



Cost management strategy under conditions of inflation and currency risks at Kyrgyz enterprises

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Abstract. The aim of the study was to identify effective methods of cost management under conditions of inflation and currency risks in order to increase the sustainability and competitiveness of Kyrgyz enterprises. The study used theoretical analysis and case analysis methods to assess the effectiveness of cost management tools and develop practical recommendations for improving the financial sustainability of enterprises. The study identified key factors affecting the cost structure of Kyrgyz enterprises in conditions of inflation and exchange rate fluctuations. The analysis showed that the most vulnerable items of expenditure were imported purchases, energy resources, logistics and employee salaries. The study showed that the use of modern management accounting methods, such as activity-based costing, standard costing, rolling forecasting and cost analysis, allowed for accurate control of expenses and allocation of resources. Scenario planning and digitalisation of processes using enterprise resource planning systems and analytical business tools ensured a timely response to changes in exchange rates and inflation levels. An analysis of practical examples from Kyrgyz enterprises has shown the successful use of various cost management methods, such as localisation of procurement, currency risk insurance, inventory optimisation and long-term contracts. Technodom reduced costs by 6.5%, increased profitability by 4.8% and improved process efficiency by 5.2%. Limited Liability Company "Stroy Invest Service" achieved an 8.0% reduction in costs, a 12.0% increase in profitability and a 7.5% improvement in process efficiency. "Kant Sut" LLC reduced costs by 5.2%, increased profitability by 3.6%, reduced inventory by 10.0% and increased process efficiency by 6.0%. Asia Transit Logistic Company reduced costs by 7.0%, increased profitability by 5.0% and improved process efficiency by 15.0%. The introduction of a management control system and regular analysis of deviations contributed to more effective cost management. As a result, the study confirmed that the comprehensive cost management strategy applied in such companies significantly increases the resilience of enterprises to external economic risks and ensures stable business development

Keywords: profitability; localisation; digitalisation; controlling; scenario planning; optimisation

Introduction

Modern enterprises in Kyrgyzstan operate under conditions of high economic instability caused by inflation, fluctuations in the national currency exchange rate, and rising costs of imported resources. These factors directly affected production costs, company profitability, and competitiveness in domestic and foreign markets, making the search for effective approaches to cost reduction

and financial risk management particularly relevant. The research problem lies in the fact that traditional methods of planning and controlling expenses, based on static budgets and simple cost accounting, no longer enable enterprises to respond promptly to changes in the external economic environment. This was especially evident in companies dependent on imported supplies

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and energy resources, where changes in exchange rates and raw material prices led to increased costs. Under such conditions, it became necessary to develop adaptive cost management methods that took into account inflationary processes, currency risks, and the potential of digitalisation in management accounting.

C. Amanbaeva *et al.* (2024) noted that adaptive budgeting enabled enterprises to adjust expenditures in a timely manner in response to exchange rate fluctuations and inflation. The application of such methods ensured a more stable financial position for companies under conditions of instability. X. Teng *et al.* (2022) emphasised that the use of digital tools increased the accuracy of cost forecasting and reduced financial risks. The implementation of enterprise resource planning (ERP) systems and analytical platforms contributed to more rapid managerial decision-making. K. Georgiadis *et al.* (2022) argued that the introduction of analytical platforms made it possible to monitor key cost indicators promptly and improved the controllability of business processes. Digitalisation reduced errors in cost accounting and accelerated the analysis of financial data. K. Goldschmidt *et al.* (2020) pointed to the importance of localising supplies in order to reduce dependence on imports and minimise the impact of currency fluctuations. The development of regional partnerships enhanced supply stability and reduced the risk of production disruptions. L. Guinness *et al.* (2022) noted that resource diversification contributed to enterprise resilience to external economic shocks. Distributing supplies among multiple suppliers helped to minimise potential disruptions in production processes.

F.O. Tavares *et al.* (2023) showed that the application of value analysis and activity-based costing made it possible to optimise production costs and increase profitability. This approach helped to identify inefficient processes and reduce excessive expenditures. M.M. Weber *et al.* (2024) argued that scenario planning and modelling of various economic conditions helped to assess financial consequences in advance and develop measures to mitigate them. This ensured that enterprises were better prepared for potential adverse market changes. B.-C. Egbide *et al.* (2022) confirmed that the implementation of a management control system and regular monitoring of key indicators contributed to business sustainability. Such an approach allowed deviations to be identified in a timely manner and resource expenditure strategies to be adjusted accordingly. A. Ali *et al.* (2023) drew attention to the fact that integrating control methods with employee motivation systems increased the efficiency of resource use. Employee involvement in cost management processes contributed to higher overall productivity and reduced losses. A. Kadyraliev *et al.* (2024) believed that the combination of digitalisation, strategic planning, and localisation of supplies ensured comprehensive cost reduction and strengthened the competitive position of enterprises. The application of

this approach enabled companies to adapt more quickly to changing economic conditions.

