

# Analysis on China's Economic Transformation and Its Relevance to Global Economy

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China's current economic transformation has its historical reasons and its urgent need of change. With over 30 years of reform and opening-up, China's economy experienced high-speed growth for a sustained period, but China is still confronted with many obstacles which call for immediate attention, such as shortage of resources, deterioration of the environment, structural imbalance, and intensified social conflict. If these problems persist, an ominous future would not be avoided unless an economic transformation was in effect. As China's economic power and international influence increase, its economic transformation will significantly impact not only its domestic economy, but also the world economy. This article analyzes the transformation of China's economy from an international perspective, particularly focuses on the relationship between China's transformation and the economies of most developed countries (e.g., United States and EU) by comparing data and analyzing impacts caused by each other. At the end, the article will provide some suggestions for further research.

*Keywords:* mid-income trap, sustainable growth, global economy, the relevance study, new international cooperation, sustainable growth

## Introduction: The Need for China's Economic Transformation

China has experienced high-speed growth for a while and has become the second largest economy in the world. In spite of this achievement, there is still a long way to go for China to join the rank of developed countries, judging by not only the criterion of per capita GDP, but also by other criteria such as environment and infrastructure. In the meantime, international events such as the U.S. financial crisis of 2008 and the unsolved debt crisis in Europe also affected China's sustainable growth; these create the necessity for economic transformation in China.

## The Characteristics of the Current Economic Development in China

In 2010, the Chinese GDP per capita surpassed 4,000 US dollars, advancing China into the top of mid-income counties. However, the Chinese economy is likely to be "trapped" in the mid-income category if the economy were not transformed in due time. Many researchers have focused on the transformation challenge. Cai (2011) described the various paths that countries took after entering the mid-income stage, using cross-national data for comparison. The research has shown that while most countries have escaped the

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“poverty trap” by moving up from the low-income countries to mid-income countries, only a few countries escaped from the “mid-income trap” successfully. The reason was that most of the trapped countries have not overcome challenges such as the upgrade of development model, the obstacle of technological innovation, and the issues of institutional reforms and social inequity (Lin, Wang, Huang, & Ma, 2011). Today, China is facing the same challenges.

### Structural Imbalance in Demand and Production

The coordinated development of an economy requires the so-called “Three Carriages”, i.e., investment, export, and consumption, to stimulate economic growth. Reliance on investment and export through heavy industrialization has been the primary means of economic growth in China, owing to the longstanding “overtaking-the-developer-countries” strategy and export-oriented development policies. The industrialization has led to a 10% economic growth each year. But this mode of development also caused many structural imbalances in the economy, aggravated by changing factors from both inside and outside. From the demand structure point of view, the weak aggregate demand created by high-investment and low-consumption resulted in overcapacity in production and over-dependency on foreign markets. For example, the ratio of dependency on foreign trade in 2010 was 49% in China, compared with 22.3% and 42.8% in the United States and UK respectively. It is higher than the ratio in India (31.2%) by 17.8%. The financial crisis and the outbreak of the European debt crisis caused developed countries in the United States and European countries to change from consumption on debt to consumption on saving, which diminished demand of import for labor-intensive products exported from China, and led to the persistent decline of China’s export. For example, the contribution of the net export to economic growth was -5.8% in China in 2011. From the structure of industry’s point of view, the structure of industries in China is problematic. The secondary industry in China is inappropriately high, at nearly 50% of GDP in 2009, far exceeding the rest of the world in comparison. The tertiary industry in the Chinese economy has been just the opposite. It is relatively low when compared with other countries, including low-income countries (see Table 1). Moreover, structural problems also exist within industries. For example, Chinese manufacturing industry stays in the low-end of the value-chain, producing massive labor-intensive products with low profits due to lack of innovation and research. In the service sector, certain industries are under development such as information and producer services, insurance, media and communication, technological research, and consulting industries.

Table 1

#### *The 2009 International Comparison of Industry Structure*

Countries	Primary industry	Second industry	Tertiary industry
Low-income countries <sup>a</sup>	26.9	29.1	44.1
Low-mid income countries <sup>b</sup>	13.2	39.4	47.4
High-mid income countries <sup>b</sup>	6.4	33.0	61.0
High-income countries <sup>c</sup>	1.5	25.6	72.7
China	10.4	46.3	43.4

Notes. <sup>a</sup> data from 2008; <sup>b</sup> data from 2009; <sup>c</sup> data from 2007. Source: NBS “Yearbook of International Statistics 2010”.

