

# *Application of zero based budgeting*

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**Abstract:** MKM Mining Simple Co., Ltd. is an international mining company jointly invested and established by China Railway Co., Ltd. and the Congo National Mining Corporation, registered and established in Lubumbashi City, Katanga Province, Democratic Republic of the Congo on September 26, 2016, mainly engaged in the mining, processing and sales of copper metal and cobalt hydroxide raw ore. The company is located in Africa, put into operation in 2022, and the production cost remains high after putting into operation, so the company chooses to take the zero-based budget as the starting point to achieve the company's cost reduction and efficiency increase, and the company's copper production increased by 262 tons year-on-year and profit increased by 8% year-on-year.

## **1. Introduction**

### **1.1. Basic Information of Company a Mining Limited**

A Mining Limited is an international mining company jointly invested by China Railway Corporation Limited and the National Mining Company of the Democratic Republic of the Congo. It was registered and established in Lubumbashi, Haut-Katanga Province, Democratic Republic of the Congo on September 26, 2016. China Railway Corporation Limited holds a 78% stake, and the National Mining Company of the Congo holds a 22% stake. The company completed its mine construction and transformation in 2021 and entered the production and operation phase, focusing on the extraction, processing, and sales of metal copper and cobalt hydroxide ore. The company operates under a management model with a market-oriented management team dispatched by shareholder units, as well as the establishment of a party committee and a board of directors, with departments including mining plant, beneficiation plant, smelting plant, sales department, finance department, and technology department. The company adheres to the concept of "ecological mining," implements the development philosophy of "people-oriented," promotes the simultaneous improvement of corporate economic benefits and local livelihoods, and contributes to infrastructure construction in the Democratic Republic of the Congo, serving as a model of cooperation between China and the Democratic Republic of the Congo.

### **1.2. Analysis of the Current Management Status and Major Issues**

The company completed its mine construction and transformation in 2021 and entered the production and operation phase. After reviewing the company's financial reports for 2021 and 2022,

it was found that the production costs of the company were relatively high compared to industry peers. There is a considerable gap with leading companies such as Zijin Mining and China Nonferrous Metal, with the processing cost of metal copper being 12% higher than Zijin Mining. As a result, the company's profitability is relatively low. The main reasons for this are as follows:

### **1.2.1. Insufficient cost control**

The company lacks effective cost control measures, leading to unmanaged cost growth. Due to the short operation time since the completion of the mine construction in 2021, detailed cost analysis and monitoring systems are lacking.

### **1.2.2. Ineffective cost management measures**

Although the company has some cost control measures, they are simply copied from Chinese experience and are not suitable for the actual situation in the Democratic Republic of the Congo. As a result, these measures fail to produce the desired effects, lacking effective cost management strategies, systems, and processes tailored to the local conditions of the Democratic Republic of the Congo.

### **1.2.3. Lack of cost awareness**

The company is located in the Democratic Republic of the Congo, where industrial supplies are scarce and expensive. The management team consists of Chinese employees dispatched by China Railway Corporation Limited, who lack work experience in the Democratic Republic of the Congo and relevant cost education and training. Moreover, the management team does not emphasize incentivizing and guiding employees to focus on cost-saving behaviors, resulting in Chinese employees directly referring to historical experiences from China and lacking sensitivity and awareness of Congolese material costs, leading to resource wastage and unnecessary cost increases in daily activities.

### **1.2.4. Disconnect between cost and performance**

The company faces a disconnect between cost and performance, where an increase in cost does not necessarily lead to corresponding value and performance improvement. This is attributed to management neglecting cost-effectiveness considerations when setting performance indicators and goals, resulting in a conflict between cost management and overall organizational performance goals.

Based on the above reasons, the company has decided to implement zero-based budgeting to promote cost control and reduction, resource optimization and efficiency enhancement, performance improvement and goal achievement, competitiveness enhancement, and sustainable development capabilities, laying a solid foundation for the company's long-term success and sustainable development.