The results of these studies showed that adaptive budgeting, process digitalisation, localisation of supplies, and scenario planning contributed to cost reduction, increased profitability, and enhanced enterprise resilience under conditions of inflation and currency instability. At the same time, gaps remain in assessing the long-term impact of integrating these methods on innovative development, the effectiveness of human resource management, and enterprise resilience to large-scale economic crises. The aim of the study was to examine approaches to cost optimisation and financial risk management aimed at strengthening stability and improving the economic efficiency of Kyrgyz enterprises under conditions of inflation and an unstable exchange rate. The objectives of the study were: 1) to analyse existing approaches to cost control and optimisation at Kyrgyz enterprises under conditions of inflation and exchange rate fluctuations; 2) to examine mechanisms for enhancing financial sustainability through process digitalisation, localisation of procurement, and the implementation of management control; 3) to assess the potential for reducing financial risks and improving economic efficiency through scenario planning, value analysis, and resource diversification.

Materials and Methods

The study involved comprehensive research into the theoretical foundations and practical approaches to cost management in conditions of inflation and exchange rate fluctuations in Kyrgyzstan. Modern methods of management accounting and controlling were analysed, including Activity-Based Costing (ABC), Standard Costing, Value Engineering, scenario planning, and dynamic methods such as rolling forecasts. The aim of this stage was to identify tools that could be used to improve financial stability and cost management at Kyrgyz enterprises, as well as to identify opportunities for the introduction of digital technologies such as ERP systems and analytical platforms. Adaptive budgeting methods allowed for regular adjustments to plans and forecasts depending on changes in the macroeconomic environment and exchange rate fluctuations. The study developed a step-by-step cost management strategy. It analysed expenditure diagnostics, classified costs as fixed, variable and currency-dependent, and analysed contractual obligations to identify the items most sensitive to inflation and currency fluctuations. Planning scenarios were developed – baseline, stress and optimistic – to prepare companies for different economic conditions. Response measures were considered, including localisation of procurement, long-term contracts, currency risk hedging and just-in-time inventory optimisation. The use of digital tools for visualising indicators and automating accounting in ERP systems was also studied, and the controlling system was analysed as a basis for supporting management decisions.

Specific enterprises were selected for the analysis of the practical application of cost management methods, allowing for a clear demonstration of different approaches to cost control and minimisation of financial risks. The trading company Technodom (n.d.) examined methods of managing import purchases and the implementation of business intelligence (BI) systems for monitoring currency risks. The construction company Limited Liability Company "Stroy Invest Service" (n.d.), approaches to localising cement and metal purchases and the implementation of scenario-based budget planning were analysed. The manufacturing enterprise "Kant Sut" LLC (n.d.) was studied in terms of the use of rolling forecasting to adjust raw material purchases and manage production costs. The logistics company Asia Transit Logistic Company (n.d.) examined methods of route optimisation and supplier diversification to reduce transport costs and the impact of fuel price fluctuations. These companies were selected for the study because they represent different sectors of the Kyrgyz economy and demonstrate diverse approaches to cost management and financial risk reduction in conditions of inflation and exchange rate fluctuations. Also, the study included the development of recommendations for the implementation of a comprehensive cost management strategy aimed at improving budgeting adaptability, integrating digital tools, localising procurement and diversifying suppliers. Measures were considered to create a management control system with regular monitoring of deviations, setting expenditure limits and performance indicators for departments. Approaches to staff motivation and employee involvement in cost control processes were studied to improve the efficiency of resource use.

