## "Middle Income Trap"--China's Challenges and Countermeasures

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**Abstract:** According to the World Bank's latest income classification criteria, China's annual per capita GDP has reached the middle income standard, which means that China has entered the development stage of middle-income countries. This stage is a crucial period for China's economic transition and social transformation. Economic and social development faces two possibilities: it is possible to successfully realize industrialization and modernization, and enter the ranks of high-income countries. It also faces the possibility of falling into the "middle income trap". It is necessary to take measures such as transforming the economic development mode, improving the income distribution system, and innovating social management to provide a sound economic and social environment for economic transition and social transformation.

#### 1. Introduction

The World Bank first proposed the concept of "middle income trap" in the East Asia Economic Development Report (2006), stating that "many economies often reach the middle income stage very quickly, but only a few countries can cross this stage". These long-term economies in the middle-income range are either in a cycle of growth and decline, or in a relatively long-term state of very slow or even stagnant growth. In 2006, the World Bank proposed the "middle income trap" in the East Asia Economic Development Report. The concept is that when the per capita GDP of the economy reaches the middle-income level of the world, very few economies can successfully cross into high-income economies [1]. These economies are suffering from a lack of new growth drivers, leading to a long-term stagnation of the economy. Economies that fall into the "middle income trap" have some common characteristics, such as unsTable economic growth, slowing urbanization, and excessive income disparity.

### 2. The challenges China faced

#### 2.1 Environment and resource trap.

China today faces serious challenges in terms of environment and resources. The World Bank published in the "East Asian Economic Semi-annual Report" published in 2007 that China's situation is quite special compared with other East Asian countries. The "middle income trap" is mainly reflected in environmental issues [1]. At present, 20 of the 30 most polluted cities in the world are in China. One third of the country's land is affected by acid rain. 90% of the country's groundwater has been polluted to varying degrees, of which 60% are seriously polluted. The report believes that the key to the problem is that China's "world factory" is the development goal, and the manufacturing industry, rather than the service industry, is the focus, which inevitably increases the pressure on the environment.

In addition, the development of high energy consumption is also unsustainable. At the same time that China's economic achievements are attracting worldwide attention, energy consumption is also growing at a high rate. In 2010, China surpassed the United States to become the world's largest energy consumer. China's energy consumption accounted for 20.3% of the world's total energy consumption. China's energy consumption intensity is also quite high [2]. According to data from the World Bank in 2010 and the BP World Energy Statistical Yearbook, China's energy consumption intensity is 4.5 times that of Japan, 4.2 times that of Germany, and 2.6 times that of the United States. At the same time, China is gradually turning from a resource exporting country to a resource

importing country. China has become the world's largest importer of copper metals, the second largest importer of iron ore and the third largest importer of aluminum. China has absorbed one third of the world's supply of coal, steel and cotton. Inconsistent with the energy shortage and the surge in consumption, energy waste is staggering and energy efficiency is only 33%.

#### 2.2 Industrial structure trap.

When a country's production and income reach a certain level, the transformation and upgrading of industrial structure should be an ineviTable requirement for further economic upgrading. The Chinese economy is currently facing huge risks of falling into the trap of industrial structure [2].

First of all, China's industry relies too much on labor-intensive manufacturing and export-oriented development. It lacks independent brands, core technologies and integrated control of the industrial chain. It is at the lowest end of the world industrial chain and relies mainly on low labor costs. Low resource prices, low land prices and low pollution costs to obtain meager profits. On the one hand, this mode of production is susceptible to fluctuations in demand in the international market. On the other hand, with the advantages of resources and labor costs in some countries in Southeast Asia, the comparative advantages of China's manufacturing will gradually disappear [3]. If the industrial structure adjustment and transformation are not accelerated, the Chinese economy will face the danger of being eliminated.

