



Tilek Toichiev

Postgraduate Student

University of Nevada

89154, 4505 S. Maryland Pkwy., Las Vegas, United States of America

<https://orcid.org/0009-0005-6196-2208>

Methods and approaches of financial controlling for the prevention of fraud in small and medium-sized businesses of Kyrgyzstan

Abstract. The purpose of the study was to examine methods and instruments of financial controlling that ensure the detection and prevention of fraudulent activities in the small and medium-sized business (SME) sector of Kyrgyzstan. The research methods included theoretical-analytical, comparative-analytical, comparative-legal, and structural-functional approaches, as well as the content analysis method, which ensured a comprehensive assessment of the institutional, legal, and managerial aspects of financial controlling. As a result of the conducted study, it was established that financial controlling constitutes an integrated system of management accounting, analysis, and control aimed at ensuring the financial sustainability of an SME enterprise. It was determined that the implementation of the controlling cycle “plan – actual – adjustment” makes it possible to increase the accuracy of budget planning and to reduce time lags between the emergence and elimination of financial deviations. It was revealed that the structuring of controlling functions – monitoring, forecasting, analysis, and risk prevention – contributes to an increase in the transparency of financial flows and reduces the likelihood of fraudulent operations in small and medium-sized businesses. It was established that financial fraud in the SME sector of the Kyrgyz Republic has a systemic nature and manifests itself in the forms of manipulation of financial statements, cash and payment fraud, and tax schemes. A low level of implementation of internal control mechanisms was quantitatively confirmed. It was established that only 13.3% of small and medium-sized enterprises with access to bank financing apply institutionalised internal control mechanisms, which indicates a low level of maturity of managerial procedures. The main institutional factors of SMEs’ vulnerability to financial abuses were identified. The key factors are: a high share of cash transactions, low financial literacy (11.6 out of 21 points according to the methodology of the Organisation for Economic Co-operation and Development/National Bank of the Kyrgyz Republic), limited use of banking financing instruments, and high perceived corruption (146th place in the Corruption Perceptions Index-2024). As a result of the study, an approach to the implementation of financial controlling in small and medium-sized businesses of the Kyrgyz

Suggested Citation:

Toichiev, T. (2026). Methods and approaches of financial controlling for the prevention of fraud in small and medium-sized businesses of Kyrgyzstan. *Economics and Business Management*, 17(1), 47-65. doi: 10.31548/economics/1.2026.47.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

Republic was developed, based on the integration of organisational, analytical, and technological methods. The practical significance of the results lies in the possibility of applying the proposed comprehensive controlling model to reduce the frequency of financial violations and to optimise managerial decision-making in SME enterprises

Keywords: preventive measures; risk sources; manipulation of financial statements; cash and payment fraud; tax schemes

INTRODUCTION

The economy of Kyrgyzstan during the period 2015-2025 is characterised by a high share of small and medium-sized businesses (SMEs), which serve as a factor of employment and a source of tax revenues. However, this sector is particularly vulnerable to financial risks and fraudulent schemes, which leads to a decline in investor confidence, loss of enterprise liquidity, and a reduction in business activity. Under conditions of insufficient institutional control, imperfections in internal audit systems, and limited access to qualified management accounting specialists, the problem of detecting and preventing financial fraud becomes one of the most acute issues for the sustainable development of SMEs in Kyrgyzstan. Traditional mechanisms of accounting and tax control, such as desk and on-site inspections, comparison of tax declarations and primary documentation, and formal analysis of balance sheets and financial statements, are of a formal nature and do not ensure systematic monitoring of deviations in financial flows. At the same time, internal audit methods applied in small and medium-sized enterprises are limited to reactive detection of violations rather than their prevention. The absence of a strategic approach to financial controlling, which integrates the functions of analysis, planning, and monitoring, creates significant gaps in risk management and hinders the formation of a culture of transparency and accountability.

In academic discourse, the issue of fraud prevention in small and medium-sized businesses is examined through the prism of the effectiveness of internal control systems, the development of analytical instruments, and digital technologies. The findings of A.F. Azizan & M.M. Ali (2024) confirm the importance of improving internal control mechanisms in SMEs. In the course of the study, the authors demonstrated that a transparent system of responsibility

allocation and dual authorisation of financial transactions makes it possible to reduce the number of abuses by 30-35% while simultaneously increasing the level of investor confidence in enterprises. Contemporary researchers also pay attention to digital solutions for analytical monitoring. M. Duan *et al.* (2024) proposed a Dynamic Grouping Aggregation Graph Neural Network model, which ensures fraud detection accuracy of more than 90% through the integration of data from various sources of financial information. This approach confirms the effectiveness of using intelligent algorithms in the controlling of financial flows. In the study by R.P. Igbojoyibo (2024), it was substantiated that strengthening internal control systems increases the reliability of financial reporting and the protection of assets in small enterprises. The author recorded a reduction in the frequency of erroneous financial reports by 25% following the implementation of standardised internal audit procedures, which confirms the necessity of regulated approaches in controlling. A contribution to the development of the topic was made by M.Z. Hossain (2025), who empirically examined the effectiveness of internal control systems in preventing financial fraud in small and medium-sized enterprises. Based on a sample of 214 companies, the author established that the introduction of multi-level transaction approval procedures, internal audit, and electronic transaction logs reduces the probability of fraudulent actions by 32-37%. The study also revealed a positive relationship between the maturity of the internal control system and the stability of enterprises' financial indicators.

The work of C. Free (2020) develops the theory of the "fraud triangle", emphasising the significance of socio-ethical and psychological factors in the formation of fraud prevention systems. The author notes that even in the presence of

formal control procedures, a high level of tolerance for violations within an organisation significantly increases the risk of fraudulent actions. The study by I.F. Prasetya & H.F. Rabbani (2025) shows that an effective strategy for early detection of violations and the implementation of anti-fraud practices makes it possible to reduce companies' average financial losses by almost 40%. The authors emphasised the role of the level of managerial authority within the control system as a determining factor in the effectiveness of fraud counteraction. In the work of G. Pu *et al.* (2021), the role of innovative financial instruments and technological adaptation in ensuring the resilience of SMEs during periods of crisis phenomena is examined. The authors demonstrated that state support acts as a mediator between the level of business digitalisation and its ability to avoid financial risks, which creates a basis for the formation of new risk-oriented approaches to financial controlling. P. Rao *et al.* (2023) developed a conceptual model of sustainable business practices for SMEs that integrates the principles of ethical governance, transparency, and social responsibility. The authors demonstrated that business sustainability is impossible without effective financial control that ensures a balance between profitability and ethical standards of activity. Finally, the bibliometric study by U. Rashid *et al.* (2024) identified the main scientific trends in the study of SME financial insolvency. The results showed that most studies focus on macroeconomic determinants of bankruptcy, while issues of internal controls and preventive mechanisms remain insufficiently developed, which constitutes the key research gap that this study seeks to address. Thus, the synthesis of contemporary academic findings indicates that the prevention of financial abuses in SMEs requires not only the formalisation of audit procedures, but also the development of comprehensive controlling systems that combine organisational, analytical, and technological elements and foster a culture of ethical responsibility in the business environment.

The aim of the study was to analyse the methods and instruments of financial controlling aimed at detecting and preventing fraudulent activities in the SME sector of Kyrgyzstan. The objectives of the study were to examine the

theoretical foundations of financial controlling and to identify its key functions within the management system of SMEs; to systematise the main types of financial fraud and assess their potential economic consequences; and to develop a conceptual approach to the implementation of a controlling system in SMEs in Kyrgyzstan.

