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Research on Theory and Practice of Comprehensive Performance Evaluation of Financial Operation in Minority Concentrated Regions in the New Era

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Abstract:

In order to meet the needs of China's high-quality development, the minority concentrated regions must allocate public resources efficiently. It is urgent to promote the effective implementation of financial budget performance management in minority concentrated regions. Through the investigation, we summarized the progress and effectiveness of the financial budget performance management in different counties, and deeply analyzed the main problems faced by the financial budget performance management in the minority concentrated regions. These problems include: the insufficient innovation of the budget performance management system in promoting the county financial effort in each province and below, the further strengthening of the scientificity of the budget performance management evaluation indicator system to promote the county financial autonomy, and the urgent need to improve the financial budget performance management ability at the county level. After the systematic sorting out of the related documents on comprehensive performance evaluation of financial operation, the author constructed an analysis framework of the comprehensive performance evaluation of the financial operation in the minority concentrated regions, which includes two dimensions, "financial operation behavior" and "government budget function". Under this framework, we not only clearly elaborated the basic composition of the comprehensive performance evaluation of financial operation, but also determined its core evaluation indicators. In addition, the system also deeply analyzed the effectiveness and deficiency of the county financial operation, and provided valuable reference for the local government to make decisions, and also provided valuable experience for other county and even wider local financial management.

Key words: county finance; financial budget; performance indicators.

I. Introduction

(I) Research background

In order to promote China's high-quality development and improve the allocation of public resources, the use of financial funds and the quality of public service supply in minority concentrated regions, it is necessary to strengthen the financial budget performance management at the county level. County finance is the foundation of county governance, while budget reflects strategy and policy direction, and ensures modernization of governance. The Ministry of Finance promoted the local financial performance management according to the *Opinions*, and the eastern provinces and cities took the lead. County finance needs to provide public product service, and budget performance evaluation affects financial robustness, residents' life and social well-being. A scientific evaluation system shall be established to optimize financial management and promote balanced development. The financial performance evaluation in minority concentrated regions shall promote transparency, enhances public trust and support social and economic development. It is of great significance to study county financial performance evaluation, which may promote financial reform, management efficiency and social justice.

(II) Research significance

The national promotion of financial budget performance management is proceeding steadily. This paper will take Mengshan County as a concrete case to deeply discuss the implementation of financial budget performance management and its importance.

Firstly, from the theoretical point of view, at the initial stage of the national promotion of financial budget performance management, the county-level and municipality-level performance assessment system has not been fully constructed. This paper aims to analyze the existing weak links and key problems by deeply studying the related theories, drawing lessons from the existing research results and combining with the actual situation, so as to provide powerful theoretical support for the follow-up research work.

Secondly, from the perspective of reality, local government, as the provider of policy implementation and public service, whose financial budget management level is directly related to the quality and efficiency of public service. However, the budget expenditure at the city and county level accounts for as high as 70% of the total financial expenditure of China, so it is of great practical significance to strengthen the financial budget performance management at the city and county level. On the basis of summarizing the existing management methods, this paper is devoted to promoting the extensive and in-depth implementation of financial budget performance management. At the same time, in view of the relatively weak foundation of financial budget management at county level, this paper mainly studies the optimization measures of financial budget performance management in minority concentrated regions, to improve the management effectiveness and scientificity, and then to optimize the allocation of resources, change the traditional management mode, and enhance the policy implementation effect. Finally, this paper summarizes a set of performance management mode suitable for financial budget management in minority concentrated regions, which will provide useful reference for other cities and counties.