Secondly, although China is aware of the need to upgrade its industrial structure, we still do not have core competitiveness in many high value-added industries and strategic emerging industries, and we still lack a matching institutional environment. In terms of high value-added industries, China's high value-added industries account for a small proportion of the economy because China does not have core technologies in many fields, coupled with Western technological blockades. From the perspective of strategic emerging industries to promote economic development, all the technological revolutions and industrial revolutions since the industrial revolution have been based on the development of a leading industry supported by a common technology, and then led to the birth of a series of emerging industries [3]. The transformation of the overall economy, so the establishment of successful strategic emerging industries will play a significant role in China's economic upgrading. The "Twelfth Five-Year Plan" government work report proposes to accelerate the development of strategic emerging industries, namely, actively develop a new generation of information technology industry, build a high-performance broadband information network, accelerate the realization of "three networks integration", and promote the demonstration application of the Internet of Things. It is hoped that China will play a leading role in these strategic emerging industries in the next round of world economic competition.

Third, the three industrial structures need to be further optimized. In 2011, the added value of China's three industries accounted for 10.1%, 46.8% and 43.1% of GDP respectively. In developed countries such as the United States (2010), the proportion of the three industries is 1%, 20% and 79%. In contrast, the proportion of the first and second industries in China's industrial structure is relatively high, the proportion of the tertiary industry is significantly lower, and the internal structure is irrational and the benefits are low [4]. Therefore, we must accelerate the development of the service industry, so that economic growth will be driven by relying mainly on the secondary industry to rely on the coordinated development of the first, second and third industries.

#### 2.3 Income distribution trap.

The large income gap and the failure of national income to grow in tandem with GDP are considered to be one of the most important reasons for some countries to fall into the "middle income trap". At present, China's income distribution gap is getting bigger and bigger, which can be clearly seen from the sharp decline in the proportion of workers' compensation in the entire initial distribution in recent years. In 2000, this proportion was 51.4%, and by 2007, the proportion had fallen to 39.7%, and the proportion of labor income fell by 11.7 percentage points in seven years. From the perspective of the Gini coefficient, since 2000, China's Gini coefficient has crossed the warning line of 0.4. The gap between the rich and the poor in Chinese society has broken through the reasonable limits. This is highlighted by the income gap between urban and rural residents, the

widening income gap between the residents in the eastern, central and western regions, and the excessive distribution of national income to all levels of government and large monopoly enterprises. The proportion of national income has been declining, and the gap between high and low income groups is wide. This will create a series of social and economic problems, affecting the further growth of domestic demand, the adjustment and upgrading of industrial structure and social stability.

To narrow the income gap and improve the unfair distribution of income, it is necessary to deepen the reform of the income distribution system [4]. This requires a sound initial distribution and redistribution adjustment system, achieving equal efficiency and fairness in the initial distribution and redistribution, and rationally arranging the proportion of labor, capital and fiscal revenue in national income. Improve the wage formation and growth mechanism, increase the income of low-income groups, continue to expand middle-income groups, increase the regulation of high-income groups, curb monopoly industry income and various irrational incomes, and accelerate the formation of economic growth, fair distribution and social harmony.

#### 2.4 Technological innovation trap.

Since the reform and opening up, China has also attached great importance to the introduction of foreign capital and technology, and has proposed a strategy of "marketing for technology" [2]. However, there are many problems in the actual technology introduction. First of all, some of the imported technologies lack scientific justification, which cannot reflect applicability and advancement, and the structure of imported technologies is unreasonable. Secondly, it only pays attention to the introduction of hardware, but lacks the introduction of software (technical patents, process flow). According to a sample survey of major imported projects in China from 1990 to 2006, the introduction ratio of hardware and software is less than 0.35:1. The introduction of hardware is not only costly, but also dependent on foreign equipment, and it is difficult for China to master its core technology, which is not conducive to the improvement of domestic technology.