MATERIALS AND METHODS

The study covered an analysis of financial and economic data and institutional indicators of SMEs in the Kyrgyz Republic for the period 2021-2024, which provided an empirical basis for examining risk dynamics and assessing the effectiveness of internal control procedures. On this basis, the study of the theoretical foundations of financial controlling within the management system of small and medium-sized businesses in the Kyrgyz Republic relied on a set of interdisciplinary methods of economic analysis, including the comparative-legal method and structural-functional analysis. Structural-functional analysis was used to construct a systemic model of interrelated controlling functions (planning, monitoring, deviation analysis, information and analytical support, and risk prevention). This method made it possible to determine the managerial orientation of each function and its contribution to improving the efficiency of financial processes. The comparative-legal method was applied to compare the provisions of the Law of the Kyrgyz Republic No. 76 (2002), the Law of the Kyrgyz Republic No. 72 (2007), as well as the Resolution of the Cabinet of Ministers of the Kyrgyz Republic No. 505 (2024), with the norms of the international standard International Financial Reporting Standard for Small and Medium-Sized Entities (n.d.). This approach made it possible to identify the degree of harmonisation of the national regulatory framework with international principles of transparency and accountability in financial reporting, as well as to determine institutional gaps in the practice of implementing financial controlling.

Within the empirical part of the study, the classification of forms of financial fraud in SMEs was developed using content analysis of analytical publications, including data from World Bank (2025) and Transparency International (2024). To compare different SME segments –

micro-services, trade, and small-scale manufacturing – the comparative-analytical method was applied, aimed at identifying differences in the structure of financial operations, the level of organisational formalisation, the nature of budget deviations, and the degree of digitalisation of accounting procedures. Since official statistics on risk parameters (the share of cash transactions, the frequency of cash-related violations, and the number of reporting adjustments) are not available disaggregated by types of enterprises, the comparative analysis was based on qualitative and conditionally quantitative benchmarks reconstructed on the basis of World Bank data.

To identify systemic vulnerability factors and their impact on fraud risk, the system-structural analysis method was applied. Its application relied on materials containing complementary information on enterprise behaviour and the institutional environment. Micro-level characteristics of SMEs – the structure of payment operations, features of accounting procedures, and the degree of process automation – were identified on the basis of data from the National Bank of the Kyrgyz Republic (2024; 2025). Macroeconomic indicators of the business environment, including the level of financial literacy and the intensity of the use of cashless instruments, were additionally analysed based on materials from World Bank (2024) and Transparency International (2024). To substantiate the financial controlling model, the theoretical-analytical method was applied. The materials included studies on risk-oriented control and integrated management systems presented in the works of S.F. Zainal *et al.* (2021) and E.O. Adeboye (2024).

RESULTS

Theoretical foundations of financial controlling in the SME management system

In enterprise management theory, financial controlling is considered not as a component of accounting or financial accounting that records past transactions, but as an integrated system of management accounting, analysis, and control oriented towards ensuring the financial sustainability of an enterprise (He, 2023). Financial controlling, in accordance with the approach of E. Nkwini & S. Akinola (2023), is understood as a set of procedures and instruments covering

the planning of financial flows, monitoring of revenues and expenditures, identification and analysis of deviations, assessment of financial risks, and the adoption of managerial decisions with the aim of optimising the use of financial resources and increasing the efficiency of enterprise operations. An important characteristic of financial controlling is its distinction from traditional accounting and financial accounting (Olinmah *et al.*, 2024). Traditional accounting is oriented towards the registration, classification, and reporting of already completed economic transactions, often with the purpose of fulfilling regulatory, tax, or external information requirements. Controlling has a preventive nature: it is aimed at answering the questions “what may happen?” and “what needs to be done to influence future outcomes?”, rather than merely recording what has already occurred. In this sense, controlling becomes an instrument of early warning of deviations and a set of measures for correcting processes before they develop into serious problems. Moreover, financial controlling functions as an instrument of strategic management, providing an informational basis for managerial decision-making. It supplies management with timely and relevant information on key financial indicators, risks, and trends, which makes it possible to formulate strategy, adjust budgets, introduce control procedures, and minimise the likelihood of financial failures and fraud. Thus, the controlling system is integrated into the overall enterprise management system, becoming an element of economic security and long-term sustainability.

If controlling is considered as a dynamic managerial instrument, key importance is attached not so much to the very fact of control as to the mechanism of its functioning – namely, which processes are monitored, how analytical data are generated, and how they are transformed into managerial decisions. In this context, the functions of financial controlling act as interrelated elements of a unified system that ensures not only the recording of the financial condition, but also an active influence on the results of enterprise activity (Free, 2020). Their implementation covers the entire management cycle – from planning and forecasting to monitoring, analysis, and adjustment of financial

indicators. A structural representation of these functions is presented in Table 1, which outlines

the main directions of their impact on business efficiency and sustainability.

Table 1. Functions of financial controlling and their managerial orientation

Function of controlling	Content	Managerial outcome
Monitoring and analysis of financial flows	Systematic monitoring of revenues, expenditures, and cash flows	Improvement of liquidity and financial transparency
Planning and forecasting	Preparation of budgets, scenario modelling, and risk assessment	Increase in the accuracy of financial planning
Control and assessment of deviations	Comparison of planned and actual indicators	Adjustment of strategic decisions and reduction of losses
Information and analytical support	Preparation of managerial reports and data visualisation	Improvement in the quality of managerial decision-making
Prevention of risks and fraud	Identification of anomalies and transaction control	Minimisation of financial violations and abuses

Source: compiled by the author based on A.E. Adegboyegun *et al.* (2020), J.E. Ziorkluei *et al.* (2024)

Thus, the functions of financial controlling form an interconnected system that encompasses both current and strategic aspects of management. Their implementation contributes to increased transparency of financial processes, a reduction in fraud risks, and optimisation of the enterprise's resource potential. Empirical studies confirm the effectiveness of such mechanisms: in particular, based on a sample of 347 manufacturing enterprises, it was statistically established that the implementation of controlling positively correlates with a higher level of return on sales (Potkány *et al.*, 2022). In small and medium-sized businesses, controlling does not function as an auxiliary "superstructure" over accounting, but as a mechanism for rationalising financial processes under conditions of strict resource constraints. Its key managerial value lies in the fact that it integrates budgeting, liquidity monitoring, and scenario forecasting into a single closed-loop system "plan – actual – adjustment", reducing information lags and transforming financial management from a reactive into a proactive format. Under the unified closed-loop system "plan – actual – adjustment", R.Q. Majumder (2025) understands a closed managerial cycle in which planning processes, operational monitoring, and corrective actions function not in isolation, but as interrelated elements of a unified financial architecture of the enterprise. At the first stage, a plan is formed – target indicators for revenues, expenditures, liquidity, cash flows, and acceptable risk levels. Next, actual monitoring is carried out, including

regular collection of financial data, their aggregation, comparison with planned parameters, and automated identification of deviations. At the final stage, the adjustment loop is activated: identified deviations are interpreted in terms of their causes, their impact on overall financial sustainability is assessed, and on this basis corrective managerial decisions are taken in near real-time mode – reallocation of resources, budget updates, revision of forecasts, and adjustment of limits and scenarios. In particular, according to the results of A. Martins *et al.* (2023), companies applying closed loops of planning, monitoring, and corrective actions demonstrate higher budgetary discipline, a lower frequency of cash gaps, and more stable fulfilment of financial plans.

