point, the socialist market economy will end in failure.

Plan and market in socialist public ownership economy

According to Marx and Engels’s classic theory, socialist production is plan-based. Moreover, planning or adjustment is an essential feature of the socialist economy. Marx pointed out in Das Kapital: “[…] a community of free individuals, carrying on their work with the means of production in common, in which the labour-power of all the different individuals is consciously applied as the combined labour-power of the community” (Marx, 1975). In Anti-Dühring, Engels pointed out: “With the seizing of the means of production by society production of commodities is done away with, and, simultaneously, the mastery of the product over the producer. Anarchy in social production is replaced by systematic, definite organization”, “It is the humanity’s leap from the kingdom of necessity to the kingdom of freedom” (Engels and Marx, 2012d). Based on the above theories of classic writers as well as realities from that time, the initial economic system model came into being, as a highly centralised planned economic model. The highly centralised planned economic system has played a crucial role in consolidating the new socialist system and proceeding large-scale industrialisation. Its historical contribution cannot be denied. However, it turns out that the highly centralised system of planned economy tends to integrate government with enterprises and ignore the effects of commodity production and market forces, which seriously hampers the development of productivity. The shift from a highly centralised planned economic system to a dynamic socialist market economy is historically inevitable.

However, can we simply take this kind of transformation as market’s victory over planning as well as spontaneity over self-consciousness? The answer is no. Planning and market are not the fundamental factors in distinguishing socialism and capitalism, but they are neither tools that have nothing to do with the social system. The nature, status, and role of planning and market under various social systems are different. A planned economy is not equal to socialism. However, planning is not an option for socialism, but one of the essential attributes of a publicly owned economy (Guoguang, 2010). This is because, in the public ownership system, all members of society are co-owners of means of production. The social production is to satisfy their common interests. However, if there is no unified social plan, economic entities that pursue their own interests will blindly compete in the market. This will not only lead to the failure in achieving the common interests of the society but may also degrade the socialist public ownership system to a group ownership, ending up being overwhelmed by the ocean of private ownership. The development of the publicly owned economy, therefore, cannot completely be built on the spontaneous market but must rely on
the collective rationality or social plan as its own realisation form. Some may say that
capitalist countries also have state intervention while some even have implemented economic
plans. Thus, planning is not the essence of socialism. However, the intervention of the
capitalist countries in the economy is based on private ownership and is always confronted
with an insoluble contradiction: If the state’s intervention is insufficient, there will be difficulty
in dealing with unemployment, economic crisis and income gap in the capitalist market
economy. If the intervention is excessive, the sacred doctrine of private ownership will be
undermined, and the vitality of the capitalist economy will be impaired. The intertwining
of market and government failures is an unavoidable consequence in the development of
fundamental capitalist contradictions. Facts have repeatedly proven that genuinely effective
planning and adjustment are impossible for a private ownership-based capitalist market
economy. As Marx pointed out long ago, “There is no sense of existence from the beginning of
production, which is the crux of bourgeois society”. Consciousness-based regulation and
supervision, as well as adjustment in the process of social production, is said to infringe upon
the “originality” of the capitalist’s property rights, freedom, and self-determination. Under
public ownership, the link in all production is “the rules that are governed by their collective
rationality enable the production process subject to their joint control” (Engels and Marx,
2012e). This collective control on socialist production serves as nature of the socialist economic
planning. The state macro-control in the socialist market economy is based on this nature.
This is essentially different from state intervention in the capitalist economy.

First, the primary basis for macro-control implemented by socialist countries is not in the
so-called market failure, but public ownership of means of production as well as the planned
and proportionate development law generated from this. Whether there exist so-called market
failures or not, the state as the general representative of public ownership of production
materials and public social interests must be able to regulate social reproduction process in
accordance with the needs of the society and allocate social resources as long as the public
ownership dominates. Second, the primary target of the macro-control in socialist countries is
not to maintain short-term equilibrium of the total and create macro conditions for operation
of the market mechanism, but to formulate and implement correct economic development
strategies in light of the overall situation and long-term interests of economic and social
development. Take into account the significant proportions in all aspects, promote sustainable
social, economic development and satisfy the growing material and cultural needs of the
people. Third, the means by which the socialist countries plan to regulate are not limited to the
indirect demand management, namely fiscal and monetary policies, but also include many
regulatory measures that are directly controlled and implemented by the state. These include
formulating development plans, coordinating regional relations, creating strategic industry,
supervising state-owned capital, investing in infrastructure, promoting technological
innovation, as well as adjusting industrial structure and income distribution.

*Equal work exchange and exchange at equal values*
In socialist public ownership economy, personal consumer goods are distributed according
to work. After various deductions, personal consumer goods are distributed in accordance
with the labour completed by workers. Equal work exchange is applied. Marx believes that,
“the same principle prevails as in the exchange of commodity equivalents: a given amount
of labor in one form is exchanged for an equal amount of labor in another form” (Engels and
Marx, 2012f). This assertion is significant. A simple deduction will reveal the revolutionary
ideas in it. First of all, equal work exchange actually acquiesces that “unequal individual
endowment, and thus productive capacity, as a natural privilege” (Engels and Marx, 2012b).
That means that labour belongs to individuals. Second, this kind of equal labour-based
exchange also requires social dimensions and standards. This transforms labour of different
specific forms into general social labour and transforms the labour of different complexity
and intensity into average social labour. This social scale is only abstract in terms of average social labour, which is similar to value of commodities. Third, abstract social general labour can be directly calculated within an enterprise. Other than market mechanisms, however, there may not be a better way at this moment to transform the complicated and unpredictable individual labour into general average social labour across the entire society. In this way, one kind of profound intrinsic link has occurred between the realisation of distribution according to work and the market economy.

The question is that, since Marx had already noted the commonality between equal labour exchanges and equivalent exchanges, why he still insisted that “within the co-operative society based on common ownership of the means of production, the producers do not exchange their products, just as little does the labor employed on the products appear here as the value of these products” (Engels and Marx, 2012f). In this regard, Marx’s explanation is that the content and form have changed. In terms of form, the exchange of equivalents happens only on average, not in every single occasion; and in the equal exchange of labour in public ownership, individual labour no longer goes through a tortuous path. Instead, it exists as an integral part of total labour. In terms of content, commodity exchange based on private ownership feature all labour products. In public economy, no one can provide anything other than one’s own labour. Also, none can be converted to personal property other than individual consumption information. In addition, general abstract work, as scale of equal labour exchange, is generally affected by subjective conditions of labourers rather than objective conditions such as quality of production materials, like the socially necessary labour that forms the value. In other words, labour-based distribution only recognises the difference of labour quality through income distribution but does not recognise the influence of the quality of material production. In this way can equality in labour and remuneration can be achieved (Jun, 1982). Therefore, principles of equal labour exchanges embodied in distribution according to work are not the same as equivalent exchanges in commodity exchange.

How can this contradiction between equal labour exchange and equivalent exchange be resolved? That is, how can we develop commodity currency relations as well as market economy, and at the same time make socialist distribution according to labour possible? In real life, the realisation of distribution according to work, first of all, must rely on the market mechanisms. On the one hand, links among enterprises are based on commodity exchanges. Exchanges tend to be carried out in accordance with amount of value determined by the necessary labour time in society. Enabling market mechanisms to play their role so that the economic benefits of enterprises will continue to increase competition. The economic benefits created and realised by enterprises are the basis for labour evaluation. On the other hand, the specific labour of different forms and the individual labour of different labourers are enabled to compare with each other. However, the allocation through market mechanism is just a precondition for distribution according to work rather than the end. The realisation of distribution based on work goes through at least three steps. First, apart from taxing enterprises as a public power, the state must also collect capital gains from SOEs as an owner. This income is not only the realisation of public capital ownership in economy, but also to some extent, eliminate the impact of means of production occupation differences on enterprise’s distribution of income. It creates conditions for equality in work and remuneration. Second, in publicly owned enterprises, the relationship between accumulation and consumption ratios correlates with the interests of the state, the collective, and the individual. It serves as the integration point for state’s macro-level decision-making and enterprise’s micro-level decision-making. If there is no state adjustment on enterprises’ income distribution, there may be problems such as wage erosion, accumulation of consumption, and collective interests impairing social interests. Third, the distribution of personal income in enterprises includes wages, bonuses, and benefits. This is the last link of distribution according to work, and this link is inseparable
from state adjustment. State regulation mainly aims to regulate the proportion of income between a company’s managers and workers internally, prevent excessive income disparities among managers and workers, and dissuade enterprise managers from seeking personal gains and undermining public profits.

Therefore, fair labour exchange is realised both in the market and outside the market. It depends not only on market regulation but also on national regulation. Only after entering the production process will everything be revealed, just as capital appreciation happens both in and outside of circulation.

Labourer’s master status and labour market
The separation of means of production from the workforce, labourers becoming commodities, and capital employing labour and possessing surplus value created by workers are essential features of the capitalist production mode. In public ownership, the contradiction between labour and capital is eliminated, and the labourer is the co-owner of means of production, rather than the production factor that produces surplus-value for capital. This means the labour force loses its commercial nature. However, we cannot conclude that only planning and adjustment can therefore be deployed for labour in a public economy. As a matter of fact, in the socialist public ownership economy, there are both technical and institutional bases for the labour force to adopt a market-oriented approach. First, in the context of large-scale social production, the ever-changing technological and economic structure requires workers to make many transfers between different departments and enterprises so as to meet productivity requirements. Second, it aims to eliminate division of labour and realise people’s all-round development judging from the general attributes of public ownership. Labourers are free to transfer from one department or area to another, which is an important condition for this purpose. Third, both enterprises and labourers are relatively independent economic entities with different economic interests judging from the special attributes of socialist public ownership. Therefore, they need to make two-way choices and free integration in accordance with their own interests. Formally speaking, this free combination between labourers and enterprises also stands for an equal contractual relationship. It, at the same time, features price modality of labour salary and must be regulated to some extent by the relationship between labour supply and demand.

However, in the public-owned economy, the labour force is not a commodity, nor can it be wholly deployed according to market-based principle when seeing through appearance to perceive essence. First of all, managers and labourers are equal in possession of means of production in the public-owned economy. The workers of enterprises have the right to manage production and business activities in a democratic manner, as well as elect and supervise managers of enterprises. A new relationship of cooperation, now featuring equality and mutual benefit has developed. Therefore, there is no employment relationship in its true sense. Second, labourers share the business results of enterprises based on the principle of distribution according to work in the public-owned economy. Their income depends mainly on their labour contribution and economic benefits of enterprises, instead of entirely on the supply and demand of labour force. Third, in the public-owned economy, once workers enter the enterprise and integrate with production materials, they will enjoy the rights and interests of co-owners of production materials and undertake the social responsibility of safeguarding common interests of the people. In addition, full-employment plays a much more critical role in public ownership economy from a macro point of view. In the capitalist economy, the relative surplus population, as the industrial reserve force of capitalist production, is an essential mechanism in regulating the reservoir of the labour market and guaranteeing capital control over labour. In the public-owned economy, the ownership status of labour force and the equal labour and equal pay are based on the direct combination of labourers and means of production as well as “distribution according to
ability”. Otherwise, the common possession of production materials will become empty words. In this sense, full-employment is one of essential requirements of the public ownership economy. In short, the commercialisation of labour force in the capitalist economy is based on opposition between capital and labour as well as subordination of labour to capital, while commodity form of labour in socialist public ownership economy is the realisation of the combination between labour force as owner of labour and means of production. It is a productive relationship of equal labour based on common possession of means of production. The essence of the relationship is to get rid of the labour’s subordination to capital, enabling the people’s free and comprehensive development.

Market economy and common prosperity

Whether public ownership and the market economy can be integrated and how it actually happens equates to whether the essence of socialism can be realised through a market economy. The essence can be understood from two aspects: one is ownership or the basic economic system, and the other is production purpose or value standard. In terms of ownership or basic economic system, the socialist system is based on the public ownership of production means. In terms of production purposes or value standards, the essence of socialism is to satisfy people’s growing material and cultural needs and achieve common prosperity. Then, what is the relationship between essence of socialism and market economy? On the other hand, the realisation of the essence cannot be separated from market economy. Only through development of market economy can we enable full source of wealth to emerge and lay down the material foundation for individual freedom as well as social common prosperity. On the other hand, the realisation of this essence cannot rely on the market economy, because market competition follows the “jungle law”. Especially in the capitalist market economy, the general law of capital accumulation leads to the polarisation of wealth possession. One extreme is the accumulation and increase of wealth in the hands of a few, and the other is the relative poverty of the majority. The accompanying problems include confrontation between labour and capital, intensifying class conflicts, economic crisis of excessive production as well as capital concentration and monopoly. Confronted with serious shortcomings of market economy, the capitalist countries advocating freedom also have to turn to state interventionism, acknowledge responsibilities in regulating income distribution and establish social security and welfare systems. This is still the case in a capitalist society based on private ownership with labour hired by capital. How can socialism based on public ownership, satisfying people’s needs and realizing common prosperity, be entirely dependent on the market economy? To make possible common prosperity, it is necessary to expand the intensity of income redistribution adjustments, including measures to improve the social security system, increase public expenditures and increase transfer payments. However, the realisation of common prosperity in socialist economy, different from capitalist countries depends not only on redistribution of national income but also on protection of initial distribution based on basic socialist system and distribution system. As Deng Xiaoping pointed out: “Polarization can be avoided as long as public ownership dominates our economy” (Xiaoping, 1993a). “Upholding socialism and implementing distribution according to work will not lead to big income gap” (Xiaoping, 1993b).

The analysis of several aspects above shows from different perspectives that socialist public ownership economy features both commercial and non-commercial nature. In this sense, an inevitable conclusion that the relationship between public ownership and market economy is “unity and opposition” can be drawn. This means that their organic combination must follow the laws of market economy and reflect the requirements of public ownership; it is necessary to give full play to the strengths of market economy while also demonstrating
superiority of socialist system. This unity and opposition is exactly what the essence of the socialist market economy is. The socialist public ownership, characterised by division of labour and exchange of equal labour, naturally features commodity relations. From this perspective, there exists an inherent consistency between socialist public ownership and market economy. On the other hand, the purpose of establishing public ownership is to overcome basic contradiction between social production and capitalist private ownership, plan production according to needs of society, satisfy common interests of social members, and realise man’s overall development and common prosperity. In this sense, socialist public ownership features direct sociality surpassing market economy. Both commercial and non-commercial aspects are the intrinsic properties of public ownership as well as essential requirements of socialist public ownership. The traditional socialist theory only captures the contradiction between public ownership and market economy, but ignores the compatibility between the two. This seriously hampers the development of commodity-currency relations together with the role of the market, and constrains the vitality of socialist economy. In the process of reform and opening up and developing the socialist market economy, some tend to merely see the compatibility of public ownership and market economy, while ignoring the contradictions and conflicts thereof. They intentionally or unintentionally weaken and dilute the particular goals and requirements of the socialist system. Only by profoundly grasping the inherent logic of the organic integration in unity and opposition can we truly grasp the essence of the socialist market economy.

4. Enlightenment to deepen economic system reform in an all-round way
The Third Plenary Session of the 18th CPC Central Committee unlocked a new stage of deepening reforms. A new round of reforms is emerging. Understanding the contradictory relationship between public ownership and the market economy has significant implications for the deepening reform of economic system and the accelerating enhancement of socialist market economic system.

Acknowledging the direction in reforming the socialist market economy
As mentioned above, the reform of the socialist market economy largely consists of two aspects: first, the relationship between planning and market or government and market in resource allocation; second, compatibility or integration of public ownership and market economy in the underlying system. These two aspects together adequately reflect the essence of socialist market economy, and then make the overall objective of reforming and developing the socialist system with Chinese characteristics possible. Judging from the former, the goal of comprehensively deepening reform of economic system is to enable the market to play a decisive role in resource allocation and better play the role of the government. Viewed through the latter, the goal is to improve the socialist system with Chinese characteristics and better demonstrate its superiority.

What is the major problem for deepening reforms of the economic system? The answer usually goes that the remnants or market-based reforms of the old planned economy are not thorough enough. Management from government in the micro economy is excessive while the market fails to give full play to its role. For instance, the scope of administrative examination and approval is too broad, the prices of some essential resources and production factors have not been settled, and the urban-rural system remains divided. Therefore, we must promote reform in related fields by focussing on the decisive role of market, drastically reducing the direct allocation of resources by government, accelerating improvement of the modern market system, and further enhancing the vitality of the market. However, these cover just part of the problems. Some problems, such as overcapacity, income gap, financial risks, environmental pollution, food and drug safety, and shortage of employment and social security, obviously cannot be attributed merely to
remnants of the old planned economy or incomplete market reforms. These problems, to a large extent, are inherent disadvantages of market economy, inevitable even in the advanced capitalist market economy. It is unrealistic to resolve the defects inherent in market economy with a so-called thorough market approach. The fundamental way to overcome these drawbacks lies in improving the socialist system with Chinese characteristics and giving better play to the superiority of the socialist system. The most important thing is to uphold and perfect the underlying economic system featuring public ownership as the mainstay and joint development of multiple ownerships. We must adhere to improve the primary allocation system in which distribution according to work as the main body, and various distribution modes coexist. In doing so, the state macro-control in socialist countries plays its role while social fairness and justice can be ensured, realizing shared prosperity for all members of society.

Acknowledging the objectives in developing socialist economy

Social and economic development is a process of organic integration of productive relations and productivity. Socialist economic development includes two aspects: first, liberate and develop productive forces, boost labour productivity and create more social wealth; second, meet the growing material and cultural needs and promote man's all-round development. The former serves as means while the latter is the purpose. In this connection, the fundamental laws of the socialist economy can be fully reflected. That is, to continually increase and improve socialist production on a highly technical basis to maximally ensure the growing material and cultural needs in society. Deng Xiaoping pointed out that the essence of socialism is to liberate and develop productive forces, eliminate exploitation and polarisation, and finally achieve shared prosperity. This also reflects the requirements of these two areas.

Since its reform and opening up, China's social productive forces have undergone tremendous development, and people's living standards have continuously improved. However, at the same time, we are confronted with some deep problems at the institutional level. For example, some local governments and departments only focus on the pursuit of material wealth and GDP but ignore the development of education, medical care, and social security. When aggregate income increased substantially, the gap in wealth and income distribution also widened significantly. In order to maximise profit, some companies impair the legitimate rights and interests of workers, manufacture substandard and counterfeit products, destroy resources and the environment, and harm the interests of consumers. Cadre bureaucracy and corruption prevail. Officials seek private gains and isolate themselves from the masses. The existence and development of these problems violate the essence of the socialist system. Why are people-related problems fundamental? As Xi Jinping stressed, we must focus on people, which is the fundamental position of the Marxist political economy, we must adhere to the promotion of people's well-being and their all-round development, and steadily step in the direction of shared prosperity. More effective institutional arrangements must be made to grant all people a sense of gain and to advance steadily towards common prosperity in the process of co-construction and sharing (Jinping, 2015).

Acknowledging the direction for reforming SOEs

SOE reform determines our country's basic economic system. It is a matter of national security and the party's ruling foundation and must be well-accomplished. Understanding and embodying the nature of SOEs is the key to success of reforms. The nature of SOEs boils down to "ownership by and service for the entire people". The Third Plenary Session of the 18th CPC Central Committee emphasised that, "State-owned enterprises belong to the entire people and are an important force in advancing modernization and safeguarding common interests of people". Only by defining this fundamental nature can we profoundly understand why we must unwaveringly consolidate and develop the public-owned
economy, expand and grow SOEs with integrity, and not take the road of privatisation to grasp the correct direction in reforming SOEs. Essentially, the purpose of deepening reform of SOEs is to shape more perfect systems and mechanisms, fully embody the fundamental attributes and internal requirements of SOEs, and give play to the superiority of the socialist system so as to better serve interests of the entire people.

SOEs also feature the same general attributes as other types of enterprises, such as independent property rights, independent management, as well as value-added and maintenance. Therefore, SOEs must become independent producers to expand in the market competition. SOEs must adhere to market-based direction, build a corporate governance structure that is coordinated and effective, establish effective incentive and restraint mechanisms to standardise business decisions, preserve and increase the value of assets, engage in fair competition, improve enterprise efficiency and enhance enterprise vitality.

However, this just considers one aspect. For SOEs, it is far from enough to demonstrate only general attributes of companies and general requirements for marketization. They must better reflect the nature and requirements of all citizens and services for the people. First, the income of state-owned capital belongs to all people. At this stage, it is necessary to increase the proportion of state-owned capital turned over to public finances, and more will be invested in protecting and improving people’s livelihood. Second, state-owned capital investment and operation should serve the national strategic objectives, focussing on public services, developing important forward-looking strategic industries, protecting ecological environment, sustaining scientific-technical progress and safeguarding national security. Third, promote economic democracy, improve people’s congresses at all levels, perfect supervision mechanism for state-owned capital management by relevant supervision agencies and all walks of life, and improve the mechanism for workers to engage in the democratic management of enterprises. Fourth, distribution according to work and common prosperity must be applied in income distribution of SOEs, so as to ensure fairness and justice and avoid polarisation. Fifth, fulfil social responsibilities, implement the party’s principles and policies, and take into account the interests of the state, groups, individuals, and all aspects. With these five areas fulfilled, SOEs can give full play to their institutional superiority, better serve the people and gain their wholehearted support.

Acknowledging the relationship between government and market

The market economy is an economic system that regulates resource allocation through market mechanisms, namely, supply and demand as well as the role of price and competition. In the context of different social systems, however, the range and conditions under which market mechanisms function are not precisely the same. In a pure commodity economy, the role of the market mechanism is mainly confined to a limited range, and non-market factors such as blood tie, grade and power dominate economic life. In capitalist market economy, the market mechanism is not only reflected in commodity production and exchange, but also reflected on the macro level, that is, the adjustment of all sectors of society and various economic relations. It is not only the case in economic field, but in all walks of life. In the final analysis, the market’s decisive role comes down to the decisive role of capital. Capital thus becomes a “light of illumination” that governs the socio-economic, political, and cultural fields. The particular laws of capitalist economy have become the general law of the market economy such as surplus value, capital accumulation and equalisation of profits. The fundamental contradictions of capitalism and their manifestations have become increasingly intensified, such as class contradiction, economic crisis and income gap.

From the microeconomic point of view, both privately owned and publicly owned enterprises in a socialist market economy must pursue profit maximisation and accept the adjustment of market mechanisms. In other words, the market plays a decisive role in resource
allocation. In terms of social development and macroeconomics, however, the purpose of product development or resource allocation is not profit maximisation, but the utmost satisfaction of people’s material and cultural needs, realisation of all-round development and shared prosperity of society. The leading role is played by party leadership and national macro-control rather than the spontaneous market adjustment. In this context, deepening the reforms of the economic system and handling the relationship between government and the market must begin in two areas. On the one hand, reform in related fields must proceed with more respect for market laws and improved market vitality. Besides this, administration must be further simplified, and the market system further strengthened. On the other hand, we must promote reforms in related fields by giving full play to government’s role and improving its efficiency. We must fulfil the responsibilities and roles of the government, strengthen planning and strategic guidance, maintain macroeconomic stability, enhance and optimise public services and safeguard fairness. We must guarantee fair competition, strengthen market supervision, maintain market order, boost sustainable development, promote shared prosperity, remedy market failures, enhance the country’s economic governance capacity, utilise institutional advantages of the socialist market economy, and boost the economy to be more efficient, fairer, and more sustainable.

