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Management Accounting in Uncertain Times: Adapting to Risk and Change

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Abstract

This study highlights the need for a revised approach to management accounting, specifically designed for crisis-driven economic conditions. This article aims to examine the characteristics of management accounting tools used during economic crises and to propose the creation of suitable instruments. By exploring the evolution of accounting and economic thought, the authors demonstrate the connection between cyclical economic processes and the development of management accounting methods. The use of logical and historical analysis revealed various factors influencing accounting and economic theory, identifying the negative, positive, methodological, neutral, and conceptual impacts of economic crises. Using systems theory, the authors developed a conceptual framework for management accounting in crisis conditions. The research also introduces an accounting system tailored to these challenging times. In addition, the study identifies the patterns of management accounting development, including its prevalence in different sectors in Russia, based on factors such as organization size and legal structure. The article defines the main objectives and key issues of management accounting and highlights the most common and promising tools. The findings indicate a gap between the current trends in Russia and global advancements in management accounting theory.

Keywords: Economic Crisis, Accounting, Management Accounting, Management Decision-Making, Risks.

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Introduction

In a modern economy marked by crises, the success of management decisions largely depends on how well the accounting and analytical systems of an organization can generate relevant information about its internal operations, especially under conditions of uncertainty and risk [1, 2]. Economic cycles have a profound impact on both macro and micro-level activities, which makes it crucial for management strategies to adapt to these unpredictable conditions. This challenge requires the development of more effective tools for management decision-making based on timely and accurate information.

This study aims to propose a management accounting model that is specifically designed to function in uncertain and risky environments, particularly during economic crises. This can be achieved by crafting a new accounting model tailored to deal with macroeconomic disturbances such as inflation, demand drops, currency fluctuations, stock market volatility, payment



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crises, and other crises. Traditionally, management technologies have been aligned with expanding markets, but as economic crises deepen, companies must adapt to shrinking demand. The cyclical nature of economic development necessitates an emphasis on external factors, which traditional accounting systems often neglect.

As business activity slows, the tools and principles governing business management must undergo a significant overhaul. This creates a clear demand for a novel approach to management accounting that addresses the complexities of economic crises. This research will also build on the existing body of work examining how accounting and analytical methods evolve to support business management under such conditions [3-9].

Previous studies have highlighted the critical role of external factors in managing firms [10]. In a similar vein, other researchers [11] have explored ways to refine accounting and analytical systems for organizations in crisis, reinforcing the necessity of creating an accounting model that responds to crisis conditions. Bobryshev *et al.* [12] offer insights into specific methodological approaches for managing accounting practices during a crisis.

In developing a crisis-responsive management accounting model, the authors incorporated the findings from prior research on the creation of business models shaped by various macroeconomic forces [13], accounting strategies for inflation [14], adjustments to financial reports for constant purchasing power [15], the evolution of management accounting [16], and the changing information needs of managers [17]. Furthermore, the study considers new strategies for planning and control [18, 19], as well as methodologies for managing inflation [20-24].

The study also addresses macro-level territorial disparities in the face of crisis factors [25] and investigates ways to stabilize socioeconomic systems under economic crises [26]. Additionally, Fischer [27] has demonstrated that high inflation undermines sustainable economic growth, further emphasizing the need for accounting models capable of responding to such challenges.

Methods

To explore the methodological and conceptual foundations of management accounting during economic crises, we began by examining contemporary issues in management accounting development and the evolution of economic and accounting thought, particularly concerning management accounting as an independent discipline. This review enabled us to identify over 80 factors that contributed to changes in the methodology of management accounting, which we categorized into 10 classification criteria.

Next, we analyzed the effects of eight major global economic crises: the long depression (1873-1896), the first world economic crisis (1857-1858), the recession of the 1970s, the great depression (1929-1933), black Monday (1987-1989), the Russian Ruble crisis and devaluation (1998), the global crisis of 2001, and the global financial crisis of 2008. We assessed how each of these crises influenced the transformation of accounting systems.

To further investigate the distribution and development of management accounting systems in various organizational forms and sectors, we employed an expert survey. This survey helped us identify patterns in management accounting practices and assess their alignment with global trends. From this, we discerned both the opportunities and constraints in forming management accounting systems during economic crises.

In the next phase of the research, we designed specific tools to improve information generation in crisis environments. These included: a management accounting standard for supporting the creation and implementation of business models for agricultural organizations, a system of accounts and records for capturing reserve operations and inflationary adjustments, guidelines for constructing reserve budgets, a method for conducting cost-volume-profit (CVP) analysis under hyperinflation, and the KRISIS analysis method for evaluating socio-economic processes at both macro and micro levels to support management decision-making in uncertain conditions.