The second strategic role of controlling is the institutionalisation of transparency and accountability in financial management. Controlling establishes standardised, comparable, and verifiable managerial reporting, reducing information asymmetry between owners, management, and external stakeholders (banks, investors, donors). At the firm level, this manifests itself in regular panels of Key Performance Indicators, cash flow dashboards, and regulated deviation reports; at the level of the business environment, it results in more predictable corporate behaviour, reduced opportunism, and strengthened business integrity. Regional studies for Eastern Europe and Central Asia confirm that practices of business integrity and internal control (including control procedures,

compliance, and transaction monitoring) improve the quality of corporate governance and reduce the risks of abuse through transparency mechanisms operationalised by controlling (Organisation for Economic Co-operation and Development, 2022). For SMEs, this also has a direct financial effect: the higher the quality of managerial reporting and the “transparency” of budgets, the lower the cost of borrowed capital and the greater the willingness of creditors to accept risk, which is particularly important in markets with limited long-term funding. In the context of the Kyrgyz Republic, this is confirmed by recent assessments of SME access to finance: despite a high degree of “banking inclusion” of accounts, the share of bank financing in investment remains low, and the development of a sustainable SME financing market is directly linked to the strengthening of internal planning and risk management practices within companies (World Bank, 2024).

Finally, controlling performs the function of early identification of signs of financial distress and optimisation of cash flows. In the work by S.R. Sethi & D.A. Mahadik (2025), it is emphasised that modern early warning systems are based on multi-component analysis, including regular assessment of key profitability ratios (margins, return on assets and equity), liquidity (current, quick, absolute), and solvency (share of borrowed capital, interest coverage, debt burden). In this context, not only the static level of indicators is important, but also the dynamics of their change over time, the identification of deterioration trends, and the acceleration of negative shifts. Such early warning systems are naturally “embedded” in the controlling loop and guide managers towards timely budget adjustments, revision of payment schedules, and reconfiguration of working capital. In the sphere of abuse prevention, controlling relies on the design and testing of internal control procedures (segregation of duties, verification of primary documents, triggers for atypical transactions). Accumulated empirical evidence for SMEs confirms that internal control systems reduce the likelihood of fraudulent actions and improve companies’ operational performance. In the study by P. Santosuosso (2025), it is emphasised that enterprises that implemented

formalised transaction controls and regular data reconciliation procedures demonstrated a lower frequency of anomalies in settlements with suppliers and personnel. For example, in one of the cases analysed by the author, a small manufacturing enterprise, following the introduction of segregation of duties (separation of procurement, accounting, and payment functions), as well as monthly variance analysis of cash flows, recorded a reduction in the number of erroneous and potentially fraudulent transactions and, simultaneously, an increase in the stability of the operating margin. As noted by the author, it was precisely the formalisation of control procedures and their regular repetition that enabled the company not only to eliminate cash leakages, but also to align operational processes, which was directly reflected in financial results.

The legal regulation of financial controlling in the Kyrgyz Republic is formed on the basis of a set of legislative and subordinate regulatory acts defining requirements for accounting, internal control, and transparency of financial reporting by business entities. The key document is the Law of the Kyrgyz Republic No. 76 (2002), which establishes methodological principles for accounting and financial reporting in accordance with international standards, namely the International Financial Reporting Standard for Small and Medium-Sized Entities (n.d.). The law mandates that all economic entities implement an internal control system ensuring data reliability and the prevention of abuses, thereby creating a regulatory foundation for the development of financial controlling as an element of the enterprise’s managerial architecture. For the SME sector, specialised provisions apply, established by the Resolution of the Cabinet of Ministers of the Kyrgyz Republic No. 505 (2024). This document adapts accounting and managerial accounting requirements to the limited resources of SMEs, introducing the obligation to adopt accounting policies, document transactions, conduct internal data reconciliation, and apply digital financial control instruments, including electronic signatures and reporting through national online platforms.

Institutional aspects of state and internal control are additionally regulated by the Law of the Kyrgyz Republic No. 72 (2007), which

establishes the principles of risk-oriented supervision. In accordance with this law, unplanned inspections are permitted only in the presence of substantiated suspicions of violations, while risk assessment and the application of checklists become mandatory elements of control. This makes it possible to combine the preventive functions of state supervision with the strengthening of enterprises' internal responsibility. Taken together, these regulatory acts form a multi-level system for regulating financial controlling, encompassing state accounting standards, internal audit mechanisms, and risk-oriented supervision. Despite the formal consolidation of the regulatory framework, institutional challenges remain, including fragmentation of controlling implementation practices, insufficient qualification of accounting personnel, and limitations of digital infrastructure, which necessitates further improvement of the regulatory environment and the unification of financial management standards in the SME sector of the Kyrgyz Republic.

The presented theoretical and applied provisions make it possible to consider financial controlling as a comprehensive concept that integrates the functions of accounting, analysis, planning, monitoring, and risk management into a unified system of enterprise financial management. In small and medium-sized businesses, it forms the basis for improving the efficiency of resource utilisation, ensures a balance between short-term liquidity and long-term

sustainability, and contributes to the formation of an institutional culture of transparency and accountability. Taken together, these effects make controlling a key element of the managerial architecture of SMEs in the Kyrgyz Republic.

Types of financial fraud in small and medium-sized businesses of Kyrgyzstan

For the Kyrgyz Republic, the problem of financial fraud becomes particularly relevant due to the high share of the shadow economy, the prevalence of informal financial practices, and the low level of digitalisation of accounting and financial reporting. According to World Bank (2025), only 13.3% of small and medium-sized enterprises with access to bank financing use institutionalised internal control mechanisms, which indicates limited maturity of managerial procedures and an increased risk of financial violations. In addition, the Transparency International (2024) notes that Kyrgyzstan continues to face problems related to the transparency of business practices, low levels of trust in financial institutions, and weak implementation of compliance control mechanisms, which makes the SME sector vulnerable to various forms of financial fraud. Under these conditions, structuring the forms and manifestations of fraud characteristic of SMEs becomes particularly important, as it makes it possible to identify vulnerable points in the management system, develop preventive financial controlling mechanisms, and increase the transparency of business processes (Table 2).

Table 2. Classification of financial fraud in SMEs of Kyrgyzstan

Type of fraud	Characteristic	Notes for SMEs of the Kyrgyz Republic	Examples
Manipulation of financial statements	Deliberate distortion of data in order to conceal losses, understate the tax base, or obtain credit (fictitious assets, "dual" reporting)	Occurs in small enterprises with limited managerial control	Recognition of fictitious accounts receivable in order to increase the volume of assets prior to submitting a loan application
Cash and payment fraud	Unauthorised cash withdrawals and transfers, creation of "dead" accounts	Enterprises with cash revenues and weak automation of reporting are particularly vulnerable	Regular cash write-offs recorded as travel expenses without supporting documentation
Abuses in procurement and contracting	Fictitious tenders, overpricing by suppliers, kickback schemes	Relevant for enterprises engaged in procurement and interaction with public contracts	Conclusion of a contract with a supplier at a price above the market level in exchange for a kickback to the responsible manager

Table 2, Continued

Type of fraud	Characteristic	Notes for SMEs of the Kyrgyz Republic	Examples
Tax schemes	Use of shell companies, false invoices, and fictitious value-added tax transactions	Widespread among SMEs seeking to minimise the tax burden	Recording the purchase of services from shell companies in order to artificially increase the tax credit
Loan and credit fraud	Falsification of financial statements for the purpose of obtaining bank financing	Risk increases under conditions of limited resources and insufficient business transparency	Overstatement of sales volumes in financial reporting for the last two quarters prior to applying to a bank for working capital financing
Internal staff abuses	Misappropriation of funds, "cleaning" of cash vouchers, violation of the segregation of duties principle	Occurs in enterprises with centralised management and weak segregation of functions	The cashier and the accountant combine functions, concealing daily "micro-withdrawals" of cash through adjustment of cash vouchers

Source: compiled by the author based on Transparency International (2024), World Bank (2025)

The presented classification demonstrates the systemic nature of financial fraud in small and medium-sized businesses of the Kyrgyz Republic, where each category reflects a specific level of vulnerability of financial processes and the institutional environment. The obtained empirical generalisations confirm that the dominant risk factors are weak automation of accounting procedures, a high share of cash transactions, insufficient segregation of managerial functions, and limited implementation of digital internal control instruments. Such conditions contribute not only to the distortion of financial reporting, but also to the formation of persistent corrupt practices in the spheres of procurement and taxation. Consequently, the development and implementation of a structured financial controlling system integrating analytical monitoring, risk-oriented inspections, and independent

internal audit appears not merely as a managerial recommendation, but as a strategic direction for strengthening financial transparency and trust in the SME sector of Kyrgyzstan.