## **1.3. Reasons for Choosing Zero-Based Budgeting**

### **1.3.1. Cost Optimization**

Zero-based budgeting requires a comprehensive review and evaluation of all budget items, reassessing the necessity and benefits of each project from scratch. Through this approach, unnecessary costs can be identified and reduced, optimizing resource allocation and improving cost-effectiveness.

### **1.3.2. Focus on Resources**

Zero-based budgeting encourages the concentration of resources on projects that are most conducive to achieving organizational goals and strategies. By revalidating the value and contribution of each budget item, resources can be concentrated on high-priority projects, increasing resource utilization efficiency.

### **1.3.3. Performance Orientation**

Zero-based budgeting emphasizes performance and result orientation, requiring each budget item to reprove its performance and achievements. Through regular performance evaluations and monitoring, high-performance projects can be identified and rewarded, optimizing resource allocation and improving overall performance.

### **1.3.4. Innovation Incentive**

Introducing zero-based budgeting can stimulate innovation and creativity. By requiring a reassessment of the necessity and benefits of each budget item, employees are encouraged to propose new ideas, innovate work methods, improve business processes, enhance efficiency, reduce costs, and achieve increased effectiveness.

### **1.3.5. Transparency and Accountability**

Zero-based budgeting requires comprehensive justification and argumentation for each budget item, enhancing transparency and accountability. This helps promote managers' monitoring and control of costs and ensures the fairness and reasonableness of budget allocation.

## **2. Overall Design**

### **2.1. Objectives of Applying Zero-Based Budgeting**

The application of zero-based budgeting aims to achieve cost control and reduction, resource optimization and efficiency enhancement, performance improvement and goal achievement, as well as increased competitiveness and sustainable development capabilities. It lays a solid foundation for the organization's long-term success and sustainable development.

### **2.2. General Approach of Applying Zero-Based Budgeting**

The overall approach of applying zero-based budgeting to achieve cost reduction and efficiency enhancement includes current status assessment, goal setting, reassessment of budget items, detailed cost analysis, optimization of resource allocation, establishment of detailed cost control measures, performance monitoring and evaluation, as well as incentives for innovation and continuous improvement. By implementing these steps, the company can optimize cost management, improve resource utilization efficiency, reduce costs, and achieve the goal of cost reduction and efficiency enhancement.

### **2.3. Contents of Zero-Based Budgeting**

Using Q1 2023 data as a benchmark, the company need to conduct a current status assessment to comprehensively evaluate and analyze the company's budget system and cost management, understand the current budgeting and cost control situations, and identify existing issues and areas

for improvement. Based on the current status assessment, it need to clarify the goals and expected benefits of cost reduction and efficiency enhancement, and determine specific budget targets and performance indicators to ensure the consistency of budgeting and cost control with the overall strategic goals of the company. The company need to conduct a comprehensive review of all budget items based on the budget goals and indicators, and reevaluate the necessity and benefits of each project from scratch. Department heads are required to rejustify the value and necessity of their respective projects to ensure that each project can demonstrate its rationality and economic benefits. The company need to Perform a detailed cost analysis for each budget item, including the identification and calculation of direct and indirect costs. Through precise cost analysis, it need to identify and understand the composition and distribution of various costs to provide a basis for cost control. Based on the reassessment results and goal requirements, it need to formulate detailed cost control measures, including cost control policies, processes, and systems. The company need to define cost limits and control requirements for each budget item to ensure cost control within a reasonable range, and establish an effective performance monitoring and evaluation mechanism, regularly assess and provide feedback on the performance of budgeting and cost control. Through performance evaluation results, it need to promptly identify problems and areas for improvement, and take appropriate adjustment measures. Encourage employee participation in cost control and efficiency enhancement actions, it provides incentive and reward mechanisms, and stimulates the drive for innovation and continuous improvement. Establish feedback and communication channels for employee involvement, which is encouraging them to propose improvement suggestions and recommendations.