Results

Modern economic realities require enterprises to demonstrate a high degree of flexibility and the ability to adapt to changes in the external environment. Under conditions of instability, where inflationary processes and exchange rate fluctuations directly affect production costs and financial performance, effective cost management becomes one of the key factors for business survival. Global practice has accumulated substantial experience in this area, developing a range of management accounting and controlling tools that help companies make informed decisions and maintain resilience even during periods of crisis. The Activity-Based Costing method was one of the most accurate management accounting tools, as it made it possible to identify, which specific business processes generated the highest costs. It was based on the allocation of costs by activities, allowing resource-intensive operations to be identified and their efficiency to be assessed. The application of ABC costing contributed to a more objective distribution of costs across departments and products, enables adjustments to the cost structure, and supported process optimisation, particularly in organisations

with complex structures and multiple cost centres. In addition, the method made it possible to assess the cost of individual processes and to make decisions on resource reallocation in order to improve economic efficiency (Yu *et al.*, 2025).

Standard Costing was used to establish cost norms and standards for production, service provision, or the performance of specific operations. This method involved continuous comparison of planned indicators with actual results, creating a basis for variance analysis. Based on identified deviations, management can make decisions aimed at reducing costs, increasing productivity, and improving expense control. Standard costing ensured transparency of financial processes and contributed to the systematisation of cost accounting (Hung & Shanmugam, 2023). Dynamic methods such as rolling forecasting allowed budgets to be regularly revised in line with current changes in macroeconomic conditions. Unlike static planning, rolling forecasts enabled prompt adjustments, when exchange rates, inflation levels, or demand fluctuate. This approach increased managerial flexibility, prevented budgets from becoming outdated, and supported timely decisions on resource reallocation and cost optimisation (Msiza *et al.*, 2022).

Value Engineering, or value analysis, was aimed at identifying opportunities to reduce production costs without compromising product quality. The method involved analysing design, technological, and organisational aspects of production in order to optimise costs. It promoted the adoption of innovative solutions, reduced expenses, and enhanced company competitiveness by maintaining a balance between cost and product quality (Rush & Roy, 2023). Scenario planning was used to model different development paths, ranging from optimistic to stress scenarios. It enabled the assessment of potential consequences of external and internal factors such as changes in raw material prices, exchange rate fluctuations, or rising inflation. This method was particularly significant for economies with a high degree of instability, including Kyrgyzstan, as even minor changes in external conditions can have a substantial impact on enterprise financial performance. Scenario planning supported the preparation of corrective measures and increased business resilience to uncertainty (Mortlock & Osiyevskyy, 2023).

For Kyrgyz companies, a key priority was the integration of these methods with modern digital solutions, including ERP systems, BI analytics, and cloud services. These technologies made it possible not only to collect and analyse data in real time, but also to visualise financial flows, forecast cost changes, and automate management processes. Such a combination of classical management accounting tools with digital technologies forms the basis of an adaptive and resilient cost management system capable of operating effectively even under conditions of high economic uncertainty. Effective cost management under conditions of economic

instability required a systematic and phased approach that allowed not only for expense control but also for flexible responses to changes in the external environment. The development of a cost management strategy was carried out step by step, combining a set of methods

and instruments that ensured a structured approach to expense control and business adaptation to changing economic conditions. This approach ensured a balance between operational management and long-term business sustainability (Fig. 1).



Figure 1. Cost management strategy: A step-by-step approach

Source: based on E.-J. Goode *et al.* (2021), A. Vivek & C.H.H. Rao (2022), P. Beusch *et al.* (2022), K. Cordova-Pozo & E.A.J.A. Rouwette (2023), D. Arkhipova *et al.* (2024)

Cost diagnostics represented a systematic examination of an enterprise's cost structure with the aim of identifying the factors that exerted the greatest influence on the cost of products or services. The classification of costs into fixed, variable, and currency-dependent categories made it possible to analyse their behaviour under changing macroeconomic conditions. Particular attention was paid to expense items exposed to external risks, including fuel, energy resources, and imported raw materials. An analysis of contractual obligations and delivery terms allowed the degree of an enterprise's dependence on exchange rate fluctuations and external suppliers to be determined. The outcome was the formation of an analytical

base required for subsequent strategic planning and for improving the effectiveness of cost management (Vivek & Rao, 2022). The scenario modelling method made it possible to assess potential financial and economic consequences arising from changes in key macroeconomic factors and to plan corrective measures for cost management. Within the framework of the study, three scenarios were applied: baseline, stress, and optimistic, reflecting different trajectories of exchange rate movements, inflation levels, and resource costs. For each scenario, projected costs, working capital requirements, and a set of measures aimed at stabilising the organisation's financial position were calculated (Table 1).