### Domestic Problems and Social Conflicts

The East Asian Economic Development Report (2006) by the World Bank indicates that when a mid-income economy is ready to advance into high income groups, it is likely to experience a sudden outburst of conflicts masked behind the fast-growing economic scene. Such conflicts include political disagreements,

deteriorating inequality, and increasing cases of corruption. Facing these problems during recent years, the Chinese government has been improving people's livelihood by expanding social welfare coverage through public expenditures. However, major problems still persist: income inequality, lack of education, healthcare and social service, increasing corruption, weak social mobility, and polarization of wealth distribution.

### Resources and Environmental Constraints

Resources and environment are two basic determinants of sustainable development. Rich resources and good environment are the foundation of sustainable development. In China, most resources are inadequate when shared by its huge population, especially water, land, and energy. The rate of depletion is accelerating because the consumption of resources far exceeds their additions (Wang, 2011). Since the reform and opening policy started in China, especially in the last decade, GDP increased from ¥99,215 billion in 2000 to ¥401,202 billion in 2010. The growth, driven by the heavy consumption of raw materials, costs the country by depleting its natural resources with deteriorating environment. For example, the GDP of China accounted for 8.5% of the world GDP, while consumption of coal, steel, and oil in relative to the world is 46.9%, 46.4%, and 10.4% respectively (H. Y. Huang & Z. Q. Huang, 2011). The consumption of energy by GDP per 10 thousand dollars in China far exceeds that in developed countries and some developing countries (see Table 2), it is more than twice the amount of that in German.

Table 2

*The 2009 Consumption of Energy by GDP Per 10 Thousand Dollars*

Country	The consumption of energy by GDP per 10 thousand (\$)
China	2,732
America	1,703
Japan	1,260
German	1,209
UK	99.5
India	1,954
World	1,828

*Note.* Source: World Bank database.

Regarding the protection of the overall environment, there is a huge gap between China and developed countries. In 2010, the Chemical Oxygen Demand (COD) in China, though decreased from 2009, still ranked the first in the world. The sulfur dioxide emission is twice as much as that of the United States. The seven major water ecological systems were polluted to varying degrees. A total of 249 cities showed signs of acid rain, representing 50.4% of all the 494 monitored cities.

### Institutional Obstacles

Although China has progressed considerably from a planning economy to a market economy in the past 30 years, there are institutional obstacles hampering its economy. A basic market system was established to let the price determine supply and demand. A private sector with intermediate exchange agencies was established in product market. However, there is room for improvement in the factor market and in the coordination between government and market (Fan, Wang, & Zhu, 2011). In addition, the tax system lacks the ability to stimulate innovation and entrepreneurship and is not reflecting the current prices of energy and other resources.

The reform in government administration, an even more pressing issue after the reform of state-owned

enterprises, is taking place gradually. Over the past 30 years, Chinese government has changed its service attitudes, institutional functions, and administrative structures, successfully transforming itself into a modern government. Nevertheless, problems still exist in the relationship between governments and enterprises, characterized by intervention of market by administrative orders and lack of effective monitoring of governments.

### **Changes in the Climate of International Economy**

Global financial crisis and European debt crisis shattered the world economy, slowing economic recovery and increasing the downward risk of global economic development. In many advanced economies, the unemployment rate remains high while private demand stays low. Making matters worse, soaring international commodity prices, greater pressure on inflation, and the volatility of global financial market added even more uncertainties to the global economic recovery. As a consequence, China's economic growth has slowed down for several reasons. First, the crisis decreased the demand for Chinese products. Second, during the crisis, developed countries realized that their over-reliance on service industries, especially the finance industry, put their economies in jeopardy. Hence, they increased investment in research and development (R&D) and infrastructure to compete with China in manufacturing. Finally, some developing countries such as Honduras, Vietnam, Sri Lanka, and India, have cheaper labor and natural resources than China. They are strong competitors of China in labor-intensive products (Lin et al., 2011).

As global economic conditions worsened, trade protectionism has risen during recent years. Many trade disputes appeared. In the four-day period from March 19th to March 22th of 2012, United States of America filed five trade remediation cases against China, including four anti-dumping/anti-subsidy grievance and one anti-dumping and anti-subsidy investigation (Retrieved from [http://www.qstheory.cn/gj/rdjjgj/201203/t20120326\\_147954.htm](http://www.qstheory.cn/gj/rdjjgj/201203/t20120326_147954.htm)). Rather different from before, this time some developing countries including Argentina, Mexico, Brazil, Turkey, and India also participated in the accusation against China for unfair trade. During the first eight months since 2011, more than 40 lawsuits (14 were recently filed) were filed. These challenges affect China's exports considerably (Han, 2012).

