

Sustainable regional economic development - issues and recommendations

Wenqing Min, Siyao Fu

The Faculty of Economics, Belarusian State University, Minsk 220030, Belarus.

Abstract: At present, the world economy is slowing down and entering recession, and China's economy is also deeply affected. For 40 years, China's economic achievements have attracted the attention of the world, while scholars have largely ignored the problems and accumulated contradictions in China's economic development model. In this article, we will combine the research results of Chinese and foreign scholars, analyze the relevant data, analyze the factors affecting China's sustainable economic development, and put forward practical suggestions.

Keywords: Sustainable Development; Innovation Approach; Regional Economic Development; Unbalanced Development; Industrial Structure

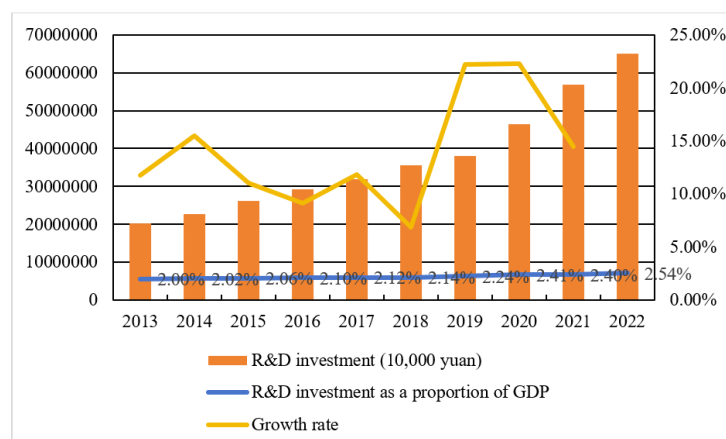
1. Introduction

After a long period of rapid economic growth, China's economy has gradually slowed down, and the experience of most developing countries shows that the only way to become a developed economy is to cross the middle-income trap and establish an innovation-driven approach to sustainable economic development. China's economy is currently facing many problems, firstly, the export-oriented economy is difficult to support sustainable economic growth in the future due to the weak recovery of the global economy; at the same time, China's high-tech industries are facing severe external sanctions and technological blockades; and finally, it is difficult for China's economy to get rid of its dependence on the land-based financial system, and the transformation of the traditional manufacturing industry is not sufficiently efficient, and there are problems of industrial hollowing-out as well as economic bubbles. Therefore, this paper will analyze these problems and give relevant suggestions.

2. Fostering innovation drivers for sustainable development

According to the global innovation index report of the World Intellectual Property Organization (WIPO), China is ranked 14th in the comprehensive ranking of the global innovation index, and among the more than 80 index data in the report, the most noteworthy ones are as follows: firstly, the proportion of the R&D investment in GDP shows an upward trend, and the latest data shows that the proportion will be 2.54% in 2022, which is basically up to 2.5%-3%, which is common in Europe and the United States.

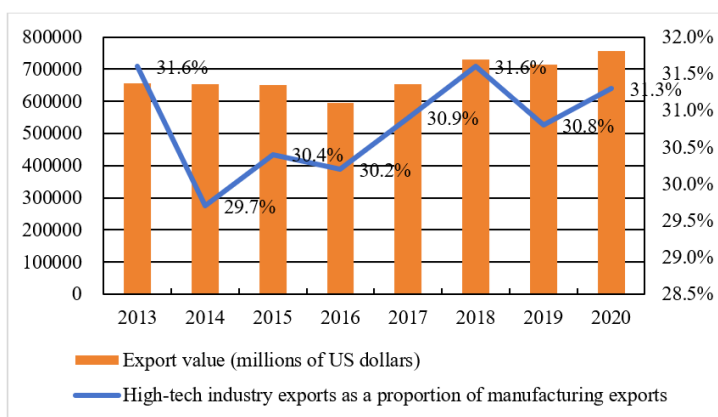
Figure 1. Investment in R&D and its share in GDP (2013-2022)



Data source: WIPO, Global Innovation Index Report 2023

At the same time, the share of high-tech industry in the export value of manufacturing industry has also remained at a high level of 30 per cent, with an overall upward trend, as shown in Figure 2 below. In the world, the proportion of China's high-tech products exports maintains a high share, as shown in Table 2. However, at the same time, China's government's innovation policy is insufficient to support SMEs as the main body of innovation, and SMEs are generally faced with the problems of difficult financing, weak risk resistance and insufficient funds and capacity for technological research and development, which leads to the lack of backward regions and traditional industries to implement the conditions for sustainable development. ^[1]