5. Concluding remarks
In the above analysis, we set aside the coexistence of diversified ownership, and conducted a detailed examination on the internal structure of socialist public ownership and its relationship with the market economy. It is crucial but incomplete for grasping the nature and laws of a socialist market economy. China will remain in the primary stage of socialism for an extended period. It will adopt an underlying economic system in which public ownership is the mainstay while allowing diverse forms of ownership to develop side by side. There are also various other forms in the public economy, such as the collective and cooperative economy. In addition to commodity relationships in public ownership economies, there are commodity relationships between public ownership and non-public ownership, and between non-public ownership and non-public ownership. These different types of relationships are intertwined to form a realistic socialist market economic system. Such a system can also find its theoretical origin in the classic literature for development of scientific socialism.

In Marx and Engels’ classic theory, there are actually two socialist economic models at different stages of development. One is a mature and complete socialist model. It is characterised by the public ownership of means of production, distribution according to work, and planned economy. Class and state are eliminated, and there is no ownership system and commodity-currency relations other than public ownership. This is the first stage of communism. The Critique of the Gotha Programme is a representative work demonstrating this model. The other refers to the transitional period of socialist model. In this model, the state has already been placed in the hands of the proletariat. The state-owned economy controls key sectors of the national economy.

However, in agricultural production, the cooperative system is implemented. In addition, there is a significant amount of private ownership economy. Moreover, the market mechanism for commodity-currency relations has also played an essential role in retaining profits, interest and land rent. The ten measures proposed by the Communist Manifesto for transition to communism reflect the outline of this model. It is not difficult to see that Marx’s description of the transitional economic model is entirely consistent with the current socialist market economy under implementation. The most important point is that there are both factors of socialist public ownership and capitalist private ownership. Moreover, they require mutual accommodation and shared development during a relatively extended historical period. Of course, there are contradictions and conflicts coexisting. This leads to a problem that is of vital importance to socialism, namely, who serves as the main body of the
socialist market economy where economies of diversified ownership coexist? How can the socialist nature of market economy be guaranteed? How can the strengths of the socialist system be drawn? This issue is the subject discussed in this paper.

Obviously, the diversification of ownership structure has not made the combination of public ownership and market economy lose its central or indeed pivotal significance in the socialist market economy. In the course of deepening reforms of the economic system, if we cannot keep improving the dominant position of public ownership, fully reflect the requirements and characteristics of public ownership, utilise the superiority of the socialist system, and persist in the direction of reforming socialist market economy, it is merely an empty slogan. The shared ideal of socialism with Chinese characteristics and the lofty goals of communism will then become empty words. In this sense we can say that, whether we can realise the unity and opposition between public ownership and market economy and better integrate advantages of socialist system with strengths of market economy, will to a large extent determine the future and destiny of the socialist market economy.

References

Corresponding author
Yu Zhang can be contacted at: zengbingjian2003@ruc.edu.cn

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
The fiscal system of China under the New Normal: trends and changes

Peiyong Gao and Jiang Zhen
National Academy of Economic Strategy, Beijing, China

Abstract
Purpose—More and more statistics have repeatedly shown that as the economic development has entered the New Normal, the Chinese fiscal system has experienced tremendous changes. Although chance cannot be ruled out, much of those changes indicate trends, and they can even be said to be the result of the law of economic development. These trends and changes have repeatedly demonstrated that, as a reflection and an inevitable result of the economic developing speed shift, structural adjustment and energy conversion, the Chinese fiscal system, far from the conventional operating state, has progressed on a new path. The paper aims to discuss this issue.

Design/methodology/approach—This paper systematically analyzes several new trends and changes in the Chinese fiscal system under the New Normal. First, revenue growth has experienced a sharp downward trend, while the tax elasticity coefficient has declined rapidly. Second, fiscal expenditure has risen against the tendency, while the rigidity of expenditure has kept on increasing.

Findings—Considering the present fiscal and taxation system reform with the analysis above, it can be seen that if the reform’s progress for the past two years is slower than expected—thus, preventing the effects of all aspects from a timely achievement—then, in the recent period, the agreement on the fiscal and taxation system reform will be reached and challenges entirely different from the past, including sharp slowdown in revenue growth rate, fiscal expenditure rising against trend and increases in fiscal deficit and government debts will be faced. The factors encouraging the reform are gathering gradually. The growth of the strength to push the reform forward is speeding up. And the pace of the reform in relevant areas is quickening.

Originality/value—In the face of those trends and changes, on the one hand, the authors should deeply understand and accurately grasp them through a comprehensive summary and systematic analysis. On the other hand, a series of conventional ideas, thoughts and strategies should be adjusted comprehensively and duly. Taking a train of new ideas, thoughts and strategies, the authors ought to actively adapt to and initiate a new Chinese fiscal structure under the New Normal of China’s economy.

Keywords Economic New Normal, New trends and changes, Revenue and expenditure, Fiscal policy, Reform of fiscal and taxation systems

Paper type Research paper

Change (trend) 1: revenue growth experiences a sharp downward trend, while tax elasticity declines rapidly
The basic theory of economics tells us that there is a substantial correspondence between economic growth and revenue (Romer and Romer, 2007). In addition, judging from the development of other related countries, it can be seen that economic growth will lead to a greater revenue increase and that an economic downturn will bring about a sharper revenue decline (IMF, 2015). Over the past few years, it is this kind of trajectory that China’s revenue has followed.

Figure 1 shows that with the continuing economic slowdown, the growth rate of China’s general public budget revenue went with a sharp download trend after the 24.8 percent in 2011, aside from the peak of 32.4 percent in 2007. It was 12.9 percent in 2012,
10.2 percent in 2013, 8.6 percent in 2014 and 8.4 percent in 2015. In other words, the growth rate has dropped sharply from 24.8 to 8.4 percent in just four years. Not only did China move directly from a double-digit era to a single-digit one, but also the growth rate in 2015 was only a third of the rate four years ago. The downward trend is so shockingly sharp.

Looking further, 8.4 percent growth in 2015 was only nominal. From the nominal growth rate to the actual rate, at least two subtractions must be made: first, the 11 government-managed fund incomes transferred from the government-managed fund budget should be deducted, with the actual rate at 5.8 percent, calculated with a comparable caliber. This figure is less than one-quarter of what it was four years ago and is also 1.5 percent lower than the budget increase. That is the second consecutive year that the budget revenue has not been achieved. Second, after deducting the revenue brought by specific special revenue-increasing measures based on the consideration of balancing the budget, such as increasing the profit margin turned over by certain state-owned enterprises and institutions, the growth rate of 5.8 percent will also have to be reduced appropriately. Therefore, it can be said that the decline in the revenue growth rate so far is sharp and sudden.

A more serious problem is that the slowdown is just the beginning, without any sign of bottoming out. Looking to 2016 and the coming years, the following factors’ changes are worthy of particular attention.

First, the economy determines the fiscal system. With the continuing downturn of the global economy, China has gradually promoted the supply-side structural reform by cutting overcapacity, reducing excess inventory, deleveraging, lowering costs and strengthening areas of weakness, but the pressure of the economic slowdown keeps on increasing. If there are no unconventionally special revenue-increasing measures, the further decline in revenue growth is a foregone conclusion.

Second, as the primary source of China’s revenue, the taxation revenue under the existing taxation system mainly comes from indirect taxes, such as value-added tax (VAT),
consumption tax and business tax. Such a taxation revenue pattern of “indirect taxes being predominate” means that, with the economic slowdown and the PPI’s continuing decline even becoming negative, revenue growth slows down at a pace faster than the deceleration rate of GDP, which can be expected.

The reason for such analysis is that a large number of studies have confirmed that among the factors affecting China’s taxation revenue, economic fluctuation and price fluctuation are two main ones (Gao, 2006; Lv and Li, 2007; Li’an et al., 2012). In 2015, the growth rate of taxation revenue was 4.8 percent, and it was the first time since 1994 that it had fallen below the GDP growth rate (6.9 percent). Moreover, throughout 2015, the monthly growth rate of the taxation revenue did not exceed 5 percent, and it was even less than 3 percent in the first half of the year. Each of them was lower than the GDP growth rate of the same period. Hereto, a more reliable explanation is that the taxation system structure with indirect taxes as its main body and industrial-added value as tax basis is highly correlated with price. Affected by the long-term downward trend in price indexes such as PPI, the revenue growth momentum has been significantly reduced.

Third, in recent years, accompanied by a pressure increase in downward economic trend, China’s tax elasticity coefficient has a rapid decline. The ratio of tax revenue growth rate to GDP growth rate is named as the tax elasticity coefficient. That is an essential standard for measuring taxation revenue-increasing ability (Craig and Heins, 1979). In the past years, as shown in Figure 2, China’s taxation revenue is elastic (with a tax elasticity coefficient of more than 1).

From 1994 to 2015, the average tax elasticity coefficient was 1.72, even higher than 2 in eight years of the period. For example, in 2011, it was 2.38. However, after that it began to decline. It was 1.57 in 2012, reduced by 0.81 in one year. It was 1.28 in 2013 and 1.07 in 2014. In 2015, it fell below 1, the critical point, and further decreased to 0.7. From being very elastic to lacking elasticity, this change took only five years.

Fourth, while the growth rate of tax revenue declines, mainly affected by the above factors, the contribution of non-taxation revenue growth to the overall revenue growth rate is increasing (Table I). From March 2014 to now, the monthly average growth rate of

![Figure 2. The trends of tax elasticity coefficient and GDP (1994–2015)](image-url)

non-taxation revenue was as high as 23.61 percent, and all monthly growth rates are not less than 10 percent. The average monthly growth rate of tax revenue during the same period was only 5.58 percent. In 2015, non-taxation revenue was 2,732.5bn RMB, representing an increase of 28.9 percent and an increase of 10.6 percent with the same caliber. However, since the non-taxation revenue, whose increase in contribution can fill the vacancy caused by the reduction of tax revenue, is much smaller than taxation revenue, in any case, the decline of the overall revenue cannot be reversed.

Fifth, in the overall decline of the revenue growth rate, the declines in different regions are different, so are the declines in central and local governments. Some resource- and energy-dependent provinces, such as the Jilin, Heilongjiang, Liaoning and Shanxi, are faced with a revenue growth decline and a negative growth. As the central government’s dependence on indirect taxation revenue is higher than that of local governments, the growth rate decline in revenue of the central government is much sharper. The imbalance between different regions and between the central and local governments can be said to aggravate the revenue whose growth rate has been declining.

Sixth, based on the need for maintaining stable growth and promoting supply-side structural reform, tax cuts have taken the place of traditional expenditure increase to become the first choice in the list of tools that can be selected for proactive fiscal policy. Whether this is the full implementation of large-scale tax cuts, represented by the comprehensive replacement of business tax with VAT, or the tax cuts for small and micro businesses, the revenue growth rate will have a further and sharper decline. This will continue as long as the direct tax reform featuring mainly individual income tax and real estate tax with a tendency of tax increase is not implemented synchronously, or the intensity of tax increase is less than that of tax cuts, making the increase unable to offset the cut, further deteriorating the decline in the growth rate of government revenue.

Under the interaction of the factors above, compared with 2015, the revenue growth rate may be further reduced after being calculated with a comparable caliber, if there are no other special revenue-increasing measures or necessary reform actions to hedge against it.

Change (trend) 2: fiscal expenditure rises, while the rigidity of expenditure strengthens

Meanwhile, the fiscal expenditure rises against the tendency. In general, expenditures in all areas have not gone beyond the general trajectory of declining correspondingly with the decrease of disposable financial resources (Romer and Romer, 2008). As the economy slows down, there is a significant demand for expenditure growth in maintaining steady growth,
adjusting the structure, promoting the reform, improving people’s lives and guarding against risks. In addition, with the effect of inertia, there is a marked tendency toward the increase in the cost of social security including pension and medical care, and the stress of medium-term and long-term expenditures is also high.

In 2015, even though the GDP growth rate fell to 6.9 percent, the growth rate of the national general public budget expenditure still reached 15.8 percent. The difference is as much as 8.9 percent. If the revenue growth rate is compared with the expenditure growth rate within a longer term, it can be found that during the 50 months, from February 2012 to April 2016, only three scattered months showed expenditure growth rates lower than their own revenue growth rates. For each month of the rest, its expenditure growth was larger than its revenue growth.

A more serious problem is that, looking forward to 2016 and the coming years, the pressure of the various expenditures as mentioned above will undoubtedly increase and tend to build up further.

First, when the economy slows down, China’s fiscal expenditure boasts a tradition of counter-cyclical regulation that the government will provide financial aid in the end. In 1998 and 2008, the two rounds of proactive fiscal policy all achieved economic stabilization through expenditure expansion (Gao, 2010). In the context of the general plan of building a moderately prosperous society in all respects, namely, doubling the size of the 2010 GDP and per capita income of urban and rural residents by 2020, proposed at the Fifth Plenary Session of the 18th Central Committee of the Communist Party of China, fiscal policies, as a regulatory tool of the government’s first level, will continue to play a vital role in reaching the economic growth rate’s annual average target of no less than 6.5 percent. It can be expected that at least during the 13th Five-Year Plan period, China’s fiscal policy will remain expansive.

Against that background, the increase in the fiscal deficit is inevitable, and it is unavoidable that the proportion of fiscal deficit to GDP increases gradually year by year. In 2015, the growth rate of fiscal expenditure was 6.27 percent higher than that of revenue, and the expenditure was 2,355.1bn RMB higher than the revenue. The actual deficit-to-GDP ratio reached 3.48 percent. In 2016, China’s budget deficit-to-GDP ratio was projected at 3 percent, and the budget deficit was planned at 2.18 trillion RMB, representing a year-on-year increase of 560bn RMB. However, if other aspects, which were not included in the deficit nominally and have almost the same influence as the actual deficit, are taken into consideration to make a calculation based on international caliber, China’s deficit-to-GDP ratio will be more than 3 percent.

Second, even if no strong stimulus measures are taken, the promotion of supply-side structural reform still needs the corresponding increase in fiscal expenditure as a precondition. Under the goal of stabilizing the macroeconomic policy and environment, whether it is cutting overcapacity, reducing excess inventory, deleveraging, lowering costs or strengthening areas of weakness, an increase in fiscal expenditure is almost integral.

Third, if smoothing economic fluctuations and alleviating economic downturns are reasons for short-term expenditure growth under the counter-cyclical fiscal adjustment, then the structural change in economic and social development is the direct reason for the long-term rigid growth in fiscal expenditure. Many countries’ rigid growth of fiscal expenditure was encouraged greatly by their own population structure change, long-term economic transformation and international status change (Xiahui, 2013). At present, China is experiencing a similar economic and social development. In 2010, the working-age population in China began to decline from its peak, and the demographic dividend officially disappeared (Cai, 2010). In 2014, China became the second largest economy in the world, its international responsibility increasing correspondingly (Xi, 2015). In 2015, China’s structural reform was comprehensively put into practice, with innovative
development as its top priority (Li, 2016). Judging from the long-term trend, the growth rate of China’s fiscal expenditure has never been lower than that of GDP since 1994 (Figure 3). Even though the growth rate of revenue in 2015 is lower than that of GDP, the growth rate of fiscal expenditure is still twice the GDP growth rate.

Fourth, the analysis of macroeconomics shows that fiscal expenditure has historically been following a growing trend. Whether it is a period of a high economic growth rate, a low economic growth rate or a medium economic growth rate, the trend has always been followed. That has been written as an economic law in textbooks. In other words, regardless of the economic trend in 2016 and the coming years, no matter the revenue, the rigid growth momentum of fiscal expenditure will not only show no change, but may be strengthened.

Change (trend) 3: the government budget changes from “surplus” to “short of revenue” and the non-general public budget plays a more important role in the full budget

In the past years, one of the daily tasks confronting China’s budget management was how to allocate and use “surplus” revenue from budget implementation. Due to the large scale and regularity of “surplus,” not only does the decision to allocate and use “surplus” gain much attention, but also problems associated with this process, including the decision-making mechanism and its economic and social impact, have always been controversies.

However, in the gradual slowdown of revenue growth, the fiscal “surplus,” which existed for many consecutive years, has changed to “short on revenue” since 2015. Calculated according to the same caliber, the general public budget revenue’s growth rate target of that year was 7.3 percent and the actual growth rate was 5.8 percent, which means a difference of 1.5 percent. The result of deducting the actual revenue growth from the budget revenue growth is the revenue shortage of 208.3bn RMB, accounting for 1.37 percent of the general public budget revenue of that year.


Figure 3. The comparison of the growth rate trends of GDP and fiscal expenditure (1994–2015)
In fact, if the impact of some particular revenue-stimulating factors had been removed, the turning point from “surplus” to “shortage” could be as early as 2014. As mentioned above, the revenue growth rate of 8.6 percent in that year was realized in the context of adopting a series of special measures including some financial institutions’ increase in profits that are turned over to China’s government. If the government exerted no special measure to proactively deal with the revenue growth slowdown, it is very likely that it cannot reach the national revenue growth rate’s budget target of 8 percent in 2014. In that case, “shortage” will be on the horizon one year earlier.

It can be seen from Figure 4 that although the turning point from “surplus” to “shortage” occurred in 2015, this change was not made in one step. Before that, along with the economic slowdown trend’s gradual formation and increasing prominence, the fiscal “surplus” has stepped out of the reduction trajectory for several years. In 2013, the national “surplus” was 257.9bn RMB and in 2014, 84bn RMB. Compared with the past, the proportion and scale of “surplus” have been continuously reduced.

A more serious problem is that the “surplus” is reduced and eventually turned to “shortage.” Whether for the central or local government, “shortage” of revenue is not temporary. It is very likely to be regular, or even worse. Figure 5 shows that judging from the central and local general public budgets, the proportions of “surplus” to central and local revenues have changed dramatically. Before 2013, the two curves showing the proportions of “surplus” in the central revenue and to the local revenue were all basically above the zero line. However, it has been below the line in the past two years. In 2015, after removing the comparison of the same caliber and certain special revenue-increasing factors, the central revenue fell by 0.5 percent, and the local revenue growth was 2.5 percent lower than the budget growth, some resource- and energy-dependent provinces’ revenue were growing negatively.

From how to allocate and mobilize “surplus” to how to deal with and make up for “shortage” deficit, it is a very significant change for China’s budget management. That means that, in the context of economic development entering the New Normal, the actual revenue is likely to go beyond the range of budget revenue. That may even be of a strong possibility in most years. Therefore, how to make up for the “shortage” deficit will increasingly become the top challenge in China’s budget management.

Figure 4.
The comparison of national actual revenue and budget revenue from 1994 to 2015

Sources: Ministry of Finance: Report on the Implementation of the Central and Local Budgets for the Last Year and on the Draft Budgets for the Next Year, submitted by Ministry of Finance to the National People’s Congress of the People’s Republic of China (NPC) from 1994 to 2015 for approval. See www.mof.gov.cn/zhengwuxinxi/caizhengshuju/
As a result, dramatic changes have emerged. The non-general public budget revenue becomes a new force suddenly rising, a result of profound significance. It has increasingly become an important power controlling the budget management and fiscal balance.

In the past, the budget management that people talk of largely referred to the general public budget, unless there was a particular context and meaning indicated. However, in addition to the general public budget, other budgets can and should be included in China’s Government revenue and expenditure, including budgets for government-managed funds, social security funds, and state capital operations. As early as the Third Plenary Session of the 16th Central Committee of the CPC in 2003, “the implementation of full-caliber budget management” was put forward based on such a budget concept and government revenue and expenditure pattern. However, in the following years, it has remained at the planning stage and has not been actually implemented.

However, as the “shortage” of revenue comes into being and the need to compensate for the fiscal gap arises from the “shortage,” the new Budget Law was implemented on January 1, 2015, under the banner of comprehensively continuing the reform, which officially expanded the concept of budget into government’s full-caliber budget system including four budgets, the general public budget and government-managed funds budget, social security funds budget and state capital operations budget. It is in such context that the significance of non-general public budget revenue for the government’s fiscal balance started to become prominent. In 2013, the proportion of general public budget revenue to full-caliber government revenue was 58.95 percent, but before 2013, that proportion was above 60 percent (Figure 6). Correspondingly, non-general public budgets revenues, including budgets for government-managed funds, social security funds and state capital operations, account for a larger and larger proportion of the fuller budget’s revenues. As a result, the fiscal balance is increasingly dependent on non-general public budgets revenues. Thus, it is self-evident to pay more attention to the non-general public budget management and to strengthen the balance between general public budgets and non-general public budgets.

Change (trend) 4: the fiscal policy expands cyclically, highlighting the significance of the full-caliber effect assessment

Our fiscal management has always been done cautiously. The cautiousness is shown in the decisions regarding fiscal policy direction. In the past, an expansionary fiscal policy,
tight fiscal policy or the extent of expansion or tightness was generally discussed once a year. Even if the new fiscal policy structure was the same as the original one, it must be expressed in the Central Economic Work Meeting held at the end of each year that it is to continue to implement proactive fiscal policy or to continue to implement prudent fiscal policy next year.

However, as the economic situation undergoes turning point changes, on the one hand, the economy continues to go downwards, and the pressure goes on with a gradual increase. On the other hand, the strategic goal of building a moderately prosperous society in all respects has a fundamental requirement for the GDP growth rate to be kept above 6.5 percent. The promotion of supply-side structural reform has an urgent need for a stable macroeconomic environment. The gathering of these challenges means that in the long cycle of macroeconomic performance, at least during the 13th Five-Year Plan period, China’s macroeconomic policies, especially fiscal policy, must maintain expansion. In other words, China’s fiscal policies have already entered a trajectory of cyclical expansion, being contrary to the past fiscal policies that were discussed once a year before making a decision.

Furthermore, while the fiscal policies are showing a cyclical expansion, the intensity of fiscal expansion is also gradually increasing. From “continuing to implement proactive fiscal policies” in 2015 to “proactive fiscal policies shall have its strength” in 2015, and then to “proactive fiscal policies must be strengthened” in 2016, the Central Economy Work Meeting’s change of the fiscal policies-oriented expressing is an observable mark.

Against that background, there will be a relatively significant increase in both fiscal deficit and government debt. As a result, the deficit-to-GDP ratio (the ratio of fiscal deficit to GDP) and the debt-to-GDP ratio (the ratio of government debt to GDP), as two indicators managing and controlling fiscal economic risks, will also have a marked increase. For example, in 2016, the fiscal deficit of 2.18 trillion RMB was listed in the general public budgets, representing a year-on-year increase of 560bn RMB. The deficit-to-GDP ratio was also increased from 2.3 to 3 percent in the same year. Wherein, the central government had a deficit of 1.4 trillion RMB, and the local government’s deficit was 780bn RMB, with a total year-on-year increase of 280bn RMB. The balance of the central government bonds had a limit of 12,500.835bn RMB, and the balance limit of local government general debts was 10,707.24bn RMB. The former is 1.4 trillion RMB more than the limit of 2015, and the latter shows a net increase on the basis of zero.
In fact, looking back to 2012, it can also be seen from Figures 7 and 8 that these gradual increases of fiscal deficit and government debts have so far lasted for four years, sharing the same time period with the economic slowdown. Looking forward to the basic prospect of the macroeconomic situation during the 13th Five-Year Plan period, it can certainly be said that this trend will not weaken but possibly further increase.

Similar to the analysis above, the change in the general public budgets, under the implementation of the new Budget Law, naturally affects the non-general public budgets, and then is reflected in the full-caliber government budget including the general public

![Figure 7. Fiscal deficit and its ratio to GDP](image)


![Figure 8. The balance of government bonds and its ratio to GDP](image)

budget and budgets for government-managed funds, social security funds and state capital operations. Therefore, from the perspective of a full-caliber government budget, measuring, managing and controlling economic risks with the full-caliber fiscal deficit and government debts will be a new trend and a new normal, following the cyclical expansion of fiscal policy.