## **2.4. Innovations in Applying Zero-Based Budgeting**

Due to the company's location in the Democratic Republic of the Congo, industrial supplies are scarce, prices are high, and instability exists. For example, the procurement cost of the ball mill spare parts for the beneficiation plant is \$34,000 in the Democratic Republic of the Congo. Purchasing too many spare parts occupies the company's "Two Golds" (currency of the Democratic Republic of the Congo). On the other hand, in the case of insufficient spare parts, production often stops due to shortages in the Democratic Republic of the Congo. In most cases, air freight from China becomes necessary, with a total air freight procurement cost of \$48,000. In response to the actual situation of the company, during this zero-based budgeting, the beneficiation plant reasonably proposed the demand for ball mill spare parts based on equipment operating time and condition, combined with historical experience from equipment vendors, thereby reducing the occupation of "Two Golds" and saving material procurement costs. Therefore, material procurement costs are calculated based on the procurement cost in the Democratic Republic of the Congo, and any excess costs incurred during actual production are shared among the material department and the beneficiation plant according to the actual situation.

## **3. Application Process**

### **3.1. Basic Overview of Organizational Structure**

The company is managed by a management team dispatched by shareholder units, with a company party committee and board of directors established, responsible for the shareholder's general meeting. The board of directors has set up an executive committee that is fully responsible for the company's day-to-day management. The organizational chart is in Figure 1.

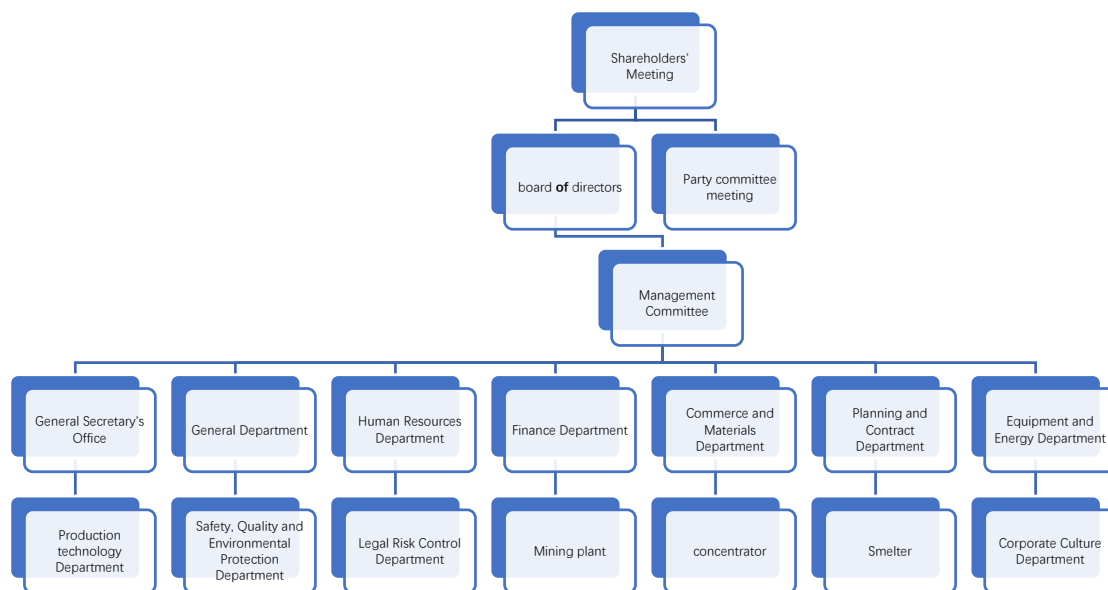


Figure 1: The organizational chart is as follows.

### 3.2. Participating Departments and Personnel

The budget preparation for this zero-based budgeting is overseen by the General Manager and led by the Finance Department, with the cooperation of various departments in establishing a budget preparation team. After preparation, the zero-based budget will be reviewed by the General Manager and submitted for approval by the shareholders' meeting.

