



# The Double Middle-Income Trap in China: Current Situation and Countermeasures

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**Abstract.** China is going through a critical period of crossing the middle-income trap (MIT). Most developing economies caught in the MIT are often accompanied by a large social income gap and a low share of the middle-income groups (MIG). Based on the theory of double MIT, this study explores the likelihood and necessity of increasing the proportion of MIG in China. In the period of economic and social development, there is still a gap between income inequality in China and the world average, and the share of MIG in the overall population is relatively low. To reduce the gap in income and cross the MIT, the paper proposes three specific measures to promote human capital based on human capital theory and common prosperity policy. To expand the MIG and build an olive-shaped society, this study analyzes the experience and concrete measures in China to successfully cross the MIT and achieve sustainable economic growth.

**Keywords:** Middle-income Group, Human Capital, Olive-shaped Society, Income Gap, Double Middle-income Trap.

## 1 Introduction

Most developing economies in the world have experienced stagnant economic growth after reaching the middle-income level, making it hard to cross the threshold of high income and achieve economic transformation and modernization. This phenomenon of economic stagnation is called the “MIT” [1]. Such stagnant economic development is also accompanied by a large income gap in society. Li from the Chinese Academy of Social Sciences proposed a new concept: the “double MIT” to describe the phenomenon of the difficulty of developing economies to cross the middle-income development stage. These economies hover below the level of high-income economies and are unable to effectively prevent social polarization [2]. There are too few MIG to build an olive-shaped economy.

According to the 2022 National Economic and Social Development Statistical Bulletin released by China’s National Bureau of Statistics, China’s gross national income per capita is \$12608, which has not yet reached the standard line for high-income economies set by the World Bank (\$13205). 2022. China’s Gini coefficient is 0.474, which exceeds the global Gini coefficient average of 0.44 that year. Based on the data of 2021 released by China’s National Statistics Bureau, with a population of 1.4 billion, China’s

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middle-income group will account for approximately 30% of it. In comparison with the international experience, only when the share of MIG reaches 50% can the economy successfully form an “olive-shape society” and achieve high-quality economic development to skip the MIT. The current socioeconomic situation has shown that China is still in the critical period of crossing the MIT, the social-income gap remains too large, and the proportion of MIG is relatively low.

## 2 Literature Review

After World War II, experts introduced the concept of developing economies to guide the country’s post-war economic reconstruction, while summarizing the laws of economic development and providing international experience in economic development. After the shock of the era of COVID-19, many developing countries and economies are also in a time of economic stagnation, and China has also seen a rise in the Gini coefficient, so it is necessary to study countermeasures to cross the double MIT. The existing literature and papers basically concentrate on the concept of the MIT, the international experience of crossing the MIT, and the countermeasures to cross the trap. However, the proposition of the “double MIT” has not been much discussed.

Li first mentioned the definition of the “double MIT” in the study “China’s Path Choice to Cross the Double MIT”. The double trap is defined as: a developing economy cannot smoothly cross the middle-income development stage, reach the high-income development level, and achieve modernization on schedule, while it cannot easily prevent polarization in its development and build an olive-shaped society dominated by MIG [2]. The study summarizes this phenomenon of economic development with the characteristics of the general income pattern of countries caught in the trap, and summarizes the inevitable connection between them, i.e., if the problem of the predominance of MIG cannot be solved the MIT cannot be crossed either. The necessity of expanding the middle-income group is clarified. More specific solutions under changing income patterns are proposed for the study of skipping the MIT. However, the authors do not specifically analyze the relevant countermeasures.

For expanding the middle-income group, many scholars have interpreted the internal logic and feasibility of the common prosperity policy [3]. Some scholars have shown the positive effect of reducing the disparity in higher education on enhancing human capital [4]. Other scholars on the proposed lack of human capital caused by low health levels [5]. Fan has also discussed that promoting the equalization of public infrastructure and services can promote common prosperity [6]. This paper analyzes the significance of human capital enhancement in crossing the trap. The study summarizes the current research results of enhancing human capital under the background of China’s policy toward common prosperity.

