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LETTER TO THE EDITOR

The Synergistic Model of Financial Ecological Assets Composition and Environmental Benefit Price Index

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Financial ecological assets refer to the environmental conditions faced by financial structure and financial activities, which are composed of political, social, cultural, ideological, institutional conditions, policy constraints, micro-foundation, laws and regulations, traditional habits and other factors. Building a good financial ecological environment is not only conducive to the development and growth of the financial industry, but also conducive to enlarging the "depression effect" of capital accumulation, guiding the scientific and rational allocation of resources, and promoting the sustainable development of local economy.
Financial Ecological Assets; Environmental Benefits; Price Index

1 Introduction

The so-called financial ecological environment refers to the interaction between external conditions and internal and external factors of the operation of the financial system, which is the basis for the operation and development of Finance and economy. The quality of financial ecological environment is not only related to the soft environment of a country and regional economy, but also directly affects the development level of regional economy and even the whole national economy. With the development of socialist market economy, the construction of financial ecological environment plays an increasingly prominent role in promoting the coordinated development of regional economy and finance. It can be said that the financial ecological environment has become a potential productivity and competitiveness. To promote the healthy and coordinated development of economy and finance, we must put the optimization of financial ecological environment in a prominent position (Vastola et al. 2017).

Xianjia Wang, Jing Shen published a paper entitled “Enterprise Supervision Research on Carbon Emission Based on Perfect Bayesian Equilibrium” on Issue 107 of Ekoloji in 2019. This paper established a Bayesian dynamic game model between government environmental regulators and carbon emission enterprises. For the first time, this paper introduced the monitoring system as a method to grasp the real-time carbon emissions of enterprises, and considers the disclosure of carbon information by enterprises, thus avoiding the review by government departments. (Lilly and Ravikumar 2017)Through the model analysis, it is concluded that the accuracy of the monitoring system and whether the enterprise publishes its carbon information have a great impact on the strategic choice of both sides of the game. The research results have important practical significance for improving carbon emission control policies, restraining excessive and secret emissions of enterprises, and improving the efficiency of carbon emission control. This paper has obtained good research results in this field. On this basis, this paper designed a synergistic model between the composition of financial ecological assets and the price index of environmental protection benefits.

2 Idea Description

Principles to be followed in evaluating regional financial ecological environment index system.

2.1 Scientific principle

The evaluation index system should have a clear hierarchical structure. On the basis of scientific analysis and quantitative calculation, an intuitive conclusion on the quality of regional financial ecological environment should be formed. The design of indicators should be based on modern statistical theory and make use of existing statistical data as far as possible (Sier and Monteith 2017).

2.2 System principle

We should regard social and economic development, financial resources, credit and legal environment as a whole system, and objectively reflect the internal relationship between social economy and financial ecology through the evaluation index of regional financial eco-environment (Li et al 2017).

2.3 Principle of comparability

The establishment of evaluation index of regional financial ecological environment should consider that evaluation index is convenient for vertical comparison and horizontal comparison. The so-called vertical comparison means that the evaluation index of regional financial ecological environment should be relatively stable compared with historical data. The so-called horizontal comparability is comparable between adjacent regions. In a region, the evaluation index of regional financial ecological environment should be at least the projects of the above provinces (cities and counties). If only a few provinces (cities and counties) have projects, the evaluation results will have no significance.

2.4 The principle of combining qualitative and quantitative

Assessment of financial ecological environment is a very complex work. If the indicators are quantified one by one, there is no scientific basis, so in practice, we must fully combine qualitative analysis. However, the final evaluation results should form a clear quantitative result to exclude the influence of subjective factors or other uncertain factors in qualitative analysis.