### 3.3. Deployment Requirements

Ensure that the organization has sufficient human resources capable of understanding and implementing the methods and processes of zero-based budgeting. Training and skill development of employees should be conducted to actively engage them in the implementation and application of zero-based budgeting. There are some measures to ensure adequate technical support, including computer hardware and software, for cost analysis, data collection, and construction and analysis of budget models. Relevant training and support for staff in using the software and hardware should also be provided. It need to establish a comprehensive cost data collection and analysis system to gather and analyze cost-related data relevant to zero-based budgeting, to support the budget preparation and cost analysis needs. Set up a decision support system to analyze and evaluate the benefits and risks of different budget proposals. These systems will help management make more informed decisions, optimize resource allocation, and improve the quality of budget preparation and cost control decisions. Successful implementation of zero-based budgeting requires effective communication and collaboration mechanisms between departments. Close cooperation and information exchange ensure the sharing of accurate and timely data and information, supporting the decision-making process for budget preparation and cost control.

### 3.4. Specific Application Model and Process

#### 3.4.1. Annual Plan

Based on the annual plan issued by China Railway Construction Corporation Limited and the company's board of directors, the company aims to produce 25,000 tons of copper metal and 45,000 tons of cobalt hydroxide in 2023, achieving operating income of 220,912 million yuan and a profit margin of 25%. The production tasks are then allocated to various production units according to the company's actual situation, and specific production targets are assigned to each production unit. The production targets for each unit in 2023 are shown in the following chart Table 1:

Table 1: A Production tasks for each production unit of the mining company in 2023.

factory area	mining plant - raw ore	mineral processing plant - raw ore	smelter - concentrate	roasting sulfuric acid plant - concentrate
processing capacity	765,480 ton	621,611 ton	12,209 ton	11,201 ton

#### 3.4.2. Production Tasks

According to the production tasks for the year 2023, each production unit and functional department calculated their respective workloads and the corresponding resource consumption quantities using the activity-based costing method. Considering our company's specific circumstances and historical experience, the beneficiation plant and the trade and materials department were identified as units with abnormal unit costs. Hence, for this zero-based budgeting, the workload expenses of the beneficiation plant were further subdivided into 25 items, including office expenses, travel expenses, repair costs, welfare expenses, low-value consumables, staff living expenses, meeting expenses, training expenses, labor protection expenses, sewage fees, experimental expenses, transportation fees, miscellaneous engineering expenses, customs clearance fees, depreciation expenses, safety expenses, research expenses, leasing expenses, major repair expenses, and service establishment fees. Similarly, the workload expenses of the trade and materials department were divided into 32 items, such as urgent air freight, air freight, sea freight, customs clearance fees, inquiry fees, and travel expenses.

#### 3.4.3. Procurement Prices

Collaborating with the trade and materials department, the comprehensive department, the human resources department, the finance department, the planning and contract department, the equipment and energy department, the production technology department, the safety quality and environmental protection department, and the legal risk control department, we conducted price inquiries for products and services in the Congo, Zambia, South Africa, and China. Considering the company's actual situation, we formulated reasonable procurement prices. The determination of procurement prices has a direct impact on the company's costs and is a critical aspect to be controlled during the procurement of materials. To ensure the procurement of high-quality and low-priced products, market development status must be fully considered, and accurate price calculations are required. Under the premise of market investigation, competitive negotiations with suppliers are conducted to reduce prices to an acceptable level while ensuring reasonable profits. The trade and materials department closely monitors market conditions, searches for price-related information, carefully calculates the baseline price, and adjusts it according to the changes in major raw material market prices during the procurement period, forming the benchmark price. For products of the same model and function but different manufacturers, 2 to 3 groups can be formed, and separate baseline prices are calculated for

each group. The management department needs to have a full understanding of market trends and break down the sub-items of the baseline price searched by each business department to determine the final baseline price. Relevant departments such as the China Railway Materials Department, the Discipline Inspection Commission, and the Safety and Quality Department are contacted for work inspection and supervision.