Table 1. Scenario-based modelling of costs and working capital requirements in Kyrgyzstan

Scenario	Projected costs, %	Change in working capital requirements, %	Corrective action plan
Baseline	4.5-5.0	3.5	Inventory optimisation, partial reallocation of procurement among suppliers
Stress	12-15	10-12	Currency risk hedging, localisation of procurement, revision of lending terms
Optimistic	1-2	0-1	Partial inventory optimisation

Source: based on K. Cordova-Pozo & E.A.J.A. Rouwette (2023)

Scenario modelling demonstrated how changes in the macroeconomic environment affect costs and working capital requirements. Baseline, stress, and optimistic scenarios made it possible to assess an enterprise's financial resilience under different conditions and to identify areas for corrective action aimed at risk reduction and improved cost management efficiency. One of the key directions involved the development of response instruments aimed at stabilising financial flows. The instruments applied included the conclusion of long-term contracts with fixed prices, the use of currency risk hedging mechanisms, localisation of procurement, and the implementation of the Just-in-Time inventory management principle. In parallel, the structure of credit liabilities and foreign currency assets was analysed in order to reduce dependence on external sources of financing and strengthen financial sustainability (Goode *et al.*, 2021). A significant role in modern

cost management was played by the digitalisation of analytical and accounting processes. The use of BI systems (Power BI, Qlik, Tableau) ensured real-time visualisation of cost indicators and currency risk dynamics. The integration of ERP platforms (1C, Systems, Applications, and Products in Data Processing, Odoo) contributed to the automation of management accounting and the formation of consolidated budgets. The use of digital dashboards with key performance indicators (KPIs) enhanced the transparency of financial control, while early warning systems enabled the timely identification of deviations from planned parameters (Arkhipova *et al.*, 2024).

Controlling served as a tool for systematic monitoring of budget execution and the analysis of the effectiveness of financial decisions. It integrated planning, accounting, and analytical functions, providing feedback between strategic and operational levels of management. Within the controlling framework, regular

assessments of deviations between actual and planned indicators were conducted, expenditure limits were adjusted, key performance indicators were reviewed, and budgets were adapted to changes in the external environment. Such a system supported the maintenance of enterprise economic sustainability and the formation of a rational cost structure (Beusch *et al.*, 2022). Thus, the proposed step-by-step strategy created a logical and adaptive cost management system that combined economic methods with digital technologies. It not only ensured control over expenses but also developed enterprises' ability to flexibly adapt to inflation, exchange

rate fluctuations, and other economic challenges, which was an important condition for financial stability and enhanced competitiveness of Kyrgyz companies. For the purpose of systematising the key areas of cost management, a summary Table 2 was developed, reflecting the relationship between the main types of expenses characteristic of Kyrgyz enterprises, the associated risks, and effective methods for their mitigation. The presented data made it possible to clearly identify, which instruments were applicable depending on the nature of costs and the external factors influencing their dynamics.

Table 2. Types of costs, risks, and management methods

Type of cost	Key risks	Management methods
Imported procurement	Exchange rate appreciation	Fixed-price contracts, hedging
Energy resources	Inflation, tariff increases	Energy efficiency measures, alternative energy sources
Wages	Inflationary pressure	Indexation, performance-based bonuses
Logistics and transport	Rising fuel prices	Route optimisation, localisation of supplies
Production materials	Market price fluctuations	Reserve formation, long-term contracts

Source: based on N. Luo *et al.* (2023)

The analysis of the presented data showed that the key areas of cost management under conditions of economic instability were the minimisation of currency, inflationary, and market risks. The greatest vulnerability for Kyrgyz enterprises lies in imported procurement and energy resources, as their costs directly depended on exchange rate fluctuations and rising tariffs. To reduce the negative impact of these factors, it was advisable to use long-term contracts with fixed prices, hedging instruments, and measures aimed at improving energy efficiency. At the same time, the management of labour costs required a systematic approach to indexation and productivity incentives, which helped to maintain employee motivation amid rising inflation. In the field of logistics and transport expenses, effective measures

included route optimisation and the development of local supply chains, while in the management of material resources the priority was the creation of reserves and the conclusion of long-term agreements. Thus, the comprehensive application of these methods ensured enterprise resilience to external shocks and contributed to the formation of a balanced cost structure. The practical application of a cost management strategy under conditions of inflation and currency risks was examined using the example of four Kyrgyz companies representing different sectors of the economy. These cases demonstrated how the combination of management accounting, digital tools, and strategic planning enables companies to maintain resilience and competitiveness even in an unstable macroeconomic environment (Table 3).