The research was grounded in several theoretical frameworks, including macro- and microeconomic theories, system management, institutional economics, sustainable cyclic development, crisis management, economic growth, and managerial and financial accounting. Through historical analysis, we identified patterns shaping management accounting under crisis conditions, classified the factors influencing its development, and evaluated the positive, negative, and neutral effects of economic crises on the accounting system.

The expert survey method allowed us to uncover patterns specific to Russia's management accounting development by surveying three distinct respondent groups. This survey helped identify both overt and latent factors that drive or hinder management accounting progress in Russia. The system analysis method facilitated the creation of a conceptual framework for management accounting in the context of economic crises. Traditional accounting methods were also integral to our study, such as developing accounts and records systems to reflect the inflationary impact and form reserves to mitigate risks in unstable conditions. We also developed reserve budgets and management reports to support the reserve management system. Lastly, economic analysis techniques, such as the KRISIS analysis, provided a comprehensive framework for assessing the impacts of crisis processes on an economic entity's activities.

Results

Evolution of Accounting and Economic Thought

Our system-chronological analysis revealed a range of factors that shaped the development of management accounting. These factors were categorized into three main groups: those related to the origin of accounting, institutional economics, and information technology. These categories highlight the significant role economic crises have played in shaping management accounting practices, leading to the development of new methods, consolidation of financial reporting, and the implementation of international standards like IFRS. Additionally, it prompted a shift toward strategic and predictive accounting practices and the redistribution of responsibilities between managers and owners, particularly in response to global institutional shifts and business instability.

Through our research, we identified over 80 factors influencing the evolution of management accounting, categorized into 11 criteria. These include evolutionary-stable, national specifics, general-evolutionary, and other types of factors. This classification helps expand our theoretical understanding of the historical development of management accounting, demonstrating its unique identity and, in some respects, its evolutionary independence.

The research also examined the impacts of eight significant global economic crises. We constructed a matrix that categorized the positive, negative, conceptual, and methodological effects of these crises on accounting methods. Key findings included the standardization of accounting procedures, unification of financial reporting, the creation of new methods and tools, changes in the information needs of users, and the growing importance of accounting infrastructure.

These insights underscore the deep connections between economic crises and the development of management accounting methodology, driving methodological and instrumental shifts in the field.

Expert Survey Findings

The expert survey helped us understand how management accounting is applied in practice. We found that larger firms, typically with over 1,000 employees (33%), are most likely to effectively use management accounting tools. These organizations are often structured as joint-stock companies (53.3%) and primarily operate in agriculture (39.8%), trade (21.7%), or construction (16.3%). Many of these firms have accounting departments with 10 or fewer employees (47%), with some having between 10 and 30 (26%). In most cases, management accounting responsibilities fall to the accounting department (40.3%).

However, the survey revealed that management accounting in Russia is often fragmented, with 53.8% of respondents indicating that only individual tools are used sporadically, rather than as part of an integrated system. This points to a significant gap in the comprehensive implementation of management accounting practices.

Our research highlights that the goals of management accounting in Russia have evolved in ways that do not always align with global trends. The study found notable differences between the goals and practices of management accounting in Russia compared to internationally accepted standards, reflecting disparities in the development and application of management accounting practices in the region.

Key Findings

Accounting goals: In Russian practice, conservative views dominate regarding the objectives of management accounting. The primary focus remains on cost control and minimization (17%) and evaluating organizational effectiveness (13%).

Use of analytical methods and tools: International companies utilize analytical methods more intensively than their Russian counterparts, highlighting a significant gap in analytical capabilities.

Modernization of methodological framework: There are varying rates of improvement in economic and accounting methods, with some practices lagging behind international standards.

Strategic accounting technologies: Strategic accounting tools are not used intensively enough in Russia, suggesting room for growth in this area compared to international practices.

A study by the University of Manchester, supported by CIMA, surveyed the opinions of associate members of the Association in 2001. The key objectives identified for the current period included:

Evaluating Organizational Performance

Cost Control and Financial Control

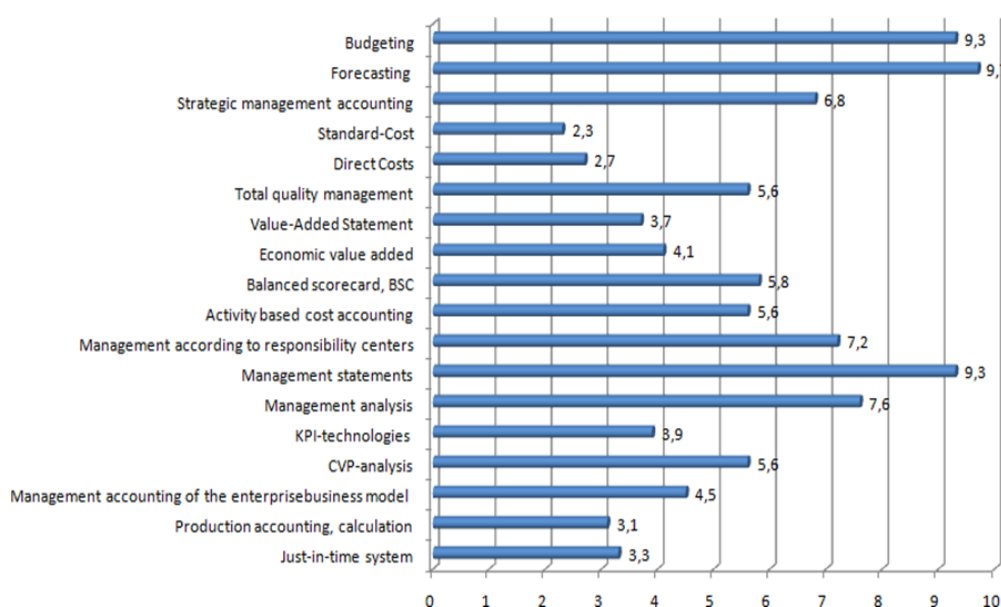
Interpreting and Presenting Management Accounting Results

These objectives align closely with the focus areas found in Russian practices, emphasizing financial and cost control management as key priorities.

Table 1. Comparison of the results of the author's study of the objectives of accountants engaged in management accounting with previous studies¹

Author's research	CIMA research, 2001.	
	The most important goals in the period from 1995 to 2000	The most important goals in the period from 2000 to 2005
1. Accounting, control, and cost minimization	1. Evaluating the company's performance	1. Evaluating the company's performance
2. Evaluating the company's performance	2. Cost control and financial control	2. Cost control and financial control
3. Planning, budgeting	3. Interpretation and presentation of management accounting results	3. Interpretation and presentation of management accounting results
4. Actual cost of production calculation	4. Planning, budgeting	4. Maximizing profit
5. Implementation of business strategies, development of an optimal business model	5. Interpretation of operating information	5. Planning, budgeting

The study revealed that over the past five years, the evaluation of the potential use of management tools and their objectives in Russia has experienced only slight changes (**Table 1**). Respondents anticipate the greatest future growth in demand for strategic management accounting, the concept of added value, the balanced scorecard system, and business model management accounting. These trends align closely with international practices, suggesting a shift towards more advanced and globally recognized management accounting approaches (**Figure 1**).

**Figure 1.** The most effective management accounting technologies in the future

The findings from our research are consistent with international trends observed in the field of management accounting. For instance, CIMA's (Institute of Chartered Accountants in Management Accounting) study has identified a growing adoption of tools such as rolling forecasts, strategic management accounting, total quality management, balanced scorecards, and economic value-added models (**Figure 2**).

CIMA's 2009 survey on the use of management accounting tools also reveals that overhead allocation and variance analysis are among the most commonly applied methods in production accounting. In addition, standard costing and full (absorption) costing are frequently utilized globally.

¹ For comparison, the data provided in [Bobryshev *et al.* [12]]

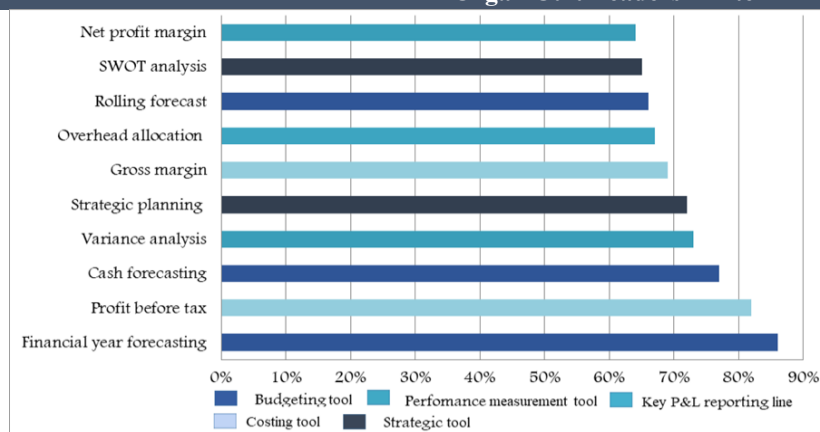


Figure 2. Most frequently used tools and technologies (as a percentage of the number of respondents)²

CIMA's research indicates that, on average, organizations apply four out of the 14 tools and technologies listed in their operations. The data also shows that larger organizations tend to utilize more methods and tools compared to smaller ones (Figure 3).