### 3 Current Situation and Discussion

#### 3.1 Basic Concept

The World Bank first mentioned the definition of the “Middle-Income Trap” in “East Asia’s Recovery Report” in 2006. The report states that after a country reaches a higher income level, it is unable to succeed in changing its pattern of economic development, and has lost the dynamism of sustainable growth, which has led to prolonged stagnation in the economy. Most of the world's developing economies have experienced stagnant economic growth after reaching the middle-income level, i.e., they have fallen into the MIT. Usually, these middle-income economies are unable to compete with either the export-oriented industrial manufactured goods low-income economies in terms of wage levels or the developed countries that are oriented towards R&D of high-tech products in terms of technology according to the Asian Development Bank. These economies are then faced with the challenge of resource depletion and economic transformation. Economies caught in "MIT" have certain common characteristics, such as unstable economic growth, fragile financial systems, and large income disparities.

In 2017, Li proposed the proposition of a "double MIT" based on the common features of the economies caught in the "MIT" and the "excessive income disparity" they exhibit. The proposition states that the economies caught in the MIT have a common characteristic of a "large income gap". The proposition points out that developing economies fallen into the MIT will inevitably have to solve the problem of polarization of social income levels and the inability of MIG to dominate. The way for developing economies to skip the "MIT" is to expand the middle-income group to solve the problem of excessive social income disparity.

#### 3.2 Status of Gross National Income and Its Disparity

**Gross National Income and Domestic Income Disparity.** From an international perspective, China is now in a crucial phase of stepping over the MIT. According to the 2022 National Economic and Social Development Bulletin released by China's National Bureau of Statistics, China's gross national income (GNI) per capita was 12,608 U.S. dollars, which not yet reaching the World Bank's standard line for high-income countries (\$13,205). However, China still demonstrates a very positive development trend, with an annual GNI per capita growth rate of 7.9% in 2021, exceeding the 6.8% of middle- and upper-income countries (see Figure 1).

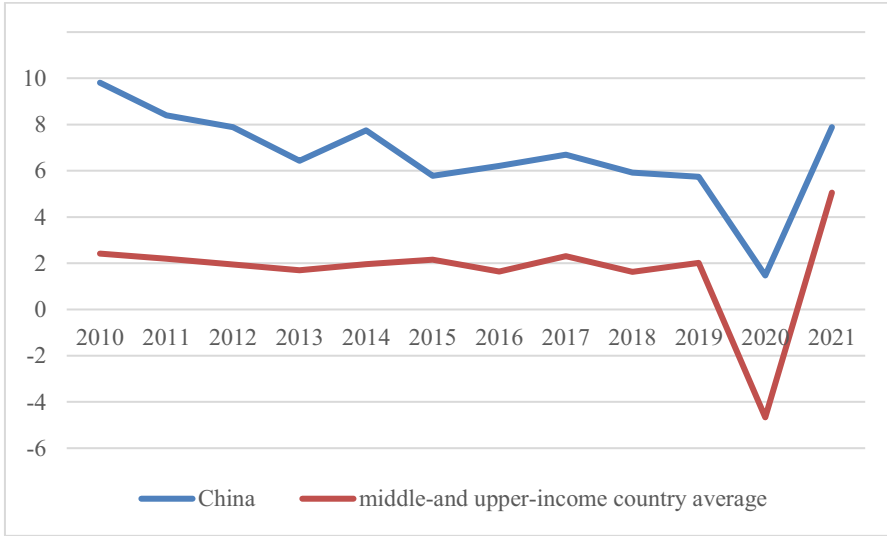


Fig. 1. Annual growth rate of GNI per capita in China.

From a domestic perspective, the GINI coefficient is an indicator that reflects that there remains a huge income gap in China. The Chinese National Bureau of Statistics estimates that in 2022, China has a Gini coefficient of 0.474, above the world average of 0.44. The large urban-rural income gap is the main cause of the current large income gap in Chinese society. However, as the effect of steady growth and employment continues to emerge, the income gap between urban and rural continues to get reduced. 2023 data from the National Bureau of Statistics for the first quarter show that the rate of disposable income between urban and rural residents is 2.35, narrowing by 0.04 compared to the same period of the previous year, and the excessive income gap between urban and rural residents is improving. Currently, domestic economists divide the income level of the country's residents into five groups, of which the category of the middle-income group is the group that holds a range from upper to middle. The middle-income group refers to individuals who can secure stable employment in society, have a high quality of life and standard of living, and have a high consumption capacity [7]. Data from the National Bureau of Statistics of China indicate that the middle-income group will reach 400 million by 2021. The share of the middle-income population will be about 30%. According to international experience, only when the share of the middle-income group exceeds 50% and the distribution pattern is formed olive-shaped, the income structure can interact positively with high-quality economic development and thus successfully cross the MIT.

