

# Study on the Path of Sustainable Financial Development in Resource-based Regions

Ke Zhang<sup>1,2</sup>

<sup>1</sup>Kangbashi District Finance Bureau, Ordos Inner Mongolia 017010, China

<sup>2</sup>Institute of Finance and Economics, Ulaanbaatar 13381, Mongolia

**Abstract:** In recent years, China's economy has shifted from a high-speed growth stage to a high-quality development stage. The transformation of economic development mode, optimization of industrial structure, and transformation of growth momentum are important ways for high-quality development, and this is also true for resource-based regions. Resource-based regions have inherent advantages in development, but as mineral resources are continuously excavated and exploited, many resource-based cities are facing serious economic decline, unemployment, and environmental degradation. Therefore, the transformation of resource-based cities and the sustainable development of the ecology and economy are highly valued by the country. In particular, China is currently in a stage of high-quality development, and resource-based cities should closely follow the national development direction and explore a new path suitable for their own sustainable development. This article takes the resource-based city of Ordos as an example to conduct comprehensive analysis on its fiscal revenue and expenditure data from 2011 to 2022 and points out the problems in the process of sustainable development of fiscal in resource-based regions, mainly including inadequate regional economic momentum, unreasonable fiscal sources, unreasonable industrial structure mainly relying on resource-based industries, and high concentration of tax revenue under the "tax-sharing system" fiscal system affecting the ability of municipal level coordination. This article proposes countermeasures and suggestions for the sustainable development of fiscal in resource-based regions, mainly including optimizing the business environment, promoting the integration of digital industry and physical industry, adjusting fiscal and tax policies, and developing local main tax categories.

**Keywords:** Resource-based regions, Fiscal revenue, Fiscal expenditure, Sustainable development.

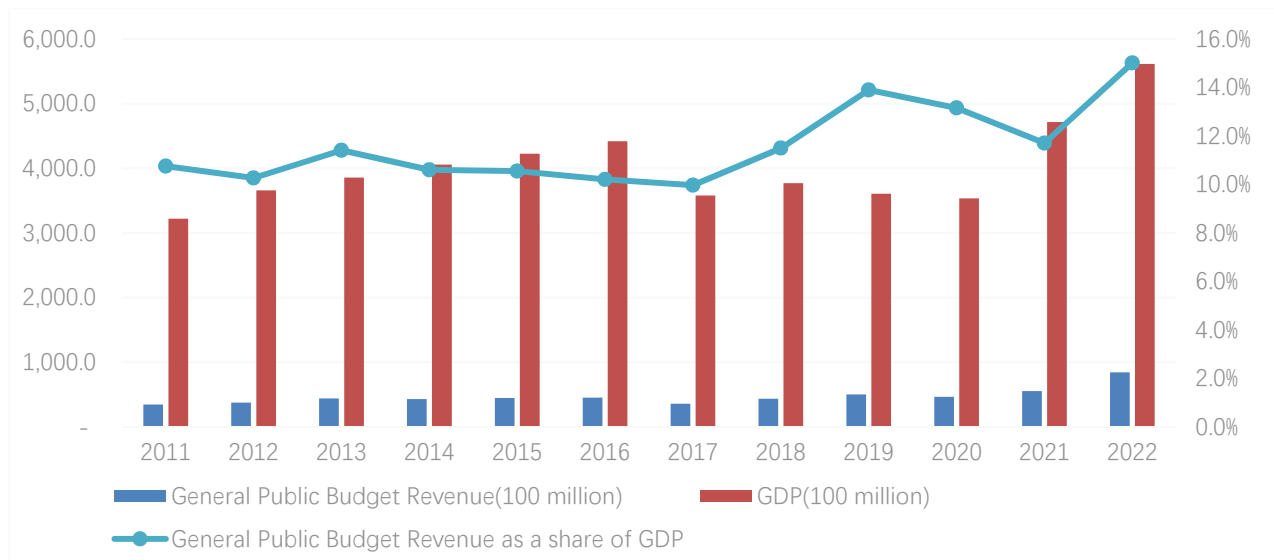
## 1. Analysis of Financial Performance in Ordos City