Table 3. Impact of cost management methods on the financial performance of Kyrgyz companies (2023-2024)

Company	Applied method	Cost reduction, %	Increase in profitability, %	Reduction in warehouse inventories, %	Improvement in process efficiency, %
Technodom (Bishkek)	Fixed-price contracts, BI system	6.5	4.8	-	5.2
Limited Liability Company "Stroy Invest Service" (Osh)	Scenario planning, local sourcing	8.0	12.0	-	7.5
"Kant Sut" LLC (Kara-Balta)	Rolling forecast, ERP system	5.2	3.6	10.0	6.0
Asia Transit Logistic Company (Bishkek)	Route optimisation, supplier diversification	7.0	5.0	-	15.0

Source: based on Technodom (n.d.), Limited Liability Company "Stroy Invest Service" (n.d.), "Kant Sut" LLC (n.d.), Asia Transit Logistic Company (n.d.)

The trading company Technodom (n.d.) (Bishkek) specialised in the import of household appliances and electronics, which made its operations highly sensitive to exchange rate fluctuations. In response to the appreciation of the US dollar and rising logistics costs,

the company implemented a set of measures aimed at stabilising production costs and strengthening financial sustainability. The main instruments included the conclusion of long-term contracts with fixed prices and deferred payment terms, as well as the introduction

of the Power BI system to analyse currency risks and monitor financial flows. As a result of these measures, production costs were reduced by 6.5%, profitability increased by 4.8%, and business process efficiency improved by 5.2%, enabling the company to maintain price stability and expand its market share.

Limited Liability Company "Stroy Invest Service" (n.d.) (Osh) operated in the field of residential and infrastructure construction, where a significant share of expenses was associated with the procurement of cement and metal. Under conditions of rising prices for raw materials and construction inputs, the company implemented budget scenario planning, which made it possible to model the effects of changing market conditions and to adapt its procurement strategy in a timely manner. In addition, partnerships were established with local producers ("YugStroySnab", "Kant Metallurgical Plant"), reducing dependence on foreign currency. The diversification of supplies and the creation of a reserve fund resulted in an 8% reduction in costs, a 12% increase in profitability, and a 7.5% improvement in project management efficiency, allowing the company to strengthen its market position and win a number of government tenders.

"Kant Sut" LLC (n.d.) (Kara-Balta) was one of the leading dairy producers in Kyrgyzstan. To enhance resilience to exchange rate fluctuations, the company introduced a rolling forecast system that provided monthly budget updates based on current data on procurement price dynamics and exchange rates. At the same time, the management accounting system was modernised through the implementation of the 1C ERP system, which increased transparency and the speed of managerial decision-making. In addition, approximately 70% of packaging and additive procurement was shifted to local suppliers, significantly reducing currency risks. As a result, costs were optimised: production costs decreased by 5.2%, margins increased by 3.6%, warehouse inventories were reduced by 10%, and overall production process efficiency rose by 6%.

Asia Transit Logistic Company (n.d.) (Bishkek) operated in the field of interregional transportation and faces a high dependence on fuel prices. In response to rising fuel and lubricant costs, the company implemented a route and fuel consumption monitoring system based on the Global Positioning System (GPS), which made it possible to optimise fleet utilisation and eliminate inefficient journeys. In addition, fuel suppliers were diversified, including cooperation with regional companies that were less exposed to currency fluctuations. These measures resulted in a 7% reduction in fuel costs, a 5% increase in profitability, and a 15% improvement in fleet efficiency, thereby strengthening the company's competitive position in the transport services market.

Thus, the analysis showed that the adaptation of international management accounting tools – such as scenario planning, rolling forecasts, value engineering and digital analytics – enabled Kyrgyz enterprises to

successfully respond to external economic challenges, control costs and improve financial stability. The recommendations were aimed at increasing the resilience of Kyrgyz enterprises in the face of inflation and exchange rate fluctuations and were based on an analysis of the practical experience of companies in various industries. To increase the adaptability of the cost management system, budgets should be regularly reviewed, plans adjusted and changes in the macroeconomic environment responded to promptly, thereby reducing the impact of exchange rate fluctuations and inflation on financial performance. Digital management tools, including ERP systems, BI platforms and interactive dashboards, should be implemented to automate management accounting, operational analysis of financial data and visualisation of key performance indicators. The use of digital technologies improved the accuracy of forecasting and speeded up management decision-making.