II. Literature review

(I) Review of foreign literature

In western countries, the concept of performance budget management was early developed, first in the United States. After a long time of change and development, at least 30 countries have adopted different performance budget management modes. Performance budget management has become a mainstream mode of strengthening budget management all over the world. By combing the development of performance budget management in western developed countries such as the United States and Britain, it can be concluded that the financial crisis has forced the continuous reform of performance budget management and formed various performance management modes. The development and characteristics of performance budget management in the United States is as follows: From 1920s to 1940s, influenced by war, economy and other factors, the financial pressure of American government increased. In 1949, Hoover Commission put forward "project budget" or "performance budget" for the first time, which established government budget on measurable performance, paid more attention to expenditure cost, and measured income and expense, which formed "traditional performance budget". However, due to the lack of supporting systems such as laws and accounting systems, and the unclear benefits of the government departments to the reform, the traditional performance budget management was difficult to promote effectively. In the 1970s, due to the government's serious financial and management crises, the Britain government carried out a great deal of reforms in public finance and budget around expenditure control and expenditure efficiency improvement. In the late 1990s, Britain began to establish a comprehensive performance budget system. Through the continuous accumulation of experience and the administration of parties in different periods, the Britain performance budget management has basically formed the working steps of setting budget performance targets, allocating budget funds, carrying out process supervision, submitting performance reports, auditing and applying performance results, and the whole process runs through the information collection and use.

(II) Review of domestic literature

In the 1980s, the new tide of performance budget management reform spread from developed countries to developing countries, and the global budget management gradually changed from budget-oriented to performance-oriented. Under the background that the budget management had not been fully legalized and standardized in China, the idea and method of performance management was introduced, and the budget performance management mechanism covering the budget preparation and the whole chain of execution and supervision was gradually established, aiming at standardizing the budget management process and improving the use efficiency of financial funds. Although budget performance management and performance budget are literally similar, and share some ideas and methods, they have significant differences in their connotation due to the differences in reform background, objectives and implementation paths.

Although China’s budget performance management has been developed for many years, we still find many challenges through in-depth research. At present, the budget performance management pays too much attention to the concrete content assessment of the project expenditure, but neglects the whole content of the project. Wang Kai investigated the budget performance management of the subordinate districts and counties of Jining City, Shandong Province, and found that the long-standing concept of “strict distribution, weak management, focusing on expenditure and ignoring performance” in the budget department has not been fundamentally changed. The implementation of budget management and performance management is mostly to meet the requirements of superior departments, while the concept of budget performance management has not really been accepted, failing to realize the organic combination of the two. Li Wei also pointed out that some departments only pay attention to the legal compliance of unit department expenditure, but ignore the effectiveness of expenditure when setting budget performance management objectives. Therefore, in actual operation, many departments pay insufficient attention to the management of performance objectives, and there is a passive coping phenomenon in the preparation of project budget performance objectives. Meanwhile, in the actual operation process, some budget performance indicators and target values are set by the project unit when preparing the budget. Because the budget preparation unit considers its own interests and the competent department has no in-depth understanding of the preparation unit, the budget preparation department may set low target values when preparing budget performance, and set performance indicators too extensively.

(III) Literature comment

Although the domestic academic circles have made some progress in the research of financial performance indicators, there are still some shortcomings. Firstly, the standardization and comparability of the indicator system need to be improved, especially in the cross-regional and cross-industry comparative study, it is difficult to form a unified standard. Secondly, the design of performance indicators tends to focus on quantitative analysis and neglect the influence of qualitative factors. In addition, the dynamic adjustment mechanism of financial performance indicators is not perfect, and it is difficult to adapt to the rapid change of policy environment.

From the perspective of financial budget performance management, this paper takes the practical work experience of financial budget performance personnel as the guide, and adds the characteristics of minority concentrated regions from the concrete conditions in practice.