Given these challenges, there seems to be one way to keep the Chinese economy growing—the transformation of the Chinese economy. Specifically, the Chinese government has to increase the domestic demand as a key solution to improve the economy (Zhang, 2012).

### **Analysis of the Relationship Between China's Economic Transformation and World Economy**

The industrial revolution has led to the formation of a global market, bringing countries closer together. An integrated global economy emerged from the accelerating world trades, catalyzed by the recent advances in information technology. Any large economy will have great influence on the rest of the world. China is no exception.

#### **The Importance of Transformation for Sustainable Development**

Economic transformation originally refers to the transition of an economy from a planned-economy in which resources are allocated by highly-centralized methods to a market economy in which resources are allocated by prices. Since the beginning of the 21st century, developing countries trapped in the mid-income group and developed countries trapped in debt crisis. All economies started to realize the need for a new form of economic transformation characterized by new development modes, usage of new production factors, and/or

new growth paths. For developing countries, the transformation usually involves the adoption of more sophisticated but less exploitative development mode, more market-oriented and less government-intervened economic structure, and more technology-dependent and less natural resource-dependent growth paths. For developed countries, the transformation usually involves a structural adjustment which emphasizes the real economy by bringing manufacturing back to the economy.

During the process of modernization, both emerging economies and developed countries experienced the transformation that helped the economy achieve high-speed growth. Wu (2005) portrayed the process of economic transformation from early models to modern modes (see Table 3) and showed the importance of transformation in economic growth. Since the 1950s, Eastern Asia including Japan and “the Four Tigers” embarked on an export-oriented development path that worked miracles for them. From the 1950s to the 1970s, Japan experienced an amazing growth rate of almost 10% each year, followed by the Four Tigers’ high-speed growth from the 1960s to the 1980s (Quan & Jin, 2010). However, this “catch-up” strategy stopped working when their economies reached a certain level. After they became developed countries themselves, they could no longer grow by copying the experiences of developed countries (Hayami, 1998). In order to escape from the trap inherent in export-oriented development model, Japan and the Four Tigers took measures to transform their economies by reforming their systems of administration, finance, and currency from the 1970s to the 1980s. After the transformation, the economic growth depends more on domestic demands and technology-intensive industries. In Japan and South Korea, the transformation helped them advance from the mid-income country group to the high-income country group.

Table 3

*Economic Transformation of Industrialized Countries*

Period	Stage	Character	Factor	Main industry
Before 1770	Stage before “takeoff”	Exploitation of natural resources	Natural resources	Agriculture
1770-1870	Early economic growth	Machines replace labor	Accumulation of capital	Heavy industry
1870-1970	Modern economic growth	The efficiency being improved	Technology progress	Service-oriented manufacturing industries
After 1970	The age of information	Transforming national economy with information technology	Informatization	Information industry

Note. Source: Wu, 2005, p. 44.

Transformation is an important step to realize sustainable economic growth for both developed and developing countries. Different transformation models work in different countries with different cultures, values, traditions, and heritage. It remains to be seen which model is right for China to sustain its economic growth.

**The Influence of China’s Transformation on the World Economy**

Since the policy of reform and opening-up, China’s economy has made noticeable progress, contributing significantly to the world economy. Its international statue improved and its national power strengthened remarkably. China is now one of the most powerful economic forces in the world. According to World Bank, the contribution to China’s economic growth to the world increased considerably. From 2005 to 2010, China’s contribution to the global growth ranked No. 2 after the United Sates (see Table 4).

Today, the old model of Chinese economic growth is no longer sustainable. It needs urgent reform. The transformation of the Chinese economy with its one-fifth of the world population will bring profound impact on

the world economy in several aspects. First, its aim to increase its domestic demand creates a bigger consumption market for export from the rest of the world. Second, its aim to grow service industries will bring opportunities to developed countries that have advantages in technology and service industry. Third, China's goal to transform itself into an "energy efficient and environment friendly society" will raise global environmental awareness and advance the frontier of a green economy for all mankind.