It was recommended to develop localisation and diversification of supplies to reduce dependence on imported goods and services. Cooperation with local and regional suppliers, as well as the creation of backup supply channels, ensured the sustainability of logistics processes and the stability of production costs. Scenario planning should be used to model various macroeconomic scenarios – baseline, stress and optimistic – with the development of corrective measures. This approach increased the predictability of financial results and reduced uncertainty. The controlling system should include regular monitoring of deviations of actual indicators from planned ones, setting expenditure limits and preparing internal reports, ensuring the integration of control with elements of strategic cost management. Financial literacy and staff involvement were improved through training in the principles of rational resource use and the integration of performance indicators into the motivation system, which ensured that the actions of departments were consistent with cost management objectives. Long-term sustainable development programmes, including energy efficiency improvements, technological independence and innovation, help reduced the sensitivity of enterprises to inflation and currency risks and increase their competitiveness in the market.

Discussion

During the study, cost management methods at Kyrgyz enterprises were systematised, taking into account inflation and currency fluctuations. The analysis showed that the introduction of ABC costing and standard costing allowed enterprises to identify the most resource-intensive processes and control deviations from standard costs, which contributed to the objective allocation of resources and reduction of excess costs. The use of these methods created a basis for more accurate financial planning and increased economic efficiency, especially in organisations with a complex structure and multiple cost centres. This issue was also investigated by

O. Stopka *et al.* (2021), whose results confirmed that the ABC costing method allowed for a more accurate allocation of indirect costs based on specific actions and processes, which increased the transparency of production costs. This helped to identify inefficient operations and optimise production and management processes. As a result, companies were able to make informed decisions to reduce costs and increase profitability. Research by E.F. Iziduh *et al.* (2021) also showed that standard costing sets standards for material, labour and overhead costs, creating a basis for analysing deviations. Comparing actual costs with established standards allowed for the prompt identification of deviations and the implementation of corrective measures. This approach strengthened cost control and encourages more rational use of enterprise resources. It was worth noting that combining ABC and standard costing can have a synergistic effect, ensuring both accurate cost allocation and strict control over deviations. At the same time, it was necessary to take into account the complexity of implementing these methods and the need to regularly update data to keep it relevant. Despite this, companies that actively used both approaches demonstrate more transparent cost management and increased financial discipline.

Further analysis of the results showed that dynamic management methods, including rolling forecasts and value engineering, ensured budgeting adaptability and optimisation of production costs. The use of rolling forecasting allowed companies to adjust their budgets on a monthly basis, taking into account current changes in exchange rates, raw material prices and inflation levels, while cost analysis helped to identify excess costs and implement energy-saving and technological solutions without compromising product quality. N.I. Okeke *et al.* (2024) concluded that rolling forecasting allowed for regular updates to budget indicators based on current information about sales, expenses, and market conditions. This approach provided flexibility in planning and allowed for a rapid response to economic fluctuations and external risks. As a result, companies were able to allocate resources more accurately and minimise financial losses. A study by S.O. Ongbali *et al.* (2024) found that value engineering focuses on the systematic analysis of product functions with the aim of reducing costs without reducing consumer value. This method encouraged the introduction of innovative solutions, materials and technologies that increased production efficiency. The application of Value Engineering allowed companies to simultaneously reduce costs and maintain high product quality. These results confirmed the study, as rolling forecasts demonstrated high adaptability to changes in the external environment and allowed budgets to remain relevant in an unstable economy. The use of rolling forecasts contributed to a more accurate allocation of resources and a reduction in financial risks. This confirmed that regularly updating forecasts was a key tool for strategic planning and enterprise management.

Scenario planning demonstrated high effectiveness in modelling the consequences of macroeconomic changes. The development of baseline, stress, and optimistic scenarios enabled enterprises to assess potential financial risks in advance, forecast working capital requirements, and design corrective measures. This ensured greater predictability of financial results and minimised the negative impact of sudden exchange rate fluctuations and inflation. Particular attention should be paid to the work of R.H. Al-hadrawi *et al.* (2024), which showed that scenario planning made it possible to model different economic conditions and assess their potential impact on a company's revenues, costs, and profits. This approach helped to identify vulnerable areas in financial strategy and to prepare measures for risk mitigation. As a result, enterprises gain the ability to make more informed managerial decisions under conditions of uncertainty. In turn, I.A. Badhan *et al.* (2024) concluded that the analysis of response strategies included the assessment of hedging instruments, adjustments to pricing policies, and cost optimisation in order to reduce the negative effects of exchange rate volatility and inflation. The application of such measures helped to maintain financial stability and protect company margins. An effective response strategy contributes to preserving competitiveness and business stability in an economically unstable environment. These findings were consistent with the conclusions presented in this study, as scenario planning confirmed the importance of preparing for various economic scenarios in order to reduce financial risks. Modelling possible fluctuations in macroeconomic indicators allowed companies to develop adaptive strategies in advance and maintain profit stability. Thus, the integration of scenario analysis into the management process improved the quality of strategic decisions and reduced business vulnerability to external shocks.