III. Performance indicator framework and theoretical analysis

The effective implementation of financial budget performance management at the county level is very important for the grass-roots finance to keep the bottom line thinking and improve the quality of people’s livelihood security and public service while ensuring the sustainable development. Whether to integrate “stronger county” with “enriching the people”, or combining “reform” with “development”, or breaking through the barriers of “town” and “village”, in the new era, following the trend of digital economic development and innovation of public service supply, promoting the bi-directional circulation and deep integration of county-level urban-rural resources, promoting the coordinated development between regions, and promoting the construction of national identity, the realization of these goals can not be separated from the accelerated promotion and efficient implementation of county-level financial budget performance management in minority concentrated regions. This action is not only conducive to the implementation of the goal of deep integration of urban and rural development and common prosperity proposed by the Fifth Plenary Session of the 19th Central Committee of the Communist Party of China, but also a basic condition for promoting the modernization of financial governance in local grass-roots counties and consolidating the national identity, and also a new opportunity for high-quality economic and social development of counties in minority concentrated regions and sharing the dividends of digital economic development. In accordance with the preliminary exploration stage of the comprehensive performance evaluation of financial operation, the current research mainly defines the main body and object of the evaluation, that is, following the guidance of the *Opinions of the Central Committee of the Communist Party of China and the State Council on the Overall Implementation of Budget Performance Management*, it is clear that “financial departments at all levels need to carry out comprehensive performance evaluation on the financial operation of lower-level governments”. However, the specific content and implementation method of evaluation, i.e. what to evaluate and how to evaluate, have not yet formed a widely recognized standard. In view of this, based on the core elements of performance and performance evaluation, this paper constructs a comprehensive performance evaluation analysis framework of financial operation, which includes two dimensions: “financial operation behavior” and “government budget function”. Under this framework, this paper further refines and summarizes the key performance indicators of comprehensive performance evaluation of financial operation.

(I) Key performance indicator framework design

Considering that performance is a multi-dimensional construction, the results will vary depending on the factors observed and measured. On the basis of the comprehensive behavior performance view and the result performance view, this paper grasps the two key elements, “financial operation behavior” and “government budget function”. This paper analyzes the financial operation from the perspective of budget management, and correspondingly puts forward an analysis framework including two dimensions “financial operation behavior” and “government budget function”. The financial operation behavior corresponds to the state and development of the financial revenue, expenditure, management, sustainability and forging a keen sense of national identity at the primary government. Government budget function is the function and goal of budget management in income raising mechanism, resource allocation function and revenue adjustment function.

Analysis dimension	Financial operation behavior	Government budget function	Interactive relationship
Source of income	Tax income, non-tax income	Income raising mechanism	Financial operation behavior affects the scale and structure of budget revenue; Budget revenue policy adjusts financial revenue
Direction of expenditure	Education, health care, social security, etc.	Resource allocation function	The structure of financial expenditure affects the efficiency of budget resource allocation. The principle of budget allocation guides the direction of financial expenditure
Efficiency of expenditure	Economic and social benefits	-	Evaluation of expenditure efficiency is fed back to budget adjustment and optimization
Financial balance	Financial deficit; financial surplus	Revenue adjustment function (Indirect)	Financial balance affects budget deficit management strategy; Budget regulation function promotes financial balance
Supervision and control	Budget execution and compliance	Supervision and control function	Budget execution monitoring and performance evaluation promote the standardization of financial operation; Budget rigid constraint guarantees financial discipline

Analysis dimension	Financial operation behavior	Government budget function	Interactive relationship
Policy synergy	Financial and other policies	-	Policy coordination enhances the overall efficiency of financial operation and government budget
Institutional innovation	Reform of budget management system for ethnic groups	-	Establishment of individual performance evaluation indicator sub-system with distinctions and characteristics

Form 1 Theoretical Analysis Framework

(II) Selection of indicators

In order to scientifically design the indicator system to measure financial performance, we should not only base on the theoretical connotation and characteristics of financial performance, but also fully consider the practical application value of the indicator system. This means that the indicator system should be easy to understand and easy to operate, and be able to briefly summarize and basically reflect the development direction of financial performance. Therefore, it becomes particularly important to avoid being overly complex and cumbersome so as not to reduce the ease of understanding and application. In designing the financial performance indicator system, we must adhere to a series of key principles, such as operability, comparability, high representativeness, strong objectivity, independent social and economic significance, etc. Following these design principles, and based on the understanding of the connotation and characteristics of financial performance, this paper designs and constructs a financial performance evaluation indicator system, which consists of 5 primary indicators, 9 secondary indicators and 18 tertiary indicators. The following is a brief explanation of these indicators:

The first primary indicator: financial revenue, including two secondary indicators, which mainly evaluate the county-level government's financial revenue from financial security and revenue quality, including: per capita available financial capacity, transfer payment dependency, tax share and financial burden rate. ① Per capita available financial capacity assesses the distribution of income resources at the per capita level. According to the theory of public goods, one of the important functions of the government is to provide public goods and services, such as infrastructure construction, education, medical care, etc. The supply level of these public goods directly affects the economic development of the region and the living quality of the residents. The per capita available financial capacity is an important indicator to measure the level of resources that the government can use to provide public goods. In terms of financial security, higher per capita available financial capacity means that the government has more resources to meet public needs. ② Transfer payment dependency reflects the degree of dependence on transfer payment. Under the background of slow economic growth and weak tax growth, the local government is facing increasing financial pressure. As an important financial support means of the central government, transfer payment can effectively relieve the financial pressure of the local government and guarantee its normal operation and public service supply. ③ Tax share reflects the importance of taxation in financial revenue. The theory of taxation function points out that taxation has the functions of raising financial revenue, regulating economy and supervising economic activities. Among them, raising financial revenue is the most basic function of taxation. Its rationality and stability directly affect the result of financial performance evaluation. A reasonable tax share can not only ensure that the government has enough financial resources to provide public services, but also improve the efficiency of the use of financial funds, thus achieving the goal of financial performance evaluation. The financial burden rate reflects the extent to which the taxpayer bears the financial expenditure. ④ The financial burden rate reflects the degree to which taxpayers bear the financial expenditure. The financial burden rate is directly related to the realization of financial function and economic function. When the financial burden rate is too low, it may not be enough to support necessary public services and infrastructure construction, affecting the performance of financial functions, and thus affecting the long-term stability and quality of financial revenue.

The second primary indicator is financial expenditure. According to the *Local Financial Performance Evaluation Method* and other documents, the focus of financial management is examined and the evaluation contents are clarified: people's livelihood security and economic effect. In terms of people's livelihood security, the increase in per capita social expenditure means that the government increases its investment in social security. This helps to improve the coverage and level of social security, provide basic living security for vulnerable groups, reduce poverty and social instability, and thus maintain social harmony and stability. The increase in per capita expenditure on culture and education means that the government invests more in education. This helps to improve the quality of education, expand the coverage of education and provide higher-quality education services for the people. The improvement of education level is one of the important contents of people's livelihood security and also an important indicator of financial performance. By increasing the two expenditures, the social security level can be improved, the flexibility of the labor market can be promoted, the consumption confidence and level can be enhanced, the education level can be improved, the human resource development can be promoted, and the social cohesion and innovation capacity can be enhanced, so that people's livelihood can be comprehensively guaranteed and improved. The growth rate of regional GDP is an important indicator to measure the actual economic growth. It eliminates the interference of price factors and can reflect the real changes of economy more accurately. Investment in fixed assets is one of the important driving forces of economic growth. It promotes economic growth by investing in production equipment and infrastructure to improve production capacity and efficiency. Investment in fixed assets can increase the supply of production equipment and infrastructure, improve production capacity and productivity, and meet the market demand.

