Research on the Construction of an Enterprise Total Budget Management System Based on EVA

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Abstract. Total budget management is an important method in the modern enterprise management. In the business management activities, the overall budget occupies a very important position. As the market environment continues to evolve, companies that only apply full budget management have gradually exposed some shortcomings. Relative to the traditional accounting indicators, EVA indicators more clearly and truly reflect corporate profitability. By analyzing the application status and problems of a company's comprehensive budget management system, it is found that there are some problems in the formulation of long-term and short-term strategy, budget organization system, budget management environment and appraisal system, which need to be improved in the following management. According to the specific circumstances of the enterprise, this article wills EVA management thinking into a comprehensive budget management system. Improve the strategic objectives of the enterprise, budget organization system, budget management environment and enterprise budget evaluation system. Find the meeting point of the two management methods, integrate the thought of EVA and the idea of total budget management, and try to construct a new way of budget management. Promote the promotion of enterprise development, so that enterprises have stronger market competitiveness.

1. Introduction
Overall budget management is an important method in modern enterprise management. In enterprise management activities, overall budget occupies a very important position. As the market environment continues to evolve, companies that only apply full budget management have gradually exposed some shortcomings. Currently the major in the enterprise, the ultimate goal of business activities is to maximize the shareholders' rights and interests. EVA management ideas and join the comprehensive budget system. Relative to the traditional accounting indicators, EVA indicators more clearly and truly reflect corporate profitability. EVA as an emerging management thinking, but also an advanced budget management tool. It is of great significance to the construction of a comprehensive budget management system. Therefore, many scholars in this subject continue to study in-depth.

2. Methodology
2.1. Research methods
The methods of literature reading and case study are used to collect the materials related to the dissertation, read the relevant literature of China and foreign countries, discuss the arguments of a large
number of documents, the writing thoughts and the research methods. First understand the EVA theory, a comprehensive budget management system theory. Finally, I reflect on the shortcomings in the dissertation, and make further research in the future study. Overall budget management system is shown in Figure 1.

2.2. EVA's basic theory

EVA (Economic Value Added), the concept was first proposed by the famous American Stern Stewart & Co, and founded the EVA performance evaluation system. EVA means that after a certain period of time after the company adjusted net profit after tax minus the cost of capital surplus, the true shows that the increase in shareholder value, so the EVA reflects the company's economic profits, rather than accounting profits, it through the business Part of the accounting profit on the accounting statements is adjusted to reflect the real business conditions of the enterprise. The formula is:

\[
EVA = NOPAT - TC \times WACC
\]

Note: NOPAT: net operating profit after tax. TC: total cost of capital. WACC: Capital cost rate.

(A). After-tax net operating profit (NOPAT) represents the after-tax investment income of all the capital of the enterprise, and the calculation result reflects the profitability of the enterprise assets. It's calculated as:

\[
NOPAT = NP - TaxAd
\]

Note: NP - net income tax before tax, TaxAd - tax adjustments.

(B). Total capital (TC) represents the entire book value of all funds invested by the investor in the company, including debt capital and equity capital.

\[
TC = \text{equity capital} + \text{debt capital} = \text{minority interests} + \text{ordinary shares} + \text{short-term loans} + \text{long-term loans}
\]

(C). Weighted average cost of capital (WACC)
WACC = Debt Cost Ratio * (1-Income Tax Rate) * (Debt Capital / Total Capital) + Equity Cost Ratio * (Equity Capital / Total Capital)

Equity cost rate is calculated by CAPM (Capital Asset Pricing Model). The basic formula is:

\[ E(R) = R_f + \beta \left[ E(R_m) - R_f \right] \]

Note: \( E(R) \): expected return on risk assets. \( R_f \): Risk-free return on assets. \( E(R_m) \): Average market rate of return.

3. A company's overall budget management problems

3.1. Total budget management and business strategy out of touch

In the initial management of an enterprise, although it has received the management ideas of western science to a certain extent and formulated the budget management method, the formulation and decision-making of strategy in practice are superficial and have no concrete content. On the one hand, although the strategic objectives have been formulated, the budgetary targets formulated cannot be effectively combined with the strategic objectives. An enterprise in the loss of strategic objectives in the context of budget management, the process focuses only on short-term activities, while ignoring the long-term business goals. Short-term goals and long-term development strategy cannot be adapted to each other. Furthermore, the implementation of the preparation of annual, quarterly and monthly budgets cannot promote the achievement of long-term development goals and it is very difficult to achieve the desired effect of management. The budget objective of an enterprise is essentially a manifestation of the phased strategic objectives. If the strategy and budget are not closely linked together, it will be impossible to determine whether the operation of the enterprise is correct and the order of resource allocation is reasonable. The result is that there are some mutually exclusive short-term behaviors among various departments within the enterprise. This situation undoubtedly brings a big obstacle to the overall budget management of an enterprise. Not conducive to the realization of long-term business goals.