It can be seen from Figure 9 that in 2015, if the general public budget deficit is 1,620bn RMB, its share in GDP is 2.39 percent. If the other three government budgets are added on the basis of that to calculate the full-caliber government budget, then the fiscal deficit will be reduced to 1,113.19bn RMB, accounting for 1.65 percent of GDP.

That is a fundamental change (trend). It reveals that in the context of the fiscal policy cyclical expansion, it is necessary to accurately measure the fiscal deficit and the government debt from the perspective of the full-caliber government budgets instead of general public budgets. It helps us not only to evaluate the expansion extent and the macroeconomic effect of fiscal policy comprehensively and systematically but also to manage and control the fiscal and economic risks related to that.

**Change (trend) 5: the centralized system exhibits a trend of loosening, showing the sign back to the tax distribution system**

Historical experience tells us that the relationship between the central fiscal system and the local fiscal system resembles the financial exchange between two generations within a family. If parents are financially healthy or have sufficient financial resources, with an ability to fulfill the needs of their children by giving them money, then it is natural and regular to directly meddle in or strictly control their children’s financial arrangements. However, once the parents’ financial situation gets worse or their financial resources are inadequate, they no longer have the ability to satisfy the needs of their children as before. As a result, as financial support for their children declines, the intervention and control will be reduced, even if they do not want that.

The relationship between the central fiscal system and the local fiscal system is like that. Since 1994, despite the fact that China has always held the banner of the tax distribution system in the fiscal system, as the central revenue accounts for a larger and larger proportion of national revenue and the central fiscal system gradually increases the transfer payments to local fiscal system, in fact, the primary trend of the relationship between central

---

**Figure 9.** The basic situation of the full-caliber fiscal deficit between 2012 and 2015

fiscal system and local fiscal system in over 20 years’ tends to centralization rather than devolution. This can be confirmed from many angles. For example, the match of financial power and authority takes the place of the combination of financial power and authority to be the fundamental principle of dealing with fiscal relationship between the central fiscal system and the local fiscal system; On the issue of the tax categories division, some local taxes, even some major local taxes were transferred to shared taxes between the central and local governments. The proportion of the latter is over 80 percent. As for the adjustment of the transfer payment system, the standardization process coexists with the phenomenon of begging ministries for money. In the implementation of hierarchical fiscal management, the management power and balance power of local revenue and expenditure are not covered in the long term. In fact, that local fiscal system is meaningless to some extent. Moreover, there are other similar facts.

However, we have seen that under the revenue slowdown and increasing contradiction between revenue and expenditure, especially the central fiscal system becoming increasingly difficult, the centralization pattern, which has been with China’s fiscal system for a long time, has had sign of loosening, at least since 2015.

For example, transfer payments. Figures 10 and 11 show that the general transfer payments account for a steadily increasing percentage of the transfer payments’ and tax refund’s sum from the central government to the local government. This percentage reached 53.44 percent in 2014, which is nearly 3 percent higher than that in 2013. They also show that since 2011, the ratio of transfer payments’ and tax refund’s sum in the central general public budget expenditures has declined gradually and continuously, going away from the former increasing trend. This percentage was 70.74 percent in 2011, 70.11 percent in 2012 and 69.57 percent in 2014. In the three years, it decreased by 1.17 percent.

Local debt is another example. After the implementation of the new Budget Law and the issue of The Opinions of the State Council on Strengthening Local Government Debts Management (issued by the State Council (2014) No. 43), Ministry of Finance successively published The Notice on the Print and Distribution of the Interim Measures of Local Governments General Bonds Issuing and Management (C. K. (2015) No. 64) and The Notice on the Print and Distribution of the Interim Measures of Local Governments Special Bonds

![Figure 10. The structural trend of transfer payments from the central government to the local government](image-url)
Issuing and Management (C.K. (2015) No. 83). The central fiscal system, taking this as an opportunity, began to loosen local debt control and allowed local governments to manage the issue and repayment of local debts by themselves. The standardization and institutionalization of local government financing through debts officially emerged. It can be assumed that following this trend, the centralization structure of the fiscal system that has plagued us in the long term will likely be loosened further, and it may even return to the tax distribution system. In that process, many concepts, such as the gradual improvement of the local fiscal system, the mobilization of local government and the real implementation of fiscal system reform under the background of comprehensively deepening the reform, are going to be realized.

Change (trend) 6: fiscal difficulties force continued reform of fiscal and taxation system, resulting in a new dynamic

The history of the fiscal and taxation systems' reforms in ancient and modern China, and abroad shows that every significant financial and taxation system reform takes place during difficult financial periods, instead of periods of ample finance. The greater the gap between revenue and expenditure is, the more challenges the fiscal balance will face. The more limits public finances suffer, the more dynamic and vital the reforms will be, and the less obstacles the reforms will face. And it will be easier to launch the proposed fiscal and taxation reforms.

China’s fiscal and taxation system reform in 1994 was an excellent example of this. The reason why the reform was able to begin smoothly and comprehensively with an unprecedented scale, in the final analysis, is the extreme difficulty of the finance at that time, making the original system unrealistic. It can be clearly seen that if the annual value of the revenue’s ratio in GDP is made to be a curve, it is a deep-V trajectory from 1978 to 2015. The lowest point appeared around 1994. As is shown in Figure 12, the ratio of revenue to GDP was 31.02 percent in 1978 and only 10.77 percent in 1994. During that period, revenue and expenditures at all levels were difficult to move on. In particular, the central government, under the decline of its revenue’s ratio to national revenue (Figure 13), even could not implement the most basic budget. It can be said that it is the growing fiscal difficulties that have made fiscal and taxation system reform imminent and eventually led to reform.
Considering the present fiscal and taxation system reform with the analysis above, it can be seen that if the reform’s progress for the past two years is slower than expected. Thus, preventing the effects of all aspects from a timely achievement, then in the recent period, the agreement on the fiscal and taxation system reform will be reached and challenges entirely different from the past, including sharp slowdown in revenue growth rate, fiscal expenditure rising against trend and increases in fiscal deficit and government debts will be faced.
The factors encouraging the reform are gathering gradually. The growth of the strength to push the reform forward is speeding up. And the pace of the reform in relevant areas is quickening.

Comprehensively replacing business tax with VAT is an example. As a measure for macroeconomic control policy as well as fiscal and taxation system reform started in 2012, it was officially launched in the whole China in May 2016 after a long-distance running for more than four years and a halt of four months. It serves as an opportunity. With the formation of the transitional plan on revenue distribution between the central and local governments, the overall plan on that and the guidelines on the reform of powers' and spending responsibilities' division between the central and local government seem ready to come out. Furthermore, there is a gradual achievement of the 500bn tax reduction because of replacing business tax with VAT comprehensively. Under the goal of stabilizing tax burdens, it is likely to propel the reform of direct taxes represented by individual income tax and real estate tax.

Another example is the full-caliber government budget management. That is a reform that had been decided as early as 2003. Making any progress was challenging since it has influenced the interests of relevant departments. However, under an enormous pressure on the general public budget performance and the budget revenue that were not reached for two consecutive years, the reform became an unavoidable measure to reduce the fiscal pressure and balance the revenue and expenditure of the general public budgets. A total of 16 budgets for government-managed funds, including local education supplementary tax, the culture construction fee, employment security fund for the disabled, water conservancy construction and education fund counted and drew from the income of local land, the toll revenue of government that is transfer to other parties to repay loans, forestry maintenance funds, forest vegetation restoration fee, water conservancy construction funds, harbor dues on vessels, Yangtze estuary waterway maintenance revenue, compensation fee for water and land conservation, government housing fund, occupation fee for radio frequency, realization revenue of rail asset and the revenue of reserved asset realization of electric power reform, have been shifted into the general public budget successively since 2015. Thus, the process of balancing government-managed fund revenue began.

The new Budget Law is also an example. After more than ten years of amendment, a halt because of severe problems and starting again, it was passed in August 2014 and formally implemented on January 1, 2015.

It is against this background that, in recent times, the financial authorities have continuously released information on fiscal and taxation system reform, “The budget reform has made decisive progress. Taxation reform has been propelled in an orderly manner. The fiscal system reform has been actively promoted. In such periods, it is necessary to take measures to push forward fiscal and taxation system reform” (Ministry of Finance, 2016).

It can be expected that in 2016 and the next few years, China may experience strong momentum toward a new round of fiscal and taxation system reforms that have been long-awaited.

References


Further reading


About the authors

Peiyong Gao is a member of the Academic Division, Chinese Academy of Social Sciences (CASS), is Director of National Academy of Economic Strategy, CASS, and is Professor and Doctoral Supervisor. Peiyong Gao is the corresponding author and can be contacted at: gaopy@263.net

Jiang Zhen is an Associate Research Fellow at the Tax Research Office, National Academy of Economic Strategy of CASS, and Temporary Deputy Director of Beijing Xicheng Local Taxation Bureau.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com
Determinants of China’s structural change during the reform era

Kaiming Guo and Jing Hang
Lingnan College, Sun Yat-sen University, Guangzhou, China, and Se Yan Guanghua School of Management, Peking University, Beijing, China

Abstract

Purpose – Economic theories on structural change focus on factors such as fluctuations in relative prices and income growth. In addition, China’s reform and opening up has also been accompanied by increasing openness, significant fluctuations in investment rates, and frictions in the labor market. Existing literature lacks a unified theoretical framework to assess the relative importance of all these determinants. The paper aims to discuss these issues.

Design/methodology/approach – To incorporate all of the potential determinants of China’s structural change, the authors build a two-country four-sector neoclassical growth model that embeds the multi-sector Eaton and Kortum (2002) model of international trade, complete input-output structure, non-homothetic preference and labor market frictions. The authors decompose the sectoral employment shares into six effects: the Baumol, Engel, investment, international trade, factor intensity and labor market friction effects. Using the data of Chinese economy from 1978 to 2011, the authors perform a quantitative investigation of the six determinants’ effects through the decomposition approach and counterfactual exercises.

Findings – Low-income elasticity of demand, high labor intensity, and the existence of the switching costs are the reasons for the high employment share in the agricultural sector. Technological progress, investment and international trade have comparatively less influence on the proportion difference of employment in the three sectors.

Originality/value – Therefore, to examine the impact on China’s structural change, in addition to Baumol effect and the Engel effect, it is also necessary to consider the impact of three more factors: international trade, investment and switching costs. Therefore, the authors decompose the factors that may influence China’s structural change into the Baumol, Engel, investment, international trade, factor intensity effect and switching cost effects. The authors evaluate these six effects using the decomposition approach and counterfactual exercises.

Keywords Structural change, Chinese economy, Multi-sector model

Paper type Research paper

1. Introduction

Structural change, that is, the reallocation of economic activities across different sectors, is a common feature among most countries that have embarked on the road to industrialization. Whether measured by output share or employment share, the structural change will reflect the Kuznets curve: with the development of the economy, the proportion of the agricultural sector economy declines, while at the same time, the proportion of the service sector

JEL Classification — O41, O53, F43

© Economic Research Journal. Published in China Political Economy. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode. Originally published in Simplified Chinese in Economic Research Journal.
economy increases, and the proportion of the industrial sector economy slowly declines after the initial rise. The economic development since China’s reform and opening up was also in line with this trend. From 1978 to 2015, the agricultural sector’s employment share fell from 70.5 to 28.3 percent, with the share of value added decreasing from 27.7 to 8.9 percent; the industry sector’s employment share rose from 17.3 to 29.3 percent, with the share of added value decreasing from 47.7 to 40.9 percent; the service sector’s employment share increased from 12.2 to 42.4 percent, with the share of added value increasing from 24.6 to 50.2 percent. What accounts for these changes? This paper examines the determinants on China’s structural change in a unified analytical framework and analyze the direction and magnitude of each of these effects.

For a long time, the Baumol effect and the Engel effect were considered as the most important factors affecting structural change. The Baumol effect was proposed by Baumol (1967), emphasizing the influence of the relative prices of products in different sectors. If there is certain complementarity among the products of different sectors, the relative lower prices of the products of the sectors with rapid technological progress will induce the transfer of labor to other sectors (Ngai and Pissarides, 2007). Acemoglu and Guerrieri (2008) further suggested that if there is the intensity of production factors differs across sectors, even if the technological progress is at the same pace, the relative prices of the products will change and structural change will be promoted.

The Engel effect is derived from Engel’s law, emphasizing the influence of the income elasticity of product demand in different sectors. As the income elasticity of demand for agricultural products is lower than that of non-agricultural products, the increase in income will raise the demand for non-agricultural products more quickly, and thus result in the transfer of labor to non-agricultural sectors (Kongsamut et al., 2001). The Engel effect is often introduced with non-homothetic consumer’s preferences. Foellmi and Zweimuller (2008) and Boppart (2014) considered more general forms of consumption categories and consumer preferences. Li and Gong (2012) pointed out that non-homothetic preferences are also endogenous, which has an important impact on structural change.

Both the Baumol effect and the Engel effect may affect China’s structural change. However, based on the latest research on China’s macroeconomic characteristics and structural change, we find that the following three factors may also play an important role. First, since China’s reform and opening up, the degree of openness has been increasing, and the total value of imports and exports which are measured at the current rate of RMB occupied as a share of GDP rose from 12.4 percent in 1980 to 35.8 percent in 2015. In recent years, an important breakthrough in the field of structural change highlights the role of international trade. Matsuyama (2009) proposed that, in a closed economy, the labor force will shift from the sector with lower relative prices to other sectors due to the Baumol effect. In an open economy, the lower-priced sector is more likely to export products to the international market in order to expand its demand, which may instead lead to an increase in the employment share. From this perspective, the research results are numerous. Uy et al. (2013), Sposi (2015) and Swiecki (2017) demonstrated that this mechanism has a significant impact, and suggested that engaging in international trade can also bring comparative advantages and increase the rate of technological progress, thus affecting structural change through the Baumol effect. Although these works do not specifically study China, they at least imply that international trade may have affected China’s structural change.

Second, since China’s reform and opening up, the investment rate has been above 30 percent. After 2003, the investment rate exceeded 40 percent, which was significantly higher than other countries’. According to the nine input-output tables, since 1990, about 90 percent of China’s investment products come from the industrial sector. Therefore, compared with the share of industrial added value or the output share, China’s investment
activities have a disproportionate impact on the demand for products in the three sectors, which may affect the structural change.

Third, China’s household registration system, public education, and social security have caused labor market frictions, which has caused the labor switching costs among the sectors (Cai et al., 2005; Sun et al., 2011). Recent research on structural change shows that the labor switching costs have an important impact on structural change. Lee and Wolpin (2006) accounted for labor’s acquirement of specific human capital for each sector. This makes it difficult for the labor force to transfer across sectors and affects the productivity of sectors. Messina (2006) and Hayashi and Prescott (2008) pointed out that the switching costs caused by the institution have an important impact on the structural change of Europe and Japan. These studies indicate that China’s labor market frictions may also affect the structural change.

Therefore, to examine the impact on China’s structural change, in addition to Baumol effect and the Engel effect, it is also necessary to consider the impact of three more factors: international trade, investment, and switching costs. Therefore, we decompose the factors that may influence China’s structural change into the Baumol, Engel, investment, international trade, factor intensity effect and switching cost effects. We evaluate these six effects using the decomposition approach and counterfactual exercises.

This paper contributes to the study of China’s structural change. The existing articles which explain China’s structural change focused on the impact of market frictions while considering the Baumol effect or the Engel effect. Brandt and Zhu (2010) and Brandt et al. (2013) found that the distortion of China’s production factor market is manifested in different regions, different ownership systems, and different sectors, affecting the allocation of production factors and productivity. Gai et al. (2013) pointed out that labor market frictions have affected China’s structural change and brought about significant efficiency losses. Cheremukhin et al. (2015) studied the impact of market frictions on the process of structural change in China since 1953. They quantitatively decomposed the distortions in the product market, consumer market and labor market.

In addition to market frictions, Dekle and Vandenbroucke (2012) studied the role of government scale. They pointed out that the Chinese government promotes capital accumulation by lowering tax rates, while investment products are all produced by non-agricultural sectors, which affects the structural change. Cao and Birchenall (2013) found that China’s total factor productivity in the agricultural sector grows rapidly after the reform, which can broadly explain the transfer of production activities to non-agricultural sectors. These papers have made important contributions to explaining China’s structural change, but only part of the above six effects have been considered. The contribution of this paper is that it simultaneously evaluates and compares all six effects and helps us to fully explain the structural change of China.

From the perspective of research methodology, this paper has developed a multi-national and multi-sectoral study about the structural change. Our model is based on the frameworks of Uy et al. (2013), Sposi (2015) and Swiecki (2017), all of which employed the model in Eaton and Kortum (2002). However, these studies did not consider capital and labor market frictions. We further introduce capital, investment, and labor switching costs so that we can measure the effects of investment and switching costs. The decomposition approach and counterfactual exercises that we conduct are similar to those of Dennis and Iscan (2009) and Cai (2015). Dennis and Iscan (2009) compared the Baumol effects and Engel effects on the structural change of the USA in the past two centuries, and Cai (2015) compared the difference in the Baumol and switching cost effects on the structural changes of the USA, India, Mexico and Brazil. However, they only discussed some of the six effects and did not account for the influence of all the effects.
The rest of the paper is organized as follows. The second section establishes the model; the third section conducts the theoretical analysis; the fourth section discusses the parameter calibration and the data processing; the fifth section conducts the decomposition; the sixth section includes the counterfactual exercises; the seventh section summarizes.

2. The model

This section establishes a multi-sectoral neoclassical growth model for two countries. We use the subscript $i,j \{1, 2\}$ to represent the countries where 1 and 2 represent the home country and foreign country, respectively. The agricultural ($a$), industrial ($m$) and service ($s$) sectors are distinguished by subscript $k,n \{a, m, s\}$. Each sector produces multi-category intermediate goods, and intermediate goods of different categories are combined into composite products that can be used for consumption or production. The production of intermediate goods for each category all uses capital, labor, and intermediate goods. The subscript $\chi$ indicates the production of the investment products. In production, the investment product production department uses intermediate goods produced by the three sectors. We adopt the Eaton and Kortum (2002) approach of trade, that is, productivity is a random variable; there are iceberg trade costs; productivity and trade costs vary across different sectors and will change over time. Assume that the agricultural and industrial sectors can trade their intermediate goods, but the service industry cannot. Preference is non-homothetic, and there are certain alternative relationships among different consumer products. Except for frictions existing in the labor market, all other markets are fully competitive[1].

2.1 Technology

Each sector produces multi-category intermediate goods, which are distributed over a continuum $[0, 1]$ with a measure of 1. The production technology of the intermediate good $z$ in the sector $k$ satisfies:

$$Q_{ik}(z) = \chi_k A_{ik}(z) L_{ik}(z)^{\lambda_k} K_{ik}(z)^{\mu_k} \left[ \prod_{n=a,m,s} M_{ikn}(z)^{\gamma_{kn}} \right]^{1-\lambda_k-\mu_k},$$

where in $Q_{ik}(z)$ is the output; $A_{ik}(z)$ the productivity; $L_{ik}(z)$ and $K_{ik}(z)$ are the labor and capital, respectively, and $M_{ikn}(z)$ is the compound formed by the combination of the intermediate goods and the sector $n$. The parameters $\lambda_k$ and $\mu_k$ are constants and represent the labor and capital share in the output, respectively. The parameter $\gamma_{kn}$ is a constant that represents the share of the composite product in the sector $n$, which satisfies $\chi_k^2 \mu_k e^\theta \prod_{n=a,m,s} \gamma_{kn} (1-\lambda_k-\mu_k)^{\gamma_{kn}} = 1$. The parameter $\chi_k$ is used to normalize prices and satisfies.

Drawing on Eaton and Kortum's (2002) hypothesis, productivity $A_{ik}(z)$ obeys the Frechet distribution and the distribution function satisfies $F_{ik}(A) = e^{-T_{ik} A - \theta}$. Where the parameter $T_{ik} > 0$ determines the mean value of the productivity, and the parameter $\theta > 1$ determines the variance of the productivity. The intermediate goods used by the agricultural sector and the industrial sector can be imported through international trade, but the intermediate goods used by the service sector can only be produced domestically. International trade generates iceberg trade costs, resulting in the delivery of 1 unit of intermediate goods produced by the country $i$’s sector $k$ to the country $j$, with only $1/\tau_{ijk}$ units arrived. Domestic trade has no cost, i.e., $\tau_{ijk} = 1$. Determinants of China’s structural change
Different types of intermediate goods in the same sector use CES technology to form composite products, namely:

\[ Q_{ik} = \left( \int_0^1 Q_{ik}(z) dz \right)^{\frac{\eta}{\eta-1}}, \tag{2} \]

wherein the elasticity of substitution \( \eta > 0 \) is a constant. Composites cannot be traded either for final consumption or production.

The production department of investment product uses composite products from three sectors and uses Cobb-Douglas technology to produce, namely:

\[ X_i = \chi_x \prod_{k=a,m,s} M^z_{ik}, \tag{3} \]

wherein \( X_i \) is an investment product; and \( M^z_{ik} \) a composite product formed by a combination of intermediate goods of the sector \( k \). The parameter \( \alpha_k \) is a constant, indicating the share of the sector \( k \)'s composite product.

The labor market has friction, which is reflected in the existence of switching costs among the sectors and the gap in wages among the three sectors. We introduce the variable \( \xi_{ik} \) to measure the switching costs, assuming that labor wages in the sectors satisfy \( w_{ik} = \xi_{ik} w_{ia} \). If \( k = a \), there must be \( \xi_{a0} = 1 \). The capital market is fully competitive, and all producers face the same rent \( r_c \).

The product market is fully competitive, and the product price is equal to the marginal cost of production. Defining the input unit cost of the sector \( k \):

\[ v_{ik} = w_{ik} \alpha_k \left( \prod_{n=a,m,s} P^{zn}_{in} \right)^{1-\lambda_k - \mu_k}, \tag{4} \]

wherein \( P^{zn}_{in} \) is the composite product price of the sector \( n \). Therefore, the service sector category \( z \) intermediate good price is \( p_{sz}(x) = v_{sz}/A_{sz}(x) \); the agricultural and the industrial category \( z \) intermediate good price is \( p_{sz}(x) = \min_{j \in \{a,m\}} \{ \tau_{ijk} v_{jk}/A_{jk}(x) \} \), in which \( k \in \{a,m\} \). By \( A_{jk}(x) \) obeying the Frechet distribution, the price of the composite goods in the sector \( k \) satisfies:

\[ P^z_{jk} = \Gamma \Phi_{ik}^{-\frac{1}{\theta}}, \tag{5} \]

wherein \( \Gamma \) is a constant. For \( k \in \{a,m\} \), \( \Phi_{ik} = \sum_{j=1,2} T_{jk} (\tau_{ijk} v_{jk})^{-\theta} \); for \( k = s \), \( \Phi_{ik} = T_{ik} v_{ik}^{-\theta} \).