The third primary indicator is financial management. According to the *Budget Law of the People's Republic of China (2018 Amendment)*, financial management is an important part of the budget performance management system, mainly analyzed from cost control and budget control. From the perspective of cost control, the financial support ratio refers to the proportion of the number of government financial support personnel (such as civil servants, personnel of public institutions, etc.) to the total population or total financial revenue. The financial support ratio directly affects the government's direct administrative cost. The higher the ratio, the more the government will have to pay for salaries and benefits, thus increasing the financial burden. The share of administrative expenditure visually reflects the share of resources consumed by administrative activities in the overall allocation of resources. If this share is too high, it means that a large amount of financial resources are allocated to administration, and the investment in other areas such as education, health care and infrastructure construction may be squeezed. In the aspect of budget management, the completion rate of government budget expenditure directly reflects the efficiency of government budget management. An efficient budget management system should be able to ensure that budget funds are spent in full and on time as planned, so as to achieve policy objectives and effective provision of public services. The completion rate of government budget expenditure also directly affects the effect of policy implementation. If budget funds are not available on time, policy implementation may be hindered and the realization of policy objectives will be affected. The proportion of financial funds in stock has an important influence on budget arrangement and adjustment. In the stage of budget preparation, the scale and proportion of the financial funds in stock is an important basis for determining the budget scale and distribution direction. If there is a lot of funds in stock, the scale of newly-increased budget can be appropriately reduced to avoid waste of funds; If the funds in stock are insufficient, the budget will need to be increased to ensure that expenditures are covered.

The fourth primary indicator is sustainability, which requires county-level financial departments to pay attention to financial risks and ensure the sound operation of finance. Financial conditions and risks need to be assessed, including capacities for balance of financial revenue and expenditure and debt management. The theory of performance indicators emphasizes the goal-oriented, and evaluates whether the organization or project achieves the expected goals through setting a series of measurable indicators. In budget management, the goals are to realize financial sustainability, effective allocation of resources and stable supply of public services. Government debt ratio and debt servicing ratio serve as key performance indicators that are directly linked to these goals. One of the government goals is to ensure financial stability and avoid a debt crisis affecting the provision of public services. Government debt ratio and debt servicing ratio indicators can reflect whether the government is moving towards this goal in terms of debt management. In terms of balancing capabilities, performance indicator theory is a management theory that emphasizes the setting, measurement and analysis of key performance indicators (KPIs) to evaluate and optimize the efficiency, effectiveness and sustainability of an organization or project. These indicators not only reflect the current state of operations, but also provide direction and rationale for future improvements. The financial self-sufficiency rate directly reflects the financial independence and stability of the local government. A local government with high financial self-sufficiency rate can use its financial revenue to better meet the demand of financial expenditure and reduce the dependence on superior finance, thus enhancing the financial independence. At the same time, the higher financial self-sufficiency rate also means that the local government has a stable financial situation and can better cope with various financial risks and challenges. The sustainability of "three guarantees" refers to the long-term ability of the government to maintain and stabilize development in guaranteeing basic livelihood, wages and operation. It embodies the government's comprehensive ability and level in financial management, public service provision and social stability maintenance. Ensuring the sustainability of "three guarantees" is of great significance for maintaining social stability, promoting economic development and enhancing the government's credibility.

The fifth primary indicator is forging a keen sense of national identity, which is helpful to establish a clear political orientation in the minority concentrated regions and provide a political guide for all kinds of work including the ethnic work. The funds for national unity and progress are aimed at promoting the implementation of the national unity policy and promoting equity and justice in minority concentrated regions and throughout China. Fund guarantee establishment work promotes the construction of education base, promotes economic development and improves the overall level. Development funds for ethnic minorities improves infrastructure, improves public services and promotes economic balance. General Secretary Xi Jinping has always stressed the importance of forging a keen sense of national identity as the main line. Capital utilization enhances social stability, stimulates economic development, narrows economic differences and lays a foundation for national identity. At the same time, strengthening cultural soft power promotes cultural protection and inheritance, drives the development of cultural industry, and achieves all-round progress.