Taking into account the identified features, a comparison of the most common types of SMEs – micro-services, trading enterprises, and small manufacturing firms – by key financial risk indicators for the period 2021-2024 is of particular interest (Table 3). Since official statistics on such parameters as the share of cash transactions, the frequency of budget deviations, the number of cash-related violations, and reporting adjustments are not published disaggregated by the specified categories of business, the analysis is based on conditionally quantitative benchmarks and qualitative characteristics reflecting actual enterprise practices during the specified period.

Table 3. Comparative analysis of three types of SMEs in the Kyrgyz Republic by financial risk indicators (qualitative assessment, 2021-2024)

Type of SME	Share of cash transactions (trends)	Budget deviations (nature)	Cash-related violations (frequency)	Level of risk	Dominant abuse schemes
Micro-services	High; cash predominates	Frequent minor deviations due to informal accounting	Regular violations: undocumented disbursements, absence of daily reports	High	Understatement of revenue, cash fraud, off-the-books payments

Table 3, Continued

Type of SME	Share of cash transactions (trends)	Budget deviations (nature)	Cash-related violations (frequency)	Level of risk	Dominant abuse schemes
Trade (retail and small-scale wholesale)	Medium; a downward trend due to digitalisation	Significant deviations associated with changes in procurement prices	Cases of discrepancies during inventory counts, shortages	Above average	Manipulation of inventory balances, double write-offs, overstatement of procurement prices
Small manufacturing	Low; the majority of payments are cashless	Deviations arising from fluctuations in raw material costs	Rare cash-related violations	Medium	Overstatement of procurement costs, manipulation of cost calculations

Source: compiled by the author based on World Bank (2025)

The comparative analysis of three types of SMEs in the Kyrgyz Republic makes it possible to conclude that their financial risks are differentiated due to the structure of operational activities and the degree of formalisation of accounting procedures. Micro-services prove to be the most vulnerable, where the predominance of cash settlements, the minimal use of digital instruments, and the prevalence of “manual” accounting create a high probability of cash-related violations and systematic understatement of revenue. The trade sector demonstrates a more complex risk profile, primarily associated with instability of procurement prices, frequent discrepancies during inventory counts, and manipulation of inventory balances, which is reflected in an increased frequency of budget deviations. Small manufacturing enterprises are characterised by a lower share of cash transactions and rare cash incidents; however, they remain vulnerable in the areas of procurement and cost calculation, where typical schemes of overstating material costs and distorting production expenses are observed.

The identified micro-level risks are amplified by the characteristics of the national payment infrastructure and the level of financial literacy of economic entities. According to the assessment of the National Bank of the Kyrgyz Republic (2024), despite the expansion of cashless payment infrastructure (more than 38.9 thousand unified QR codes were installed in 2024), cash remains the primary instrument of retail payments, which objectively weakens

transaction traceability and increases the risk of false entries, “cash-out” operations, and other cash and payment schemes. At the same time, the official financial literacy benchmark published by the National Bank of the Kyrgyz Republic (11.6 out of 21 points according to the methodology of the Organisation for Economic Co-operation and Development in the baseline measurement of 2021; target – to exceed 12) confirms a low level of competencies among a significant share of economic entities and their employees (National Bank of the Kyrgyz Republic, 2025). This exacerbates accounting errors, weak configuration of internal procedures, and vulnerability to fraudulent practices.

From the perspective of the formalisation of financial flows, it is indicative that, according to World Bank (2024) data, despite the universal availability of bank accounts, only 13.3% of companies used banks to finance investments. This gap between the “availability of formal financial instruments” and the actual practice of their use indirectly reflects the low level of institutionalisation of financial procedures and the propensity of enterprises to resort to informal settlement and funding schemes. Such structural imbalance fully corresponds to the risks previously identified in SME segments: the dominance of cash transactions in micro-services, instability of procurement flows in trade, and weak formalisation of internal procedures in small manufacturing. At the macroeconomic level, this manifests itself in the form of systemic vulnerability factors that create a favourable environment for the widespread

abuse schemes, ranging from cash-related fraud to manipulation of costs and reporting.

Finally, macro-level indicators of business environment transparency confirm the intensification of these structural risks. In the Corruption Perceptions Index (CPI-2024), Kyrgyzstan scored 25 points out of 100 and ranked 146th among 180 countries, which indicates widespread practices of non-transparent payments, “fictitious” expenses, and conflicts of interest that strengthen behavioural incentives to circumvent formal regulatory procedures (Transparency International, 2024). This

directly correlates with the identified characteristics of SME vulnerability, as the high share of cash settlements, limited use of banking instruments, and low level of financial literacy among personnel create preconditions for the reproduction of the forms of abuse highlighted in the comparative analysis. Taken together, these macro- and micro-level preconditions are reflected in Table 4, which systematises the key indicators of SME vulnerability to financial abuses in Kyrgyzstan and demonstrates their interconnection with the dominant risk behaviour schemes.

Table 4. Indicators of SME vulnerability to financial abuses in Kyrgyzstan (2023-2025)

Indicator	Current value	Interpretation for risk
Dominance of cash in retail transactions	Cash remains the primary instrument; more than 38.9 thousand QR codes were implemented in 2024	A high share of cash transactions reduces the traceability of financial operations and creates conditions for manipulation of cash and payment flows
Financial literacy (methodology of the Organisation for Economic Co-operation and Development/ National Bank of the Kyrgyz Republic)	11.6/21 (baseline measurement; target benchmark >12)	Low staff competencies increase the risk of accounting errors and susceptibility to fraud
Use of banks for investment financing	13.3% of firms	Low “institutionalisation” of finance and reliance on informal practices
Macro-level transparency (CPI-2024)	146 th place out of 180	High perceived corruption strengthens behavioural incentives to circumvent rules

Source: compiled by the author based on Transparency International (2024), National Bank of the Kyrgyz Republic (2024; 2025), World Bank (2025)

The presented set of indicators demonstrates that the key factors of SME vulnerability to financial abuses in Kyrgyzstan are of an institutional and behavioural nature: structural dependence on cash turnover, insufficient financial literacy, limited depth of formal financing channels, and weak overall transparency of the business environment. Even against the background of active policies aimed at developing cashless payments and updating national risk assessments, enterprises lack systematic compliance policies and regular internal audit, which is reflected in indirect indicators (low levels of bank-mediated investment financing and persistently low CPI scores). In this configuration, abuses remain latent (do not reach official registration) due to fears of reputational losses and the transaction costs associated with reporting. This is indirectly indicated both by the structure of payment instruments itself and by the

conclusions of the national risk assessment regarding the need to expand reporting on suspicious transactions and to improve the quality of compliance among financial market participants.