The proportion \( \pi_{ijk} \) of imports from country \( j \) in all intermediate goods of country \( i \)'s sector \( k \) \{a, m\} is equal to the probability value that country \( j \) can sell intermediate goods of any category to country \( i \), satisfying:

\[ \pi_{ijk} = \frac{T_{jk} (\tau_{ijk} v_{jk})^{-\theta}}{\Phi_{ik}}. \tag{6} \]

The investment product market is fully competitive. The investment product price \( P_{ix} \) is equal to the marginal cost of production, that is:

\[ P_{ix} = \prod_{k=a,m,s} P^z_{ik}. \tag{7} \]
2.2 Preferences
Assume that personal labor supply is not elastic and standardized to 1. Personal utility
is set to:

\[ c_i = \sum_{k=a,m,s} \frac{c_{ik}^{\frac{\omega_k}{\epsilon}} (c_{ik} - \mu_k)^{\frac{\epsilon - 1}{\epsilon}}}{C_k}, \tag{8} \]

wherein \( c_{ik} \) represents the consumer goods produced by the sector \( k \) and is composed of
intermediate goods according to (2). \( C_k \) is a constant that represents the minimum level of
consumption. This setting reflects the non-homothetic preferences. If \( C_k > 0 \), the income
elasticity of demand of consumer goods in the industry is less than 1, and vice versa.
The parameter \( \omega_k > 0 \) is a constant that satisfies \( \sum_{k=a,m,s} \omega_k = 1 \). The parameter \( \epsilon > 0 \)
is a constant and measures the elasticity of substitution of consumer goods in the sector.
We can establish \( c_i \) as a composite consumer product formed by the product mix from
three sectors.

Assuming that \( \phi_{ic} \) and \( \phi_{ix} \) are the consumption rate and investment rate of country \( i \),
respectively, we can conclude that:

\[ \sum_{k=a,m,s} P_{ik} c_{ik} L_k = \Phi_{ic} Y_i, \tag{9} \]

\[ P_{ix} X_i = \Phi_{ix} Y_i, \tag{10} \]

wherein \( Y_i \) is the final product; \( L_i \) the total population.

To solve utility maximization:

\[ P_{ik}(c_{ik} - \mu_k) = \frac{\omega_k P_{ik}^{1 - \epsilon} c_{ik}}{P_{ik}^{1 - \epsilon}} \Phi_{ic}, \tag{11} \]

Among these values, \( P_{ic} \) represents the price of compound consumer goods, meeting
the requirements:

\[ P_{ic} = \left( \sum_{k=a,m,s} \omega_k P_{ik}^{1 - \epsilon} \right)^{\frac{1}{1 - \epsilon}}. \tag{12} \]

2.3 The market clearing conditions
The amount of capital and labor is \( K_i \) and \( L_i \), and the allocation of sub-sectors is represented
by \( K_{ik} \) and \( L_{ik} \). The clearing conditions of production factor market are:

\[ \xi_{ik} w_{ik} L_{ik} = \lambda_k P_{ik} Q_{ik}, \tag{13} \]

\[ r_i K_{ik} = \mu_k P_{ik} Q_{ik}, \tag{14} \]

\[ L_i = \sum_{k=a,m,s} K_{ik}, \tag{15} \]

\[ K_i = \sum_{k=a,m,s} K_{ik}. \tag{16} \]
Outputs of the agricultural and industrial sectors are used for domestic consumption, domestic investment, intermediate goods of the agricultural and industrial sectors of the two countries, and intermediate goods of the service sectors in one’s own country:

\[ P_{ik}Q_{ik} = P_{ik}c_{ik}L_i + x_kP_{ik}X_i + \sum_{n=a,m} (1-\lambda_n - \mu_n)\gamma_{nk} \sum_{j=1,2} P_{jk}Q_{jn} + (1-\lambda_n - \mu_n)\gamma_{nk}P_{is}Q_{ls}. \]  

The output of the service industry is used for domestic consumption, domestic investment and intermediate goods in the three sectors of the country:

\[ P_{is}Q_{is} = P_{is}c_{is}L_i + x_sP_{is}X_i + \sum_{n=a,m,s} (1-\lambda_n - \mu_n)\gamma_{nk}P_{in}Q_{in}. \]

3. Six effects on the structural change

Define \( l_{ik} \) as the employment proportion of sector \( k \), i.e., \( l_{ik} = L_{ik}/L_i \). We can break \( l_{ik} \) into:

\[ l_{ik} = (\Lambda_{ik, \text{Baumol}} + \Lambda_{ik, \text{Engel}} + \Lambda_{ik, \text{inv}} + \Lambda_{ik, \text{trade}}) \times \Lambda_{ik, \text{intensity}} \times \Lambda_{ik, \text{wedge}}, \]  

wherein \( \Lambda_{ik, \text{Baumol}}, \Lambda_{ik, \text{Engel}}, \Lambda_{ik, \text{inv}}, \Lambda_{ik, \text{trade}}, \Lambda_{ik, \text{intensity}} \) and \( \Lambda_{ik, \text{wedge}} \) represent the Baumol, Engel, investment, international trade, factor intensity and switching cost effects, respectively:

\[ \Lambda_{ik, \text{Baumol}} = \sum_{n=a,m,s} d_{ik}\Omega_{in, \text{Baumol}}, \]  

\[ \Lambda_{ik, \text{Engel}} = \sum_{n=a,m,s} d_{ik}\Omega_{in, \text{Engel}}, \]  

\[ \Lambda_{ik, \text{inv}} = \sum_{n=a,m,s} d_{ik}\Omega_{in, \text{inv}}, \]  

\[ \Lambda_{ik, \text{trade}} = \sum_{n=a,m,s} d_{ik}\Omega_{in, \text{trade}}, \]  

\[ \Lambda_{ik, \text{intensity}} = \frac{\lambda_k\sum_{n=a,m,s}(\lambda_n + \mu_n)\phi_{in}}{\sum_{n=a,m,s}\phi_{in}}, \]  

\[ \Lambda_{ik, \text{wedge}} = \frac{1}{\xi_{ik}^{\text{wedge}}}, \]  

wherein, \( d_{ik} \) is a constant formed by Leontief (1949) matrix generation, which is determined by \( \lambda_k, \mu_k \) and \( \gamma_{kn} \):

\[ \Omega_{ik, \text{Baumol}} = \frac{m_k P_{ik}^{1-\varepsilon}}{\sum_{n=a,m,s} m_n P_{ik}^{1-\varepsilon}} \times \phi_{in}, \]
Of these, \( y_i = Y_i / L_i \) represents the ratio of final product to labor, \( \phi_{ik} = P_k Q_k / \sum_{n=0, m} sP_{nm} Q_{nm} \) represents the output proportion of the sector, \( \Theta_{ik} = w_{ik} L_{ik} / \sum_{n=0, m} w_{nm} L_{nm} \) represents the proportion of labor income in the sector.

We refer to Equation (20) as the Baumol effect, because it captures the effect of changes in the relative price of the product, which is similar to the economic mechanism highlighted by Ngai and Pissarides (2007). The decrease in relative prices led to an increase in actual demand for sectoral products. However, when \( \epsilon < 1 \), that is, the elasticity of substitution of the three industrial consumer goods is relatively small, the relative price decrease plays a leading role, causing a rise in the proportion of departmental product consumer spending, and the proportion of sectoral employment will tend to decline. Compared with Ngai and Pissarides (2007), there are two differences in the Equation (20). The first is that the consumption rate will affect the Baumol effect. The drop in the consumption rate not only directly reduces the employment share in the industry but also reduces the impact of relative prices on the employment share in the industry. The second is that in addition to production technology, there are other factors that affect relative prices. Through Equations (5) and (6), we can conclude that \( \hat{P}_k = \Gamma (\pi_{ik} / T_{ik})^{1/\theta} \gamma_{ik} \), and the higher the technical level, the greater the share of international trade, or the lower the production cost is, the lower the product price is. This reflects the comparative advantages of international trade, because the greater the degree of participation for an sector in international trade is, the higher the level of production technology relative to the closed economy is, and the lower price of the product is.

We call (21) the Engel effect because it captures the effect of income elasticity of demand, which is similar to the economic mechanism highlighted by Kongsamut et al. (2001). With the increase of income, the demand for products will rise. However, if income elasticity of demand of products is relatively small, the rise of demand for products will be slower than incomes', resulting in a decrease in the proportion of product consumption expenditures; and vice versa. According to (21), as the increase of income, if \( C_k > 0 \), the first part of \( \Omega_{ik, Engel} \)'s right side will fall, resulting in a decrease in the employment share of the sector. In the other two sectors, \( \Omega_{ik, Engel} \), where the second part of the right side will decline, the situation results in an increase in the employment share, and vice versa. As the income level increases, the effect of the minimum consumption level will decrease, and the Engel effect will also gradually decrease.

We call (22) the investment effect because it captures the impact of the investment. Since the production of investment goods requires the products of three sectors as intermediate goods, if the investment rate increases, the investment effect will increase the employment share accordingly. The increase in investment rate will always be accompanied by a decline in the consumption rate or net export rate, but this effect is captured by other effects. The impact of investment on the three sectors is different. If the production of investment products uses more composite products of the sector \( k \), that is, the \( a_k \) is higher than the other
two sectors, and the other conditions remain unchanged, then investment has the greatest degree of the impact on the sector.

We call (23) the effect of international trade because it captures the impact of international trade, which is similar to the economic mechanism highlighted by Matsuyama (2009) and Uy et al. (2013). The variable \( \Omega_{ik,\text{trade}} \) measures the proportion of net exports of products in the sector to the total added value. \( \Omega_{ik,\text{trade}} > 0 \) means that the product exports are greater than the imports. If \( \Omega_{ik,\text{trade}} \) is higher, a significant amount of products in the sector will be exported to the international market, and the positive impact on the employment share will be higher. International trade can also influence production technology through comparative advantage, but this indirect effect is captured by other effects.

In fact, \( \Omega_{ik,\text{Baumol}}, \Omega_{ik,\text{Engel}}, \Omega_{ik,\text{inv}}, \) and \( \Omega_{ik,\text{trade}} \) measure the effects of the Baumol, Engel, investment and international trade effects applied to sector output. However, since the output of each department must become the intermediate good of other departments, the Baumol effect, Engel effect, investment effect, and international trade effect that affect the employment share in the industry are measured by \( \Lambda_{ik,\text{Baumol}}, \Lambda_{ik,\text{Engel}}, \Lambda_{ik,\text{inv}} \) and \( \Lambda_{ik,\text{trade}} \), each of which is also a sum of three sectors, and its weightiness is determined by the parameters \( \lambda_k, \mu_k, \) and \( \gamma_{kn} \).

We call (24) the factor-intensity effect because it captures the influence of factor intensity, which is similar to the economic mechanism emphasized by Acemoglu and Guerrieri (2008). According to (24), under the same conditions, the employment share in the sectors with higher labor-intensity is relatively higher. Moreover, if the proportion of output in the sectors with higher labor-intensity begins to decline, the factor-intensity effects of the three sectors will increase, and the degree of impact on the proportion of industrial employment will also increase.

We call (25) the switching costs effect because it captures the impact of labor switching costs among sectors, which is similar to the economic mechanism highlighted by Cheremukhin et al. (2015). According to (25), under the same conditions, the employment share in sectors with higher switching costs is relatively lower; as the switching costs decrease, the employment share will increase inversely. Moreover, if the proportion of labor wages in sectors with a higher proportion of switching costs increases in the total labor wages, the effect of switching costs in all of the three sectors will increase, and the degree of influence on the employment share will also increase.

Consider the dynamic changes of \( l_{ik} \), we use \( Z \) to represent the logarithmic growth rate of the variable \( Z \). Through (19) we can get:

\[
i_{ik} = \frac{\Lambda_{ik,\text{Baumol}}}{\Lambda_{ik,\text{sum}}} \dot{A}_{ik,\text{Baumol}} + \frac{\Lambda_{ik,\text{Engel}}}{\Lambda_{ik,\text{sum}}} \dot{A}_{ik,\text{Engel}} + \frac{\Lambda_{ik,\text{inv}}}{\Lambda_{ik,\text{sum}}} \dot{A}_{ik,\text{inv}} + \frac{\Lambda_{ik,\text{trade}}}{\Lambda_{ik,\text{sum}}} \dot{A}_{ik,\text{trade}} + \dot{A}_{ik,\text{wedge}}.
\]

Besides, \( \Lambda_{ik,\text{sum}} = \Lambda_{ik,\text{Baumol}} + \Lambda_{ik,\text{Engel}} + \Lambda_{ik,\text{inv}} + \Lambda_{ik,\text{trade}} \). We will use the above formula to carry out decomposition accounting.

4. Parameter calibration and data processing
4.1 Parameter calibration
4.1.1 Production. We differentiate sectors according to the National Bureau of Statistics National Industry Classification Standards. The parameters \( \{\lambda_k, \mu_k, \gamma_{kn}, \alpha_k\} \) determine the relative shares of capital, labor and intermediate goods in the three sectors and investment product sector. We selected nine national input-output tables from 1990 to 2010, calculating the capital, labor and intermediate inputs for different sectors in each table, and summed up
the sectors according to the sectors, and then obtained \( \{\lambda_k, \mu_k, \gamma_{kn}, \alpha_k\} \). After that, we take the mean value of these as the estimated value of \( \{\lambda_k, \mu_k, \gamma_{kn}, \alpha_k\} \). The parameter \( \eta \) determines the elasticity of substitution for different categories of products but does not affect the quantitative results. According to the estimations of Simonovska and Waugh (2014), we take \( \theta = 4 \).

### 4.1.2 Preferences

We learn from Uy et al. (2013), and take \( \epsilon = 0.751, \sigma = 0 \). Thus, the undetermined parameters are \( \{\omega_a, \omega_m, \sigma, \sigma_s\} \). We adjust the values of these four parameters, to make the proportion of the nominal consumption of the three sectors calculated by the Equation (11) to the total consumption be in line with the real economy in China. To this end, we need at least two years’ nominal consumption and prices for the three sectors, as well as the total labor force. We used the final consumption data in the input and output tables of 1997 and 2007, and summed them up in industry to obtain the nominal consumption of the three sectors. After that, we used the deflator of industry’s added value to obtain the industrial added value price index in 1997 and 2007, and took them as the price of the sector. Finally, we obtained the total labor force in 1997 and 2007 from the China Statistical Yearbook. Normalize \( \sigma \) to 1, where \( \sigma_s = 1 \) is equal to the ratio between \( \sigma \) and \( \sigma_s \) in the estimated result. Table I shows the values of all the parameters.

### 4.2 Data processing

#### 4.2.1 Production

First, we construct the nominal value and the actual value of the added value in the three sectors. Based on the nominal value \( (VA_k^{CHN}) \) and index \( (VA_k^{INX}) \) of the RMB price measurement given by the National Bureau of Statistics, using the Penn World Table (PWT) purchasing power parity PPP and the nominal exchange rate to obtain the nominal value of PPP measurement and US dollar measurement of the current year \( (VA_k^{PPP}, VA_k^{USD}) \). Afterwards, calculating the value added of the PPP constant value segment in 2005 \( (VA_k^{PPP}) \). First, set \( VA_k^{PPP} = VA_k^{PPP} \), and then through \( (VA_k^{PPP} / VA_k^{PPP}) = (VA_k^{INX} / VA_k^{INX}) \), iterate toward other years’ data. Second, we construct the capitals of three sectors. Based on the output \( P_kQ_k = VA_k^{PPP} / (\lambda_k + \mu_k) \) measured in PPP of the current year, we use PWT 2005 PPP constant price to measure the total capital, and get \( K_k = \mu_k P_k \). Third, we construct the labor of three sectors. After demographic censuses in 2000 and 2010, the National Bureau of Statistics adjusted employment data, but did not adjust the total employment data before 1990. Based on the census data, Holz (2006) adjusted the total employment and sub-industry employment data before 1990. We obtained employment data (before 1990) from Holz (2006) and subsequent employment data from the China Statistical Yearbook.

#### 4.2.2 Demand

First, directly use the ratio of gross capital formation to GDP declared by the National Bureau of Statistics as the investment rate \( \omega_i \). Second, we construct international trade data for the agricultural sector and the industrial sector. The data comes from COMTRADE. According to the classification of SITC Rev.1, the goods belonging to code 0 are classified as the agricultural industrial products, and the goods of code 1–9 are classified as the industrial products. Afterwards, \( \pi_{ij} \) can be

<table>
<thead>
<tr>
<th>Sector</th>
<th>( \lambda_k (1 - \lambda_k - \mu_k) )</th>
<th>Production</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>0.158</td>
<td>0.178</td>
<td>0.060</td>
</tr>
<tr>
<td>m</td>
<td>0.062</td>
<td>0.533</td>
<td>0.108</td>
</tr>
<tr>
<td>s</td>
<td>0.017</td>
<td>0.270</td>
<td>0.190</td>
</tr>
</tbody>
</table>

Table I. Results of parameter calibration
directly calculated by using the nominal added value and output measured by three sectors in US dollars. Due to the absence of international trade data in China before 1984, we take the 1984s value of $\pi_{ijk}$ as the values before 1984. Figure 1 shows the calculated $\pi_{11k}$. Third, we use 1 minus the investment rate and net export rate to get the consumption rate $\Phi_{ic}$. Compared with the data from the National Bureau of Statistics, the consumption rate calculated by us is slightly higher. However, except for individual years, the gap between the consumption rate and the statistics bureau data does not exceed 1 percentage point.

**Price.** First, to create the production technical parameter $T_{ik}$, we first calculate total factor productivity of the added value $\text{TFP}_{Vik}$, and then calculate the total factor productivity of the output $\text{TFP}_{Oik} = (\text{TFP}_{Vik})^{\lambda} \pi_{ijk}$. According to (5) and (6), if we know the values of $\text{TFP}_{Oik}$ and $\pi_{ijk}$, the technical parameter $T_{ik}$ can be calculated. Figure 2 shows the technical parameters of the three sectors, which normalized the value of 1978 to 1. Second, solve price levels of $P_{ik}$ and $P_{ic}$. Given the nominal added value, capital, labor, international trade share and technical parameters of the three sectors, we first normalized the price of the first industrial product in 1978 to 1; then substituted (13) and (14) into (4), wrote $v_{ik}$ as $P_{ik}$, before substituting into (6), and wrote $\Phi_{ik}$ as $P_{ik}$. Finally, after entering (5), the three-dimensional linear equations about log $P_{ik}$ can be obtained to get $P_{ik}$. Given $P_{ik}$, use (12) to obtain $P_{ic}$ through calculation.

5. Decomposition approach
First, we set the values of $y$ and $T_k$ in 1978. To this end, we choose the proportion of nominal added value of the three sectors in 1978 and 2011, and the proportion of nominal output in

![Figure 1](image1.png)
**Figure 1.** Changes in the share of international trade in the primary industry and the secondary industry

![Figure 2](image2.png)
**Figure 2.** Technological changes in the three sectors
1992 and 2007 as the target, which will minimize the gap between models and data. After the initial conditions are selected, the ratio between the value of the total added value per year and the labor can be calculated through the value-added and labor data. Using the $T_k$ calculated, the technical parameters of each year can be obtained, and also the product prices of the sector can be obtained. Afterward, we calculate the Baumol effect, Engel effect, investment effect, international trade effect and factor concentration effect according to the Equations (20)–(24), and then obtain switching costs effect with Equation (19). Figure 3 shows the calculated switching costs. Finally, decompose and calculate the structural change with Equation (26).

Table II reports the accounting results according to the periods from 1978 to 2011. Due to the lack of data on international trade in different sectors before 1984, Table II only sums up

![Graph showing switching costs of secondary and tertiary industry](image)

Figure 3. Switching costs of the secondary industry and tertiary industry

<table>
<thead>
<tr>
<th>Period</th>
<th>Changes in the employment share (%)</th>
<th>Impact of six effects (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Baumol</td>
<td>Engel</td>
<td>Investment</td>
<td>International trade</td>
<td>Factor intensity</td>
</tr>
<tr>
<td>Agricultural sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978–1984</td>
<td>−6.5</td>
<td>1.7</td>
<td>−9.3</td>
<td>−19.0</td>
<td>3.0</td>
<td>1.5</td>
</tr>
<tr>
<td>1984–1992</td>
<td>−5.5</td>
<td>−2.7</td>
<td>−19.0</td>
<td>3.0</td>
<td>2.0</td>
<td>3.4</td>
</tr>
<tr>
<td>1992–2000</td>
<td>−8.5</td>
<td>1.9</td>
<td>−8.5</td>
<td>−2.6</td>
<td>−0.5</td>
<td>1.4</td>
</tr>
<tr>
<td>2000–2011</td>
<td>−15.2</td>
<td>−4.6</td>
<td>−3.5</td>
<td>5.3</td>
<td>−0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>1984–2011</td>
<td>−29.2</td>
<td>−5.4</td>
<td>−31.0</td>
<td>4.7</td>
<td>0.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Industrial sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978–1984</td>
<td>2.6</td>
<td>−1.0</td>
<td>0.3</td>
<td>1.6</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>1984–1992</td>
<td>1.8</td>
<td>0.6</td>
<td>0.1</td>
<td>−1.8</td>
<td>0.3</td>
<td>1.2</td>
</tr>
<tr>
<td>1992–2000</td>
<td>0.8</td>
<td>0.1</td>
<td>1.8</td>
<td>0.3</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2000–2011</td>
<td>7.0</td>
<td>−2.3</td>
<td>0.1</td>
<td>5.1</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>1984–2011</td>
<td>9.6</td>
<td>−2.7</td>
<td>0.5</td>
<td>4.9</td>
<td>1.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Service sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978–1984</td>
<td>3.9</td>
<td>1.0</td>
<td>1.5</td>
<td>−0.4</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>1984–1992</td>
<td>3.7</td>
<td>−1.6</td>
<td>2.7</td>
<td>0.5</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>1992–2000</td>
<td>7.7</td>
<td>1.4</td>
<td>1.4</td>
<td>−0.6</td>
<td>0.1</td>
<td>0.6</td>
</tr>
<tr>
<td>2000–2011</td>
<td>8.2</td>
<td>−6.1</td>
<td>0.9</td>
<td>2.2</td>
<td>0.0</td>
<td>0.6</td>
</tr>
<tr>
<td>1984–2011</td>
<td>19.6</td>
<td>−6.3</td>
<td>5.0</td>
<td>2.1</td>
<td>0.2</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Table II. 1978–2011 China’s structural change
the results of the period from 1984 to 2011. Table II shows that the Engel effect, investment effect and switching costs effect are the most important factors affecting the change in the employment share in the primary, secondary and service sectors, respectively, and the direction and degree of influence will also change in different periods. From 1984 to 2011, the employment share in the agricultural sector decreased by 29.2 percent, and the Engel effect decreased by 31.0 percent.

The employment share in the industrial sector has increased by 9.6 percent, of which the investment effect has increased by 4.9 percent; the employment share in the service sector has increased by 19.6 percent, where the switching costs effect has increased by 16.4 percent. The Engel effect has always been negative in the direction of the agricultural sector, but the degree of influence has gradually weakened. During the period of 2000 to 2011, the employment share was only reduced by 3.5 percent, which was lower than the degrees of Bowmore effect and switching costs effect. The direction of the investment effect on the industrial sector has changed. The employment share has been reduced during the two periods (1978–1984 and 1992–2000); and the investment effect was lower before 2000, and its significant impact mainly occurred in 2000–2011. So the proportion of its employment increased during this period. In 7 percentage points, the investment effect accounted for 5.1 percent. The impact of the switching costs effect on the service sector has always been positive, and the degree of influence has gradually increased. The percentage of employment increased by 10.6 percent from 2000 to 2011, which was higher than the impact of all previous periods.