**Social Income Disparity in Major Developed Countries.** The Kuznets inverted U-curve, which is important in development economics, assumes that income disparities will close automatically after countries reach a medium level of income. However, the current international economic situation does not seem to follow this theory, and

income inequality in developed countries has continued to increase since the 1980s. The Gini coefficient in the United States has been hovering below the 0.41 level since 2000, and compared to developed European countries, where it is basically below 0.4, the United States still exhibits a large social income gap. In terms of income groups, the share of the income of the top 1% income group of income of the population has risen from 8.5% and 7.5% in the 1970s to 19.8% and 10.4% in 2018 in the United States and Europe. In addition, the Social Economy Panel (SOEP) measured that the share of the middle-income group in Germany fell to 54% between 1991 and 2016 [8]. The impact of the epidemic era on the share of the middle class in developed societies was even more severe, as the economic depression brought about by the new crown epidemic led to a significant contraction in consumption and investment, and society lacked the incentive to pull positive development. This brought about the social situation of rising unemployment and job losses. In April 2020, the unemployment rate climbed to 14.7% in the United States and the number of unemployed people reached 20.5 million, bringing a huge shock to the economic growth of the United States [9]. Such a phenomenon shows that even the developed countries, the core sample targeted by the Kuznets curve, show a situation where the facts run counter to the projections. Therefore, the emphasis on changing the income pattern and optimizing of the social income structure should also be given high priority.

### 3.3 The Fundamental Role of the Middle-income Group

Expanding the share of the middle-income group is the driving force for boosting consumer demand, promoting high-quality employment, and advancing science and technology. China's tendency to depend on exports to push economic growth is weakening, and the government is inclined to boost internal consumption and develop the potential capacity of the domestic consumption market. In the consumer market, the middle-income group has a stronger marginal propensity to consume than the high-income group. The middle-income group has a stronger desire to consume and to improve people's well-being, and the income level of this group can support them to make quality enjoyment consumption. The study shows that the middle-income group has the highest propensity to enjoyable consumption at 0.081, which is higher than that of low-income households at 0.053 and higher than that of high-income households at 0.018. The enjoyment-based marginal propensity to consume for middle-income households is 1.5 times higher than that of low-income households and 4.4 times higher than that of high-income households. At the same time, the current Chinese consumption market is also dominated by consumer goods that improve life quality, so the target consumers of the consumption market are the middle-income group.

The middle-income group is mainly located in the fields of scientific research, finance, and legal industries, and has a high level of education. College students, graduate students, etc., who have received higher education tend to work in the enterprise to become a member of MIG. Due to the saturation of the job market and the increasing popularity of higher education, there is an imbalance between supply and demand between the labor market and college graduates, with 1.67 million more college graduates in 2022 than in 2021, a record high of 10.76 million. The employment quality of

graduates has been affected by the low turn-over rate of enterprise interns, the mismatch between the ability of college graduates and job demand, and the low employment intention of some graduates, resulting in low employment quality of graduates and limiting the development potential of the middle-income group. Meanwhile, expanding the middle-income group can promote scientific and technological progress.

### 3.4 The Main Ways to Expand the Middle-income Group

Improving human capital is one way to expand the middle-income group. In the 1950s and 1960s, based on the rapidly developing socio-economic level of Western capitalist countries and the lack of traditional economic theories, economists proposed a new perspective for studying economic growth - human capital theory. This theory clearly states that human capital is the main cause of national growth in the present era. According to Schultz, Human capital is a kind of capital embodied in the labor force, expressed by the quantity and quality of the workforce, as well as their knowledge, skills, workability, and health status. Human capital comes into being by investing in social production, and it plays a vital role in social production. For the quantitative study of human capital, Lucas established the spillover model of human capital and quantitatively concluded that human capital is the fundamental driver of economic development [9]. The MIG generally have sufficient human capital stock. Li and Sit point out that investing in human capital is the decisive factor in forming the middle-income structure [10]. Therefore, improving human capital is one way to expand the middle-income group.

**Improvement of Education Level.** Education is a vital way to promote scientific and technological innovation and knowledge accumulation, so promoting education is a necessary way to promote economic growth. The Chinese government proposes to expand the middle-income group, with an emphasis on graduates from colleges and vocational institutions, skilled laborers, and migrant workers. According to the data of the seventh census in China, 15.47% of the population is educated at the university level and above, which is still far from the 20%-25% of developed countries. At the same time, the official data shows that the per capita disposable income of residents in major cities and towns with higher education levels in China is also at a higher level. It can be concluded that graduates from universities and vocational colleges with higher diploma are more likely to enter urban areas and obtain higher salaries and consumption levels, thus helping form the middle-income group. Educational advancement has proven to be a prerequisite for achieving technological advancement and fostering a vocationally oriented middle-income group.