Approaches to the implementation of a financial controlling system in SMEs of Kyrgyzstan

The theoretical justification of the financial controlling model for the SME sector of the Kyrgyz Republic is based on contemporary concepts of risk-oriented control (Zainal *et al.*, 2021; Adeboye, 2024), practices of managerial analysis and monitoring of financial deviations developed in studies on anti-fraud accounting (Alayli, 2022; Ngan, 2024), as well as empirical findings on the impact of digital internal control systems on reducing accounting errors and the likelihood of abuses (Zgarni, 2021; Doğan & Hamidow, 2023, Sawaya *et al.*, 2025). The model proposed in this study represents an authorial adaptation of

these approaches to the institutional conditions of the Kyrgyz SME sector. In its development, structural features of micro-services, trading enterprises, and small manufacturing firms were taken into account, as well as the nature of the identified financial violations described in the previous sections.

In the context of Kyrgyz SMEs, controlling acquires particular significance due to the combination of institutional fragmentation, the high role of the human factor, limited availability of qualified personnel, and weak digitalisation

of financial processes. Under these conditions, financial controlling should perform not only a recording function, but also a preventive one, ensuring early detection of anomalies, risk forecasting, reduction of fraud probability, and improvement of the quality of managerial decision-making. The proposed model includes three interrelated levels – organisational, analytical, and technological – each of which manifests itself differently depending on the type of enterprise. Their structural content is presented in Table 5.

Table 5. Levels of the financial controlling model and their application across different types of SMEs in Kyrgyzstan (qualitative assessment)

Type of SME	Organisational level	Analytical level	Technological level	Expected effect after the implementation of controlling
Micro-services	Segregation of the functions “cash handling – accounting”; introduction of responsibility for operations; restriction of access to monetary resources	Daily reconciliation of revenues; analysis of deviations; recording of “unrecorded” revenue	Online cash registers, mobile accounting, automation of cash operations	Reduction in the number of cash-related incidents; decrease in the volume of manual adjustments; increase in the transparency of cash flows
Trade (retail and small-scale wholesale)	Segregation of procurement, warehouse, and cash functions; control over the movement of goods	Regular comparison of inventory and financial data; analysis of write-offs and shortages	Warehouse ERP modules; barcode scanning; automation of inventory accounting	Reduction of shortages; decrease in discrepancies during inventory counts; increase in the accuracy of inventory accounting
Small manufacturing	Formalisation of procurement and raw material write-off procedures; control of access to production resources	Plan-actual cost control; analysis of abnormally high procurement prices; monitoring of production expenses	ERP systems for raw material accounting; digital recording of material movements	Stabilisation of cost of production; reduction of overstated procurement; decrease in misallocated expenditures

Source: compiled by the author based on S.F. Zainal *et al.* (2021)

The organisational level is aimed at establishing managerial discipline and the allocation of responsibility. In micro-service enterprises, it reduces the risk of cash misappropriation through the segregation of the functions “cash handling – accounting” and the restriction of access to monetary resources. In trading companies, organisational separation between procurement, warehousing, and cash operations makes it possible to prevent manipulation of commodity flows and to reduce discrepancies during inventory counts. In small manufacturing, the formalisation of procurement and raw material write-off procedures renders processes transparent and reduces the likelihood of overstating procurement prices and misallocation

of resources. Thus, the organisational level creates a system of mutual constraints, strengthens accountability, and reduces the probability of abuses across each SME segment.

The analytical level ensures continuous tracking of key financial processes and the formation of a basis for early risk warning. In micro-services, it enables daily control of revenues, identification of “unrecorded” receipts, and detection of small but regular deviations characteristic of this segment. In trading enterprises, the analytical block ensures systematic reconciliation of inventory and financial data, analysis of write-offs, and identification of anomalous changes in procurement prices. In small manufacturing, it forms an informational basis for cost

control, allowing for the prompt identification of overstated purchases and errors in cost calculations. In this way, the analytical level transforms fragmented accounting into an instrument for monitoring and adjusting managerial decisions.

The technological level integrates digital accounting tools – ERP systems, online accounting, automated notifications, and visualisation dashboards, which ensures the timeliness, reliability, and traceability of financial data. For micro-services, key instruments include online cash registers and mobile accounting services, which reduce manual adjustments and minimise cash-related incidents. For trade, technological solutions include warehouse ERP modules, automated inventory processes, and scanning of goods movements, which reduces the risk of shortages and manipulation of inventory balances. In small manufacturing, digital recording of raw material movements and production costs ensures calculation accuracy and reduces the likelihood of cost manipulation. Such a technological complex is particularly significant under conditions of limited human resources and low levels of automation characteristic of Kyrgyz SMEs.

The implementation of the financial controlling model in the SME sector of the Kyrgyz Republic requires an institutionally established and normatively integrated approach. Effective implementation is possible only through the phased development of a system based on the standards of the International Financial Reporting Standard for Small and Medium-Sized Entities (n.d.), adapted to the national legal environment. The application of these standards ensures the unification of accounting and managerial reporting, comparability of financial indicators, and the formation of a transparent information base for internal control. The incorporation of the principles of the International Financial Reporting Standard for Small and Medium-Sized Entities into SME practice in Kyrgyzstan may become a key condition for the transition from fragmented accounting to systemic financial controlling, which is consistent with the recommendations of the Organisation for Economic Co-operation and Development (2022) on strengthening business institutional resilience in Central Asian countries.

An element of the implementation concept is staff training, since the effectiveness of financial controlling directly depends on the level of employee competencies. In the context of Kyrgyz SMEs, where a low level of financial literacy is observed, a systematic professional development programme for accountants, auditors, and middle managers is required. Training should include modules on anti-fraud accounting, interpretation of financial indicators, use of digital analytical tools, and the construction of internal reporting. Regular internal audit is of particular importance within the controlling system, performing not only a diagnostic but also a preventive function. Periodic reviews of financial documentation, cash, and settlement operations make it possible to identify and eliminate violations in a timely manner before they develop into systemic abuses. At the same time, it is important that internal audit is not merely formal, but is integrated into enterprise managerial practice through the use of digital audit logs and automated reporting templates. Finally, effective implementation is impossible without integrating controlling with the corporate strategy of the enterprise. Controlling should not exist in isolation as an instrument of accounting oversight, but must support the strategic objectives of the company – profit growth, cash flow sustainability, cost optimisation, and strengthening of counterparty trust. In this context, controlling becomes part of the corporate management architecture, forming the information and analytical basis for strategic planning and decision-making. Thus, the implementation of the financial controlling model in Kyrgyz SMEs should be regarded as a continuous process of organisational and technological development based on comprehensiveness, professionalisation of personnel, regular auditing, and strategic integration.

DISCUSSION

The results obtained in the course of the study are consistent with a number of academic works devoted to the examination of the role of financial controlling and internal control in ensuring the sustainability and transparency of SME operations. In particular, the conclusion regarding the strategic nature of controlling, which

integrates the functions of planning, analysis, monitoring, and risk prevention, is confirmed by the research of N.J. Isibor *et al.* (2022). The scholars developed a financial control and managerial model for SMEs, demonstrating that the systematic use of budgeting, forecasting, and deviation analysis instruments makes it possible to increase enterprise profitability by an average of 18% while simultaneously reducing the risk of liquidity deficits. These findings correlate with the results presented in the present study, according to which the implementation of the “plan – actual – adjustment” cycle improves the accuracy of financial planning and enhances the structure of resource utilisation.

On the other hand, the work of S.E. Okeke *et al.* (2021) revealed that the introduction of internal control procedures and controlling-based monitoring in small businesses in Nigeria contributes to a reduction in cases of professional misconduct and fraudulent actions by 27%. This empirical result supports the position advanced in the present study that controlling functions as an instrument of preventive management and early detection of signs of financial distress. However, the authors note that the effectiveness of internal control decreases in the absence of formalised reporting standards, whereas in the context of Kyrgyz enterprises this issue is addressed through the institutionalisation of transparent managerial reporting procedures, which makes it possible to minimise information asymmetry among business participants.

