# Study on the Problems of Regional Economical Innovation and Development under the "Belt and Road" Strategy

# Li Jing

Xi'an Siyuan University, Xi'an, Shaanxi, China, 710038

Keywords: "Belt and Road"; regional economy; policy; research

**Abstract:** The "Belt and Road" is an important strategic concept proposed by General Secretary Xi in 2013. It focuses on the interconnection and intercommunication of Asia, Europe, and Africa and the nearby oceans, and establishes a multi-faceted exchanges and cooperation in political, economic, and cultural aspects between countries along the route. The "Belt and Road" policy has also brought about changes in the development of China's regional economy, and has a strong practical significance to study the development of regional economy.

# **1. Introduction**

In September and October 2013, General Secretary Xi Jinping successively put forward an important strategic concept for building the "Silk Road Economic Belt" and "21st Century Maritime Silk Road", and later called it the "Belt and Road" strategy. The proposal of this concept has aroused great attention from the whole country and even the whole world, especially caused extensive discussion between the economics community and international big companies [1]. People unanimously believe that the "One Belt and One Road" strategy has brought rare opportunities to China, alongside the strategy, and has a strong sense of the times and the reality.

# 2. Contents of the "Belt and Road" Strategy



Fig.1 The Belt and Road and the Silk Road ancient route map

The "One Belt and One Road" strategy is devoted to the diversified interconnection and interoperability in Asia, Europe and Africa, adhering to the principles of mutual business, sharing, and joint development, abide by the Five Principles of Peaceful Coexistence, abide by the purposes of the UN Charter, adhere to open cooperation, and adhere to a harmonious and inclusive environment. Adhere to market operations, adhere to mutual benefit and win-win situation. The

"One Belt and One Road" strategy is conducive to the establishment of a comprehensive cooperation system, an interoperable network platform, and a strategy-matching project to increase exchanges and learning among peoples along the route and enhance the feelings of people in all countries.

The Silk Road Economic Belt has been delineated in Xinjiang, Chongqing, Shaanxi, Gansu, Ningxia, Qinghai, Inner Mongolia, Heilongjiang, Jilin, Liaoning, Guangxi, Yunnan, and Tibet. The demarcation scope of the Maritime Silk Road in China is five provinces: Shanghai, Fujian, Guangdong, Zhejiang, and Hainan [2]. The "One Belt and One Road" has changed from an initiative to a specific international strategic measure. After the "One Belt and One Road" initiative was proposed, people gathered. Among the countries along the route, nearly 60 countries have explicitly expressed their support and active participation in the construction.

# 3. The Significance of the "Belt and Road" Strategy

# 3.1 Further deepening reform and opening-up.

After the reform and opening up in 1978, it has established 5 special economic zones, 14 coastal port cities, and a number of development zones that enjoy special policies. In the past four decades, the economic growth on the southeastern coast has been rapid, and the regional differences in economic development in the interior regions have been increasing. At the end of the last century, our country carried out the strategy of developing the western region and supporting projects for the northeast old industrial base. These strategies and support plans have played a role in promoting the development of the Mainland economy. However, the gap between the level and pace of economic development in the southeastern coastal areas has not been reduced [2]. The Belt and Road Initiative strategy is to develop the internal regions of China first, tap the economic potential of the central and western regions, and implement an important measure of reform and opening up in an all-round way.

#### 3.2 Important measures for China to increase foreign cooperation.

The Belt and Road Initiative not only involves the deepening of past cooperation regions and countries, but also involves more cooperation areas. After the reform and opening up, the economic development of the western developed countries, represented mainly by Europe, the United States, and Japan, has experienced a great slowdown. The economic growth of developing countries and the continuous increase in the demand for foreign cooperation are an important part of the world today. The growth pole is one of the important measures to strengthen cooperation with developed and developing countries in both directions and deepen exchanges between politics, economy, science and technology, and culture.

# **3.3** Meet the requirements of China's economic transformation and international industrial transformation.

In the three decades before the reform and opening up, China's introduction of economic factors was mainly based on the introduction of capital technologies and management models, and mainly the export of labor, raw materials, and semi-finished products. The strategy of the Belt and Road Initiative in China includes the "five links", that is, policies. Communication, road connectivity, trade flow, currency circulation, and common people [3]. This is all-rounded in ideology, politics, economy, and culture, allowing countries along the route to share the fruits of cooperation and radiate to the world.