Primary indicator	Secondary indicator	Tertiary indicator	Indicator description	Attribute
Financial revenue	Financial security	Per capita available financial capacity	Ratio of disposable income to resident population.	Positive
		Transfer payment dependency	Ratio of superior transfer payment to available financial resources.	Positive
	Revenue quality	Tax share	Proportion of tax revenue in general public budget revenue.	Positive
		Financial burden rate	The proportion of financial revenue to GDP.	Positive
Financial expenditure	People's livelihood security	Per capita social expenditure	Per capita social security and employment, health, urban and rural community expenditures.	Positive
		Per capita expenditure on culture and education	Per capita expenditure on education, culture, sports and media.	Positive
	Economic effect	Growth rate of regional GDP	Compared the current year's GDP with the previous year's GDP.	Positive
		Growth rate of investment in fixed assets	The rate of fixed asset investment growth in the reporting period to the scale in the base period.	Positive
Financial management	Cost control	Financial support ratio	The proportion of government financial expenditure to GDP.	Negative
		Share of administrative expenditure	The ratio of administrative cost to financial expenditure.	Negative
	Budget management	Completion rate of government budget expenditure	The ratio of actual expenditure to budget expenditure.	Negative
		Proportion of financial funds in stock	The proportion of financial funds in stock to total funds.	Positive
Sustainability	Debt management	Government debt ratio	The ratio of government borrowing to financial revenue.	Negative

		Debt servicing ratio of government debt	The ratio of total debt servicing for the year to the government's consolidated financial revenue.	Negative
	Balance capability	Financial self-sufficiency rate	The rate of revenue to expenditure in the general budget of local finance.	Positive
		Sustainability of "three guarantees"	Supporting the grass-roots government to guarantee basic people's livelihood, wages and operations.	Positive
Forging a keen sense of national identity	National unity	Funds for the establishment of national unity and progress	Support funds for key regions and departments to carry out the establishment work.	Positive
		Development funds for ethnic minorities	Funds for promoting regional development of ethnic minorities.	Positive

Table 2 Comprehensive Performance Evaluation Indicator System Framework for Financial Operation of Mengshan County

IV. Practice of comprehensive performance evaluation of financial operation

(I) Indicator weight

In order to make the performance evaluation indicator system effective in local government evaluation, we designed it carefully. This includes setting indicator weights, dividing evaluation criteria, defining scoring methods, and determining the source of weights. By doing so, we can accurately compare financial performance across years. In addition, this research innovatively adopts entropy method to scientifically analyze the weight of comprehensive performance evaluation indicators.

Entropy, originally used to measure the disorder degree of physical system, is used to measure the disorder degree of information in information system. The more discrete the data, the more rich and diverse the information, the smaller the information entropy; Conversely, the more centralized data, the more single information, the greater the information entropy.

Through the application of the entropy method, this research not only realizes the scientific quantification of the indicator weight of the financial comprehensive performance evaluation, but also further improves the accuracy and reliability of the evaluation system, and provides powerful theoretical support and practical guidance for the continuous optimization of the financial performance management. In the process of weight setting, we pay special attention to the balance of the following aspects: The first is the balance of economic and social indicators, not only considering the economic development achievements of the local government, but also fully considering its actions in society and people's livelihood, environmental protection, etc.; The second is the balance between long-term and short-term indicators to avoid over-seeking short-term benefits and neglecting long-term development; The third is the balance between the common and individual indicators, not only considering the common standard of local government performance, but also combining the actual situation of Mengshan County to reflect the individual difference. The specific operation steps of the entropy method are as follows:

The first is to build a raw data set

$$X = \left(x_{ij}\right)_{m,n}\#(1)$$

where n represents the number of indicators, and m represents the number of all sample data of the indicator. For a certain indicator item $x_j^T = (x_{ij})_m$,, the greater the degree of discretization the indicator x_{ij}, the greater the function of information entropy indicator in the whole evaluation system and the greater the weight should be assigned; and vice versa.