3 Main Contents of Financial Eco-environment Index System

As mentioned earlier, financial ecology is the sum of environmental conditions composed of many factors, which has various restrictions and influences on the operation behavior, operation effect and performance evaluation of financial institutions. The different intensity and contribution rate of these factors are essentially the main content of our research and evaluation of financial ecological environment. Analyzing the financial ecological environment from the regional level and evaluating the relevant variables, the evaluation index system of regional financial ecological environment should generally include the level of economic development, financial development, social credit level and financial ecological security mechanism, among which each category can be further divided into a large number of sub-factors according to needs. According to the consistency and comparability of the evaluation criteria and the applicability and operability of the scoring model, we selected the factors that directly affect the financial ecological environment as the basis of the evaluation (Odefey AS et al 2017).

3.1Economic development level

Economy is the material basis of financial exhibition. The level of economic development determines the direction, structure, scale, quality and efficiency of financial development. The index system reflecting the level of economic development can be composed of 10 indicators, such as regional proportion, Investment-Output ratio and regional GDP growth rate (Xue Y, Lei H 2017).

(1) The proportion of regional GDP refers to the percentage of GDP in the whole province in the reporting period of regional GDP. Its calculation formula is: the proportion of regional GDP= (regional GDP/province GDP in the reporting period)*100%.

(2) The proportion of fiscal revenue refers to the percentage of fiscal revenue in the whole province in the regional reporting period. Its calculation formula is: the proportion of fiscal revenue. = (Regional fiscal revenue/provincial fiscal revenue in the reporting period)*100%.

(3) The proportion of investment in fixed assets refers to the percentage of total investment in fixed assets in the province during the regional reporting period. The calculation formula is as follows: the proportion of fixed assets investment = (total regional fixed assets investment in the reporting period/provincial fixed assets investment) * 100%.

(4) The proportion of foreign capital utilization refers to the percentage of total foreign capital utilization (including direct investment and indirect investment) in the whole province in the regional reporting period. The calculation formula is as follows: the proportion of foreign capital utilization = (total regional foreign capital utilization / total provincial foreign capital utilization)*100%.

(5) The proportion of private economy refers to the percentage of GDP achieved by private economy in the regional reporting period. The formula is as follows: the proportion of private economy = (gross domestic product/regional gross domestic product realized by private economy in the reporting period)*100%.

(6) Investment-output ratio. It refers to the proportional relationship between GDP and fixed assets investment in the regional reporting period. The formula is: the ratio of investment to output = (gross domestic product/investment in fixed assets in the reporting period)*100%.

(7) The ratio of credit funds occupied per 100 yuan. Indicators reflecting the occupancy of credit funds per 100 yuan. The formula is: loan ratio = (total loan/gross product in the reporting period)*100%.

(8) Regional GDP growth rate. It refers to the percentage of GDP growth in the reporting period, which reflects the capacity of regional economic growth. The calculation formula is as follows: the growth rate of regional GDP = [(real GDP at the end of the year in the region - real GDP at the base period) / real GDP at the base period] * 100%.

(9) The growth rate of fiscal revenue. It refers to the growth percentage of the total fiscal revenue in the regional reporting period compared with the base period, reflecting the growth capacity of the regional fiscal revenue. The calculation formula is as follows: the growth rate of fiscal revenue = [(fiscal revenue in the reporting period - base fiscal revenue) / base fiscal revenue] * 100%.

(10) The growth rate of per capita disposable income. It refers to the percentage increase of per capita disposable income in the reporting period. The calculation formula is: the growth rate of per capita disposable income = [(per capita disposable income in the reporting period - per capita disposable income in the base period) / per capita disposable income in the base period] * 100%.

3.2 Level of financial resources.

Financial resources are the direct material basis of financial development. The index system reflecting the level of financial resources can be composed of five indicators: the proportion of total deposits, the growth rate of total deposits, the capital adequacy ratio and the profit margin of assets.