#### **3.4.4. Production Costs**

Determining the production costs of each production department and consolidating the production costs of various semi-finished products.

#### **3.4.5. Expenses**

Determining the expenses of each functional department and three-period expenses, based on which the company's estimated taxes and fees are compiled. During the compilation of financial expenses, our company's operating funds are currently sourced from two places: shareholder registered capital and shareholder loans. The annual interest rate of shareholder loans is 7%, and the cost of capital is high. According to consultation with the finance department, there are currently policies supporting Sino-African cooperation and the Belt and Road Initiative. Combining with our company's actual business and state-owned assets background, there is a high possibility of obtaining low-interest loans from the China Export-Import Bank through the "Two Priorities and Two Supports" policy. Currently, company leadership and the finance department are actively striving for this policy.

#### **3.4.6. Annual Budget**

Drafting the company's annual budget and conducting a cost-benefit analysis. Adjusting the annual budget based on the cost-benefit analysis and submitting it for approval after review by the General Manager.

#### **3.4.7. Budget Execution and Control**

During the budget execution, the management found that the procurement cost of materials has a significant impact on the company's profitability. To address this, the budget preparation team formulated the company's "Internal Control Management System," which strengthens the transparency, compliance, and effectiveness of external product and service purchases. (1) It need to ensure separation of duties during the procurement process and avoid the same personnel from undertaking multiple roles in the procurement process. (2) It need to formulate clear procurement policies and procedures to ensure that procurement activities comply with laws, regulations, and internal organizational rules. This includes defining procurement processes, authorization levels, requirements for competitive bidding, supplier selection criteria, etc. (3) The budget preparation team established an independent internal audit system responsible for auditing and supervising procurement activities. Regular internal audits are conducted to identify issues and provide improvement suggestions, ensuring the compliance and efficiency of the procurement process.

#### **3.4.8. Budget Feedback and Analysis**

In the "Monthly Budget Execution Report," it was observed that after consolidating the semi-finished product costs, the production costs of our company's mining plant are as follows Table 2 :

Based on the above figure, the mining plant's highest cost proportion is attributed to the stripping cost. After joint analysis by the technical department, finance department, and mining plant, it was determined that the stripping workload and associated costs cannot be reduced. The main reasons are

as follows: (1) The stripping equipment is purchased from China at relatively higher prices compared to domestic options, and subsequent maintenance expenses and spare parts procurement costs remain high. (2) Our company is a state-owned enterprise located in the Democratic Republic of the Congo, and the management costs for Chinese personnel are high. (3) Although the mining and stripping plants are located close to each other, there is a small river in between, requiring detour transportation for the original ore, which increases the secondary haulage cost. Based on the actual situation, the budget preparation team collaborated and recommended outsourcing the entire stripping operation to a third-party company. After obtaining quotations, the outsourcing model for the mining plant resulted in a cost of 26,210,000 RMB, with an estimated saving of 8,090,000 RMB.

Table 2: Mining costs for mining company A in 2023.

project	divestment fee	drainage costs	mining costs	manufacturing costs
amount of money	3,170 ten thousand yuan	26.90 ten thousand yuan	67.34 ten thousand yuan	166 ten thousand yuan

### 3.4.9. Budget Assessment

In the company's budget assessment, individual or departmental performance is evaluated fairly and impartially. Incentive mechanisms and reward systems are established to encourage employees to pursue excellence and improve work performance. At the same time, the company considers the actual situation in the Democratic Republic of the Congo and proposes that budget deviations caused by non-human factors should not be included in the assessment, ensuring the adaptability and flexibility of the budget.