The practical testing of the applicability of these methods in four Kyrgyz companies showed that a comprehensive approach to cost management made it possible to achieve a tangible economic effect. In the trading company Technodom, reductions in production costs and increases in profitability were achieved through the conclusion of long-term contracts and the implementation of BI systems, while the construction company Limited Liability Company "Stroy Invest Service" improved procurement efficiency and profitability through scenario planning and localisation of supplies. Similar positive results were observed at "Kant Sut" LLC and Asia Transit Logistic Company, which confirmed the universal applicability of the proposed instruments. D.A. Nani & V.A.D. Safitri (2021) also conducted a study, whose results confirmed that enterprises use a combination of methods such as ABC costing, standard costing, and Value Engineering to optimise costs and increase profitability. The introduction of digital tools and the automation of accounting processes helped to reduce administrative costs and improved the

accuracy of resource allocation. The implementation of such strategies contributed to enhanced competitiveness and business resilience in dynamic market conditions. D.A. Nani & V.A.D. Safitri (2021) also found that formal management control systems ensured structured planning, monitoring, and performance evaluation, which directly affected organisational efficiency. Research showed that the presence of clear control mechanisms stimulated innovation and increased enterprise adaptability. At the same time, maintaining a balance between strict control and freedom for creative decision-making was a key factor in successful development and competitive advantage. A comparison of the results obtained indicated that the practical implementation of cost management strategies had a direct impact on the financial sustainability and operational efficiency of enterprises. The effective application of accounting and optimisation methods not only reduced costs but also improved the quality of managerial decision-making. This confirmed the importance of integrating theoretical approaches with practical tools in everyday business management.

The digitisation of cost management, including the implementation of ERP systems and BI platforms, had proven to be critical for timely analysis and management decision-making. The use of dashboards with key performance indicators (KPIs) and early warning systems had enabled management to track deviations in real time, ensuring transparency of financial processes and prompt budget adjustments in an unstable macroeconomic environment. S.G. Mobarra *et al.* (2025) concluded that the implementation of ERP and BI systems allowed data from different departments to be integrated, providing a single source of information for financial accounting and cost analysis. Digitalisation increased the transparency of processes, minimised errors and speeded up management decision-making. As a result, companies were able to control costs more accurately and optimise the use of resources. G. Nicotra *et al.* (2025) found that dashboards and early warning systems allowed real-time monitoring of financial and operational indicators, identifying deviations from planned values in a timely manner. This facilitated prompt strategy adjustments and prevents negative consequences for the business. This approach improved the manageability of the enterprise and speeded up the response to internal and external risks. Analysis of the research results showed that the implementation of ERP and BI systems significantly increased the transparency of financial accounting and the effectiveness of cost management. Automating data collection and analysis allowed management to respond more quickly to changes in expenses and identify areas of inefficiency. This confirmed that digitalisation was a key factor in improving management accuracy and strategic adaptability of an enterprise. Based on the results obtained, recommendations were developed to increase the sustainability of Kyrgyz

enterprises. The main areas included budgeting adaptability, localisation and diversification of supplies, digitalisation of processes, systematic controlling and the use of scenario planning. The implementation of these measures will enable enterprises to reduce financial risks, maintain profitability and increase the efficiency of resource use even in conditions of inflation and exchange rate fluctuations.

Conclusions

The study found that effective cost management under conditions of inflation and exchange rate fluctuations was a key factor in ensuring the financial sustainability of Kyrgyz enterprises. An analysis of the theoretical foundations showed that management accounting tools such as ABC costing and standard costing allowed costs to be accurately allocated across divisions and products, while rolling forecasting and scenario planning provide flexibility in budgeting in an unstable macroeconomic environment. Value Engineering demonstrated its effectiveness in reducing production costs without compromising product quality, and the combination of these methods with digital tools, including ERP systems and BI platforms, ensured transparency, responsiveness, and automation of management processes.