**Enhancement of National Health.** Poor health impacts new human capital development in a country, thus losing the driving force behind socioeconomic development. For example, brain damage in young children is caused by air pollution in Africa, thus reducing the lifetime economic productivity of such groups [11]. The stock of healthy human capital positively affects income growth and an increase in healthy human

capital increases income growth. An example is the growth of the economy in the short term due to investments to increase healthy human capital in sub-Saharan African countries.

China has focused on the level of people's health. the "Health China 2030" planning outline issued in October 2016 proposed the "Health China 2030" development strategy. Affected by the family planning policy, China's natural population growth rate has rapidly decreased from 20‰ to about 5‰. In terms of population stock, this transition has also brought about a slow growth rate and a serious aging of the population. The continued decline in infant and child mortality rates and under-five mortality rates reflects the improvement in social development and health. According to the National Bureau of Statistics, the national infant and child mortality rates and under-five mortality rates have continued to decline between 2010 and 2020, from 13.1‰ and 16.4‰ to 5.4‰ and 7.5‰, respectively.

In summary, China's infant survival is converging with that of developed countries, but urban-rural and regional imbalances still exist. In 2020, rural infant mortality and under-five mortality rates are 6.2‰ and 8.9‰ respectively, which is higher than the urban levels (3.6‰ and 4.4‰). Specifically, the rate of infant and under-five mortality in the West is 7.9 percent and 10.6 percent, respectively, which is higher than that in the Middle and East areas. Therefore, the improvement of national health should also pay attention to the development inequality between urban and rural areas to achieve a coordinated improvement of health and social economic development.

**The Equalization of Public Service Facilities.** Parity of public facilities refers to the process of making the basic public infrastructure enjoyed by urban and rural areas between different regions and groups roughly equal within a country. Public infrastructure and services aim to guarantee public services for the basic needs of survival and development of all citizens [12]. The three basic indicators for measuring the differences in the popularity of public infrastructure and services are the coefficient of variation, the Gini coefficient, and the Thayer coefficient. The coefficient of variation is applied to measure the differences in the provision of public infrastructure and services between regions. The coefficient of variation is positively correlated with the level of basic public service facilities provision among regions. From 2007 to 2016. The coefficient of variation changed from 0.1979 to 0.1485, and the Gini coefficient, which measures the fairness of the level of basic public service provision, changed from 0.1063 to 0.0799, while both the total Chinese Thiel index and the inter-regional Thiel index showed a significant downward trend, with a decrease of 42.25% and 51.26%, respectively. These three sets of coefficients together indicate that interregional public service facilities tend to be equalized [13]. The necessity of equalizing public service facilities is twofold. First, the equalization of public facilities can help promote social equity and thus increase the feeling of accessibility and happiness, which is the key to fulfilling people's aspirations for a better life quality. The equalization of public facilities can improve the quality of the workforce by enhancing people's sense of happiness and access and thus promote sustainable development of China in long run. Second, equalization of public infrastructure and services can help promote national consumption. Huang use provincial panel data from 2000-2016 to show that urban-rural social

security imbalance is positively correlated with urban-rural consumption inequality, thus promoting equalization of public facilities, and thus reducing the urban-rural social security gap can help reduce the urban-rural consumption gap [14].

## 4 Conclusion

Based on the concept of MIT and the proposition of the double MIT, this paper discusses the necessity and specific measures for expanding the share of the middle-income group. The research finds that China is still at a critical stage of crossing the MIT with a relatively large domestic income gap. There is an inevitable link between stagnant economic growth and large income disparity, and the necessary way and important prerequisite for crossing the MIT are to get the domestic income gap reduced and expand the middle-income group. The expansion of the middle-income group can be achieved through three specific measures: improving education degrees, improving the level of national health, and comprehensively promoting the equalization of public facilities. However, this paper does not quantitatively analyze the connection between the two aspects of the double MIT based on data and cannot investigate whether there is a linear relationship between them through data. It is believed that under the guidance of the Chinese government's policy of common prosperity, there will be an optimistic prospect of skipping the MIT and building an olive-shaped society in China.

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