Ordos City is a prefecture-level city under the jurisdiction of the Inner Mongolia Autonomous Region, located in the southwest of the Inner Mongolia Autonomous Region and in the hinterland of the Ordos Plateau. The mineral resources in Ordos City are abundant, with more than 50 types of mineral deposits, of which the proven coal reserves are 167.6 billion tons, accounting for one-sixth of China's total reserves; the proven natural gas reserves are more than 800 billion cubic meters, accounting for one-third of China's total reserves. It is an important energy resource supply and reserve base in China and belongs to a resource-based city with growth potential (Wang Yan and Deng Feng, 2022). Therefore, the economic development and financial resources of Ordos are closely related to the exploitation of nonrenewable mineral resources and the development and operation of related industries. In 2022, the GDP of Ordos City was 561.3 billion yuan, ranking 49th among the top 100 cities in mainland China's GDP in 2022; the general public budget revenue was 84.28 billion yuan, of which the top three tax revenues were value-added tax, enterprise income tax, and resource tax, accounting for 28.6%, 19.2%, and 18.4% of tax revenue, respectively. The general public budget revenue increased by 52.7% year-on-year, ranking first in the autonomous region; the general public budget expenditure was 99.58 billion yuan, an increase of 36.5% year-on-year, mainly concentrated in education expenditure of 10.04 billion yuan, resource exploration and information expenditure of 16.95 billion yuan, and urban and rural construction expenditure of 22.15 billion

yuan. It can be seen that the financial revenue in the Ordos region is far ahead of the entire autonomous region, and the proportion of financial revenue and expenditure in resource-related areas is relatively large.

### 1.1. Analysis of the Scale of General Public Budget Revenue and Expenditure

In terms of revenue scale, during the "12th Five-Year" period from 2011 to 2015, the general public budget revenue and regional GDP of Ordos City continued to steadily increase. The general public budget revenue increased from 34.62 billion yuan to 44.59 billion yuan, an increase of 28.8%, and the regional gross domestic product (GDP) increased from 3,218.5 billion yuan to 4,226.1 billion yuan, an increase of 31.3%. However, the proportion of general public budget revenue to GDP fluctuated slightly downwards. This indicates that during the "12th Five-Year" period, the economic operation of Ordos City continued to be stable, and the overall operation of fiscal revenue was stable, but the pressure on fiscal support for economic and social development continued to increase. During the "13th Five-Year" period from 2016 to 2022 and the beginning of the "14th Five-Year" period, the general public budget revenue of Ordos City basically achieved sustained growth, increasing from 45.10 billion yuan to 84.28 billion yuan, basically doubling and increasing by 94.4%; the regional GDP fluctuated significantly, with a continuous decline in GDP from 2019 to 2021 due to the impact of the COVID-19 epidemic. In 2022, with the epidemic effectively controlled, both GDP and general public budget revenue showed a recovery growth trend.