The role of the Engel effect on the employment share in the agricultural sector is consistent with the changing trend of the Engel coefficient in China. According to data from the National Bureau of Statistics, the Engel coefficients of urban residents and rural residents in China from 1978 to 2011 were reduced from 57.5 and 67.7 percent to 3 and 40.4 percent, respectively, which means that the ratio of consumption of agricultural sector accounting for household consumption dropped significantly. This is consistent with the minimum consumption level of the agricultural sector that we have fitted, indicating that the proportion of agricultural products in consumption will decline as income increases. However, this degree of influence is gradually weakening. This situation is consistent with the Chinese economy. Although the Engel coefficient has been declining since the reform and opening up in China, the decline has slowed down from 2000 to 2011, and the Engel coefficients of urban residents and rural residents dropped only by 3.1 percentage points and 8.7 percentage points, respectively, which was significantly lower than those years before 2000.

The role of the investment effect on the employment share in the industrial sector is consistent with the trend of changes in the Chinese investment rate and the investment structure. During the period from 1978 to 2011, China’s investment rate rose from 38.2 to 48.3 percent. Since 91.0 percent of investment products come from the industrial sector, the increase of investment rate will significantly enhance the employment share in the industrial sector. It is worth noting that investment rates have declined in both the period of 1978–1984 and 1992–2000, and the effect of investment has also been negative. By 2000, the investment rate was 35.3 percent, even lower than the level of 1978, so the investment effect was negative overall by 2000. After that, the investment rate began to rise, and it increased by 13.0 percent in 2000–2011. Therefore, the positive effect of the investment effect on the industrial sector in this period has been significantly enhanced.

The role of switching costs effect on the employment share in the service sector is consistent with the trend of changes in switching costs. According to Figure 3, the most significant decline on the switching costs of the service sector was from 1978 to 2011, which means that the proportion of service sector employment is the most affected. Although the switching costs of the service sector fluctuate in some years, it still showed a downward
trend throughout the period. In the early 1980s and early 1990s, the switching costs of the service sector had sharply fallen for two times. This may be related to the reform of the economic system in the same period. After 2000, the switching costs of the service sector continued to decline, which was in line with the influence of the reform of the household registration system after 1998. It is worth noting that, compared with the past, the decline in switching costs in 2000–2011 did not significantly increase, but the degree of influence exceeded the sum of all previous years’. This is also consistent with the previous analysis. Since the switching costs effect is affected by the proportion of labor wages in the sector, the increase in the share of employment in the service sector will also increase its impact.

In addition to the above three effects, the Baumol effect has a greater impact on the agricultural sector and service sector. The effects of international trade have a greater impact on the agricultural sector and industrial sector, and the effects of factor intensity have the greatest impact on the agricultural sector. According to the previous analysis, the Baumol effect is influenced by the consumption rate and relative commodity prices. The impact of the Baumol effect on the changes of direction is mainly caused by the changes in consumption rate over the same period. For example, the decline in China’s consumption rate after 2000 has caused the Baumol effect to have negative effects on the three sectors over the same period. The effect of international trade is affected by changes in the net export rate of products in the sector. The net export rate of China’s agricultural sector started to decline after 1992, and the international trade effect also turned negative. The net export rate of the industrial sector was always positive, and the international trade effect was always positive. Although the impact of international trade on the employment share in the agricultural sector was also significant before 2000, however, due to the shift in the direction of influence, international trade had little impact on the agricultural sector during the entire period from 1984 to 2011. The effect of factor intensity is affected by the changes in the proportion of industrial output. As the average labor intensity of China’s agricultural sector is 86.6 percent, which is significantly higher than that of the industrial sector and service sector, and the output ratio of the agricultural sector is continuously declining, and according to the previous analysis, the factor intensity effects of the three sectors will be positive and will have the greatest impact on the agricultural sector.

Compared with the other effects, the effect of international trade is not significant, which is related to the characteristics of China’s trade. Since China’s reform and opening up, total exports and imports have been growing rapidly, but the overall net export rate is not high. Although the net export rate has increased significantly since 2005, it has begun to decline after being influenced by external demand shocks in 2009, offsetting the previous impact. The result in Figure 1 also roughly matches this trend. To verify this mechanism, we further decompose the net exports in the international trade effect into imports and exports, so that the independent effects of exports and imports can be separated. Table III gives the main results. It can be seen that the impact of export trade is very significant. From 1984 to 2011, the employment share in the agricultural and industrial sectors increased by 5.3 and 6.8 percentage points, respectively, and even influenced 1.7 percentage points for the

<table>
<thead>
<tr>
<th>Period</th>
<th>Agricultural sector</th>
<th>Industrial sector</th>
<th>Service sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Totality (%)</td>
<td>Export (%)</td>
<td>Import (%)</td>
</tr>
<tr>
<td>1984–1992</td>
<td>2.0</td>
<td>4.6</td>
<td>−2.6</td>
</tr>
<tr>
<td>1992–2000</td>
<td>−0.5</td>
<td>−0.1</td>
<td>−0.4</td>
</tr>
<tr>
<td>2000–2011</td>
<td>−0.7</td>
<td>0.8</td>
<td>−1.5</td>
</tr>
<tr>
<td>1984–2011</td>
<td>0.8</td>
<td>5.3</td>
<td>−4.5</td>
</tr>
</tbody>
</table>

Table III. The impact of international trade on the structural change in China
service sector. The impact of export trade on the agricultural sector mainly occurred during the period of 1984–1992, and the impact on the industrial sector was evenly distributed throughout the entire period. However, the impact of export trade was offset by imports to a great extent, resulting in that effect of international trade was not significant.

6. Counterfactual exercises

This section discusses counterfactual exercises. In order to assess the impact of production technology, we successively keep the production technical parameters of the three sectors in line with the parameters of 1978. The simulation results are shown in Figure 4. It can be seen that the technological progress of the agricultural sector has a relatively large impact on the structural change. If there is no technological progress in the sector, the proportion of its employment will increase significantly, and the employment share in the industrial sector and service sector will decline. By 2011, the employment share in the agricultural sector will increase by 3.4 percent, and the share of employment in the industrial sector and service sector will decrease by 1 and 2.4 percent, respectively. Technological progress in the industrial and service sectors has little impact on the structural change, whose proportion is within 1 percent. This is consistent with the results of Figure 2. According to the left column of Figure 2, the growth rate of the technical parameters of the agricultural sector is significantly higher than that of other sectors; the growth rate of the technical parameters of the industrial and service sectors is relatively lower, and it does not appear to be too much difference between them.

In order to assess the impact of non-homothetic preferences, we set the minimum consumption levels of the agricultural and service sectors to zero, which means that the three sectors have equal income elasticity of demand for products. The results of the simulation are shown in Figure 5. It can be seen that non-homothetic preferences have a significant impact on the structural change. If the three sectors have the same income elasticity of demand, the employment share in the agricultural sector will drop sharply, and that in the industrial and service sectors will increase significantly. With the increase in income per capita, the minimum level of consumption has dropped significantly relative to
income, and the influence of non-homothetic preferences on the employment share has gradually declined. By 2011, the gap between non-homothetic preferences and the actual data had already narrowed within 1.5 percentage points. Compared with the impact of technological advances, the influence of non-homothetic preferences is even more important, which is consistent with the conclusions of Herrendorf et al. (2013). They found that non-homothetic preferences and income growth have a significant impact on the proportion of sub-sectors for final consumption goods, while changes in price only have a significant effect on the proportion of sub-sectors for the added value of consumption. Since the consumption in this model corresponds to the final consumer goods in the data rather than the added value, the comparison between Figures 4 and 5 also proves that the income growth is more important than the price fluctuation in explaining the structural change.

To assess the impact of investment, we successively keep the investment rate at the level of 38.2 and 20 percent in 1978, and, respectively, carry out simulations. Figure 6 shows the results. It can be seen that the impact of investment rate on the employment share in the industrial and service sectors is greater than that in the agricultural sector. If the investment rate remains at the level of 1978, by 2011, the employment share in the industrial sector will be 2.3 percentage points lower than the actual figure, and the employment share in the service sector will be 2.8 percent higher than the actual figure. The fluctuation of investment rate also caused the situation that the employment share under the counterfactual exercises to fluctuate around the actual data, and the direction of the fluctuation is consistent with the changes in the investment rate over the same period. It is precisely due to this characteristic that investment has less influence over the entire period since the reform and opening up. If we reduce the investment rate to 20 percent, by 2011, the employment share in the industrial sector will be 6.9 percentage points lower than the actual figure, and the employment share in the service sector will be 8.3 percentage points higher than the actual figure. Then, the investment effect will be more significant.

In order to assess the impact of international trade, we take the value of the net export rate and the international trade share of the industry for each year at zero, namely, simulating a closed economy. The results are shown in Figure 7. Compared with decomposition accounting, the impact of international trade in Figure 7 also includes the effect of comparative advantage on the technological level of the sector. It can be seen that the impact of international trade on the structural change has fluctuated. Before 2004, international trade increased the proportion of its employment in the agricultural sector, and the impact was basically within 1 percentage point. Before 1994, international trade had reduced the employment share in the industrial sector, but basically shifted to increase the employment share after 1995, especially in 2005–2011, the impact became more pronounced, and the degree of changes in the service sector also expanded during the same period.

To assess the impact of factor intensity, we use the value of labor intensity in the industrial sector as the agricultural sector’s and keep the values of the industrial and service sectors unchanged. The results of the simulation are shown in Figure 8. It can be seen that
the difference in factor intensity among the sectors has a significant impact on the structural change. Since the labor intensity of the agricultural sector (86.6 percent) is significantly higher than that of the industrial sector (36.1 percent), the employment share in the agricultural sector under the counterfactual exercises is 20.4 percent lower than the data, and the average ratio of employment in the industrial sector and the service sector is 10.6 and 9.8 percent higher than the data, respectively. This means that higher labor intensity is an important reason for the higher employment share in the agricultural sector, which may be related to the perception that China usually takes land income as labor income or agricultural production methods. A policy implication in Figure 8 is that if the capital intensity of the agricultural sector is increased, the employment share in the agricultural sector will decline significantly, and the proportion of employment in the industrial sector and service sector will increase significantly.

To assess the impact of the switching costs, we keep the switching costs among the three sectors at the level of 1978. Figure 9 shows the results. It can be seen that the switching costs have a significant impact on the structural change. If the switching costs do not change, the employment share in the agricultural sector will exceed 50 percent in 2011, which is
15.6 percent higher than the actual figure; the industrial sector will be lower than the actual figure before 1992 and after 2006. In 1992–2006, it will be higher than the actual data. The change in switching costs has a significant effect on the increase in the employment share in the service sector. Under counterfactual exercises, the employment share in the service sector rose by only 10.0 percent from 1978 to 2011, which was far below the 23.5 percent rate of increase in the actual figures.

7. Conclusion
This paper uses a multi-sectoral neoclassical growth model of two countries to measure the impact of different factors on China’s structural change. The conclusions are listed as below. First, the Engel effect, the investment effect, and the switching costs effect are the main factors affecting the change in the employment share in the primary, secondary, and service sectors, respectively. The impact of the Engel effect on the agricultural sector mainly occurred before 2000, and the effect of the investment effect and switching costs on the industrial and service sectors mainly occurred after 2000. The Baumol effect has a stronger effect that decreases the employment ratio in the agricultural and service sector, and the effect of international trade has a certain role in the increasing employment share in the industrial sector. Second, low-income elasticity of demand, high labor intensity, and the existence of the switching costs are the reasons for the high employment share in the agricultural sector. Technological progress, investment, and international trade have comparatively less influence on the proportion difference of employment in the three sectors.

The above conclusions have important policy implications. From the perspective of the factors on the demand-side, the demand-side factors that have chronically promoted the structural change are difficult to sustain. First of all, although the Engel effect played an important role in the transfer of agricultural labor force before 2000, the current effect is already very small. This means that future income growth will not lead to a significant decline in the relative demand for agricultural products, and changes in the consumption demand structure will be difficult to continuously stimulate the transfer of agricultural labor. Second, investment demand has played an important role in the increasing proportion of China’s industrial employment after 2000. However, Chinese investment rate has exceeded 40 percent, but it has not risen in recent years. We also find that it is difficult to expand the industry through continuous increase in the investment rate. Third, although the comparative advantage created by the low labor cost has greatly promoted the rapid growth of China’s foreign trade, China’s agricultural and sectors have basically achieved a trade balance, and the total net exports’ share in GDP is not high. If the trade structure cannot be transformed and upgraded quickly, foreign trade will not significantly affect China’s structural change.

From the perspective of the supply side, the development of modern agriculture and the reduction of labor switching costs should become policy exertions to promote China’s structural change. First of all, the high labor intensity of agriculture is an important cause of its high employment share. Developing modern agriculture with capital intensity, and gradually replacing traditional agricultural production methods, will effectively promote the transfer of agricultural labor. Second, since the reform and opening up, especially in the years after 2000, there has been a gradual downward trend for the costs of agricultural labor switching to industry and service industry, which has effectively promoted China’s structural change. However, the current switching costs are still high, and this factor should continue to play an important role. If we can further reduce the switching costs through policies such as the reform of the household registration system, we will effectively promote the development of sectors and service sectors. Third, China is similar to most industrialized countries in that, compared to the service industry, its agricultural and industrial technological progress is relatively fast. This means that, during the process of shifting
economic activities to service sectors, technical progress in the overall economy will gradually slow down, and the economic growth rate will also drop. Therefore, the development of the service industry should be adapted to the phase of economic development. Before reaching the level of high-income countries, it is not appropriate to simply increase the proportion of service sectors. Instead, more focus should be put on the development of producer services and optimization of the service industry structure.

Acknowledgments
This article was selected by the 16th China Youth Economists Forum, and was sponsored by the National Natural Science Foundation of China (71503102), the Humanities and Social Sciences Research Youth Project of the Ministry of Education (14YJC790040), the Natural Science Foundation of Guangdong Province (2015A030310147) and 2014 annual project of “the 12th Five Year Plan” of the Philosophy and Social Sciences in Guangdong Province. GD14YYJ04). The authors thank the anonymous reviewers for their valuable advice and takes full responsibility for all the problems caused by the articles they write.

Note
1. Refer to the appendix for the detailed derivation process of the theoretical model of this paper. If necessary, please contact the author.

References


Corresponding author
Kaiming Guo can be contacted at: GUOKAIMING1984@163.COM

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Supply-side structural reform and the transformational development of China’s foreign trade

Erzhen Zhang
School of Economics, Nanjing University, Nanjing, China, and
Xiang Dai
Nanjing Audit University, Nanjing, China

Abstract
Purpose – From the perspective of supply-side structural reform, the purpose of this paper is to analyze and discuss the necessity and feasibility of China’s foreign trade transformation and development and explores the realization path accordingly.
Design/methodology/approach – This paper mainly uses the speculative method of qualitative research to find out the scientific countermeasures of foreign trade transformation from the supply-side reform level on the basis of in-depth interpretation of the supply-side structural reform and foreign trade transformation and development.
Findings – The study found that the main problem facing China’s foreign trade development is structural problems. Therefore, through structural reforms such as technological innovation and institutional innovation, it can effectively promote the transformation and development of foreign trade.
Originality/value – This paper is the original result of the author. Except for the content already quoted in the text, this paper does not contain any other individuals or groups that have published or written the work.
Keywords Foreign trade, Supply-side, Structural reform, Transformational development
Paper type Research paper

1. Questions
Opening up makes China stronger and it is the inevitable path to prosperity. This was put forward clearly in the report of the 19th CPC National Congress that we must “promote a new pattern of all-round opening up.” General secretary Xi Jinping has emphasized that “China’s door of opening up will not be closed and will only open wider.” This is a major strategy made by the Party Central Committee with President Xi Jinping as the core, based on the accurate judgment of new changes in the international situation and a strong grasp of the development of China’s open economy entering a new era at this time. The essence of forming a new pattern of all-round opening up is to transform the open development, namely, to develop a high-level open economy. As one of the important parts of the open economy, China’s foreign trade is of decisive significance. It is a pivotal manifestation and the result of entering the international division system, which is dominated by the current global value chain. Owing to its rapid growth, China’s foreign trade has been ranked as one of the best in the world. Faced with international and domestic challenges, especially the “anti-globalization” of some advanced economies in the form of trade protection, China’s foreign trade development has shifted from high-speed growth to a new stage of high-quality development. We must “transform the driver and improve the quality” as soon as possible. To achieve this goal effectively, China must adopt a supply-side structural reform of foreign trade.
2. The necessity of supply-side structural reform of foreign trade

First, factors constraining the growth of China’s exports exist both on the demand-side and the supply side, but the central aspect of the contradiction is still the latter one. It is difficult for supply side structure and quality level to meet the demands of the international market. This helps to explain recent Chinese consumers’ craze for overseas shopping and overseas procurement services. From Japanese toilet lids and rice cookers to New Zealand milk powder and Dutch razors, the Chinese purchase a vast amount of various foreign products. The products produced by domestic companies, whether in terms of quality or brand, cannot meet the “hierarchy of needs” of domestic consumers, let alone be exported to compete in the international market.

In the previous round of open economy development, China seized vital opportunities brought by the development of economic globalization and achieved rapid development of foreign trade through its deep integration into the global value chain. In particular, China promoted the import and export trade relying on processing trade. However, it is undeniable that the previous round of development could be termed as “low-end embedded” and “large but short flow model.” “Low-end embedded” is mainly reflected in the fact that China’s main production and exports are mostly concentrated in labor-intensive products. While a large number of China’s machinery and electronics are more differentiated, more complicated, and even considered to be highly technical and highly competitive, they are actually produced through various forms of processing and assembly for re-export. China is still developing the low-end segment of high-end industries. For example, photovoltaic products were representative products in conventional Chinese foreign exports, but their core technologies and high value-added sectors have not been “absorbed” by China. A “large but short flow model” means that when China integrates into the division system of value chain, the domestic value chain is short. The specialized chain that is undertaken by China is not able to effectively extend to both sides, the value-added ratio in the value chain is low, and its leading role and spillover effects on other industries are limited. In conclusion, from the supply perspective, China’s foreign trade development has not completely formed the comprehensive competitive advantages with technology, brand, standards, quality and service as the core; it has not been able to take the lead in completing self-adjustment against the background of “profound readjustment of global economy;” it has not resolved inefficient and low-end supply in a timely and effective manner; and it has not created an “effective and high-end supply” in line with the new trend of global economic development. Therefore, it is imperative to promote the structural reform of the supply side in China’s foreign trade.

Second, the current sluggish growth in foreign trade is mainly because of structure. Objectively speaking, the sluggish growth or even negative trend in foreign trade is not a unique phenomenon in China but a “common problem” in global trade in recent years. Foreign trade refers to trade among various countries or regions, so obviously, the foreign trade issue should be considered more objectively and comprehensively in the global context. Generally speaking, there are two kinds of factors that affect the growth rate of trade. One is a short-term factor, which is called cyclical factor or macroscopic factor by the academic circle. The other one is the long-term factor, also known as structural factors in the academia. As a matter of fact, both cyclical factors and structural factors have a profound effect on the slowdown of China’s trade to some extent.

The development of trade derives from the expansion of the division of labor, and the evolution of it depends on the trend and pattern of the industry development. That is to say, in the long run, the supply-side structure is certainly the determinant of the division of labor and the trade. Today, the “re-industrialization” strategy is implemented by major countries in the world. They are not just repeating the old pattern of traditional manufacturing industry development, but seeking a new status in the global division of
labor from the supply-side structural changes and occupying the commanding heights in global industrial chain, taking the lead in “getting out of the dilemma” and becoming a pacemaker in the next round of growth in global trade. This is both a pressure and also an impetus for China to promote the supply-side structural reform and the transformational development of foreign trade.

Third, to maintain a steady medium- to long-term growth in foreign trade, China can only look for solutions from the supply-side structural reforms. The difference between foreign trade and domestic trade is that the demand-side of foreign trade is in the international market, while the demand-side of domestic trade is in the domestic market. Compared to domestic trade, the demand-side factor of foreign trade cannot be regulated by one country. That is why in numerous theoretical and empirical studies the export demand is always regarded as an income function of the international market but not affected by domestic income levels. Since it is impossible to regulate the international market with demand-expanding policies, the only way to maintain the steady development of foreign trade lies in the efforts made on the supply side. More exactly, as the demand-side of foreign trade lies in global market, supply-side structural reform becomes more necessary.

At present, the global economy is undergoing a period of changes and the situation remains complex and severe. While it has become a consensus that the main issue is contradiction of structure, cyclical contradiction still exists and plays an important role in global economic development. In other words, the global economy is in a period of in-depth adjustment in which both cyclical and structural contradictions coexist. In this special period, the traditional demand in the international market is unlikely to rebound sharply in a short term. This poses a serious challenge to China, which has a high level of export-oriented economic development. If we still stick to the conventional foreign trade development model and provide products needed by the traditional demand, we will likely not only face with ever-smaller room to grow, but also larger scale variations which are caused by competition from other developing countries and regions. Notably, the transformational development of foreign trade must be realized in a certain process of growth. If China cannot stabilize its growth rate, the transformational upgrade will lose its supporting conditions. Furthermore, under the division system of the current global value chain, when a country is unable to stabilize the growth rate of foreign trade, it essentially means that this country is losing its ability to integrate into the global value chain further. Obviously, in this sense, since the demands of the international market cannot be regulated, it is of great strategic importance to stabilize foreign trade development by promoting supply-side structural reform, producing marketable and high-quality products, as well as seeking and even leading new demand in the international market.

3. The connotation of supply-side structural reforms in foreign trade

To smoothly advance supply-side structural reform of foreign trade, we need to understand the necessity and urgency and also grasp its scientific connotation. The supply-side structural reform of foreign trade actually means the implementation and application of supply-side structural reforms in the field of foreign trade. Therefore, in addition to the general meaning of supply-side structural reforms, it also incorporates the factors of foreign trade. That is to say, this concept not only includes what to supply to the international market, but also how to supply.

As is known to all, over the 40 years since China’s reform and opening up, China has become the world’s largest trader, as well as the world’s largest exporter. However, on overall, China is still at the medium-and-low end of the global value chain, and its comparative advantages are mainly concentrated on the labor-intensive products or the medium-and-low end links in high-end industries. Chinese industries are still characterized by extensive development. The rapid growth of trade driven by extensive development
features is the result of the full and effective use of its own comparative advantages. Meanwhile, China also benefits from the high international market demand created by the former phase of global economic prosperity. As some scholars have pointed out, making full use of the low-end domestic elements in the international demand market is the essence of promoting the rapid growth of the former round of foreign trade. This long-term extensive development model, having brought certain economic development benefits, has been criticized for both its elements of low added value and low profitability. Driven by this powerful inertia, the long-term extensive development model led to a general manufacturing industry with the reputation of “the world factory.” But, it is easy to cause serious overcapacity, especially in the global economic profound adjustment period in which cyclical and structural contradictions coexist. This would cause foreign trade companies with low-profit margins to face challenges and risks of falling profitability and rising debts. The inevitable result is the lack of growth drive and a slowdown in foreign trade growth. This is precisely the current plight of China’s foreign trade development. Therefore, the essence of supply-side structural reform is to change the extensive development model through reforms and to transform the factors-driven and investments-driven development to the innovation-driven model. By doing this, we can improve the quality and efficiency of the foreign trade development, enhance the long-term innovation vitality and focus on the long-term and sustainable development of foreign trade. In summary, reducing “low-end and inefficient supply” and increasing “high-end and efficient supply” is one of the important connotations of the supply-side structural reform of foreign trade. That is to say, we must adopt structural reform focused on supply. This point focuses on foreign trade production area.