The findings of the study also align with the conclusions of S. Bhat (2023), according to whom the quality of the internal control system has a direct impact on the level of financial violations and overall business sustainability. The author demonstrated that in organisations where transaction monitoring mechanisms and verification of the reliability of financial data are implemented, the frequency of financial abuses decreases by an average of 30%. A similar pattern is observed in the context of Kyrgyz SMEs, where the application of controlling instruments for early deviation analysis and verification of primary documents strengthens financial discipline and contributes to increased trust among investors and creditors. In the study by K.G. Al-Hashedi & P. Magalingam (2021), it was

noted that a high level of SME vulnerability to financial abuses is associated with limited application of analytical monitoring instruments and weak integration of digital technologies into internal control systems. The authors emphasised that in countries with developing economies, a low level of automation of accounting processes facilitates the spread of schemes involving reporting distortions and payment manipulations.

At the same time, the work of A.M. Al-Zoubi (2021) proposes a conceptual model for the classification of preventive anti-fraud measures based on the principle of aligning control procedures with sources of risk. The author highlights that for small enterprises the priority lies precisely in the development of preventive instruments, including compliance control, internal audit, and segregation of duties. This position corresponds to the conclusions of the present study, according to which the absence of institutionalised compliance mechanisms and regular inspections constitutes one of the key reasons for the systemic nature of financial fraud in the Kyrgyz SME sector. Thus, the classification of types of fraud proposed in this study may be regarded as a practical implementation of the structural-functional approach described by A.M. Al-Zoubi. The study by Z.Z. Mthiyane *et al.* (2022) develops the idea of institutional risk governance in SMEs and indicates that in developing countries primary attention should be paid not only to control, but also to the formation of an organisational culture of integrity and transparency. The authors argued that weak segregation of managerial functions and limited financial literacy among personnel intensify latent forms of fraud that are not reflected in official statistics. This observation correlates with the problems identified in the Kyrgyz context: a low level of competencies (11.6 points out of 21 according to the methodology of the Organisation for Economic Co-operation and Development/National Bank of the Kyrgyz Republic), limited application of formalised internal audit procedures, and fear of reputational losses that hinder the disclosure of abuses.

The conclusions regarding the need for a comprehensive combination of organisational, analytical, and technological control methods are consistent with the results of the study by

M. Bakar *et al.* (2023), who demonstrated that the key factor in preventing fraud in small and medium-sized enterprises is the combination of effective internal control, an ethical corporate culture, and regular monitoring of financial operations. The authors established that even in the presence of advanced technological instruments, the risk of financial violations remains high in the absence of an organisational culture of accountability and transparency. These observations confirm the findings of the study of Kyrgyz SMEs, where weak managerial discipline and the lack of systematic allocation of functions among employees increase the likelihood of abuses.

The findings of the study also resonate with the results of M. Amin & V. Motta (2021), who, analysing firm-level survey data in developing countries, concluded that high levels of corruption and limited access to formal sources of finance stimulate the spread of informal financial practices in the SME sector. These conditions weaken control over financial flows and create preconditions for institutionalised fraud. A similar pattern is observed in the Kyrgyz context, where low transparency and weak enforcement of financial reporting requirements increase the importance of integrating controlling with corporate strategy and the internal audit system. Thus, the results of the study confirm that financial controlling in Kyrgyzstan should perform not only a managerial, but also an anti-corruption function.

At the same time, a partial divergence is observed with the results presented by K.M. Mang'ana *et al.* (2024). These authors demonstrated, using the example of agrarian SMEs in Tanzania, that technological automation of accounting and digital instruments constitute the main factor in enhancing the effectiveness of financial management. However, the data obtained for the Kyrgyz SME sector show that technological solutions alone are insufficient: without prior formation of an organisational structure and analytical support, controlling instruments do not ensure a sustainable effect. This allows the conclusion that for Kyrgyzstan a comprehensive approach combining institutional and human factors with digital control mechanisms is more relevant. Thus, the results of the study confirm the thesis regarding

the necessity of phased implementation of a financial controlling system encompassing organisational, analytical, and technological methods, and emphasise that in the conditions of the Kyrgyz Republic the decisive factor is not the level of digitalisation, but the coherence of managerial and control functions that form a transparent and sustainable financial architecture of enterprises.

CONCLUSIONS

The conducted study made it possible to confirm the systemic nature of financial controlling as an element of the managerial architecture of SMEs and to develop an empirically grounded model for its implementation, adapted to the institutional and resource conditions of the Kyrgyz Republic. The model is based on the standards of the International Financial Reporting Standard for Small and Medium-Sized Entities, the recommendations of the Organisation for Economic Co-operation and Development, and the results of an analysis of national regulatory acts, which ensures its applicability in the context of a developing economy. The analysis demonstrated that the level of financial risks varies across different types of SMEs. Micro-services are characterised by a high share of cash transactions, a high frequency of cash-related violations, and a significant volume of manual accounting adjustments, which forms the most vulnerable risk profile. Trading enterprises demonstrate an increased risk of inventory discrepancies and deviations related to procurement prices, while small manufacturing is distinguished by risks of cost overstatement and manipulation of production costs. The probability of financial abuses is most significantly influenced by such indicators as the structure of payment operations (share of cash), the frequency of budget deviations, the number of cash incidents, the regularity of reporting adjustments, and the level of digitalisation of accounting procedures. This confirms the necessity of an adaptive and differentiated approach to the implementation of controlling depending on the type of enterprise. The institutional context reinforces these risks: the share of companies using formalised internal control mechanisms does not exceed 13.3%, while the financial

literacy indicator according to the methodology of the Organisation for Economic Co-operation and Development/National Bank of the Kyrgyz Republic amounts to 11.6 out of 21 points, indicating a systemic deficit of competencies. At the same time, the Corruption Perceptions Index CPI-2024 (25 points out of 100; 146th place out of 180 countries) reflects a low level of institutional transparency and creates conditions for the spread of informal financial practices.

The practical significance of the obtained results lies in the formation of a step-by-step algorithm for implementing a financial controlling system, which includes: institutional adaptation of the International Financial Reporting Standard for Small and Medium-Sized Entities; development of training programmes for accountants and auditors in anti-fraud accounting; implementation of digital platforms for internal audit and financial monitoring dashboards; and integration of controlling with corporate strategy. The implementation of this model is capable of increasing the transparency of financial flows, reducing the frequency of cash and reporting manipulations, and strengthening creditor confidence in the SME sector. The theoretical conclusions of the study demonstrate that controlling in small business should perform an adaptive and preventive function, transforming financial management

from a reactive into a proactive format. The combination of organisational and digital instruments makes it possible not only to record results, but also to generate managerial signals regarding risks in real time. This ensures a transition from formal reporting to managerial accountability and internal compliance.

The limitations of the study are associated with insufficient availability of detailed data on enterprises' internal control systems and the latent nature of fraud cases. Prospects for further research include empirical validation of the proposed model on a sample of enterprises from different industries, assessment of the economic effect of controlling implementation, and the development of a financial management maturity index for SMEs in Kyrgyzstan. Such an instrument would make it possible to integrate controlling into the national system for assessing business transparency and the sustainability of the entrepreneurial sector.

ACKNOWLEDGEMENTS

None.

FUNDING

None.

CONFLICT OF INTEREST

None.