3.2. Total budget management organization is not perfect

Every business can make the basics of funny budget management, and there must be a scientifically rigorous budget organization in that business. The target enterprises are still not perfect in the initial construction of a comprehensive budget management organization. The main table for the initial acquisition is now, it is still a moderately-sized private enterprises. At that time, the management was not paying enough attention to the overall budget management. Although the budget management department was set up within the enterprise, the budget structure of the budget department was relatively loose and could not fully exert its due functions and functions. At present, the so-called comprehensive budget management organization of the enterprise is just an empty shelf. At the same time, due to the particularity of the financial department, most employees think that the budget should be completed by the finance department and have no relationship with other functional departments. On the one hand, we agree that the financial department is indeed an important part of overall budget management. However, if we rely solely on the financial department to adapt to the overall budget management, there is no mutual communication and connection between the various departments.

When the company asked all departments to submit departmental budget plans respectively, because they were unaware of the impact of a comprehensive budget on the overall operation of the company, they first came up with the idea of how to accomplish the index tests efficiently. Therefore, we will formulate a more lenient budget index that is relatively easier to complete and leave room for ourselves. Even after the financial adjustment, all departments will still choose to deviate from the actual target when reporting the budget plan. This makes the enterprise resources cannot get the optimal distribution. Analysis of the corporate financial data: most departments have different degrees of exaggerated the activities of the budget consumption. As shown in Table 1:
Table 1. An enterprise budget expenditure and actual expenditure comparison

| Project (million)       | Total budgetary funds | The actual cost | The amount of funds difference |
|-------------------------|-----------------------|----------------|--------------------------------|
| Cost of production      | 5659                  | 5449           | 210                            |
| Manufacturing costs     | 2485                  | 2407           | 78                             |
| sales expense           | 784.47                | 687.83         | 96.64                          |
| Financial expenses      | 312.77                | 298.31         | 14.46                          |
| Management costs        | 256.50                | 238.62         | 17.88                          |
| Other business receipts and payments | 612.07 | 615.11 | -3.04 |
| Operating expenses      | 72.02                 | 70.35          | 1.67                           |
| other                   | 18.96                 | 18.82          | 0.14                           |

The operating revenue of an enterprise in 2014 is estimated to be 210,613,300 yuan. However, the actual operating income of the group subsidiaries in the year was 224,048,900 yuan, exceeding the budget by 14,047,760 yuan. All of these revenues exceeded the budget, although they achieved excellent results for the business development of enterprises. However, due to the high deviation from the income budget indicator, it can be seen that the department that compiles the income budget intends to underestimate the annual revenue budget so as to be able to easily achieve the annual budget target. In this way, the pressure to complete its own budget tasks is reduced. It shows that the setting of an enterprise's budgetary budget index does not combine the actual situation of the enterprise and the market, and the function of overall budgetary organization needs to be improved.

Table 2. An enterprise finance main business budget revenue budget and actual income comparison table

| Project (million)            | Total budgetary funds | The actual cost | The amount of funds difference |
|------------------------------|-----------------------|----------------|--------------------------------|
| Drinking water sales revenue | 11225.68              | 12207.64       | 981.96                         |
| Fruit juice sales into       | 8347.99               | 8093.11        | 327.95                         |
| Puree sales revenue          | 807.47                | 1107.83        | 40.91                          |
| Dairy sales revenue          | 520.56                | 1032.31        | 53.94                          |
| total                        | 21036.13              | 22440.89       | 1404.76                        |

4. Construction of an Enterprise Total Budget Management System Based on EVA

Understand the basic situation of a company, this article should focus on the main question is: on the basis of EVA, through what kind of method can solve Z business existing budget management problems. This paper argues that the integrated budget management, which integrates EVA management, is oriented by enterprise value creation. In improving a company's budget management system, it first defines the long-term and short-term strategic goals of the enterprise and adheres to the correct corporate strategic goals. Second, based on the EVA to optimize the enterprise's overall budget organization, the optimization content should be divided into organizational structure optimization and budget preparation method optimization. Third, pay attention to the training of internal budget management environment. Improve employee budget management awareness. Finally, the evaluation model based on EVA management is established on the original budget evaluation system. Through these four steps, we can improve the existing deficiencies in a company's overall budget management system so that EVA can be effectively applied to the budget management of an enterprise. Enhance the goal of creating the maximum value for shareholders.