The supply-side structural reform of foreign trade can take place in the production sector, and from the purely “foreign trade” perspective, it can also take place in the logistics sector. To put it another way, it is changing the supply mode through the reform, specifically, the renovation and innovation in the supply structure. The new motivation for foreign trade growth depends on not only what is supplied but also how it is supplied. High-end and effective supply is significant for opening up and entering the new international market. However, how to do this will largely determine whether it can “cater” for the demands of the international market or not. According to the Heterogeneous Corporate Trade Theory, compared with domestic companies, export-oriented companies tend to have higher survival rates and stronger financing capacity because entering the international market requires more sunk costs. That means small- and medium-sized foreign trade companies are often limited by factors such as capital, technology and their own size. These reasons make it difficult for them to enter the international market. This point has also been confirmed in many theoretical and empirical studies. In a country’s export trade, large- and medium-sized enterprises with a small proportion often occupy most of the trade volume while the rankings of small- and medium-sized enterprises in foreign trade are not high (Fernandes et al., 2015). This is normal in the traditional trade pattern. However, with the rapid development of information and communication technology, especially the rapid development and popularization of the internet technology, the above situation is quietly changing. From the perspective of consumers’ demand, the importance of personalized and decentralized demand in the international market is increasingly prominent. Besides, the falling costs of entering the international market for small- and medium-sized foreign trade enterprises makes it easier to meet the personalized and decentralized demand in the international market. Undoubtedly, these two factors have provided new kinetic energy for the development of foreign trade. However, the application of these two favorable factors to the real trade depends on the reform and innovation on the structure of foreign trade supply, which can promote the development of foreign trade with new-style trade type. All in all, it is also the important connotations of the supply-side structural reform of foreign trade that
develop new-style trade types and diversify the structure of foreign trade supply mode while consolidating the traditional import and export pattern at the same time. This point focuses on foreign trade circulation area.

It should be noted that although the supply-side structural reform of foreign trade has a well-established theoretical basis, which mainly originated from the supply schools of the western economics circle, the current supply-side structural reforms for China’s foreign trade development are by no means simply following up and copying the existing western economic theories. Even if western supply theory has been developed over a long time, from the neoclassical theory with the core of Say’s Law to the new supply economics focusing on traditional supply economics, it cannot be fully applied to China’s practice in foreign trade development. The school of supply theory suggests to generally stimulate the input of factors of production via policies such as tax cuts to maintain growth, while the current supply-side structural reform of China and its practice and application in foreign trade is to adjust the structure based on the specific features such as production layout, industry nature, production efficiency and international market demand. That is why it is called supply-side structural reform, not supply-side reform. A report “Seven Questions for the Supply-Side Structural Reform” (Gong et al., 2016a), posted by the People’s Daily states that the Party Central Committee with Xi Jinping as General Secretary has comprehensively analyzed the long-term cycle of the world economy, the stage characteristics of China’s development and the interaction between them. With its result from the wisdom of the whole party and people, the idea of supply-side structural reform has been put forward from theory to practice. In this way, the reform is a comprehensively integrated innovation based on China’s practice and bears Chinese characteristics (Gong et al., 2016b). In the field of foreign trade, the basic starting point is to improve the quality of services and products. To improve the ability of sustainable development in foreign trade, China must implement effective reforms to eliminate the inappropriate configuration of production factors, expand the supply of high-end products and services during the structural adjustment, as well as satisfy changes of international market demand, including the content and methods of consumer demand. That is the essential connotation of the supply-side structural reform.

4. The goal of the supply-side structural reform in foreign trade

Speeding up the transformation and development of China’s foreign trade is one of the crucial goals of advancing the supply-side structural reform in China’s foreign trade. Based on the practice of China’s foreign trade development and the actual needs of the transformational development, the goals of the supply-side structural reform of foreign trade, specifically, can be summarized as the following four aspects:

(1) Improving products’ quality: when deeply integrated and participating in the division of global value chain dominated by multinational corporations in developed countries, China’s manufacturing industry has developed rapidly, narrowing the technological gap with developed countries in general manufacturing industry and becoming a strong country of large-scale manufacturing. However, quantity can never replace quality. Compared with Germany, the USA, Japan and other manufacturing powerhouses, China still has a long way to go. Although China can produce whatever other industrial powers can, the quality of Chinese products simply cannot be compared in terms of manufacturing quality. The Institute of Industrial Economics of CASS recently conducted a survey on the international competitiveness of China’s manufacturing industry, aiming to know clearly how big the gap is between China’s manufactured products and those of advanced economies (Zhang, 2014). The comparison shows that the selected Chinese manufactured products are highly competitive on the whole. However, in the production process of
the whole machine, many core parts and components have to be imported. Even in the simplest production links and phases, the quality and details of Chinese products are a far cry from those of developed countries, especially from the industrial powers. According to some researches, the rapid expansion of China’s export scale of finished products has not methodically promoted the quality of export products, but has led it to a continuous downward trend (Li et al., 2014). Therefore, one of the vital goals of the supply-side structural reform of foreign trade is to upgrade products’ quality and refinement levels, so as to transform the low-end supply to high-end supply.

(2) Elevating its status in the value chain: since the 1980s and 1990s, the international division system has been increasingly refined, and the specialized division of labor based on the global value chain has gradually become the dominant form worldwide. The rapid development of China’s foreign trade is the result of participation in the division network of the value chain with various forms of processing trade. In the division model of the global value chain, because of different characteristics of factor concentration in different links and stages, there are differences in profitability and additional value creating ability in specialized specific links, namely, the differences in status in division model of the global value chain. The academic circle usually uses the “smiling curve” to describe the division of global value chain. Processing, assembly and manufacturing are the links of low added value, located at the bottom of the curve. Countries and regions specialized in these stages and links apparently have lower levels and capacity on profitability when they take part in division and trade, while technology, R&D, marketing and after sales are links of high added value on both ends of the “smiling curve. Countries and regions specialized in these stages and links have stronger capacity on profitability and higher levels in the global value chain. Objectively, the essence of China’s foreign trade is actually to take part in the global value chain and specialized in the links and stages of low added value such as assembly, processing and simple manufacturing, so China is at the mid-low end of the global value chain. In academic words, this is called “low-end embedded.” When facing the profound changes in the current domestic and international environment, especially in the period that the cyclical and structural contradictions coexist and develop, we must elevate our status in the global value chain through supply-side structural reforms. Moreover, with the division in global value chain, the participation of a company or an industry is not only in order to obtain the trade in tasks, but more importantly, from a dynamic point of view, to obtain added value and the ability of elevating status in the chain.

(3) Optimizing the industrial structure: one of the momentous contents and directions of “rebalancing the economy (adjusting the structure and transform motives)” is to optimize and upgrade the industrial structure because the development of industry is the cornerstone of the development of foreign trade. After years of development as an open economy, China has made great strides in “improving” the industries. This can be seen that at the earlier stages, China has simply followed the development path of western developed countries. By actively accepting the technological transfer and diffusion from developed countries, China has developed rapidly in the general manufacturing industry, and even improved technology in the general manufacturing industry. But at the same time, we have to admit that in the high-end and advanced manufacturing industry, China is far behind the world’s manufacturing powers in terms of quality and technological innovation. Therefore, after “improving” its industries, China must begin the development at the
new stage of “strengthening” our industries to elevate our status. To realize this goal, China must improve the developing level of advancing and high-end manufacturing industry, transforming from a great power of quantity manufacturing to that of quality manufacturing. This is the optimization and upgrading of the internal structure within the manufacturing industry. In addition, a prominent feature of the current economic globalization is that the trend of service industry globalization has become increasingly evident, which is just like the manufacturing industry globalization. The level of development of service industry and trade has become an important indicator, which can show a country’s or a region’s ability of taking part in the global competition. However, the former development of foreign trade was mainly focused on the manufacturing sector, developing the trade and the industries by opening up in the field of manufacturing. On the other hand, China’s service industry, especially the modern productive service, is lagging behind that of developed countries. To a certain extent, the development of the advanced manufacturing industry must be supported and guided by advanced productive services. Therefore, to optimize and upgrade the industrial structure, we must also promote the development of the modern service industry, especially the advanced productive service industry. This is the optimization and upgrading of the inter-industry structure. That is one of the great goals of supply-side structural reform of foreign trade from the perspective of industrial structure.

(4) Diversifying supply methods: in the traditional product supply mode, China satisfies the global market demand by export and satisfies the consumer country’s market demand with FDI. However, neither exports nor FDI is “large scale.” In the comparative analysis of the characteristics in international trade and domestic trade, the “large volume” of a single order is often considered as one of the important characteristics of international trade. This is also the practical need to achieve “economy of scale” under the traditional pattern. However, with the continuous advancement of technique such as applied information technology and physical network systems, the traditional “scale-style” supply may experience complete disruption. This is because consumer demand will become increasingly decentralized and individualized. Of course, it does not mean that the pattern of large-scale supply in foreign trade is no longer vital, but it means that the model of supply in the future must be large scale, decentralized and individualized as well. Large-scale supply is still a crucial means for ensuring low cost, but from the perspective of consumer demand, we have to seize new growth points of consumer demand to satisfy the needs of “decentralization and individualization.” In the case of ensuring that the total volume has a scale effect, on the consumers’ demand for decentralization and individualization, China must combine the large scale, decentralized and individualized supply modes through dynamic configuration of modular supply. By doing this, China can transform their supply mode from focusing on single large orders to dealing with many individualized, decentralized and integrated orders. Consequently, from the perspective of the supply mode, to meet or even lead the trend of international consumer demand, China must implement a supply-side structural reform of foreign trade, change the traditional supply model, create more trading forms and diversify supply patterns.

5. The measures for the supply-side structural reform of foreign trade
The key to successfully promote the transformation and development of China’s foreign trade lies in the implementation of effective measures for the supply-side structural reform
of foreign trade. Basically, the supply-side structural reform of foreign trade includes the adjustments on the supply content as well as the supply mode and structure. Based on this realistic demand, China should focus on the following aspects in the supply-side structural reform of foreign trade:

(1) Paying attention to technological innovation: no matter what we do, to improve the quality of products by focusing on the original product areas, to elevate its status in the global value chain, or to adjust and optimize the industrial structure, the most fundamental, direct and efficient method is to upgrade technology. At present, Chinese companies do not have their own core technologies in most industry sectors due to fund shortages and limited intensity of technological transformation, which causes a serious lack of intellectual property and brands. In this connection, China must increase its funding in R&D and technological transformation to improve its technology. Improving technology is not only an important measure and direct path to promote the upgrading of the industrial structure, but also the only way, on which China can reform the traditional labor-intensive industries with applicable technology and high-tech to sharpen its competitive edge. Of course, with regard to technological innovation and advancement, the government cannot replace enterprises, or decide the allocation of projects or resources. Instead, it must let the market play a decisive role in the allocation of resources, reducing the use of outdated capacity through market competition and producing competitive new products and services. During this process, a powerful government should work on the transformation of services. Namely, the government should remove all barriers to institutional and ideological innovation, rewarding researchers with an adequate benefit compensation, making technology R&D meet the demand of economic development, making innovation achievements meet the development of the industry, and making innovative projects be transformed to productivity. In that case, technology, knowledge, labor, information, management, capital efficiency and profitability can be upgraded. China boasts a wealth of science and education, with solid foundation in rich resources for science and education to provide the necessary support to technological innovation. It is believed that as long as the reform measures are conducted properly, enterprises or individuals, acting as the economic units, can become real innovators. With the potential for social innovation and vitality, economic units can play an important role in enhancing technology’s effect on the transformation of foreign trade during the reform of technological innovation.

(2) Paying attention to craftsmanship: as mentioned above, one of the important directions for the transformation of foreign trade is to consolidate the advantages of the traditional development model. In other words, China should rely on the improvement of quality and refinement, specializing, perfecting and fully knowing its traditional industries. At present, from the perspective of supply and demand, it is more than a problem of excess products but a structural imbalance of products. Specifically, the supply of low-end products is greater than its demand, while the supply of high-end products is significantly insufficient. The supply-side structural reform of foreign trade is to open up the international market and meet the medium-and-high end demand. We can steadily develop by occupying the high-end market. According to the existing international experience, the production of high-quality products needs to rely on the craftsmanship. Craftsmanship is a reason why some countries can become industrial powers, such as Germany and Japan. In the 2016 government work report of China, “craftsmanship” was mentioned for the first time. For improving foreign trade products and services, undoubtedly, vigorously advocating craftsmanship is an effective way to promote the supply-side structural
reform of foreign trade. Basically, the supply-side structural reform of foreign trade is to improve the quality and production efficiency of foreign trade products and service supply system. Attention to details, be patient and focused, and pursuing of excellence is the essence of this spirit. Just as the “People’s Daily” stated (Li, 2016): while not every person of craftsmanship is an entrepreneur, most successful entrepreneurs are of this good spirit, which represents the spirit of an era and the attitude of firmness, diligence and perfectionism. It can thus be seen that the craftsmanship is closely related to the supply-side structural reform in foreign trade. It is a pivotal path for China’s foreign trade transformation based on the supply-side structural reform of foreign trade to improve the quality and profitability of products, and to increase the supply of differentiated as well as high-end products and services with the spirit of craftsmanship. So China should pay attention to cultivating craftsmanship.

(3) Paying attention to institutional innovation: there is no doubt that technological innovation and craftsmanship are the most straightforward and effective measures to promote the transformation of foreign trade, but these measures should not be just publicized. More importantly, the appropriate institution is the prerequisite of inducing these measures. After all, the lack of the impetus and the vitality of technological innovation as well as the lack of spirit of craftsmanship actually comes from the constraints of institutional mechanism. Therefore, it is necessary to create an institutional mechanism that is more suitable or more conducive for innovation. As some scholars have pointed out, the lack of technological innovation capability of Chinese enterprises is indeed a prominent challenge. However, it is the institution rather than the lack of innovation that constrains the technology. To put it another way, Chinese enterprises have inadequate technology and ability for innovation mostly because the institutional mechanism does not stimulate innovation effectively. A good institution can make resources flow to new areas and industries of innovation. In recent years, academics and government departments have become increasingly aware of the valuable spirit of craftsmanship of industrial powers such as Germany and Japan. We have talked about their attitudes of excellence, and how well entrepreneurs with craftsmanship can adhere. However, in fact, it is the institutional logic behind their craftsmanship that deserves to be studied. In-depth institutional reasons such as lifelong employment, powerful labor unions, effective intellectual property protection and corporate governance systems are the foundation and cultural background for the formation of excellent craftsmanship. Thus, besides technology, China also needs institutional reform and innovation. In terms of institutional improvement, there are three things that should be focused on in the reform ahead: solid intellectual property protection, an efficient foreign trade management system and more open fields. Solid intellectual property protection is the most important institutional guarantee for aggregating global innovation factors and inspiring enterprises to innovate; an efficient foreign trade management system is a further requirement for the facilitation of trade and investment as well as the evolution of the global division of labor; the expansion of the open industries is essential to expand market access, including the opening up of high-end manufacturing and service industries, so that a variety of better products and services can be created in an environment with more competition.

(4) Paying attention to model innovation: China’s supply mode of products and services should also urgently seek innovation. The progress of technology and the cultivation of craftsmanship are variables that change slowly, while the innovation of foreign trade management model is a variable that can change rapidly. This has long-term
effects on industries and can create new momentum for foreign trade growth. Under the tremendous pressure of the slowdown in the growth of foreign trade, the innovation of foreign trade management model can stabilize the foreign trade growth effectively. So far, this point of view has been proved by certain new trade industries. Some new business models such as market procurement, cross-border e-commerce and overseas warehousing have achieved initial success. The Chinese Government should strongly support the innovation of these new trade industries. For cross-border e-commerce, the regulatory model of inspection, quarantine, declaration and release of products should be built. Also, the government should research new policies on the management model of custom clearance that are appropriate to this new trade industry. For market procurement, there have been some experimental regions in China. If everything goes well, the pilot projects will be expanded and the successful experience will be popularized. In promoting the development of foreign trade comprehensive service enterprises, it is necessary to formulate pilot programs as soon as possible and introduce policies and measures to support the development of these enterprises.

References

About the authors
Erzhen Zhang is Professor of Economics at Nanjing University. His principal research interest is the theory and practice of the open economy. Erzhen Zhang is the corresponding author and can be contacted at: zrz@nju.edu.cn
Xiang Dai is Professor at the Government Auditing Institute of Nanjing Audit University. His main research areas are open economic theory and practice, global value chain and China’s industrial development.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
"Das Kapital and political economy in the broad sense: a review on Wang Yanan’s research"

Lu Jiang
School of Marxism, Zhejiang University, Hangzhou, China, and
Yang Ge
School of Economics, Nanjing University, Nanjing, China

Abstract

Purpose – Wang has focused on the relationship between "Das Kapital" and the political economy in the broad sense. Numerous ideas covering the political economy in the broad sense are involved in the overall structure of "Das Kapital", methodology of historical materialism and analyses of the historical fate of capitalist system. The paper aims to discuss these issues.

Design/methodology/approach – In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs, marking progress in the economic development of society (Wang, 2007b). Historical materialism provides a new, scientific and objective explanation for understanding the dialectical development laws of society. It is crucial for constructing the theoretical system of a political economy in the broad sense. It could be said that it is the key to solving the puzzle of the historical course of social development.

Findings – Today, economic relations between the world’s top two economies have merged with each other. How can two countries with different systems trade with each other so well? These questions can no longer be answered with traditionally narrow political economic theory. The authors have to seek these answers from the perspective of a political economy in the broad sense.

Originality/value – Numerous ideas covering the political economy in the broad sense are involved in the overall structure of "Das Kapital", methodology of historical materialism, and analyses of the historical fate of capitalist system.

Keywords "Das Kapital", Wang Yanan, Political economy in broad sense

Paper type Research paper

What are the key objects studied in "Das Kapital"? This question has long existed in academic circles. In the preface to the first volume of his book, Marx said, "In this book I have to examine the capitalist mode of production, and the conditions of production and exchange corresponding to that mode. Up to the present time, their classic ground is England" (Marx and Engels, 2004). Marx hoped to reveal the economic operation law of the capitalist system, so the economics studied in "Das Kapital" is defined as a political economy in the narrow sense. By 1867, Marx and Engels had completed many works, including Economics and Philosophic Manuscript of 1844, The German Ideology and the Communist Manifesto. From the perspective of logical structure and methodology, the research objects of these works were not limited to the scope of the capitalist economic system. Characteristics of political economy in the broad sense were also included. While Marx did not clearly propose the concept of a political economy in the broad sense, this does not mean that Marx did not
understand the importance of a political economy in the broad sense for dissecting the general rules of human social development. Thus, Marx did not oppose Engels’s opinions in Anti-Dühring. Engels said, “Political economy, however, as the science of the conditions and forms under which the various human societies have produced, exchanged and distributed their products – political economy in this wider sense has still to be brought into being” (Marx and Engels, 2009d). The well-known Chinese scholar Wang Yanan has contributed much to the study of political economy in the broad sense. He once publicly suggested, “It has been my long-held wish to do research on political economy in the broad sense, and I have made preparations for this over several years” (Wang, 2007a). Wang has focused on the relationship between Das Kapital and the political economy in the broad sense. Numerous ideas covering the political economy in the broad sense are involved in the overall structure of Das Kapital, methodology of historical materialism, and analyses of the historical fate of capitalist system.

1. The possibility of taking Das Kapital as the starting point for studying political economy in the broad sense

According to the definition, if we look at history’s natural development process, the starting point for studying political economy in the broad sense should begin with primitive society, followed by the studies of slave society, feudal society, capitalist society and communist society. This research order is in accordance with Marx’s theory of “five types of social formation” and it can better fit the history and logic. The other basis of the research is Marx’s theory of “three types of social formation,” which classifies societies into human-dependent society, substance-dependent society and the society in which people can develop comprehensively and freely. From the viewpoint of human liberation, this research method values historicity and also embraces various social systems. Therefore, this theory is the best choice for foundation of the study of political economy in the broad sense. Where is the entry point for political economy in the broad sense? As is known to all, Das Kapital is mainly about the economic operation of capitalist systems, so there is no conflict when analyzing the capitalist economy with it. However, what can be the reference point for researching the economic law of non-capitalist systems? Non-capitalist systems include social formations before and after the capitalist system. Is it possible to begin with the commodity stage just as in Das Kapital? Wang’s answer is “yes,” “The question is how to interpret and analyze it comprehensively” (Wang, 2007a). It is convenient to study China’s economic operation law from the aspect of the commodity because before its liberation, China was in a semi-colonial and semi-feudal society. “Regarding the economic analyses of the feudal society, slave society and even the end of primitive society, I think, even if it is not necessary to start from the value relationship of commodity, at least it should be started from the labor formation that is closely related to the value of the commodity” (Wang, 2007a). According to Wang, it is possible to regard Das Kapital as a starting point for research on political economy in the broad sense.

As a work that focuses on general laws of capitalist social economic operation, Das Kapital contains a wealth of ideas on political economy in the broad sense using both theoretical logic and historical logic. Wang states, “In his famous book, What Are the Friends of the People, Lenin emphasised that, in Das Kapital, Marx had drawn the economic relation from all social relations, and then had drawn the productive relation from the economic relation, as the foundation for the entire superstructure. Further to this, he set a productive relation to a certain level of productive forces. Marx had not only correctly handled the relationship between various social phenomena and demonstrated the regularity of their relationship, but also had shown an inevitable law that the social formulation would evolve to a superior one without thinking about any factors except social and productive relations” (Wang, 2007b). Furthermore, he said, “Capitalist society is the most developed and most complex production organization in history, so the categories that express its various relationships, the understanding about its structure, as well as structures and the production relations that have perished all provide a possibility to
comprehend it thoroughly” (Wang, 2007b). These concepts are the indispensable components of political economy in the broad sense. In another example, on the commodity economy, Marx studied the duality of goods from the duality of labor, and then put forward the law of surplus value. A product is of use value and exchange value, and the social and economic relation it implies can be deduced from the relation of the commodity economy.

Another reason to consider Das Kapital as a starting point for the study of political economy in the broad sense is the evolution of the labor division theory. With a historical logic of labor division theory, the book finds the connection between the social formations before and after the capitalist society. “How far the productive forces of a nation are developed is shown most manifestly by the degree to which the division of labor has been carried,” said Marx in German Ideology, “Each new productive force, insofar as it is not merely a quantitative extension of productive forces already known (for instance the bringing into cultivation of fresh land), causes a further development of the division of labor” (Marx and Engels, 2009a), “The division of labor inside a nation leads at first to the separation of industrial and commercial labor from agricultural labor, and hence to the separation of towns and countries, and to the conflict of their interests. Its further development leads to the separation of commercial labor from industrial labor. At the same time through the division of labor inside these various branches, various divisions develop among the individuals co-operating in definite kinds of labor. The relative position of these individual groups is determined by the methods employed in agriculture, industry and commerce.” “The various stages of development in the division of labor are just so many different forms of ownership, i.e. the existing stage in the division of labor determines also the relations of individuals to one another with reference to the material, instrument, and product of labor” (Marx and Engels, 2009a). In chapter five, volume three of Das Kapital, Marx said, “The rise in the rate of profit in one branch of industry is the result of the increase of the productive power of labor in another […] Such a development of the productive power is again traceable in the final analysis to the social nature of the labor engaged in production; to the division of labor in society; and to the development of intellectual labor, especially in the natural sciences. What the capitalist thus utilizes are the advantages of the entire system of the social division of labor” (Marx and Engels, 1974).

These arguments demonstrate the status of the social division system of labor in Marxist economics. In fact, the division of labor can indeed be a main line throughout the study of political economy in the broad sense. Anti-Duhring divides the social division of labor into natural division of labor, spontaneous division of labor, and conscious division of labor, which corresponds to natural economy, commodity economy, and product economy. At the same time, they also coincide with human dependence, human independence and human comprehensiveness.