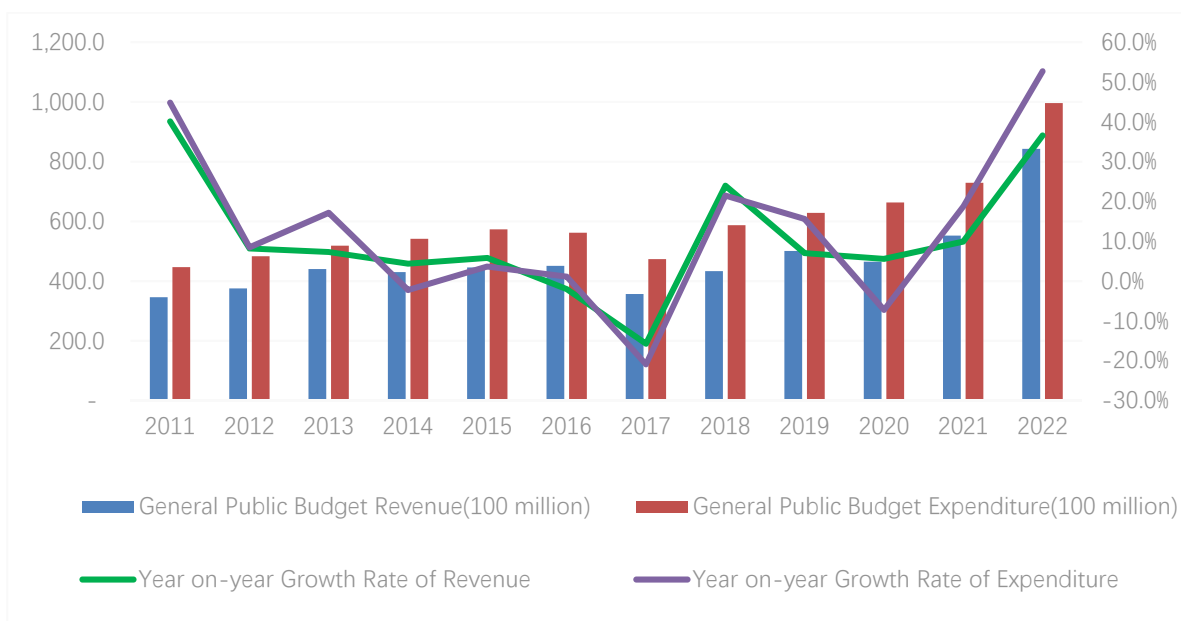
**Figure 1.** Trend chart of general public budget revenue and GDP from 2011 to 2022.  
Data Sources: "Ordos Financial Yearbook" and the website of the Autonomous Region Finance Department.

In terms of expenditure scale, during the "12th Five-Year Plan" period from 2011 to 2015, the general public budget expenditure of Ordos City steadily increased from 44.66 billion yuan to 57.31 billion yuan, an increase of 28.4%. During the "13th Five-Year Plan" period and the early stage of the "14th Five-Year Plan" from 2016 to 2022, the general public budget expenditure of Ordos City fluctuated and rose, increasing from 56.16 billion yuan to 99.58 billion yuan, an increase of 77.3%.

In terms of the growth rate of revenue and expenditure, from 2011 to 2017, the growth rate of general public budget revenue and expenditure in Ordos City continued to decline, with negative growth even appearing in 2016 and 2017. In 2017, the year-on-year growth rate of expenditure reached a record low of -15.7%, and the year-on-year growth rate of revenue reached a record low of -20.9%. Due to the collapse of the housing market in Ordos City in 2011, a serious financial crisis occurred, and the growth rate of fiscal revenue and expenditure changed from a "rocket-style" increase to a

downturn and continued to decline. After the housing market collapse, Ordos City resumed its development path relying on "coal", and its economy began to recover in 2018. From 2018 to 2020, the year-on-year growth rate of general public budget revenue and expenditure continued to decline. Due to the outbreak of COVID-19 in 2019 and its continuous impact for nearly 3 years, the economy suffered another heavy blow. Through a series of national anti-epidemic measures, the COVID-19 epidemic was finally brought under control in early 2022, and various industries resumed production and life, leading to an increase in fiscal revenue and expenditure.

In summary, from 2011 to 2022, the absolute values of general public budget revenue and expenditure basically maintained a fluctuating upwards trend. However, with the continuous increase in rigid expenditures and limited sources of revenue, the contradiction between fiscal revenue and expenditure has become increasingly prominent, and there are difficulties in achieving fiscal balance.



**Figure 2.** Comparative analysis of general public budget revenue and expenditure.  
Data Sources: "Ordos Financial Yearbook" and the website of the Autonomous Region Finance Department.