Figure 2. Changes in exports of high-tech products (2013-2020)



Data source: WIPO, Global Innovation Index Report 2023

Table 1. Export shares of high-technology products of the world's leading industrial countries

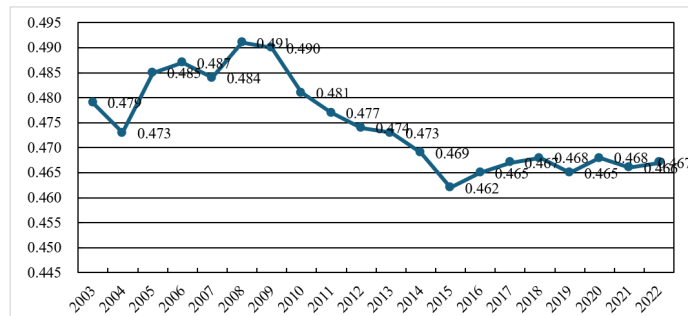
Countries	2013	2014	2015	2016	2017	2018	2019	2020
China	31.60%	29.70%	30.40%	30.20%	30.90%	31.60%	30.80%	31.30%
USA	20.50%	20.90%	21.80%	22.70%	19.30%	18.50%	18.70%	19.50%
Japan	17.80%	17.80%	18.10%	17.60%	17.60%	17.30%	17.00%	18.60%
UK	23.90%	22.40%	22.60%	23.90%	22.60%	22.30%	23.10%	23.00%
France	27.30%	27.60%	28.30%	28.10%	26.00%	25.90%	26.90%	23.10%
Germany	17.40%	17.30%	17.90%	18.20%	15.80%	15.70%	16.40%	15.50%

Data source: China High-Tech Industry Report 2022

3. Imbalance in regional economic development

The course of economic development in modern China can be divided into two stages, the first being the adoption of a highly planned economic system in the face of an external blockade during the early years of the founding of the country, with the initial establishment of an industrial system; and thereafter the market economy model that has existed so far during the period of economic system reform in the late 1970s. Under the support of this policy, the economy of some regions has developed rapidly, but at the same time, the gap between the rich and the poor and the regional disparities in China have been widening, and the per capita disposable Gini coefficient of China has long been higher than the warning line of 0.4 generally given by international academics ^[2], and the specific data are shown in Figure 3 below.

Figure 3. Gini coefficient of disposable income per inhabitant (2003-2022)



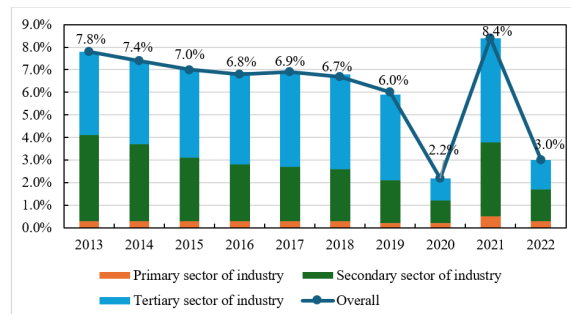
Data source: National Bureau of Statistics of China

In the past, China's special economic zones (SEZs) were relatively independent, and favorable policies were limited to cities within the zones. However, with rapid economic development, accelerated urbanization and unbalanced regional development, the original development space and policies can no longer be adapted to the current situation, and supportive policies have therefore been adjusted to strengthen the construction of city clusters, in the hope of creating a stronger scaling effect and improving the balance of economic development between regions.

4. Varying degrees of implementation of the concept of sustainable development

From the supply side, economic growth is affected by the continuous introduction of new technologies and products, so the high innovation capacity and technology conversion rate of high-tech industries determines their important role in China's future economic development^[3]. From the demand side, economic growth will bring about changes in demand, and China's current economic development means that the traditional model can no longer meet the consumption needs of residents, so changes in the demand side will affect the transformation of China's industrial structure.^[4]