## 3. China's possibility of crossing the "middle income trap"

Classified according to the latest definition of the World Bank: countries with a per capita national income below \$824 are low-income countries; countries with a per capita income of between \$825 and \$3,254 are low- and middle-income countries; and between \$3,255 and \$,..., are among medium- and high-income Country; more than \$10065 is a high-income country. If a country enters the middle and low incomes for more than 28 years and does not enter the middle and high income countries, it can be considered as a "low-middle income trap"; if the countries with high-income income do not enter the high-income ranks within 14 years, they can be considered as falling. Into the "high-income income trap." Since 2010, China has been in the middle and high income development stage. According to Yao Zhizhong's point of view, there are two criteria for entering the middle-income trap. From the absolute standard, the phenomenon of stagnant or negative growth in economic growth in middle-income countries is called a middle-income trap. From a relative standard point of view, the economic growth rate of middle-income countries is lower than that of high-income countries, which is called a middle-income trap [5].

From an absolute standard point of view, China's GDP has been on the rise since 1978. Although China's development has entered the mid-high-speed stage, 2015 was below 7% for the first time in recent years, but according to many scholars or institutions for the Chinese economy. It is predicted that before 2030, China's economic growth rate will not be lower than 5%. According to this speed, China's entry into high-income countries is beyond doubt. From the relative standards, Professor Hu Angang of Tsinghua University has predicted the growth trend of GDP between China and the United States according to the exchange rate method and the purchasing power parity method [3]. The exchange rate law predicts that China's GDP will be 19.8 trillion US dollars in 2019 and 18.9 in the United States. The trillion-dollar dollar; the purchasing power parity method predicts that China's GDP will be US\$17.1 trillion in 2016 and US\$16.8 trillion in the US. Moreover, in the current form, China's GDP growth rate will be higher than the average GDP growth rate of developed countries by 2020. Therefore, judging from these two standards, in the context of the world economic situation

without major changes, China's sTable reform of the economic transformation is smooth, according to China's current development trend, the possibility of crossing the "middle income trap" is still very big.

### 4. China's countermeasures to cross the "middle income trap"

More than 40 years of reform and opening up have not only created the "China's fans" of economic growth, but also enabled China to enter the middle income development stage, and accumulated rich experience and possessed the confidence and ability to cross the "middle income trap". According to China's specific situation. It is possible to take effective measures to move across the "middle income trap" and move to high-income countries [6]. The following specific countermeasures are proposed:

# 4.1 Continue to promote economic system reform is an important guarantee for China to cross the "middle income trap".

China's gradual reforms have made the progress of reforms in different fields of different industries inconsistent. "Easy to change has changed, and the rest are hard bones." Moreover, many of the current institutional problems are interrelated and intertwined [6]. How to clarify the ideas of reform and to do a good job in top-level design and reform support.

# 4.2 Effectively divide the boundaries between the government and the market to balance the role of the market and the government.

The government should significantly reduce the power to directly allocate resources and control market operations, and transform to a public service-oriented government. The government provides the public with the most important and basic non-operating public facilities and public services, and opens up more operational infrastructure and public services to private capital, relaxing access restrictions on private capital in many fields, and reducing approval of the project [7].

## 4.3 Strictly control the rapid increase in production costs and living costs.

A high level of innovation and management ability is gradually formed in the business practice of sTable profitability for a long period of time. It must be prepared for a protracted war. The precedent in this regard is Taiwan: Since the late 1980s, Taiwan has introduced a number of strategies and supporting policies and measures to implement transformation [6]. However, until now, Taiwan is still in the middle of the industrial chain and has long been the main force of internationally renowned enterprises. Before China's innovation, management and production technology levels have not made a qualitative leap, strict control of the rapid rise in production and living costs is the key to China's sustainable development.