### 3.5. Issues encountered and solutions during implementation

#### 3.5.1. Main issues encountered during implementation

Overemphasis on budget accuracy and inflexibility, neglecting timely adjustments and optimizations based on market conditions and business operations. Especially since our company's operations are primarily located in the Democratic Republic of the Congo in Africa, there is significant uncertainty related to exchange rates, policies, customs, etc. Inadequate management during budget execution: Even if the budget plan is well-prepared, insufficient management during the budget execution process may lead to failure in identifying and addressing issues in a timely manner, resulting in overspending and financial flow disruptions. It need to inadequate timeliness and accuracy of budget information.

#### 3.5.2. Solutions to the main issues encountered during implementation

It need to improve budget execution flexibility: Timely adjust and optimize the subplans of the budget. Specifically, our company made corresponding adjustments to the budget based on the requirements and instructions of China Railway Corporation, changes in exchange rates, and policy changes related to customs tariffs to ensure budget flexibility, enhance employee motivation, and maintain corporate adaptability and responsiveness. Also, our company need to Strengthen management during budget execution: Establish an appropriate budget execution management mechanism, assign dedicated personnel to oversee specific budget execution tasks, and rigorously supervise and manage the budget utilization process to address issues promptly. It need to Ensure timeliness and accuracy of budget information: Regularly update and modify market information to ensure the timeliness and accuracy of budget information. Additionally, the company utilizes internet tools to establish an OA platform for budget execution, facilitating real-time, comprehensive, and



accurate sharing and management of budget information.

## 4. Achievements

### 4.1. Comparison before and after the application of zero-based budgeting

Table 3: From May to June 2023, the company's Income statement - brief statement.

serial number	project	unit	amount of money	same period last year	increase/decrease
one	product production status				
1	cathode copper metallicity	Metal ton	5,027.37	4,502.00	
2	unit production cost	Yuan/ton	17,625.02	18,261.91	-0.03
3	metallicity of copper monosulfide concentrate	Metal ton	9,021.91	89,445.90	
4	unit production cost	Yuan/ton	10,094.37	12,734.41	-0.21
5	cobalt(II) hydroxide metallicity	Metal ton	70.00	67.43	
6	unit production cost	Yuan/ton	90,107.39	98,254.76	-0.08
two	sales and profit situation				
1	cathode copper metallicity	ton	4.466.76		
2	average sales price	Yuan/ton	64,551.48		
3	sales unit production cost	Yuan/ton	17,818.23	18,712.75	-0.05
4	metallicity of copper monosulfide concentrate	ton	6,537.10		
5	average sales price	Yuan/ton	51,379.09		
6	sales unit production cost	Yuan/ton	10,094.27	11,087.23	-0.09
7	metallicity of hydrogen oxide drill	ton	0.22		
8	average sales price	Yuan/ton	298,976.21		
9	sales unit production cost	Yuan/ton	68,058.73	70,156.98	-0.03
10	total product revenue	Ten thousand yuan	62,556.31	59,225.00	0.06
11	total cost	Ten thousand yuan	14,556.18	15,098.34	-0.04
12	selling expenses	Ten thousand yuan	1,561.94	1,571.00	-0.01
	customs clearance fee: cathode steel	Ten thousand yuan	475.56	495.00	-0.04
	customs clearance fee: sulfide steel concentrate	Ten thousand yuan	622.70	610.87	0.02
	customs clearance fee: hydrogen oxide diamond	Ten thousand yuan			
13	financial expenses	Ten thousand yuan	3,310.99	2,320.87	0.43
14	overhead	Ten thousand yuan	3,377.87	3,490.34	-0.03
15	environmental recovery reserve	Ten thousand yuan	312.78	312.78	0.00
16	nonbusiness revenue and expenditure	Ten thousand yuan	169.75	101.67	0.67
17	profit	Ten thousand yuan	39,266.78	36,330.00	0.08

Through the implementation of zero-based budgeting, it has been effectively applied to various departments in the company's production process. For example, in the finance department, high financial borrowing costs were promptly identified, and effective measures were taken by negotiating with the China Export-Import Bank to obtain low-interest loans under the "two optimizations and two loans" policy. In the mining plant, the self-operation of the current mining-stripping operations has been transformed into outsourcing, leading to innovation in the production and operation management model. This transformation has encouraged the entire workforce to develop cost-saving awareness,

thus avoiding resource wastage.