2. The research methods of Das Kapital: applicable to the study of political economy in the broad sense

Research methods found in Das Kapital are the fundamental guarantee of the rigor of its theoretical system. Since its publication, many scholars have tried to overthrow the economic system theories constructed by Marx, but all failed. Why? The reason is that Marx’s research method is scientific. “As a concept of historical materialism, a key to the study of human social history, Das Kapital has changed from a scientific hypothesis into a universal truth that can be applied to all social forms” (Wang, 1959). In practice, historical materialism and dialectical materialism are the basic methods for studying economic activities in society in various historical forms and they are the only accurate methods. Both Das Kapital and political economy in the broad sense are inseparable from historical materialism. “Lenin once stated that if it is said that Marx has not put forward professional dialectics, his Das Kapital is the most vivid dialectics; or people may regret that Marx did
not leave behind a special work on historical materialism, while in fact, *Das Kapital* has made up for this deficiency with extremely rich content and variety" (Wang, 2007b).

What is historical materialism? Marx answered this in the preface to *A Critique of Political Economy*. "At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution. The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure [...] In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society" (Wang, 2007b). Historical materialism provides a new, scientific and objective explanation for understanding the dialectical development laws of society. It is crucial for constructing the theoretical system of a political economy in the broad sense. It could be said that it is the key to solving the puzzle of historical course of social development.

In *Das Kapital*, the dialectics is shown from the beginning to the end, during its research and narration. According to the dialectical principle of materialism, Marx launched a critique to bourgeois political economy and established a new theoretical system. Wang pointed out that according to *Das Kapital*, capitalist commodity production was developed on the basis of the production of small commodities, and capitalism bred the material and human conditions for realizing socialism. For example, Marx's rigorous analysis of dialectical logic can be shown when labor-products become goods, certain goods become currency, currency turns into capital, and the process of capital movement leads to its own *aufheben* of capitalist system when capitalism finally perishes. Of the most essential and fundamental requirement for historical materialism, its essence and features should be understood from the overall capitalist economic phenomena, economic relations in social lives and fundamental productive relations should be further explored. Further to this, two aspects should be considered: the basic productive relation and social productivity, and the economic foundation and superstructure. This enables the investigation of the law of economic movement in an overall capitalist society.

When applied to the analysis of economic issues, historical materialism can scientifically explain the nature and inherent laws of things. “Never has Marx used any factors except these productive relations to make explanations, but he has made it possible for us to see how commercial organizations of social economy have developed, how they become capitalist organizations and consequently created two opposing classes – the bourgeoisie and the proletariat (in the area of productive relations), as well as how people improve labor productivity and bring the factors that are in an irreconcilable contradiction with the foundation of this capitalist organization into the society” (Wang, 2007b). The categories of political economy such as commodities, currencies and capital all contain specific attributes of productive relations. Therefore, in the system of political economy, different specific people examined are the personification of specific economic categories. They are bearers of certain class relationships and interests. This research method thus reveals the general laws of human social development. “With regard to the discovery and study of the general law, the author of *Das Kapital* did not explore along the path of historical development, but rather explored a highly developed social formation. In other words, by analyzing capitalist social formation and its productive relations, Marx has provided clues to understanding all social forms in history and found general development rules” (Wang, 2007b). Wang further stated, “Because of its strict and complete scientism and extremely revolutionary nature, the *Das Kapital* system, which fully embodies historical materialism and the dialectics, made a decisive effect on the later study of political economy” (Wang, 2007b). We believe that “the later study of
political economy” mentioned here certainly includes political economy in the broad sense. Essentially, the research methods of *Das Kapital* are consistent with the research methods used for political economy in the broad sense.

3. The three-volume structure: concepts of political economy in the broad sense in *Das Kapital*

The three-volume structure of *Das Kapital* has its own particularity, especially as the first volume was edited by Marx himself. Fully reflecting the development of the history of the capitalist system, it contains numerous ideas covering the political economy in the broad sense. Consisting of seven parts, the first volume discusses the production process of capital. Beginning with prehistory of capital and ending with its future, the main body, including five parts, is concerned with how to produce capital. In chapter 24, Marx analyzed the historical fate of capital in depth: “The monopoly of capital becomes a fetter upon the mode of production, which has sprung up and flourished along with it. Centralization of the means of production and socialization of labor at last reach a point where they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist private property sounds. The expropriators are expropriated” (Marx and Engels, 2004). This points out that the capital production process is essentially the production process of surplus value, which is the fundamental mystery of capitalist economic operation. The capitalist economic system is only a particular stage of human social development. Once its historical conditions disappear, the system itself will cease to exist. In volume two, the first and the second parts analyze the individual capital movement; the third part focuses on social capital movement; the last part elaborates on the necessary ladder of research on individual capital movement stages to research on the capitalist overall process. Volume 3 mainly discusses the distribution of surplus value. The first three parts emphasize the conversion of surplus value into profit, the conversion rate of surplus value into profit rate, and the conversion of different rates of profit from different departments into general profit rate, thus forming the average profit rate and the productive prices, as well as the law of the falling tendency of the rate of profit. The fourth, the fifth and sixth parts discuss the distribution of surplus value.

With regard to the general three-volume structure of *Das Kapital*, Marx has thoroughly clarified the most complex and subtlest form of exploitation, namely, the form of surplus value. He has also corroborated that, “the history after the primitive society is a history in which the exploiting class exploits the exploited class” (Wang, 2007b). In the *Introduction to A Contribution to A Critique of Political Economy*, which was completed in 1857, Marx proposed the outline of the political economy that he intended to write about. “The disposition of material has evidently to be made in such a way that: Section One – comprises general abstract definitions, which, therefore, appertain in some measure to all social formations, but in the sense set forth earlier. Two - the categories which constitute the internal structure of bourgeois society and on which the principal classes are based. Capital, wage labor, land ownership and relationships among them. Urban areas and rural areas; the three large social classes; exchanges between them; Circulation. The (private) credit system. Three – the state as the epitome of bourgeois society. Analysis of its relations to itself; The ‘unproductive’ class; Taxes; National debt; public credit; Population; Colonies; Emigration. Four – international conditions of production. International division of labor; International exchange; Export and import; Rate of exchange. Five-world market and crisis” (Marx and Engels, 2009c). This writing plan is not in contradiction with Marx’s six-part plan, which refers to: capital (including some introductory chapters); land ownership; wage labor; countries; international trade; and world markets. This wide system actually not only goes beyond the political economy in the narrow sense as we understand, but also contains the characteristics of a political economy in the broad sense.
4. Conclusions and further reflection

“And even when a society has got upon the right track for the discovery of the natural laws of its movement […] it can neither be clear by bold leaps, nor remove by legal enactments, the obstacles offered by the successive phases of its normal development. But it can shorten and lessen the birth-pangs” (Marx and Engels, 2009b). This is stated by Marx in the preface to “Das Kapital.” That is to say, the economic and social form is a process that does not follow the will of the people but is in accordance with the inevitable law. This is the full expression of the relationship between “Das Kapital” and political economy in the broad sense as explained in this article. Of course, the history of the world’s development is very complex, and the development of the human society has not been strictly in accordance with Marx’s basic assumptions. For example, Marx said that in the first phase of communism, there should be a tradition or trace of capitalism – but in some instances, human socialism skipped the development stage of capitalism. This situation happened not only in the USSR, but also in China. People cannot help asking how they could achieve such a leaping development. After its reform and opening up, China has established a socialist market economic system, but how can a socialist country develop a commodity economy? Today, economic relations between the world’s top two economies have merged with each other. How can two countries with different systems trade with each other so well? These questions can no longer be answered with traditionally narrow political economic theory. We have to seek these answers from the perspective of a political economy in the broad sense.

References


Further reading


Corresponding author

Yang Ge can be contacted at: GEYANG@NJU.EDU.CN
How does the urban–rural income gap affect the quality of China’s economic growth?

Baoping Ren and Xiaojing Chao

School of Economics, Xibei University, Xi’an, China

Abstract

Purpose – Based on the theoretical definition of the quality of economic growth as well as the availability and reliability of the given data, the purpose of this paper is to build an evaluation system of a regional economic growth quality on three levels: conditions, processes and results.

Design/methodology/approach – From the perspective of economic quality, this paper offers a theoretical interpretation on how the urban–rural income gap affects the quality of economic growth and takes an empirical test on the sample panel data from 30 provinces and regions through difference GMM and system GMM models.

Findings – The results show that the excessively large income gap will influence economic growth in terms of the foundation, operation and the outcome, thereby, restricting the quality of economic growth. In addition, investments in human and physical capital and improvements in terms of transport infrastructure, industrial structure and economic openness play an active role in economic growth quality, whereas government expenditure scale, financial development and the deviation of industrial structure have a negative effect.

Originality/value – There has been a substantial amount of experience and evidence on the research about China’s income distribution and the quantity of economic growth, whereas there are relatively fewer discussions about the income distribution and the quality of economic growth. This paper, based on what has been mentioned above, tries to give a theoretical interpretation and an empirical test to describe the relationship between urban–rural income gap and the quality of economic growth from the quality point of view.

Keywords Urban–rural income gap, Human capital investment, Quality of economic growth

1. Introduction and relevant literature review

China has witnessed a rapid economic growth over the past four decades since the reform and opening-up, proposing an alternative economic model with Chinese-characteristics to the world (Beijing consensus). However, there are also some structural imbalances presenting in the fast-paced development of the national economy. Large-scale empirical research studies indicate that, since the 1990s, the urban–rural income gap reflects the main income gap in China to a great extent, which has been expanding continuously. Taking 2016 as an example, the urban–rural income gap was RMB 21,253, and the urban–rural income ratio was 2.72: 1 (Lin et al., 1998; Chen et al., 2010).

Current literature mainly discusses the income distribution from the perspective of the quantity of economic growth, forming five major viewpoints. The first one is the incentive theory of capital accumulation. This theory holds that the excessively large income gap restricts the investment opportunities for the poors and discourages them from wealth accumulation, which is unfavorable to the quantity of economic growth (Banerjee and Newman, 1993). The second is the division of labor theory. This theory states that lower-skilled people prefer no division of labor. A balanced structure of income distribution promotes participation and cooperation and hence boosts the economic growth in quantity (Fishman and Simhon, 2002).
The third is consumption demand. This viewpoint believes that the excessively large gap in income distribution will lower consumer demand and therefore limit the quantity of economic growth (Murphy et al., 1989; Rudai and Shi'e, 2007). The fourth is human capital investment. When the capital market is not well developed, and the human capital investment is indivisible, the large gap in income distribution will provide fewer opportunities for the poor to receive education. They tend to raise more children but spend less on physical and human capital investment, holding up the quantity of economic growth (Galor and Zeira, 1993; Croix and Doepke, 2004; Lu et al., 2005). The fifth is in terms of political economy. The income gap affected by revenue and social conflicts may harm the quantity of economic growth (Yin et al., 2005).

A comprehensive definition of economic growth should give equal priority to external quantity and internal quality. With increasing concerns about the quality of the economic growth at the end of the twentieth century, the research on the quality of economic growth has become a hot topic in academic economic analysis. Regarding to income distribution, we not only consider its mechanisms in the quantity of economic growth but also (its) internal influences on the quality of economic growth. Barro (2002) considers that the quality of economic growth is a wild-ranging concept with respect to the quantity of economic growth. International empirical research results show that the expanding income gap not only has a prominent influence on the quantity of economic growth, but closely connects with other variables such as economic structure, educational level, crime rate, suicide rate and the proportion of religious groups. Chinese empirical research studies indicate that the expansion of the income gap has a major impact on factors such as industrial structure, economic efficiency, social welfare, etc. (Tian et al., 2009). Suggestions for further reforms of income distribution system clarifies that the general requirements for further reforms of income distribution system are to optimize the income distribution structure and to give full play to the function of the redistribution system. There has been a substantial amount of experience and evidence on the research about the issue of China’s income distribution and the quantity of economic growth, whereas there are relatively fewer discussions about the income distribution and the quality of economic growth. This paper, based on what has been mentioned above, tries to give a theoretical interpretation and an empirical test to describe the relationship between urban–rural income gap and the quality of economic growth from the quality point of view.

2. Theoretical interpretation of the influence that the urban–rural income gap has on the quality of economic growth

Theoretically, the quality of economic growth is a standard value judgment. The current research on the quality of economic growth includes both narrow and broad perspectives. Scholars who hold the narrower view believe that the quality of economic growth refers to its efficiency, namely, the ratio of the factor input in consumption and the total output of the economic activities (Kamayev, 1983; Wang, 2000; Liu, 2002). Scholars with the broader perspective emphasize that the quality of economic growth is related to the quantity of economic growth, including education, health, environment, law, order and many other aspects (Thomas and Wang, 2001; Barro, 2002; Liu, 2007; Chao and Ren, 2011).

Corresponding to the quantity of economic growth, the quality of economic growth describes the nature and laws of economic growth, which not only focuses on its dynamic process but also on the initial conditions as well as the final results of economic growth. That is to say, the quality of economic growth is defined through three levels: conditions, processes and results. Concerning the conditions of economic growth, it reflects the basic situation of the overall quality of the national economy. When it comes to the process of economic growth, it refers to the basic situation of the economic growth structure. In terms of the result of economic growth, it refers to the effectiveness of economic growth and the improvement of social welfare.

According to system theory, the economic growth system will generally show an orderly and high-quality upward trend as the quantity of economic growth reaches a certain stage...
where the basic conditions of the economic growth is well developed, all the factors corporate with each other, as well as the relationships among various interest groups and that between the interest groups and the eco-system are well balanced. The urban–rural income gap will not only, through investment channels, restrict the improvement of the basic conditions of economic growth, but will also have an impact on both the process and the results of economic growth as well.

2.1 The influence that urban–rural income gap has on the quality of economic growth
The prerequisite of economic growth is related to the basic conditions and capability of a country, by which it can effectively develop and utilize diverse resources in the long run and hence create national wealth, organically combining various internal elements of a national or regional economic system. High-quality economic growth is based on the quality of national economy, and human capital investment plays an instrumental role in the capability of economic growth. Massive theoretical and empirical research studies have demonstrated that the poor's tend to raise more children but spend less expenditure on education in the case of excessively large urban–rural income gap, degrading the average educational level of a society (Galor and Zeira, 1993; Croix and Doepke, 2004). This means that the excessively large urban–rural income gap will hinder rural residents from human capital investment and restrict the capability of economic growth, which might be detrimental to the quality of economic growth.

In China, the impact of resource constraints is different in the urban and rural areas, in terms of individual education and human capital investment. To a large extent, a person's birthplace will determine his or her access to education and skills, resulting in the severe urban–rural differences. The empirical research studies conducted by Yang et al. (2008) and Lu et al. (2005) indicate that the excessively large urban–rural income gap not only restricts physical capital investment but also affects the acquisition of education and human capital investment. Currently, the working-age population in China shows a constant downward trend, whereas the dependency ratio of the population is continuously rising. As the era of unlimited labor supply and the demographic dividend coming to an end, improving the quality of the laborers through human capital investment will become the basic condition for advancing economic operations and the important content of the quality of economic growth.

2.2 The influence that urban–rural income gap has on the structure of economic growth
Economic growth manifests itself as the interaction of the diverse elements in the entire economic system. From the perspective of demand structure, when income distribution is unequal, the lower-income group with relatively high marginal propensity to consume has limited purchasing power. Conversely, the high-income group with a relatively low marginal propensity to consume tends to show a preference to buy luxury consumer goods, inhibiting the aggregate consumption demand (Murphy et al., 1989; Rudai and Shi’e, 2007). At present, expenditure on education and medical treatment conducts increasing influence on inhabitant consumer behavior in China. Low-income individuals have to spend a large amount of their increased income on education and medical investment, relatively reduce other types of consumption and further constrain the consumer demand to some extent. This means that the expanded urban–rural income gap will limit consumer demand, bringing about the imbalance of the demand structure and therefore inhibiting the promotion of the quality of economic growth.

From the angle of dual economic structure, when there is an excessively large urban–rural income gap, the rural residents at a lower wealth level, instead of choosing human capital investment, tend to work in the traditional department as unskilled labor force, which not only hampers the transition from unskilled labor force to skilled labor force, and the transformation of dual economic structure, but is also detrimental to the production efficiency of the traditional production department (Chao and Shen, 2014). Schulz (1987) believes that traditional sectors of
any country are promised to contribute significantly to its economic growth. The reason why they cannot become a new source of economic growth lies in their low production efficiency. The production function of the traditional sectors will be revolutionized if the labor force of traditional sectors could get promoted. Consequently, the expanded urban–rural income gap will restrict the promotion of the labor force and hinder the transformation of the dual economic structure, thereby, affecting the quality of economic growth.

2.3 The influence that urban–rural income gap has on the results of economic growth

The economic growth theory focuses more on the improvement of the overall residents’ welfare through the economic growth, but not just the process of economic growth. It could upgrade people’s income levels as well as people’s physical conditions in terms of basic necessities of life such as food, clothing, housing and travel. It also provides the residents with better health care and higher education quality, in an effort to improve individuals’ quality. Only when the overall welfare level of the residents is improved can the goal of the economic growth is finally realized. Nevertheless, to improve the welfare level not only depends on the overall level, but also lies in the distribution of the economic growth results among residents. Economic growth would not be of high quality if the residents’ welfare level is improved in general, whereas the distribution of economic growth results is deteriorated. The continuous inequality of income distribution not only does harm to the economic results sharing of a nation, but also restrains the economic growth through various mechanism and channels. Only when the fruit of economic growth is shared by the majority can we regard it as high quality. Through conclusive analysis, Defen (2002) believes that the residents’ well-being is the core of the quality of economic growth. Regarding to the essence of development, the ultimate goal of pursuing high-quality economic growth is to provide people with better living conditions. Humans are the subject of both economic growth and development. In this connection, it could be concluded that excessively large urban–rural income gap is detrimental to develop the inclusiveness of economic growth and hence affects the quality of economic growth.

3. The empirical test of the influence that urban–rural income gap has on the quality of economic growth

On the basis of the above theoretical analysis, this paper adopts the panel data from 1998 to 2015, which are collected from 30 provinces and regions in China (excluding Tibet, Hong Kong, Macao and Taiwan), and further examines the relationship between urban–rural income gap and the quality of economic growth in China.

3.1 The evaluation of the quality of China’s economic growth

The key to the research on the relationship between the urban–rural income gap and the quality of economic growth is the measurement of the quality of regional economic growth. This paper uses the evaluation system of the economic growth quality proposed by Chao and Hui (2009), Chao and Ren (2011) as references. Based on the theoretical definition of the quality of economic growth as well as the availability and reliability of the given data, the research builds an evaluation system of a regional economic growth quality on three levels: conditions, processes and results. Specifically, the conditions of economic growth include the average years of education, the proportion of higher education population, the proportion of research and development in GDP, the number of patent applications processing, the proportion of social expenditure as well as education expenditure shared in the fiscal expense. The economic growth structure chooses the following statistics as the basic measurement index: the ratio of the output value between the tertiary industry and the secondary industry, structural deviated Theil index, consumption rate, investment rate, the proportion of deposit and loan balance from financial institutions in GDP and the
The proportion of total imports and exports in GDP. The results of economic growth select the following statistics as the basic measurement index: the growth rate of total factor productivity, capital productivity, labor productivity, energy consumption of total output value per unit area, air pollution degree of per unit output, wastewater discharging of per unit output, population-weighted urban–rural income ratio and Engel coefficient. Therefore, it provides 21 basic indicators as the index for evaluating the quality of economic growth in various regions of China. Data from 1998 to 2015 were selected as the sample, all of which derive from China Compendium of Statistics from 1949 to 2008, Data of Gross Domestic Product of China (1952–2004), the China Statistical Yearbook, Almanac of China’s Population and the China Statistical Yearbook on Science and Technology.

This paper mainly adopts principal component analysis, which inputs the equalized covariance matrix as the principal component and selects all the coefficients of basic measurement from the first principal component as the corresponding weights. Then the quality of economic growth in various regions of China from 1998 to 2015 is measured, the results are shown in Figure 1[1].

Figure 1 shows the changes in indexes in the quality of economic growth in various regions of China from 1998 to 2015. On overall, since 1998, the quality of economic growth in various regions of China has been promoted to some extent. Nevertheless, in the lens of the regions, there are huge differences among diverse provinces, cities and autonomous regions in terms of the quality of economic growth. In this connection, research studies should be considered on the basis of conditions, processes and results, in an effort to study the factors affecting the quality of regional economic growth. As mentioned in the theoretical analysis, the difference in urban–rural income gap is also a predominant factor.

3.2 Setting econometric model and variables

The continuity of the quality of economic growth requires introducing the first-order lags in the econometric model. Therefore, we set the dynamic panel data model revealing the relationship between urban–rural income gap and economic growth quality as follows:

\[
QEG_{it} = z_0 + z_1 QEG_{i,t-1} + z_2 ine_{it} + z_3 edu_{it} + z_4 ine_{it} \cdot edu_{it} + \sum_{j=1}^{S} \beta_j X_{j,t} + \lambda_i + \epsilon_{it}.
\]

Figure 1. The quality of economic growth in China, 1998–2015.
In the model, the subscripts \( i \) stand for the regions \( (i = 1, 2, \ldots, 30) \); and the subscripts \( t \) represent the years \( (t = 1998, 1999, \ldots, 2015) \); \( \lambda \) represents the permanent effects of individuals; \( \epsilon \) represents stochastic errors. We use \( \text{QEG}_{it} \) to reveal the level of the quality of economic growth in various regions. \( \text{QEG}_{it-1} \) means the level of economic growth quality in region \( i \) during a specific \( t-1 \) period. \( \text{ine} \) stands for the urban–rural income gap shown through the ratio of urban–rural per capita income. \( \text{edu} \) represents human capital investment measured by the average education length. The interaction between the urban–rural income gap and human resource is presented by \( \text{ine} \cdot \text{edu} \), the interaction item of the two factors. Furthermore, since there are many other factors that are likely to affect the quality of economic growth, it is also required to control some possible variables. \( X \) is a collection of control variables. We follow the relevant report on the quality of economic growth by first controlling the variables affecting the operating conditions of the quality of economic growth, including \( \text{inv} \), the investment represented by capital stock; \( \text{gov} \), government expenditure scale represented by the proportion of government expenditure in GDP, \( \text{highway} \), the transport infrastructure represented by the highway freight volume and \( \text{finance} \), the scale of financial development represented by the proportion of loan balance from financial institutions in GDP. Furthermore, we control the variables affecting the process of economic growth, including \( \text{indop} \), the industrial structure upgrading represented by the ratio of the output value between tertiary industry and secondary industry, the reasonable ration of the industrial structure represented by Theil index and \( \text{private} \), the degree of non-nationalization represented by the proportion of fixed assets investments, as well as \( \text{open} \), the extent of economic openness represented by the proportion of both imports and exports in GDP (Table I).

### 3.3 Statistics and demonstration

This paper selected the statistics from 1998 to 2015 as the sample interval. The reasons are as follows: notwithstanding reform and opening-up policies have been implemented for more than three decades, the urban–rural income gap in China has rapidly expanded since the middle and the late years of the 1990s; and the availability of relevant statistics on the primary index of the economic growth quality is limited. Besides, due to the low quality of Tibet data, this paper selected panel data from 30 provinces, cities and autonomous regions for empirical tests.