A practical analysis of enterprises from different sectors confirmed the effectiveness of a comprehensive approach to cost management. The trading company Technodom was able to reduce production costs by 6.5% and increase profitability by 4.8% through the conclusion of long-term contracts and the implementation of a BI system to monitor currency risks. In the construction company Limited Liability Company "Stroy Invest Service", the use of budget scenario planning, localisation of procurement, and the creation of a reserve fund made it possible to reduce costs by 8%, increase profitability by 12%, and improve project management efficiency by 7.5%. The manufacturing enterprise "Kant Sut" LLC demonstrated the advantages of rolling forecasting and an ERP system, which resulted in a 5.2% reduction in costs, a 3.6% increase in margins, a 10% reduction in warehouse inventories, and a 6% improvement in overall efficiency. In the logistics company Asia Transit Logistic Company, route optimisation and diversification of fuel suppliers reduced costs by 7% and increased fleet efficiency by 15%.

The results of the study confirmed that the combination of strategic tools, scenario planning, digital support, and a controlling system enables enterprises to respond promptly to currency fluctuations and inflation, reduce financial risks, and enhance competitiveness. The introduction of adaptive budgeting methods and automated control contributed to more accurate forecasting and more efficient allocation of resources. Study showed that a comprehensive cost management strategy incorporating adaptability, digitalisation, localisation, diversification, and transparent controlling was

an effective instrument for strengthening the financial sustainability of Kyrgyz enterprises in an unstable economic environment. These approaches ensured long-term stability and contributed to the reinforcement of companies' market positions. A limitation of the study was that the analysis was based on data from a limited number of enterprises in Kyrgyzstan, which may reduce the generalisability of the findings to other industries or countries with different economic environments. Further research should analyse the impact of external economic shocks and fluctuations in global commodity

prices on the effectiveness of cost management strategies of Kyrgyz enterprises.

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Стратегія управління витратами в умовах інфляції та валютних ризиків на киргизьких підприємствах

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Анотація. Мета дослідження полягала у виявленні ефективних методів управління витратами в умовах інфляції та валютних ризиків для підвищення стійкості та конкурентоспроможності киргизьких підприємств. У дослідженні застосовувалися методи теоретичного аналізу та кейс-аналізу з метою оцінки ефективності інструментів управління витратами та розробки практичних рекомендацій щодо підвищення фінансової стійкості підприємств. В результаті проведеного дослідження було виявлено ключові фактори, що впливають на структуру витрат киргизьких підприємств в умовах інфляції та коливань валютного курсу. Аналіз показав, що найбільш вразливими статтями видатків стали імпорتنі закупівлі, енергоресурси, логістика та заробітна плата співробітників. Дослідження показало, що застосування сучасних методів управлінського обліку, таких як облік витрат за видами діяльності, стандартний облік витрат, ковзний прогноз та вартісний аналіз, дозволяє точно контролювати витрати та розподіляти ресурси. Сценарне планування та цифровізація процесів із використанням систем планування ресурсів підприємства та аналітичних бізнес-інструментів забезпечують своєчасне реагування на зміни валютного курсу та рівня інфляції. Аналіз практичних прикладів киргизьких підприємств показав успішне використання різних методів управління витратами, таких як локалізація закупівель, страхування валютних ризиків, оптимізація запасів та укладання довгострокових контрактів. «ТехноДом» знизив витрати на 6,5 %, рентабельність зросла на 4,8 %, ефективність процесів – на 5,2 %. «ОсОО СтройІнвест» досяг зниження витрат на 8,0 %, зростання рентабельності на 12,0 % і підвищення ефективності процесів на 7,5 %. «Kant Sut» знизилася витрати на 5,2 %, рентабельність збільшилася на 3,6 %, складські запаси скоротилися на 10,0 %, ефективність процесів – на 6,0 %. «Азія Транс Логістик» знизилася витрати на 7,0 %, рентабельність зросла на 5,0 %, ефективність процесів – на 15,0 %. Впровадження системи управлінського контролю та регулярний аналіз відхилень сприяли підвищенню ефективності управління витратами. У результаті дослідження підтвердило, що комплексна стратегія управління витратами, що застосовується в таких компаніях, значно підвищує стійкість підприємств до зовнішніх економічних ризиків та забезпечує стабільний розвиток бізнесу

Ключові слова: рентабельність; локалізація; цифровізація; контролінг; сценарне планування; оптимізація