REFERENCES

- [1] Adeboye, E.O. (2024). Strengthening fraud prevention in small businesses: An analysis of effective accounting and auditing practices. *International Journal of Science and Research Archive*, 13(2), 590-595. [doi: 10.30574/ijrsra.2024.13.2.2160](https://doi.org/10.30574/ijrsra.2024.13.2.2160).
- [2] Adegboyegun, A.E., Ben-Caleb, E., Ademola, A.O., Oladutire, E.O., & Sodeinde, G.M. (2020). Internal control systems and operating performance: Evidence from small and medium enterprises (SMEs) in Ondo state. *Asian Economic and Financial Review*, 10(4), 469-479. [doi: 10.18488/journal.aefr.2020.104.469.479](https://doi.org/10.18488/journal.aefr.2020.104.469.479).
- [3] Alayli, S. (2022). The impact of internal control practices on fraud prevention: The case of Lebanese small-medium enterprises. *European Journal of Business and Management Research*, 7(5), 141-147. [doi: 10.24018/ejbmr.2022.7.5.1671](https://doi.org/10.24018/ejbmr.2022.7.5.1671).
- [4] Al-Hashedi, K.G., & Magalingam, P. (2021). Financial fraud detection applying data mining techniques: A comprehensive review from 2009 to 2019. *Computer Science Review*, 40, article number 100402. [doi: 10.1016/j.cosrev.2021.100402](https://doi.org/10.1016/j.cosrev.2021.100402).
- [5] Al-Zoubi, A.M. (2021). [A proposed framework for classifying preventive and detective fraud controls](#). *International Journal of Entrepreneurship*, 25(2), 1-21.
- [6] Amin, M., & Motta, V. (2021). The impact of corruption on SMEs' access to finance: Evidence using firm-level survey data from developing countries. *Journal of Financial Stability*, 68, article number 101175. [doi: 10.1016/j.jfs.2023.101175](https://doi.org/10.1016/j.jfs.2023.101175).

- [7] Azizan, A.F., & Ali, M.M. (2024). The effect of internal control mechanism towards fraud prevention in small and medium enterprises. *Indonesian Journal of Sustainability Accounting and Management*, 8(1), 178-188. doi: [10.28992/ijSAM.v8i1.843](https://doi.org/10.28992/ijSAM.v8i1.843).
- [8] Bakar, M., Kamal, M., & Ishak, M. (2023). The tendency for occupational fraud in Malaysian small, medium enterprises and the effect of internal control, ethical culture, and awareness of fraud. *International Journal of Academic Research in Business and Social Sciences*, 13(1), 1398-1424. doi: [10.6007/IJARBS/v13-i1/16293](https://doi.org/10.6007/IJARBS/v13-i1/16293).
- [9] Bhat, S. (2023). The effectiveness of internal controls in preventing fraud and financial misconduct. *Journal of Law and Sustainable Development*, 11(5), article number e1178. doi: [10.55908/sdgs.v11i5.1178](https://doi.org/10.55908/sdgs.v11i5.1178).
- [10] Doğan, Z., & Hamidow, M.H. (2023). Fraud symptoms specific to small and medium-sized business (SMEs) and research to determine the measures taken: Gaziantep case. *Politik Ekonomik Kuram*, 7(1), 16-31. doi: [10.30586/pek.1238134](https://doi.org/10.30586/pek.1238134).
- [11] Duan, M., Zheng, T., Gao, Y., Wang, G., Feng, Z., & Wang, X. (2024). DGA-GNN: Dynamic grouping aggregation GNN for fraud detection. *Proceedings of the AAAI Conference on Artificial Intelligence*, 38(10), 11820-11828. doi: [10.1609/aaai.v38i10.29067](https://doi.org/10.1609/aaai.v38i10.29067).
- [12] Free, C. (2020). Looking through the fraud triangle: A review and call for new directions. *Meditari Accountancy Research*, 23(2), 175-196. doi: [10.1108/MEDAR-02-2015-0009](https://doi.org/10.1108/MEDAR-02-2015-0009).
- [13] He, T. (2023). Financial fraud prevention and monitoring from the perspective of internal control. *Accounting and Corporate Management*, 5(12), 107-112. doi: [10.23977/acccm.2023.051217](https://doi.org/10.23977/acccm.2023.051217).
- [14] Hossain, M.Z. (2025). Effectiveness of internal control systems in preventing financial fraud in SMEs. doi: [10.2139/ssrn.5255489](https://doi.org/10.2139/ssrn.5255489).
- [15] Igbojioyibo, R.P. (2024). The Impact of Internal Control Systems on Asset Protection and Financial Reporting Accuracy in SMEs. *Asian Journal of Economics, Business and Accounting*, 24(12), 65-80. doi: [10.9734/ajebe/2024/v24i121592](https://doi.org/10.9734/ajebe/2024/v24i121592).
- [16] International Financial Reporting Standard for Small and Medium-Sized Entities. (n.d.). Retrieved from <https://www.ifrs.org/issued-standards/ifrs-for-smes/>.
- [17] Isibor, N.J., Ibeh, A.I., Ewim, C.P.-M., Sam-Bulya, N.J., Adaga, E.M., & Achumie, G.O. (2022). A financial control and performance management framework for SMEs: Strengthening budgeting, risk mitigation, and profitability. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), 761-768. doi: [10.54660/IJMRGE.2022.3.1761-768](https://doi.org/10.54660/IJMRGE.2022.3.1761-768).
- [18] Law of the Kyrgyz Republic No. 72 "On the Procedure for Conducting Inspections of Business Entities". (2007, May). Retrieved from <https://dpa.gov.kg/en/npa/1>.
- [19] Law of the Kyrgyz Republic No. 76 "On Accounting and Financial Reporting". (2002, April). Retrieved from <https://www.nbkr.kg/index1.jsp?item=52&lang=ru>.
- [20] Majumder, R.Q. (2025). The role of forecasting and budgeting data accuracy in improving organizational performance. *International Journal of Research and Innovation in Social Science*, 9(7), 4963-4976. doi: [10.47772/IJRISS.2025.907000402](https://doi.org/10.47772/IJRISS.2025.907000402).
- [21] Mang'ana, K.M., Hokororo, S.J., & Ndyetabula, D.W. (2024). An investigation of the extent of implementation of the financial management practices of agri-SMEs in developing countries: Evidence from Tanzania. *Sustainable Technology and Entrepreneurship*, 3(1), article number 100049. doi: [10.1016/j.stae.2023.100049](https://doi.org/10.1016/j.stae.2023.100049).
- [22] Martins, A., Oliveira, C., Silva, R., & Castelo Branco, M. (2023). Management control practices as performance facilitators in a crisis context. *Administrative Sciences*, 13(7), article number 163. doi: [10.3390/admsci13070163](https://doi.org/10.3390/admsci13070163).
- [23] Mthiyane, Z.Z., van der Poll, H.M., & Tshehla, M.F. (2022). A framework for risk management in small medium enterprises in developing countries. *Risks*, 10(9), article number 173. doi: [10.3390/risks10090173](https://doi.org/10.3390/risks10090173).
- [24] National Bank of the Kyrgyz Republic. (2024). *Annual Report of the National Bank of the Kyrgyz Republic for 2024*. Retrieved from <https://www.nbkr.kg/DOC/11072025/000000000064986.pdf>.