Table 4

*The Contribution to the World Economic Growth*

Ranking criterion	Year					
	2005	2006	2007	2008	2009	2010
GDP (current price)						
China	22,569	27,130	34,931	45,218	49,913	59,266
United States	125,797	133,362	139,950	142,969	140,481	145,867
Japan	45,522	43,626	43,779	48,799	50,330	54,588
German	27,663	29,027	33,238	36,237	32,986	32,805
Britain	22,801	24,441	28,110	26,575	21,732	22,488
India	8,340	9,513	12,424	12,160	13,773	17,271
World	456,583	495,063	558,489	613,045	580,883	631,239
Percent of change of GDP (%)						
China	11.3	12.7	14.2	9.6	9.2	10.4
United States	3.1	2.7	1.9	0.0	-3.5	3.0
Japan	1.9	2.0	2.4	-1.2	-6.3	4.0
German	0.7	3.7	3.3	1.1	-5.1	3.7
Britain	2.1	2.6	3.5	-1.1	-4.4	2.1
India	9.3	9.3	9.8	4.9	9.1	8.8
World	3.5	4.0	4.0	1.4	-2.3	4.2
Share of contribution (%)						
China	15.96	17.4	22.2	50.58	34.37	23.25
United States	24.4	18.18	11.9	0.0	-36.8	16.51
Japan	5.41	4.41	4.7	-6.82	-23.73	8.24
German	1.21	5.42	4.91	4.64	-12.59	4.58
Britain	3	3.21	4.4	-3.41	-7.16	1.78
India	4.85	4.47	5.45	6.94	9.38	5.73
World	100.0	100.0	100.0	100.0	100.0	100.0

Note. Source: World Bank data.

**The Impact of the World Economy on the Transformation of China**

In the context of globalization, countries are closely linked with each other. The economic transformation of China will have an influence on the world economy, and vice versa. Many structural problems emerged during the U.S. financial crisis and the Euro-zone debt crisis. The erosion of the manufacturing base has encroached on the economic health of many developed countries. It is desirable to restore the real economy by reindustrialization their countries through innovation of new products in new markets. The developed countries most likely will focus on renewable energy and reusable materials to build low-carbon economies. In these new industries, China and other industrialized countries will compete directly, for China sees the low-carbon economy as an important goal for sustainable economic development too. China's future economic growth will be constrained because developed countries have an advantage in technology and research capability.

### **Forging New International Cooperation**

In recent years, the world has seen an elevated level of protectionism in finance, trade, and investment as evident from increasing trade frictions. There are reasons for this trend. In developed countries, many of them have encountered considerable domestic problems within their own economies. Until now, the shadow of unemployment still haunts the recovery of their economies. For emerging economies, declining exports and inflation pressure require them to do some things to protect their own economies. To avoid escalation of trade wars, it is desirable to build a new cooperation relationship that will benefit all economies involved.

Historically, behind the facade of a closely-coordinated global trade, there exists an unequal distribution of benefits from trade. This inequality, shaped by the uneven nature of political power and the monopoly of technological know-how, created an unequal relationship between developed countries and developing countries. To establish a new healthy relationship among countries, the first and most important thing to do is to give emerging countries a say that they deserve in the international community. This new relationship implies an equal, fair, and compatible economic development of all countries. It means that countries shall look out for each other to avoid conflicts and to achieve growth through cooperation and mutual trust.

China is in a key stage of transformation where many uncertainties exist. Thus, a peaceful and stable international relationship is of great importance to China. On the one hand, China has to maintain consistent foreign trade policies and make more use of the WTO dispute settlement mechanism to solve problems from trade friction. On the other hand, China has to pay more attention to adjust the composition of its export products and to explore emerging markets to diversify its exports.

Since the end of the Cold War, the landscape of international politics has changed considerably. The U.S. financial crisis and the Euro-zone debt crisis have accelerated the need for reform in the international economic system. Some developed countries have been trying to resist this change by reducing domestic unemployment through protectionism. Two observations can be made to explain why protectionism will be counterproductive and unwarranted. First, as China shifts its emphasis to domestic demand, its import of high-tech products from developed countries has to increase. This will provide an excellent opportunity for the developed countries to increase their exports to China. Second, huge amount of Chinese foreign reserves has to seek an exit in the international market. Enterprises with high productivity in developed countries will be a good target for Chinese investment. Chinese direct investment in these countries will result in the reduction of unemployment in these countries. Thus, in the time of crisis and changes, it is better that every country cooperates to fight protectionism for sustainable growth of the global economy.

### **Further Exploration**

There are a few theoretical and practical questions yet to be resolved regarding economic transformation and the establishment of a new international cooperation relationship. To tackle some of the major issues requires innovative thinking and creative approaches. For instance, how to measure if an economic transformation is successful in China? Can such measure be defined precisely or scientifically? Current literature might shed some light on these questions. But each country has its own unique economic circumstances that justify the use of different criteria and evaluation methods. What are the criteria and methods that work in China? There seems to be no easy answer.

Regarding the effort to establish a new international economic order, what framework shall we use for

such an effort? Is the WTO achieving its mission as originally envisioned? What are the areas that WTO failed to deliver? Do we need an entire new international organization and structure to replace WTO? If we need to create a new system of international order and laws, how can we ensure the enforcement of these new international laws? All of these issues would require further research.

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