The second is to standardize the sample data matrix. To ensure that the scores are consistent with the status of the sample, a positive transformation will be applied to the indicators that are negatively correlated with the scores. Next, we will conduct non-dimensional processing for the indicators with significant unit and magnitude difference. x'_{ij} is the normalized sample data value, $\bar{x}_j$ is the mean value of the jth indicator data, δ_j is the standard deviation of the jth indicator data, and the expression is obtained as follows:

$$x_j = \frac{1}{x_j}, x'_{ij} = \frac{x_{ij} - \bar{x}_j}{\delta_j} \#(2)$$

The third is to calculate the proportion of the jth indicator of the ith sample, wherein the standardized matrix is P:

$$p_{ij} = \frac{y_{ij}}{\sum_{i=1}^{m} y_{ij}} \#(3)$$

According to the entropy theory calculation, where k=1/ln (sample data), the information entropy value and difference coefficient of the jth indicator are calculated as follows:

$$e_j = -k \sum_{i=1}^{m} p_{ij} \ln p_{ij}, k > 0, 0 < e_{ij} < 1 \#(4)$$

$$g_i = 1 - e_j \#(5)$$

The calculation method based on the theory shows that the smaller the information entropy value, the larger the difference coefficient g_i. The greater the weight of the indicator in the comprehensive evaluation, the greater its importance.

The fourth is to determine the indicator weight and calculate the indicator as follows:

$$w_j = \frac{g_j}{\sum_{j=1}^{m} g_j}, R_i = \sum_{i=1}^{m} w_j p_{ij} \#(6)$$

Finally, the weight of each indicator is calculated.

(II) Data processing and calculation of indicators

China’s county financial indicator model is not only a model that can comprehensively evaluate the county financial operation in theory, but also needs to be applied in practice. By describing the social governance of different counties, the objective and comparable advantages of the indicators are brought into play, the governance level and quality of different districts and counties are measured, and the county financial governance ability is promoted. The application of China’s county financial indicator model includes the determination of indicator weight, the synthesis of indicator and so on.

In the synthetic scheme of the social governance indicators of Mengshan County, in view of the significant differences in dimensions, economic significance, forms of expression and the trend of action on the overall goal, these indicators are not directly comparable. In order to ensure the accuracy and fairness of the calculation results, each indicator must be treated without dimension to eliminate the influence of the dimension of the indicator. In this paper, for the treatment of tertiary indicators, we uniformly adopt the extremum method for non-dimensional treatment, and the specific calculation formula is as follows:

$$x_i^* = \frac{\mathrm{x_i} - \mathrm{x_{min}}}{\mathrm{x_{max}} - \mathrm{x_{min}}} \#(7)$$

That is, each variable value is divided by the difference between the maximum value and the minimum value of the group of variables after subtracting the minimum value of the group of variables. Where, $\mathrm{x_i^*}$ indicates normalized variable results, x_i indicates the value of the specific tertiary indicator variable, x_{min} indicates the minimum value of the group of variables, x_{max} indicates the maximum value of the group of variables. Specifically, the tertiary indicators can be divided into positive indicators and negative indicators. The processing of negative indicators needs to be further positive based on the above formula. The specific steps are as follows:

$$x_i^{**} = 1 - x^* \#(8)$$

That is, the dimensionless data after one standardization is subtracted from 1 to obtain the forward measurement and calculation value. Excel software is used to do dimensionless processing to the selected indicators, calculate the variability and conflict among the indicators, and then get the weight.

Further, indicator synthesis is carried out on the basis of standardization of the tertiary indicators, and the calculation formula of each dimension, the primary indicator and the secondary indicator is as follows:

$$Q_i = \sum_{i=1}^{n} x_i^* \, w_i \#(10)$$

Where: Q_i represents the final sub-indicator result of a particular dimension, primary or secondary indicator, x_i^* is the standardized value of the tertiary indicator of the dimension, primary or secondary indicator; w_i is the weight of the tertiary indicator corresponding to x_i^*; n is the number of terms of the tertiary indicator belonging to the dimension, primary or secondary indicator.