Figure 4. Share of contribution of sectors to GDP growth rate



Data source: National Bureau of Statistics of China

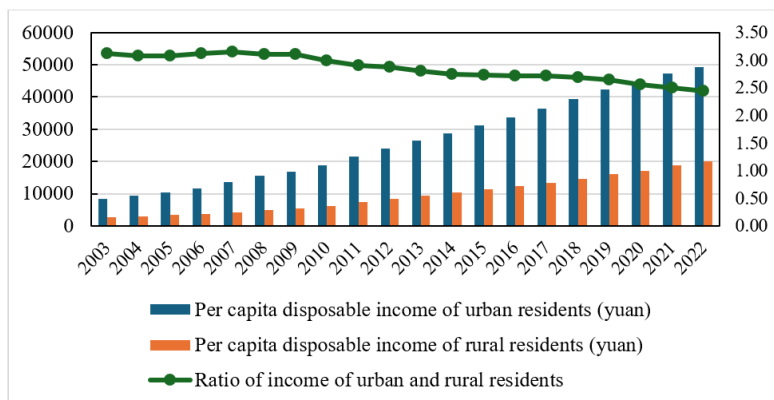
Despite the rapid increase in the degree of internationalization, scale of production and economies of scale of China's industrial system, the following problems remain: resource-intensive enterprises still account for a large proportion of the total; the strength of key high-tech enterprises is insufficient, and the industrial chain is incomplete; there is a lack of sufficient technological autonomy, and there is a lack of resistance in the face of the external embargo; the local financial system has led to an excessive quest for superficial economic data, and some local governments are mimicking successful cases without regard to the actual situation of the localities, which has led to the homogeneity of the economic structure of the inter-region; the quest for economic data has led to massive investment in real estate and finance, and there is a great risk of the economy being hollowed out by the industry.

5. Development conflicts between urban and rural areas

In the past economic development model, cities absorbed a large amount of labor from rural areas, and although the ratio of per capita

income between urban and rural areas has declined, it is still as high as 2.5. The situation of rural areas lagging in terms of development has not changed, and the gap between urban and rural areas in terms of industrial development, infrastructure, and public services has continued to widen even beyond the disposable income of the individual, which is not consistent with the vision of common prosperity in the construction of socialist modernization. This phenomenon is not in line with the vision of common prosperity in the construction of socialist modernization.

Figure 5. Changes in the average income of urban and rural residents and the urban/rural income ratio



Data source: National Bureau of Statistics of China

6. Policy recommendations

6.1 Innovation system construction

First, continue to implement cross-regional resource integration, giving full play to each region's own advantages and forming a more complete innovation system relative to the past. Secondly, we will improve the trading market for innovative technologies and products, optimize the business environment, strengthen the links between universities, research institutes and enterprises, and promote the efficiency of technology transfer. Third, we will strengthen the synergy effect between the supply and demand of industrial technologies and implement technological innovation and industrial development through the docking of scientific research actualities with enterprise demands. Fourth, strengthening the system of intellectual property protection and incentive policies for scientific researchers. Fourth, to strengthen the construction of the system of intellectual property protection and incentive policies for scientific researchers.

6.2 Regional economic integration

First, the construction of city clusters should be based on a global vision, and the economic construction should adhere to opening to the outside world. Second, it is necessary to explore cross-administrative regional development modes, strengthen the synergy between central cities and small and medium-sized cities within the city clusters, and form a system of industrial structure with complementary advantages within the region. Thirdly, we should pay attention to the contradiction between urban and rural areas and incorporate the rural economy into the urban economic construction system.

6.3 Industrial structure adjustment

Strengthen the overall design of industrial structure to form a development layout with complementary advantages and co-ordination; give policy support to strategic emerging industries to strengthen the effect of industrial agglomeration; and apply modern information technology to integrate the rural economy into the urban economic construction system.

6.4 Integrated development of urban and rural areas

First, strengthen the integration of basic public services and infrastructure construction in urban and rural areas; Second, policy support, increase the assistance to backward areas, establish a long-term mechanism for poverty eradication and return to poverty, and ensure

the sustainable development of the rural economy; Accelerate the pace of industrial upgrading, eliminating backward and highly polluting production capacity, and realizing the government's financial strength from land to tax revenue, to enhance the city's capacity for sustainable development.

References

[1] Liu Yue, Sun Yuan, Cai Ruihan et al. Research on the Implementation of Sustainable Development Strategy of Small and Medium-sized Enterprises under the Background of "Double Carbon"[J]. *Marketing World*,2022,(23):53-55.

[2] Chang Jiancong. Analysis of the Contribution of Investment, Consumption and Export to China's Economic Growth under the Perspective of Keynesian Economic Theory[J]. *Business Times*,2012,(13):4-5.

[3] Bronwyn H. Hall, Nathan Rosenberg, *Handbook of Innovation Economics*, Translated by Shanghai Institute of Science, Shanghai Jiao Tong University Press, 2017.

[4] Guo Kaiming, Hang Jing, "Demand Structure Change, Industrial Structure Transformation and Productivity Improvement", *Economic Research*, No. 12, 2018.