- [25] National Bank of the Kyrgyz Republic. (2025). *Strategic Directions in Activity Conducted by the National Bank of the Kyrgyz Republic for 2025-2030*. Retrieved from <https://www.nbkr.kg/index1.jsp?item=3326&lang=ENG&utm>.
- [26] Ngan, N.T. (2024). Factors affecting the effectiveness of internal control systems in small and medium enterprises operating in the trade and service sector in Binh Duong Province. *International Journal of Management & Entrepreneurship Research*, 6(10), 3577-3588. doi:10.51594/ijmerv6i10.1680.
- [27] Nkwini, E., & Akinola, S. (2023). The importance of financial management in small and medium-sized enterprises (SMEs): An analysis of challenges and best practices. *Technology Audit and Production Reserves*, 5(73), 12-20. doi:10.15587/2706-5448.2023.285749.
- [28] Okeke, S.E., Offor, S.I., & Chukwunwike, O.D. (2021). Internal control: Its role in the reduction of fraud and professional misconduct among SMEs. *Asian Journal of Economics, Business and Accounting*, 21(19), 57-66. doi:10.9734/ajeba/2021/v21i1930506.
- [29] Olinmah, F.I., Abiola-Adams, O., Otokiti, B.O., & Ojonugwa, B.M. (2024). A data-driven internal controls modeling framework for operational risk mitigation in financial services. *International Journal of Scientific Research in Science, Engineering and Technology*, 11(5), 368-383. doi:10.32628/IJSRSET24105475.
- [30] Organisation for Economic Co-operation and Development. (2022). *Business integrity in Eastern Europe and Central Asia 2022*. Retrieved from https://www.oecd.org/en/publications/2022/09/business-integrity-in-eastern-europe-and-central-asia-2022_88a3ae74.html.
- [31] Potkány, M., Hašková, S., Lesníková, P., & Schmidtová, J. (2022). Perception of essence of controlling and its use in manufacturing enterprises in time of crisis: Does controlling fulfill its essence? *Journal of Business Economics and Management*, 23(4), 957-976. doi:10.3846/jbem.2022.17391.
- [32] Prasetia, I.F., & Rabbani, H.F. (2025). Influence of early detection, anti-fraud strategies, and authority levels on median loss. *Jurnal Riset Akuntansi dan Keuangan*, 13(2), 481-492. doi:10.17509/jrak.v13i2.84712.
- [33] Pu, G., Qamruzzaman, M., Mehta, A.M., Naqvi, F.N., & Karim, S. (2021). Innovative finance, technological adaptation and SMEs sustainability: The mediating role of government support during COVID-19 pandemic. *Sustainability*, 13(16), article number 9218. doi:10.3390/su13169218.
- [34] Rao, P., Verma, S., Rao, A.A., & Joshi, R. (2023). A conceptual framework for identifying sustainable business practices of small and medium enterprises. *Benchmarking: An International Journal*, 30(6), 1806-1831. doi:10.1108/BIJ-11-2021-0699.
- [35] Rashid, U., Abdullah, M., Khatib, S.F., Khan, F.M., & Akhter, J. (2024). Unravelling trends, patterns and intellectual structure of research on bankruptcy in SMEs: A bibliometric assessment and visualisation. *Heliyon*, 10(2), article number e24254. doi:10.1016/j.heliyon.2024.e24254.
- [36] Resolution of the Cabinet of Ministers of the Kyrgyz Republic No. 505 "On the Approval of the Rules of Accounting by Small Business Entities". (2024, August). Retrieved from <https://cbd.minjust.gov.kg/7-32645/edition/16960/ru>.
- [37] Santosuosso, P. (2025). A practical approach to designing internal control systems in SMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(2), article number 100565. doi:10.1016/j.joitmc.2025.100565.
- [38] Sawaya, C., Jabbour Al Maalouf, N., Hanoun, R., & Rakwi, M. (2025). Impact of auditor independence, expertise, and industry experience on financial reporting quality. *Asia Pacific Management Review*, 30(1), article number 100357. doi:10.1016/j.apmrv.2025.100357.
- [39] Sethi, S.R., & Mahadik, D.A. (2025). Forecasting financial distress for organizational sustainability: An empirical analysis. *Sustainable Futures*, 9, article number 100429. doi:10.1016/j.sfr.2024.100429.
- [40] Transparency International. (2024). *Corruption Perceptions Index 2024*. Retrieved from <https://www.transparency.org/en/cpi/2024>.

- [41] World Bank. (2024). *Kyrgyz Republic developing a sustainable finance market for MSMEs*. Retrieved from <https://documents1.worldbank.org/curated/en/099092724003530502/pdf/P505643-b39bac95-c1d6-4743-a296-33e8054f2ac4.pdf>.
- [42] World Bank. (2025). *Country Economic Memorandum for the Kyrgyz Republic*. Retrieved from <https://www.worldbank.org/en/country/kyrgyzrepublic/publication/cem-2025>.
- [43] Zainal, S.F., Hashim, H.A., Ariff, A.M., & Salleh, Z. (2021). Research on fraud: An overview from small medium enterprises (SMEs). *Journal of Financial Crime*, 29(4), 1283-1296. doi: [10.1108/JFC-09-2021-0205](https://doi.org/10.1108/JFC-09-2021-0205).
- [44] Zgarni, A. (2021). Financial fraud detection and the importance of internal control. *International Journal of Accounting and Financial Reporting*, 11(4), 28-36. doi: [10.5296/ijafr.v11i4.19333](https://doi.org/10.5296/ijafr.v11i4.19333).
- [45] Ziorklui, J.E., Ampofo, F.O., Nyonyoh, N., & Antwi, B.O. (2024). Effectiveness of internal controls mechanisms in preventing and detecting fraud. *Finance & Accounting Research Journal*, 6(7), 1259-1274. doi: [10.51594/farj.v6i7.1322](https://doi.org/10.51594/farj.v6i7.1322).

Тілек Тойчієв

Аспірант

Університет Невади

89154, 4505 шосе С. Меріленд, м. Лас-Вегас, Сполучені Штати Америки

<https://orcid.org/0009-0005-6196-2208>

Методи та підходи фінансового контролінгу для запобігання шахрайству в малому та середньому бізнесі Киргизстану

Анотація. Мета дослідження полягала у вивченні методів та інструментів фінансового контролінгу, що забезпечують виявлення та запобігання шахрайським діям у секторі малого та середнього бізнесу (МСБ) Киргизстану. Методи дослідження включали теоретико-аналітичний, порівняльно-аналітичний, порівняльно-правовий, структурно-функціональний підходи та метод контент-аналізу, що забезпечило комплексну оцінку інституційних, правових та управлінських аспектів фінансового контролінгу. В результаті проведеного дослідження встановлено, що фінансовий контролінг є інтегрованою системою управлінського обліку, аналізу та контролю, спрямованою на забезпечення фінансової стійкості підприємства МСБ. Визначено, що впровадження контролінгового циклу «план – факт – корекція» дозволяє підвищити точність бюджетного планування, скоротити часові лаги між виникненням і усуненням фінансових відхилень. Виявлено, що структурування функцій контролінгу – моніторинг, прогнозування, аналіз і попередження ризиків – сприяє зростанню прозорості фінансових потоків і знижує ймовірність шахрайських операцій у малому та середньому бізнесі. Встановлено, що лише 13,3 % малих і середніх підприємств, які мають доступ до банківського фінансування, застосовують інституціоналізовані механізми внутрішнього контролю, що вказує на низьку зрілість управлінських процедур. Ідентифіковано основні інституційні фактори вразливості МСБ до фінансових зловживань. Ключовими факторами є: висока частка готівкових розрахунків, низька фінансова грамотність (11,6 з 21 бала за методикою Організації економічного співробітництва та розвитку/Національного банку Киргизької Республіки), обмежене використання банківських інструментів фінансування та високий рівень сприйняття корупції (146-те місце в Corruption Perceptions Index-2024). В результаті дослідження розроблено підхід до впровадження фінансового контролінгу в малому та середньому бізнесі Киргизької Республіки, заснований на інтеграції організаційних, аналітичних та технологічних методів. Практична значущість результатів полягає в можливості застосування запропонованої моделі комплексного контролінгу для зниження частоти фінансових порушень та оптимізації управлінських рішень на підприємствах МСБ

Ключові слова: превентивні заходи; джерела ризику; маніпулювання бухгалтерською звітністю; касово-платіжні махінації; податкові схеми