#### 4. Requirements and Strategies of Belt and Road Initiative for Regional Economic Transition

#### 4.1 Requirements of industrial economic transformation and improvement of innovation.

Under the harsh environment of the world economic situation, China is facing greater demands for deepening reforms and industrial economic transformation. On the one hand, China is facing the

pains and risks brought about by adjustments. On the other hand, it is also an opportunity for China to strengthen external cooperation and strengthen the "openness". The requirements for industrial transformation mainly include the following points: First, the transfer of excess production capacity in China is shared with other countries in urgent need. It is necessary to analyze the demand and supply of various countries and increase the transfer of excess production capacity in China on the basis of strengthening exchanges and cooperation. The second is to continue to introduce advanced foreign technologies, experience and systems. For the new economic situation, there are bound to be many methods that are worth learning from abroad. Our country must strengthen ties with the surrounding areas to jointly discuss strategies to tide over difficulties. The third is to strengthen the output of China's Midwest products. The important part of the Belt and Road Initiative is the development of the Silk Road Economic Belt on the Western Line. This is an important measure for China to further increase its opening-up efforts in the central and western regions, and it is also an important measure to change the industrial structure of the central and western regions that focuses on the production of resource-based products. The fourth is to strengthen the influence of China's manufacturing industry. Chinese manufacturing has become an important international label. Under the One Belt One Road Strategy, manufacturing must strengthen its own technological content and product quality in order to increase its influence.

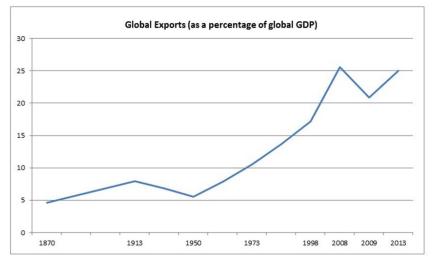


Fig.2 World trade has yet to recover to pre-financial tsunami levels

(Source: WTO, HKTDC)

# 4.2 Increased requirements for financial innovation.

The establishment of China's AIIB and Silk Road Funds has enabled countries along the Belt and Road initiative to respond actively to participate. In the form of financial cooperation is greatly enriched, further rational in the circulation of funds. For our country, the financial products are also greatly enriched. For Chinese companies involved in the Belt and Road Initiative, there are also more channels and benefits for the introduction of funds. For our financial institutions, we have ushered in unprecedented opportunities for development.

#### 4.3 Optimize economic development strategies to boost regional economic development.

The Belt and Road strategy requires a series of policies to support it. With the participation of countries along the route, policy makers have shifted from unit structure to diversity. Such policy formulation will take more consideration of regional development. It will greatly promote the development of our country's economy and regional cooperation. At the same time, the formulation of correct strategies will have an impact on all walks of life and will result in policies. The construction of the legal system has more scientific optimization.

#### 4.4 Deepen regional cooperation among developing countries

The thinking of the Belt and Road in China mainly involves many developing countries.

Cooperation with developing countries is the key economic growth point for China in the future, and it is also an important direction for China's foreign cooperation. Only under the environment of deepening cooperation with developing countries can China's capital flow and overcapacity be digested, and the economic structure of China and even the region can be further optimized to truly achieve a win-win situation.

#### 5. Measurement Method of Regional Economic Innovation and Development

The "variation coefficient method" is often used for the innovation and development of regional economy. The coefficient of variation refers to the relative number of variations in the unit sample values of the population, which is the ratio of the absolute difference to the average value. Because a statistical indicator is calculated based on the standard deviation, it is also called the standard deviation coefficient. The coefficient of variation is based on the standard deviation. Taking into account the difference in the size of the base of each sample, in order to eliminate the effects caused by the difference in the base number, the coefficient of variation is the standard deviation of the sample divided by the average value of the sample. The calculation formula is:

$$CV = \frac{\sigma}{\overline{X}}, \sigma = \sqrt{\sum_{i=1}^{n} \frac{(x_i - \overline{x})^2}{n}}$$
(1)

Among them, n is the number of samples, xi is the sample value of the i region, the mean value of the sample, and the standard deviation. The indicator uses all the data of the region, so the amount of information contained is adequate. The commonly used weighted coefficient of variation is also called the Wilson coefficient [2]. Its formula is:

$$Vu = \frac{1}{x'} \times \sqrt{\sum_{i=1}^{n} \frac{(x_i - x)^2 p_i}{p}}$$
(2)

The GDP per capita in the i region, the per capita GDP in the background region, the population in the i region and the total population in the background region.

Strengthen financial innovation and promote coordinated regional development. In promoting the implementation of the "One Belt and One Road" strategy, we must establish an innovative concept and, based on the existing regional economic governance structure, complete investment and financing operations within the framework of the rules. At the same time, we must build an open economic development platform and use multilateral agreements to allow more regions to join. In addition, regional governments must continue to strengthen economic innovation services, in accordance with the "One Belt and One Road" strategic development model, with the help of capital markets, industrial adjustment, and informatization, so that more regions and countries can conduct investment and trade more efficiently. Economic exchanges, and then promote the coordinated development of the regional economy.

#### References

[1] Ma D, Management S O, University H M. China to Implement "One Belt One Road" Strategy Under the New Situation of Global Regional Economic Cooperation[J]. Reformation & Strategy, 2016.

[2] Li W. Impact of China's Logistics Development on Regional Economic Growth Under the "One Belt One Road"[J]. Reformation & Strategy, 2017.

[3] Yuanyuan N I, Song R. Path Selection of Chongqing Economic Development Based on "One Belt One Road" Strategy[J]. Journal of Chongqing Jiao tong University, 2016.