4.1. EVA-oriented strategic objectives to determine

The goal of building a comprehensive budget system based on EVA is to "realize the maximization of enterprise value" as an enterprise's core values and to break down the enterprise strategy into long-term management strategies and short-term management strategies. And based on this, formulate the
short-term and long-term budget of the enterprise to ensure that the budgets of different periods can be consistent with the strategic goals of the enterprise. To whether there is a value for any business can be based on growth, to help companies creatively accomplish the strategic objectives of the period, motivate employees to work enthusiasm and the creation of enterprise value.

The basic idea of EVA-based enterprise budget management system is to establish the transmission path of value through the budget index system and to decompose the key drivers according to the EVA value tree to standardize the strategic objectives to form a comprehensive financial management system including financial indicators and non-Financial indicators, as the target for determining each year, quarter, monthly budget goals and business plan, then the quarter, monthly business plan into a comprehensive budget indicator system, and strengthen the implementation of the budget of each period.

4.2. EVA-oriented overall budget organization to improve

4.2.1. EVA organizational structure optimization. To establish a comprehensive budget management system based on an EVA enterprise, we should first sort out the original budget management structure and staffing positions within the enterprise. Retain the effective departments and positions in the original budget management and withdraw some of the posts and departments that cannot bring effective accounting to the enterprise in the budget management. Clear the specific budget of all ministries, there is no size, the specific budget work arrangements to specific staff. It laid the organizational foundation for the construction and management of a comprehensive budget system from the aspects of budget formulation and adjustment, budget execution and feedback, budget analysis and calculation, budget evaluation and supervision. At the same time should integrate the various departments of enterprises, institutions, according to their different business value chain value management. In the process of simplifying business management, while improving the efficiency of a business management. As shown in picture 2.

![Figure 2. A company based on the EVA of a comprehensive budget management system](image)

EVA-based comprehensive budget preparation is not a one-time budget statement, but a dynamic process that can change according to the specific circumstances of different periods. This should be a continuous loop in the day-to-day operations of the business. We can no longer believe that budgeting is the same framework that has been prepared in the accounting period. By determining the overall goal of EVA, the budgets of various departments are broken down to specific project budgets, adjusted according to the compilation of EVA and target EVA, and finally adjusted to the target EVA through continuous dynamic adjustment. As shown in Figure 3.
Figure 3. The Construction of Total Budget Management Content under the EVA Guidance of a

4.2.2. Based on EVA Budgeting Improvement. First, the improvement of business budgeting. The operating budget includes product sales budget, production budget, direct material budget, direct labor budget, manufacturing cost budget, ending inventory of finished goods inventory, sales and management expenses budget. The addition of EVA budget tables; the purpose of adding EVA budget tables is to show the future operation results of the enterprises to the users of statements more intuitively by reflecting the budget of relevant business and financial indexes, and to reflect the operation status of the enterprise. Through professional report data, policy makers can intuitively see the benefits of EVA data to enterprise total budget management. This can be more accurate for the future development of a business to make a reasonable prediction. At the same time, it also reflects the planning of the enterprise strategy and the future economic trend through this table.

4.3. Improvement of a company’s overall budget evaluation system
The establishment of an enterprise incentive system based on the guidance of EVA can be started from the following two aspects: Firstly, the monthly implementation budget should be taken as the basis of assessment and the progress of each line should be evaluated. And the department or institution that has not reached the standard shall strictly implement the punishment system. In this way, all departments and agencies are urged to pay attention to the balance of indicators so as to realize the overall EVA goal of the enterprise. Secondly, departments and agencies that can accomplish their work according to budget requirements are also rewarded according to the reward system. Mention all sectors of the EVA degree of recognition, make full use of EVA bonus to promote grass-roots employees to create value for the enterprise, and promote the effective improvement of the overall value of the enterprise.

5. Summary
This article integrates the idea of EVA management with the idea of overall budget management and introduces the advantages of EVA management based on the original budget management. Play their respective advantages, make up for each other, and avoid weaknesses. Based on the management concept of EVA, the company guides various management decisions of enterprises and realizes the transformation of the overall budget strategy from pursuing corporate profits to focusing on the economic value added of the enterprises; using EVA management to optimize the organizational structure of enterprises and realizing the modernization of enterprise management. Although the economic situation in our country is not yet perfect, as time goes on, China's economic system and rules...
and regulations will gradually be improved. However, as China's economic situation changes, a more scientific approach is bound to be more accepted by the enterprises.

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