Finally, the final synthetic formula of financial performance indicators of Mengshan County is:

$$\mathrm{P} = \sum_{\mathrm{i}=1}^{\mathrm{n}} \mathrm{Q_i} \cdot \mathrm{w_i} \#(11)$$

Where: P is the numerical result of financial performance indicators of Mengshan County, Qi is the numerical result of a specific dimension; Wi is the weight of the dimension corresponding to Qi; N is the number of terms in the dimension.

V. Suggestions on accelerating county financial budget performance management in minority concentrated regions in the new era

(I) System construction

1. Improvement of the management system

In combination with the characteristics of counties in minority concentrated regions and the relevant requirements of national and superior financial departments, a series of rules and regulations shall be formulated, such as the implementation measures of comprehensive budget performance management with local characteristics and the management methods of result application. For example, considering the support needs of special industries in minority concentrated regions and the funding arrangement for cultural protection and development, a complete chain management system from budget preparation, implementation, evaluation and result application shall be established.

The responsibilities of departments in budget performance management shall be defined, and accountability mechanism shall be established. For departments or individuals who have dereliction of duty or violation in budget performance management, corresponding punishment measures shall be taken to strengthen the seriousness of the system.

2. Integration with ethnic policies

The preferential policies and supportive policies in minority concentrated regions should be combined with the financial budget performance management. For example, in the aspect of financial support for the development of industries with national characteristics, special performance evaluation indicators should be formulated to not only consider economic benefits, but also pay attention to social benefit indicators such as national cultural inheritance and employment in minority concentrated regions.

It shall be ensured that financial budget arrangements reflect the special needs of minority concentrated regions in education, health care, culture, etc., and the effectiveness of the use of these funds shall be supervised through effective performance management.

(II) Management of performance objectives

1. Scientific goal-setting

In the budget preparation process of the counties in minority concentrated regions, the project establishment should be fully demonstrated. The resource endowment, development status and long-term planning of minority concentrated regions shall be considered to ensure the rationality of performance objectives. For example, in infrastructure construction projects, it is necessary to set targets such as construction scale and construction period in combination with factors such as geographical environment and population distribution in minority concentrated regions.

The measurability of performance objectives shall be improved and quantitative indicators shall be used as much as possible. For the difficult-to-quantify national culture protection and national unity promotion, we should explore the establishment of scientific and reasonable qualitative indicators and transfer them into measurable evaluation standards.

2. Strengthening the review of objectives

A strict performance objective review mechanism shall be established, which shall jointly participated by the financial department, relevant industry experts and the ethnic affairs management department. For example, for projects involving ethnic cultural inheritance, the ethnic affairs management department may provide review opinions from aspects of cultural connotation protection, cultivation of inheritors, etc.

The budget unit is required to readjust the performance objectives that fail to pass the review to ensure that the performance objectives conform to the actual development of minority concentrated regions and the benefit requirements for the use of financial funds.

(III) Performance evaluation

1. Comprehensive evaluation system

A performance evaluation system covering all aspects of the use of county financial funds in minority concentrated regions shall be built, including economic benefit, social benefit, ecological benefit and the impact on the stability and national unity of minority concentrated regions. For example, when evaluating tourism development projects in minority concentrated regions, we should not only evaluate the economic indicators such as tourism income, but also evaluate the social benefit indicators such as the spread of ethnic culture and the promotion of the image of minority concentrated regions.

Diversified evaluation methods shall be adopted, such as cost-benefit analysis, comparative analysis, public evaluation, etc. For people’s livelihood projects in minority concentrated regions, public judgment can be a priority to collect opinions and satisfaction of local residents (including ethnic minorities).

2. Result application and feedback

A linkage mechanism between the performance evaluation results and the budget arrangement shall be established, and the evaluation results may be taken as an important basis for the budget preparation of the next year. For projects with good performance, budget support can be increased appropriately; For those with poor performance, budget may be cut or the project content may be adjusted.

The results of performance evaluation shall be fed back to the budget unit in time, and the budget unit shall be required to formulate rectification measures for the existing problems and track the rectification to form a virtuous circle of budget performance management.

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