Especially noteworthy is that the company's production costs have been further reduced, enhancing the competitiveness of its products and promoting the company's high-quality development. The comparison is as follows Table 3.

#### **4.2. Evaluation of Addressing Unit Management Issues**

The company ensured the decomposition of zero-based budgeting objectives by formulating clear systems, measures, and indicators. These objectives were implemented across various work processes and positions, ensuring active participation and valuable suggestions from all employees. Additionally, a sound mechanism for responsibility implementation was established to provide adequate support for the implementation of zero-based budgeting and ensure that each employee is aware of their responsibilities. Furthermore, continuous improvement and innovation were applied to the zero-based budgeting method, promoting diversified cost control measures for standardized management in the company. The integration of revenue and expenditure into budget management was effectively achieved, providing management and financial personnel with a clear understanding of fund usage. This facilitated the development of rational financial planning and improved fund control to achieve cost-saving objectives, thus providing greater support for the company's sustainable development. Transparent and fair performance assessments were carried out during the supervision process, with departments achieving the cost reduction and efficiency improvement targets being rewarded, incentivizing and enhancing employees' engagement in the cost-cutting process. <sup>[1]</sup>

#### **4.3. Evaluation of Enhancing the Usefulness of Unit Management Decisions**

Under zero-based budgeting, unreasonable factors are excluded from the outset, reducing waste and raising output levels through cost-benefit analysis for each operation. This system represents an excellent cost management and cultural change, contributing to the increased usefulness of unit management decisions. Zero-based budgeting enables the seamless integration of strategic management and budget management, creating a closed-loop management system that encompasses strategic planning, decomposition, operational objectives, key tasks, financial budgeting, daily budget monitoring, and performance evaluation. The adoption of zero-based budgeting facilitates proactive planning, control, and evaluation, guiding the orderly and rational allocation of resources and transforming cost management. Starting from "zero," the zero-based approach forces managers to deeply consider strategic priorities, reallocating funds each year based on strategy and insights rather than adhering to traditional or historical patterns. This approach facilitates capital investment and operational spending based on strategic needs. <sup>[2]</sup>

#### **4.4. Evaluation of Improving Unit Performance Management Level**

Considering the close relationship between performance evaluation and zero-based budgeting, continuous improvement of performance assessment is essential in the zero-based budgeting process. Enhancing the zero-based budgeting framework and corresponding performance evaluation objectives emphasizes the daily role of responsible individuals, providing a basis for the specific implementation of zero-based budgeting and conducting targeted performance evaluations. This encourages different responsible parties to promptly correct deviations in the budget plan, ensuring the achievement of overall objectives. Implementing effective supervision of zero-based budgeting also requires the establishment of a corresponding evaluation system to ensure that expected goals are met. The conscientious implementation of the zero-based budgeting plan by relevant personnel

can be encouraged through performance evaluations, boosting their work motivation. Internal control management is considered while also considering external supervision in performance evaluations. External supervision is incorporated by requiring different departments to periodically disclose information about fund usage and destinations, making financial information public through various channels, and evaluating the degree of information disclosure as part of performance assessments. Moreover, more performance evaluation elements related to zero-based budgeting reforms and applications should be included to drive the completion of zero-based budgeting and achieve the expected goals.