## 1.2. Analysis of the General Public Budget Revenue Composition

General public budget revenue is composed of tax revenue and nontax revenue. From 2011 to 2022, tax revenue in Ordos City accounted for approximately 75% of general public budget revenue, while nontax revenue accounted for approximately 25%. The proportions of the two were complementary. Generally, the proportions of tax revenue and nontax revenue should be maintained at 80% and 20%, respectively. The slightly lower proportion of tax revenue in Ordos City indicates that the economic vitality is not strong enough, and further promotion of local economic development and strengthening of tax collection should be carried out. The slightly higher proportion of nontax revenue may affect the quality of fiscal revenue, so the proportion of nontax revenue should be controlled.

From the perspective of tax composition, tax revenue is the main source of fiscal revenue, and its increase or decrease has a decisive impact on the overall financial strength of the region and therefore requires in-depth analysis of its composition. In 2022, the tax revenue of Ordos City was 70.88 billion yuan, a year-on-year increase of 65.4%,

accounting for 84.1% of the general public budget revenue. Nontax revenue was 13.4 billion yuan, a year-on-year increase of 8.6%, accounting for 15.9% of the general public budget revenue. Most of the increase in the city's fiscal revenue comes from taxes, and the contribution rate of tax revenue is significantly higher. Among them, value-added tax, corporate income tax, and resource tax are the main drivers of the city's tax revenue growth, and the income from these three major taxes directly determines the operation status of the city's fiscal revenue. In 2022, value-added tax, corporate income tax, and resource tax were 24.07 billion yuan, 16.19 billion yuan, and 15.51 billion yuan, respectively, totaling 55.78 billion yuan, accounting for 78.7% of the city's tax revenue, and are the backbone of the city's tax revenue support.

From an industry perspective, as shown in Table 1, the coal industry, manufacturing industry, and real estate industry have maintained a continuous growth rate, making significant contributions to the tax revenue of Ordos city. In terms of the main industrial product output index, the indexes for raw coal production and coke production have increased year by year, ranking first and second, respectively, among the main industrial product output indexes.

**Table 1.** Indicators for some areas of Ordos City from 2020 to 2022.

Industry/Indicator	2020	2021	2022
Coal industry growth rate	4.30%	7.80%	11.10%
Manufacturing industry growth rate	2.10%	5.60%	8.90%
Real estate industry growth rate	1.20%	3.40%	5.60%
Raw coal production index	100	121.4	145.3
Coke production index	100	106.2	112.1

## 2. Problems in the Financial Operation of Resource-Based Regions

### 2.1. The regional economic driving force is insufficient, and the dependence on resources is high

Ordos city's structural characteristic of "one coal dominance" has not fundamentally changed over time. From the perspective of tax revenue composition and industry contribution rate, it can be seen that Ordos city still has a high degree of dependence on resources. Second, affected by the global economic downturn and the COVID-19 pandemic, it will take some time for various industries to recover their production capacity and vitality.

### 2.2. The industrial structure is not sufficiently reasonable, mainly relying on resource-based industries, and the development of the tertiary industry is inadequate

The advanced model of the industrial structure is the "3-2-1" model. China's industrial structure formed the "3-2-1" model in 2015, achieving modernization of the industrial structure. From 2017 to 2021, the proportion of the three major industries in Ordos city basically remained at 3.5:58.5:38, presenting a "2-3-1" model, with the proportion of the second industry being too high and the development of the tertiary industry being inadequate. From the proportion of the total output value of industries, it can be seen that the coal industry, natural gas industry, and petroleum processing and

coking industry have a significant growth rate, and the second industry is still dominated by coal, with the development of emerging industries lagging behind. The output value of the resource industry is the cornerstone of local economic development, with outstanding contributions (Wang Yan and Deng Feng, 2022).