(1) The proportion of total deposits. It refers to the percentage of the total deposits of all financial institutions in a region during the reporting period in the whole province. The calculation formula is as follows: the proportion of total deposits = (total deposits in the reporting period / total deposits in the province)*100%.
(2) The proportion of total loans. It refers to the percentage of total loans of all financial institutions in a region during the reporting period in the whole province. The calculation formula is as follows: the proportion of total loans = (total loans in the reporting period / total loans in the province)*100%.
(3) The proportion of the total amount of private financing. It refers to the percentage of total private capital and loans from all financial institutions in the regional reporting period. The formula is as follows: the proportion of the total amount of private financing = (the total amount of private financing / the total amount of loans of all financial institutions in the reporting period)*100%.
(4) Per capita savings ratio. It refers to the ratio of per capita savings to per capita savings of the whole province in the regional reporting period. The formula is: per capita savings ratio= (regional per capita savings/provincial (national) per capita savings)*100%.
(5) Per capita profit ratio. It refers to the ratio of the per capita realized profit of the financial practitioners in the regional reporting period to the per capita level of the whole province. Its calculation formula is: per capita profit ratio= (regional per capita profit/per capita profit of the whole province).

3.3 Social credit level

With the improvement of market economy, the allocation of credit resources is more in line with the principles of market economy, and the flow of funds in regions is more closely related to the credit environment. To a great extent, the level of social credit affects the spatial structure, asset quality and economic benefits of the financial industry. The index system reflecting regional social credit level can be composed of 10 indicators, such as government debt ratio, enterprise indirect financing ratio, enterprise tax rate on arrears, and actual execution rate of financial creditor's rights.

3.4 Financial ecological security mechanism.

Building a good financial ecological environment is a complex systematic project. It requires that under the unified leadership of the local government, all sectors of society should be mobilized, starting from fulfilling their respective responsibilities, forming a social synergy, and establishing a sound financial ecological security mechanism. For the evaluation of financial ecological security mechanism, we selected eight indicators from the aspects of government administrative behavior, the rule of law, the development of intermediary market and self-regulation mechanism.
(1) Government-led financial ecological construction (whether to establish a government-led financial stability coordination mechanism, whether to put forward suggestions and objectives for regional optimization of the financial ecological environment, whether regional industrial policies and macro-control requirements are consistent, whether there exists inappropriate government intervention in financial business).
(2) The implementation of the government's preferential policies for financial institutions (tax relief for rural credit cooperatives, interest subsidy for preservation, timely allocation of fiscal interest-discount loans, incentives and recognition for institutions or personnel who have made outstanding contributions to the regional financial system, and whether government departments support the disposal of non-performing assets of financial institutions).
(3) Perfection of financial system in the region (whether to establish information sharing mechanism of financial management in the region, whether to establish a sound financial organization system, financial market system, payment and liquidation system).

(4) The establishment of corporate governance mechanism of financial institutions (whether to establish a "three meetings and one layer" governance structure, whether information disclosure is timely and perfect, whether internal management system is sound and effective, and whether major financial cases occur in regional financial institutions).
(5) Innovation of new financial products (whether they have the ability to develop new products, whether the promotion and publicity of new products are in place, and whether they have established a sound internal control system for new products).
(6) Accuracy and authenticity of financial information of enterprises (whether the financial statements provided by enterprises to commercial banks are timely and accurate, and whether the information disclosure of Listed Companies in the region is timely and accurate).
(7) The construction of credit information system in the region (whether to open the government credit website, the storage rate and inquiry rate of credit registration and consultation system, the form and influence degree of credit publicity and education).
(8) The management and self-discipline of social intermediaries (whether industry self-discipline organizations are established, whether self-discipline organizations are functioning normally, and whether intermediaries have uniform rules and regulations.

4 Conclusion

Guided by the evaluation of financial ecological environment, on the basis of drawing lessons from the evaluation index system of investment environment and ecological environment, and based on the evaluation of financial ecological environment of municipal region, this paper initially establishes a set of evaluation index system of regional financial ecological environment. Its purpose is to scientifically assess, compare and monitor the changes of regional financial ecological environment, comprehensively and objectively grasp the development trend of the future environment, and then actively and effectively create a high-quality and efficient financial ecological environment to provide important reference, suggestions and ideas.

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