## 5. Conclusion

Zero-based budgeting starts with a baseline of zero for budget revenues and expenditures, and decisions on the necessity, reasonableness of expenses, feasibility of income, and budget amounts are reviewed and determined item by item. It is generally applicable under the following basic conditions: Uncertain or difficult-to-quantify cost-effectiveness of projects or activities. Zero-based budgeting forces managers to reevaluate the cost-effectiveness of projects and make adjustments based on actual circumstances. Smaller organizational scale or newly established operations. In such cases, zero-based budgeting helps managers better manage financial resources and control costs effectively. Organizational needs for strategic transformation. During organizational transformations, all projects need to be reassessed, and decisions made on which projects to retain and which ones to cancel. Zero-based budgeting assists managers in making these decisions. Organizational cost reduces requirements. Zero-based budgeting helps managers identify projects that can be canceled or reduced, thereby lowering costs.

In summary, zero-based budgeting is suitable for enterprises that require a reevaluation of project cost-effectiveness, face uncertain cost-effectiveness, need strategic transformation, or aim to reduce costs.

Developing an effective zero-based budget requires considering the following key factors: clear objectives and strategies: Before formulating a zero-based budget, it is necessary to define the company's long-term goals and strategies to determine budget priorities and directions. Determining the budget period: establishing the budget period facilitates better financial resource planning and control of cash flow and allows for a more accurate evaluation of budget execution. Evaluating past expenditures: evaluating past expenditures helps identify necessary expenses and those that can be reduced or eliminated. Analyzing existing resources: analyzing existing resources, including personnel, equipment, materials, etc., helps determine how to make better use of them; Identifying needs: identifying the company's needs, such as manpower, materials, equipment, etc., aids in better budget planning. Establishing the budget plan: developing a budget plan, including income, expenditures, assets, and liabilities, aligns with the company's objectives and strategies to determine budget priorities and directions. Implementing and monitoring the budget: after budget implementation, continuous monitoring and adjustment are essential to ensure the effectiveness and accuracy of the budget.

In conclusion, creating an effective zero-based budget requires comprehensive consideration of the company's objectives, resources, needs, and budget plan. Implementing and monitoring the budget are crucial to ensure its effectiveness and accuracy.

In the autumn of 2013, during his foreign visit, General Secretary proposed the "Belt and Road Initiative" for the first time. With policy and financial support, China and related countries focused on connectivity and deepened pragmatic cooperation, achieving tangible and significant results, particularly in promoting the construction of a large number of infrastructure cooperation projects. When Chinese enterprises expand their operations in overseas markets, they need to adapt to different

business environments, cultural differences, and legal systems. What works successfully in the domestic market may not yield the same results in foreign markets. Therefore, "going global" enterprises often prefer zero-based budgeting when formulating financial budgets. Under zero-based budgeting, unreasonable factors are excluded from the outset, reducing waste, and each operation undergoes cost-benefit analysis, leading to effective cost control measures. It also allows employees to abandon domestic historical experiences and establish a cost-consciousness suitable for local markets, thereby improving the company's management and profitability, leading to greater success in foreign markets.

**Optimization of resource allocation:** Zero-based budgeting compels management to comprehensively evaluate each budget item, ensuring that resource allocation aligns with strategic objectives and optimizing resource utilization efficiency. **Clear objectives and indicators:** Zero-based budgeting requires each project to have clear objectives and measurable indicators, enhancing the precision and accuracy of budgeting. **Enhanced cost consciousness:** Zero-based budgeting requires a reevaluation of all expenditures, stimulating sensitivity and awareness of costs, promoting cost control and savings. **Performance improvement through incentives:** Combining zero-based budgeting with performance management enables the establishment of performance indicators consistent with goals and budgets, incentivizing employees to enhance performance and improving overall organizational efficiency.

**Time and resource consumption:** Compared to traditional incremental budgeting, zero-based budgeting requires more time and effort for project evaluation and budget formulation, increasing the burden on management and financial departments. **Potential subjective bias:** During the implementation of zero-based budgeting, management's subjective judgment and bias may influence budget formulation, leading to unfair and inconsistent resource allocation. **Challenges to employee motivation:** which is a Zero-based budgeting.

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