### 2.3. The vitality of market entities is insufficient

The more developed the small and medium-sized enterprises and private economy are, the more dynamic the regional economy will be. Ordos is located in the Gobi Desert in inland Inner Mongolia, and its geographical location is restricted. In addition, state-owned and state-controlled economies are the main market entities. The proportion of assets and industrial sales value of state-owned and state-controlled enterprises is far higher than that of private enterprises. The development of the private economy is lagging behind, and there are a series of problems, such as difficulties in financing and weak competitiveness (Zhang Ting, 2020).

### 2.4. Under the current fiscal system, tax revenues in resource-based regions mainly come from shared axes, with few exclusive taxes

The concentration of tax revenue is relatively high, and the ability of municipal-level coordination is somewhat affected. The total amount of financial revenue handed over to the autonomous region and the central government by Ordos City

in 2016, 2017, and 2018 accounted for 33.8%, 55.4%, and 52.7% of the total financial revenue, respectively. In 2019, the proportion remained above 50%. Among them, the general public budget revenue in 2017 was RMB 35.68 billion, a decrease of RMB 9.42 billion or 20.9% compared to the previous year. However, the amount handed over to the central and autonomous regions was as high as RMB 44.37 billion, an increase of RMB 21.31 billion or 92.4% compared to the previous year. The high concentration of tax revenue greatly affects the regional fiscal coordination ability and exacerbates the contradiction between fiscal revenue and expenditure.

### **3. Countermeasures and Suggestions**

#### **3.1. Build a modern industrial system and actively develop green, low-carbon and digital industries.**

Promote the development of advanced manufacturing, strengthen the "wind, solar, hydrogen and energy storage vehicle" industrial cluster, prepare for the development of a new energy equipment manufacturing industry fund, actively develop new materials, biopharmaceuticals and other emerging industries, promote the high-end, intelligent, and green development of industrial parks, and promote the high-end, diversified and low-carbon development of the coal chemical industry. Vigorously develop the tertiary industry, tap consumption potential, enhance cultural and tourism consumption, create a number of demonstration samples with deep resource integration and cultural and tourism integration, and upgrade service consumption such as medical education, culture and entertainment.

#### **3.2. Optimize the business environment and fully stimulate the vitality of market entities.**

Continuously optimize the business environment, issue a

series of policies and measures conducive to the development of small and medium-sized enterprises, fully implement the new round of national tax reduction and fee reduction policies, and promote the listing of enterprises. Strengthen and improve state-owned capital and state-owned enterprises and enhance the leading and supporting role of state-owned enterprises in new energy, energy conservation and environmental protection, urban construction and other fields.

#### **3.3. Adjust fiscal and taxation policies and develop local taxation sources.**

Continuing to deepen the reform of the fiscal and taxation system further improves the local tax system, develops local taxation sources, and establishes a fiscal and taxation system that is compatible with high-quality transformation and development. First, ensure that fiscal power and responsibilities match, give more autonomy to cities and counties, strengthen the power of the central and provincial governments, and scientifically allocate power and expenditure responsibilities based on the scope and impact of public service benefits. Second, further improve the transfer payment system and strive for funding from higher levels. Third, cultivate local taxation sources, such as deed taxes, land occupation taxes, property taxes, etc.

### **References**

- [1] Wang Yan, Deng Feng. Identification and Effect Evaluation of Transformation Stage of Resource-Based Cities——A Case Study of Ordos City [J]. *Natural Resource Economics of China*, 2022(02): 1-15.
- [2] Zhang Ting. Thinking on the Problems and Countermeasures of Financial Operation in Resource-based Regions [J]. *Economic Problems*, 2020(11): 50-57.
- [3] Ordos Municipal Bureau of Statistics. *Ordos Statistical Yearbook (2020)* [M]. Beijing: China Statistics Press, 2020.
- [4] Ordos Municipal Bureau of Statistics. *Ordos Statistical Yearbook (2021)* [M]. Beijing: China Statistics Press, 2021.