## 4.4 Promote the upgrading of products and industries, and promote the high-end industrial structure.

On the one hand, in response to China's large population situation, we should continue to upgrade labor-intensive industries and products, and improve the grade and added value of labor-intensive industries. At the same time, we must vigorously develop new modern service industries, such as the financial industry and related service industries that are compatible with the manufacturing industry. On the other hand, we must conscientiously improve the construction of factors and product market mechanisms [7]. At present, the demographic dividend is gradually exhausted, resources are becoming increasingly tense, and demand is declining. Under the big environment, it will drive the strong innovation power of the enterprise and increase the investment of innovation. The government gives certain support in talent attraction, scientific research cooperation, loan guarantee or interest rate, and promotes the development of enterprises from relying mainly on cheap resources to relying on technology and high-quality human resources to improve production efficiency and refine in the global industrial division of labor. High technology and high value-added development, from the lowest end of the "smile curve."

#### 4.5 Regulate income distribution and narrow the gap between rich and poor.

The practice of other countries crossing the middle-income trap has repeatedly shown that the proportion of a country's middle class is the key to realizing the transition from "investment-oriented" to "consumer-oriented" society [8]. Therefore, the olive-shaped income distribution structure is an ineviTable requirement for expanding consumption and breaking through the "middle income trap". Change the situation that the capital income is too large and the labor income is small in the initial distribution. In redistribution, the government needs to play more roles: on the one hand, it should play a regulatory role in taxation, properly regulate the interests of low-income groups while appropriately adjusting the vested interests of high-income groups; on the other hand, establish and improve social insurance and social welfare. And the social assistance mechanism, through the construction of a social safety net to ensure the basic living standards of the disadvantaged groups; once again, through the financial subsidies and other means to continue to promote the national poverty alleviation strategy, increase capital investment, and promote economic development in poor areas, especially in the poor areas of the central and western regions, Improve people's living standards. Of course, the level of social security and social welfare of a country should be compatible with its level of economic development [8]. Otherwise, excessive social debt and excessive levels of social welfare and security will increase the burden on a country and economic development will be unsustainable.

# 4.6 Further reform the science and technology innovation system and education system, and encourage independent innovation.

The state should increase investment in basic research in universities and research institutions, encourage close cooperation between scientific research institutions and enterprises, and promote the industrialization of scientific research results and the guidance of scientific research institutions for enterprise R&D needs [8]. At the same time, the intellectual property protection system is strictly formulated and implemented to provide institutional guarantee for the benefits of independent innovation.

#### 5. Summary

China entering the ranks of middle-income countries faces a series of risk tests. In addition to the main trapping factors in the current environment and resources, industrial structure, income distribution and technological innovation in China's economic operation, China should also guard against it. And deal with some other issues. The development stage of "middle-income upper income" is not only a challenge for China's economic development, but also an important strategic opportunity period that can make a big difference. In this regard, we must look for opportunities in the crisis and prepare for the challenges. China is confident that it can break the curse of the "middle income trap" and realize the great rejuvenation of the Chinese nation.

#### References

- [1] Y.M.Wu, Research on China's Technology Introduction and Development Countermeasures, Industry and Technology Forum, 2018, vol.11, pp.20-22.
- [2] Ch.Ch. Wang, Across the "middle income trap": Challenges and Path Selection, First Resources, 2011, vol. 4, pp. 54-57.
- [3] Zh.Y. Zhang, Avoiding the "middle income trap" is the transformation of economic development mode, contemporary economy, 2016, vol.7, pp.34-37.
- [4] G.T. Peng and Y.W. Miao, Analysis of Income Distribution and "Middle Income Trap", People's Forum, 2014, vol.3, pp.13-17.
- [5] X.Y. Liu, Thinking and evading measures that China may fall into the "middle income trap", Journal of Liaoning Administration College, 2015, vol.2, pp.76-78.

- [6] Gao Shizhen, Zhuo Xian, Analysis and Enlightenment of the Reasons for Developing Countries to Fall into the "Middle Income Trap", Theoretical Journal, 2017, vol.12, pp.88-92.
- [7] G. Li, "Middle Income Trap" and China Reality, China Economic Issues, 2016, vol. 5, pp. 55-58.
- [8] J.Zh. Zhuang, How to avoid middle income traps in China, China Market, 2017, vol.3, pp.66-68.