Data used in this paper are all obtained from the China Statistical Yearbook, the China Compendium of Statistics 1949–2008, Data of Gross Domestic Product of China (1952–2004) and the Almanac of China’s population over the years. Since the revision of historical GDP data for most parts started from 1993, the data from 1998 to 2004 used in this paper were collected from the revised version of Data of Gross Domestic Product of China (1952–2004). Data for other years derive from the corresponding annual versions of Almanac of China’s population. Table II shows the basic statistics of major variables.

### 3.4 Methods and results of variable inspection

Economic development is a systematic process. From the aspects of condition, process and result, the quality of economic growth is unavoidably interrelated with factors such as human capital investment, physical capital investment, the degree of economic openness and other factors; and it is most likely that there is endogeneity between variables of the models. Difference GMM (DiffGMM) and system GMM (SYSGMM) are two main common methods on dynamic panel data model. DiffGMM can effectively overcome endogeneity in explanatory variables and residual heteroskedasticity. Based on DiffGMM, SYSGMM introduces level equation, which estimates level equation and difference equation at the same time and hence improves the effectiveness and consistency of the estimation. Therefore, this paper adopts DiffGMM and SYSGMM.
respectively to estimate dynamic panel data model. Initially, we adopted the three-order lagged variables as instrumental variables to carry out GMM for difference equation. Table III shows the results.

In Table III, all the null hypotheses that the model coefficient is zero (except the intercept term) are rejected by Wald test, and the overall coefficient of models has shown statistical significance. As a consistent estimation, the precondition for the DiffGMM is that there is no autocorrelation in the disturbance term. This can be judged by checking whether there is a first-order and a second-order autocorrelation in the disturbance term. The results of the autocorrelation test in Table III shows that there is a first-order autocorrelation in the difference of the model perturbation terms, but no second-order autocorrelation, then we accepted the original hypothesis that the disturbances do not have autocorrelation before using DiffGMM for estimation in the next step. In addition, due to the utilization of multiple

<table>
<thead>
<tr>
<th>Variable symbol</th>
<th>Variable name</th>
<th>Variable description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QEC</td>
<td>The quality of economic growth</td>
<td>First, the reciprocal form is applied to all the inverse indicators, making them positive. Using the mean value method to apply dimensionless treatment to the original data, and then using the principal component analysis (PCA) approach to obtain an exponential value on the quality of economic growth of various regions</td>
</tr>
<tr>
<td>ine</td>
<td>Urban–rural income gap</td>
<td>Ratio between per capita disposable income and rural per capita net income</td>
</tr>
<tr>
<td>edu</td>
<td>Human capital investment</td>
<td>Measured by the average education length, it can be obtained by multiplying the average education length of each population group classified according to education level with the rate of each group among the total population, and then adding up all the values reached. In terms of average education length, 0 is set for illiteracy, 6 years for elementary schools, 9 years for middle schools, 12 years for high schools and technical secondary schools and 16 years for junior colleges or above</td>
</tr>
<tr>
<td>inv</td>
<td>Physical capital investment</td>
<td>First, the annually fixed capital formation is uniformly converted to the constant price in 1998, according to the regional fixed asset investment price index. Then using the basic formula to estimate the physical capital stock over the years, based on the set depreciation rate and base period capital stock</td>
</tr>
<tr>
<td>gov</td>
<td>Government expenditure scale</td>
<td>The ratio of government expenditure in GDP</td>
</tr>
<tr>
<td>highway</td>
<td>Transportation infrastructure</td>
<td>Freight traffic of highways</td>
</tr>
<tr>
<td>finance</td>
<td>The scale of financial development</td>
<td>The proportion of the loan balance from financial institutions in GDP</td>
</tr>
<tr>
<td>indop</td>
<td>Upgrading of an industrial structure</td>
<td>The proportion of output value between tertiary industry and secondary industry</td>
</tr>
<tr>
<td>ration</td>
<td>Structural deviated Theil index</td>
<td>Structural deviated Theil index is a comprehensive index that combines employed persons and the proportion of output value. This reflects the proportion of industrial output weighted by population. The detailed calculation formula is as follows. In the formula, TL, Y, L, I and n represent the structure deviation degree, the output value, the employment figure, the industry and quantity of industrial sectors, respectively, the value of n is 3: $TL = \sum_{i=1}^{n} (Y_i / Y) \ln((Y_i / L_i) / (Y / L))$.</td>
</tr>
<tr>
<td>private</td>
<td>Degree of denationalization</td>
<td>Regional non-state economic fixed asset investment accounts for the proportion of regional economic fixed asset investment</td>
</tr>
<tr>
<td>open</td>
<td>Economic openness</td>
<td>The proportion of imports and exports in GDP</td>
</tr>
</tbody>
</table>
instrumental variables in the difference model, over-identification tests are also required. The Sargan test results in Table III shows that, at the 1 percent level of significance, each model cannot reject the null hypothesis that all instrumental variables are valid.

We found that the mechanism of urban–rural income gap affecting the quality of economic growth during the process of the Chinese economic development does exist through Table III. Model 1 in Table III only examines the relationship among the quality of economic growth, the ratio of urban–rural income, human capital investment and their interactions. The results show that the urban–rural income ratio has a significant negative correlation with the quality of economic growth, whereas the effect of human capital investment has a significant positive correlation with the quality of economic growth. The interaction between urban–rural income gap and human capital inhibits the quality of economic growth. To obtain more accurate information, we separately introduce control variables that affect the basic conditions and operational processes of economic growth. As shown in Models 2, 3 and 4, the expanded urban–rural income gap does generate an inhibitory effect on the quality of economic growth, while increased human capital investment has an inverse positive impact on the quality of economic growth. The same as the test results of Model 1, the coefficient of interaction between the ratio of urban–rural income and human capital investment is always significantly negative. We discarded the interaction items in Model 5, and the control variables, ration and open, in Model 6. Next, in the further research studies, we found that the effects brought by the ratio of the core variable urban–rural income and human capital investment on the quality of economic growth are consistent with the theoretical analysis. At present, Chinese have developed into a stage where education costs are relatively higher than per capita income. The expansion of the urban–rural income gap restricts the education of low-income families, which is overshadowed by the positive effect of education promotion in high-income families. More low-income families are facing constraints of time and funds, thereby, reducing the enrollment rate of education at all levels, and ultimately reducing the graduation rate and per capita education level of the whole society. As a result, the basic conditions for the operation of economic growth are limited, and improvements in the quality of economic growth are also constrained.

In addition, our empirical research studies also found other factors that influence the quality of economic growth. The estimation results of the models in Table III indicates that, from the perspective of the variables affecting the operating conditions of economic growth, at a 1 percent level of significance, the impact of improvements of physical capital investment and transport infrastructure shows an apparently positive correlation with the quality of economic growth. The relationship between the quantity of financial development and the quality of economic growth is not significant in several models. It is likely that, due

<table>
<thead>
<tr>
<th>Variable symbol</th>
<th>Variable name</th>
<th>Mean value</th>
<th>SD</th>
<th>Minimum value</th>
<th>Maximum value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QEC</td>
<td>Quality of economic growth</td>
<td>−1.64E-07</td>
<td>3.407662</td>
<td>−11.31203</td>
<td>18.04</td>
</tr>
<tr>
<td>rur</td>
<td>Urban–rural income gap</td>
<td>2.935063</td>
<td>0.6146735</td>
<td>1.622584</td>
<td>4.738562</td>
</tr>
<tr>
<td>edu</td>
<td>Human capital investment</td>
<td>46.32925</td>
<td>15.47185</td>
<td>383.6754</td>
<td>83.755.28</td>
</tr>
<tr>
<td>inv</td>
<td>Physical capital investment</td>
<td>13.535,08</td>
<td>14.045,32</td>
<td>383.6754</td>
<td>83.755.28</td>
</tr>
<tr>
<td>gov</td>
<td>Government expenditure scale</td>
<td>16.98487</td>
<td>7.793642</td>
<td>5.676461</td>
<td>61.21074</td>
</tr>
<tr>
<td>highway</td>
<td>Transportation infrastructure</td>
<td>53,952</td>
<td>45,813.77</td>
<td>3,743</td>
<td>296,754</td>
</tr>
<tr>
<td>finance</td>
<td>Scale of financial development</td>
<td>1.02115</td>
<td>0.3483679</td>
<td>0.0128022</td>
<td>2.584716</td>
</tr>
<tr>
<td>indep</td>
<td>Upgrading of an industrial structure</td>
<td>0.942387</td>
<td>0.398392</td>
<td>0.4970531</td>
<td>3.367583</td>
</tr>
<tr>
<td>stru</td>
<td>Dual economic structure</td>
<td>0.1987531</td>
<td>0.0918849</td>
<td>0.0067036</td>
<td>1.536254</td>
</tr>
<tr>
<td>private</td>
<td>Degree of denationalization</td>
<td>57.12573</td>
<td>16.9737</td>
<td>11.43783</td>
<td>88.0716</td>
</tr>
<tr>
<td>open</td>
<td>Economic openness</td>
<td>0.3164312</td>
<td>0.4038578</td>
<td>0.0320445</td>
<td>1.764581</td>
</tr>
</tbody>
</table>
### Table III
Results of Difference GMM between the ratio of urban-rural income and the quality of economic growth

<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ine</td>
<td>−1.189*** (0.0506)</td>
<td>−1.153*** (0.0231)</td>
<td>−0.962*** (0.0874)</td>
<td>−0.904*** (0.272)</td>
<td>−0.0988*** (0.0215)</td>
<td>−1.023*** (0.155)</td>
</tr>
<tr>
<td>edu</td>
<td>0.575*** (0.0263)</td>
<td>0.570*** (0.0782)</td>
<td>0.562*** (0.0477)</td>
<td>0.452*** (0.105)</td>
<td>0.148*** (0.0187)</td>
<td>0.574*** (0.0561)</td>
</tr>
<tr>
<td>inw</td>
<td>−0.151*** (0.00678)</td>
<td>−0.144*** (0.0281)</td>
<td>−0.121*** (0.0115)</td>
<td>−0.102*** (0.0263)</td>
<td>−0.119*** (0.0188)</td>
<td>−0.110*** (0.0199)</td>
</tr>
<tr>
<td>gov</td>
<td>4.88e-06*** (8.09e-06)</td>
<td>−0.00218 (0.00267)</td>
<td>−0.00518*** (0.00252)</td>
<td>−0.00723*** (0.00233)</td>
<td>−0.00729*** (0.0024)</td>
<td>−0.00756*** (0.00233)</td>
</tr>
<tr>
<td>highway</td>
<td>4.32e-07*** (4.01e-07)</td>
<td>1.17e-06*** (6.66e-07)</td>
<td>1.23e-06*** (4.64e-07)</td>
<td>8.32e-07*** (4.69e-07)</td>
<td>8.32e-07*** (4.69e-07)</td>
<td>8.32e-07*** (4.69e-07)</td>
</tr>
<tr>
<td>finance</td>
<td>0.0821*** (0.0140)</td>
<td>0.0202* (0.0111)</td>
<td>0.0472 (0.0142)</td>
<td>0.0681 (0.0109)</td>
<td>0.0681 (0.0109)</td>
<td>0.0681 (0.0109)</td>
</tr>
<tr>
<td>indop</td>
<td>0.382*** (0.0630)</td>
<td>0.408*** (0.113)</td>
<td>0.483*** (0.0910)</td>
<td>0.442*** (0.0523)</td>
<td>0.442*** (0.0523)</td>
<td>0.442*** (0.0523)</td>
</tr>
<tr>
<td>ration</td>
<td>−0.808*** (0.0531)</td>
<td>−0.709*** (0.116)</td>
<td>−0.641*** (0.0109)</td>
<td>−0.000271*** (0.000083)</td>
<td>−0.00641*** (0.00127)</td>
<td>−0.00375*** (0.00105)</td>
</tr>
<tr>
<td>private</td>
<td>−0.00271*** (0.000831)</td>
<td>−0.00641*** (0.00127)</td>
<td>−0.00376*** (0.00105)</td>
<td>−0.00433*** (0.000994)</td>
<td>−0.00433*** (0.000994)</td>
<td>−0.00433*** (0.000994)</td>
</tr>
<tr>
<td>open</td>
<td>0.590*** (0.0582)</td>
<td>0.701*** (0.0673)</td>
<td>0.625*** (0.0906)</td>
<td>0.625*** (0.0906)</td>
<td>0.625*** (0.0906)</td>
<td>0.625*** (0.0906)</td>
</tr>
<tr>
<td>LQEG</td>
<td>0.814*** (0.00423)</td>
<td>0.749*** (0.00937)</td>
<td>0.730*** (0.0138)</td>
<td>0.683*** (0.0170)</td>
<td>0.695*** (0.0189)</td>
<td>0.627*** (0.0164)</td>
</tr>
<tr>
<td>_constant</td>
<td>−4.530*** (0.207)</td>
<td>−4.677*** (0.673)</td>
<td>−4.725*** (0.406)</td>
<td>−4.199*** (0.974)</td>
<td>−1.859*** (0.244)</td>
<td>−5.103*** (0.499)</td>
</tr>
</tbody>
</table>

**Notes:** Wald test serves for testing the significance of the overall coefficient of models; The Sargan test is an over-identifying test of GMM estimators. It is used for verifying the effectiveness of the differential instrumental variables. First-order or second-order autocorrelation in disturbances, if any, can be found through AR (1) and AR (2) test; only probability values reported here. *,**,***Significance at 10, 5 and 1 percent levels, respectively.
to the expansion on the scale of financial development, potential government intervention will strengthen, and thus, weaken the improvement of the effectiveness of economic growth. In addition, Wang (2012) concluded that financial development would enlarge the urban–rural income gaps, therefore, restricting the promotion of the quality of economic growth. From the perspective of the variables affecting the operation of economic growth, the upgrading of the industrial structure brings about a positive effect on the promotion of the quality of economic growth. The estimation result of the model in Table III also shows that the coefficient representing the explanatory variables by first-order lags of the quality index of economic growth is significantly positive, indicating that the change in the quality of economic growth is featured by continuity and the change in the quality of economic growth in the last period would affect that of the current period, like inertia effects.

Furthermore, we combined the difference equation and the horizontal equation as an integrated equation system and use the SYSGMM to estimate the model. The results are shown in Table IV. This shows that we can accept the null hypothesis where the disturbance term has no autocorrelation and where all instrumental variables are valid. The estimation results of each model are basically the same as the regression results of the DiffGMM in Table III. The impact of urban–rural income gap on the quality of economic growth is significantly negative. The increase in human capital investment and physical capital investment, the improvement of transport infrastructure, the optimization of the industrial structure and the expansion of opening-up all have significantly positive effects on the quality of economic growth, whereas the effects of government expenditure scale, financial development and the deviation of industrial structure conduct on the quality of economic growth are negative.

To further test the robustness of the regression results, urban–rural income ratio adjusted through weighted urban–rural population is used as a measuring index to measure the urban–rural income gap. The specific formula is as follows:

\[
popine_{it} = \sum_{i=1}^{2} \left( \frac{p_{it}}{p_{t}} \right) \ln \left( \frac{\left( p_{it}/p_{t} \right)}{\left( z_{it}/z_{t} \right)} \right).
\]

Among the formula, \( \text{popine} \) represents the urban–rural income ratio which has been adjusted through weighted urban–rural population, \( i = 1, 2 \) means urban and rural areas, respectively, \( z_{it} \) indicates the urban or rural population during period of \( t \), \( z_{t} \) represents the total population for the period \( t \) and \( p_{it} \) indicates the total urban–rural income (represented by the product of the corresponding population and the per capita income), \( p_{t} \) stands for the total income for the period \( t \). DiffGMM and SYSGMM are adopted to show the regression results that turn out to be consistent with the results of Tables III and IV. This further validates the conclusion of the theoretical analysis in this paper: the expansion of urban–rural income gap will restrict the promotion of the quality of economic growth.

4. Conclusions and policy advice

Urban–rural income gap should be analyzed not only from the perspective of the quantitative expansion of economic growth, but also from the quality of economic growth. Focusing on the quality of economic growth, this paper offers a theoretical interpretation on how the urban–rural income gap affects the quality of economic growth and takes an empirical test on the sample panel data, from 1998 to 2015, in 30 provinces and regions of China through DiffGMM and SYSGMM models. The conclusions are as follows: first, the excessive large urban–rural income gap will influence the basic conditions, operation and results of the economic growth, and thus, hinders quality of economic growth. Second, the evaluations of the dynamic panel data model through DiffGMM and SYSGMM both present a mechanism of urban–rural income gap affecting the quality of economic growth in China’s economic advancement. The ratio of urban–rural income is significantly negatively negatively
<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ine</td>
<td>1.636*** (0.130)</td>
<td>0.939*** (0.229)</td>
<td>0.847*** (0.110)</td>
<td>0.332 (0.337)</td>
<td>0.0835*** (0.0281)</td>
<td>0.328 (0.227)</td>
</tr>
<tr>
<td>edu</td>
<td>0.809*** (0.0512)</td>
<td>0.628*** (0.103)</td>
<td>0.443*** (0.0489)</td>
<td>0.167 (0.128)</td>
<td>0.069*** (0.0217)</td>
<td>0.370*** (0.113)</td>
</tr>
<tr>
<td>inedu</td>
<td>-0.216*** (0.0168)</td>
<td>-0.121*** (0.0282)</td>
<td>-0.106*** (0.0131)</td>
<td>-0.0331 (0.0414)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>twy</td>
<td>4.57e-06*** (7.36e-07)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gov</td>
<td>-0.0264*** (0.00374)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>highway</td>
<td>1.72-07*** (2.73e-07)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finance</td>
<td>0.0626*** (0.0134)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>indop</td>
<td>0.238*** (0.0723)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ration</td>
<td>-0.832*** (0.0645)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>private</td>
<td>0.000728 (0.000858)</td>
<td>-0.00233*** (0.000948)</td>
<td>-0.00143 (0.00104)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>open</td>
<td>0.271*** (0.0330)</td>
<td>0.751*** (0.0824)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LQEG</td>
<td>0.831*** (0.00752)</td>
<td>0.736*** (0.0194)</td>
<td>0.729*** (0.0134)</td>
<td>0.603*** (0.0439)</td>
<td>0.591*** (0.0389)</td>
<td>0.735*** (0.0249)</td>
</tr>
<tr>
<td>constant</td>
<td>-6.282*** (0.409)</td>
<td>-4.739*** (0.844)</td>
<td>-3.705*** (0.424)</td>
<td>-2.144** (1.089)</td>
<td>-1.525*** (0.181)</td>
<td>-3.022*** (0.917)</td>
</tr>
<tr>
<td>Observed value</td>
<td>510</td>
<td>510</td>
<td>510</td>
<td>510</td>
<td>510</td>
<td>510</td>
</tr>
<tr>
<td>Wald test</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Sargan test</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>AR(2) test</td>
<td>0.2423</td>
<td>0.2226</td>
<td>0.2622</td>
<td>0.2659</td>
<td>0.2764</td>
<td>0.2485</td>
</tr>
</tbody>
</table>

**Note:** ***,**, **Significance at 10, 5 and 1 percent levels, respectively**
correlated with the quality of economic growth. Third, the empirical research studies also found other factors affecting the quality of economic growth. For instance, improvements in human capital investment, physical capital investment, transportation infrastructure and economic openness would generate a positive impact on the quality of economic growth, whereas government expenditure scale, the scale of financial development and the deviation of industrial structure would pose a negative impact on the quality of economic growth. Fourth, the coefficients representing explanatory variables by first-order lags of the quality index of economic growth displayed positive significance, indicating that the changes in the quality of economic growth are featured by continuity. In this connection, according to the results of the research studies, the policy recommendations are offered as follows.

First and foremost, both the primary distribution and the secondary distribution need to pay attention to the urban–rural income gap. Through effective government taxation, transferred payment activities and well-developed human capital investment incentives, the urban–rural income gap can be shrunk, in favor of keeping a sustainable high-quality economic growth of China in the long term. Efficiency and fairness should definitely not stand against each other. The continuous expansion of urban–rural income gap not only goes against the sharing of the fruits of economic development among people, but inhibits the quality of economic growth through various mechanisms. The decrease of the urban–rural income gap in China not only contributes to achieve the equity on the level of morality, but also demonstrates an inherent consistency between narrowing the urban–rural income distribution gap and the improvement of the quality of economic growth.

Second, in future economic growth, more attention should be paid to financial development and industrial structure. The transformation and upgrading of industrial structure can promote the quality of economic growth of China through financial openness and reform. Among factors affecting the quality of economic growth, the impact of the scale of financial development and industrial structure variables is significantly negative. This reflects, to a certain degree, the defects through the expansion of financial development and the upgrading of the industrial structure would bring a restrictive function on the quality of economic growth. For the further promotion of quality of economic growth, it is also necessary to attach great importance to the scale of financial development and industrial structure to ensure the sustainable economic growth, apart from continuously giving full play to the government expenditures, transportation infrastructure and opening-up policy.

Last but not least, the change of the quality of economic growth is featured by continuity to some extent. High-quality economic growth will push forward the economy into a virtuous circle. The current and future economic growth and development level can be greatly upgraded by promoting the quality of the national economy, improving the structure of economic growth, strengthening the inclusiveness of shared achievements and raising the resource utilization efficiency.

Note
1. In this paper, the provinces, autonomous regions and municipalities are referred to as regions. Limited by the data available, Tibet is not considered in this research.

References


Corresponding author
Baoping Ren can be contacted at: xdrbp@126.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
China Political Economy focuses on the crucial theoretical and practical problems China faces in the process of reform, transition and development. CPE welcomes papers which explore China’s economic transition and development, its differences to western countries and cultures and the influences of China’s economy on the wider global economy.

The editorial board includes economic scholars, government officials and entrepreneurs that are interested in China’s economic problems. The journal serves as a platform for scholars sharing ideas, a reference for governors making decisions and a source for entrepreneurs generating innovative concepts.

The research areas that the journal will focus include China's Economic System Reform, China’s Macro-economy, Industrial Organization, Financial and Capital Market, Enterprise Strategies and Behaviours.

EDITOR-IN-CHIEF
Hong Yinxing
Nanjing University, China

EDITORIAL MANAGERS
An Tongliang
Nanjing University, China
Ge Yang
Nanjing University, China

EXECUTIVE EDITORIAL TEAM
Cao Yong
Nanjing University, China
Chen Xiaoqiang
Nanjing University, China
Pi Jiancai
Nanjing University, China
Xu Tongtong
Nanjing University, China

ISSN 2016-1852
© School of Economics, Nanjing University
China Political Economy
Volume 1 Number 1

Number 1
1 Mission statement
2 The principal contradiction and its evolution in the new era of the socialism society with Chinese characteristics: from the perspective of the Marxist political economy methodology
   Xinghua Wei
13 The major innovations of Chinese economic development theories in the new era
   Yinxing Hong
30 Combining Marxism and China’s practices for the development of a socialist political economy with Chinese characteristics
   Wei Liu
45 Nationality and internationality of the Socialist Political Economy with Chinese Characteristics
   Jinju Pang
55 Economic theory innovation and China’s development practice
   Taiyan Huang
67 On the organic combination of public ownership and market economy
   Yu Zhang
84 The fiscal system of China under the New Normal: trends and changes
   Peiyong Gao and Jiang Zhen
100 Determinants of China’s structural change during the reform era
   Kaiming Guo, Jing Hang and Se Yan
120 Supply-side structural reform and the transformational development of China’s foreign trade
   Erzhen Zhang and Xiang Dai
130 Das Kapital and political economy in the broad sense: a review on Wang Yanan’s research
   Lu Jiang and Yang Ge
136 How does the urban—rural income gap affect the quality of China’s economic growth?
   Baoping Ren and Xiaojing Chao