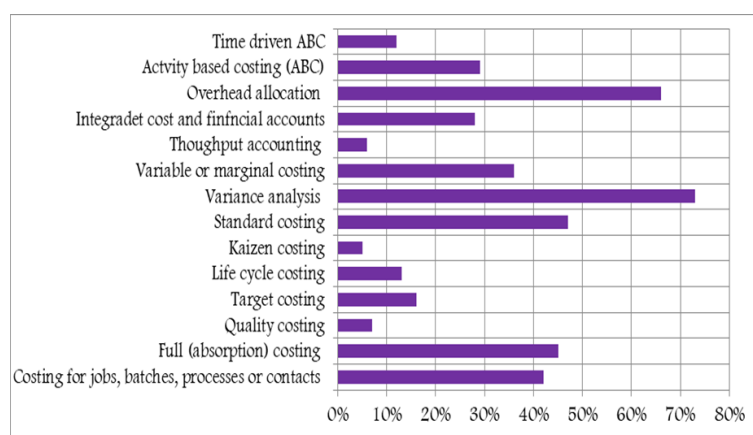


Figure 3. The evaluation tools and methods' relative popularity

The accounting team identifies the main goals of management accounting as accounting, control, and cost reduction (17%). This objective has been a fundamental aspect of management accounting systems, particularly during their early adoption internationally. For domestic businesses, the study reveals that this goal continues to hold significant importance. The second priority is assessing the organization's performance, with 13% of respondents emphasizing this focus (Figure 4).

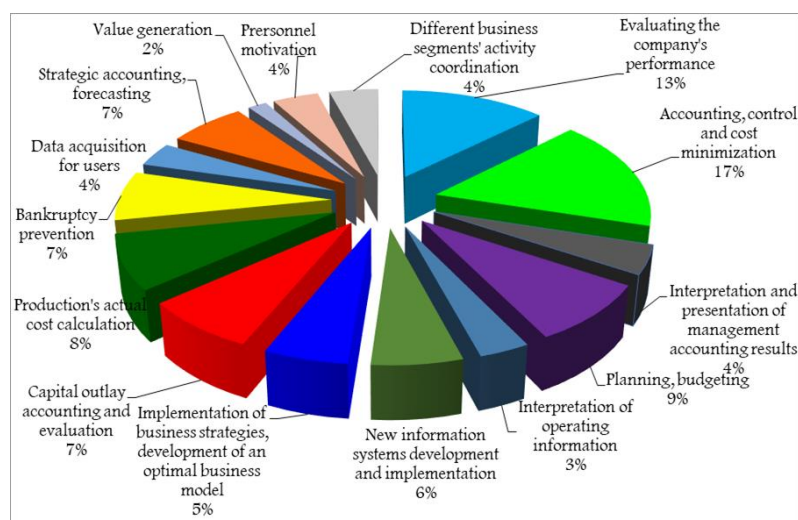


Figure 4. The views evaluation of the first focus group on management accounting goals

² According to CIMA – “Management accounting tools for today and tomorrow-2009” www.cimaglobal.com/ma

The examination of the conceptual framework surrounding the economic category of “management accounting” revealed several key patterns: the majority of definitions highlight the increasing scope of accounting objects within the management accounting system; most interpretations focus primarily on the informational aspect of management accounting's essence; and the system-based characteristics of this concept are infrequently explored.

Management accounting within the context of economic crises is a distinct area, alongside other types such as accounting for business processes, projects, strategic management, segmental management, and social management accounting. Its primary function is to provide crucial information about the external environment, translating it into insights for changes within the internal environment.

To support the development of management accounting tools during economic crises, we introduced a standard for management accounting titled “Information Support for the Formation and Implementation of the Business Model of an Economic Entity.” This standard covers the key structural components that define a business model, including contractors, activities, resources, business processes, and market interactions, all of which are especially important in crises or unstable macro- and micro-environments.

Additionally, we designed a management accounting system tailored for economic crises to mitigate inflationary effects. This system includes accounts and adjustments related to inflation, such as the impact on non-current assets, working capital, inflation adjustments on various transactions, and inflationary profit or loss. These adjustments align with the concept of maintaining capital in an anti-recession management model, helping to differentiate between regular operational performance and inflationary effects.

The study also introduced a set of reserve accounts and corresponding records, which facilitate the tracking of both planned and unforeseen crisis-related costs. These accounts cover areas like budgeted production costs, sales expenses, unexpected costs, and reserves for inflation adjustments. The system enables more precise management of crisis-related expenditures by using two accounting models: one based on retained earnings and the other through inclusion in production costs.

The proposed model of accounting support enables quick identification of unexpected crisis-related costs and the necessary funds to cover them. This flexibility is crucial during crises, allowing for rapid adjustments to cash flows and more effective management of the impact of external factors on daily business operations.

Discussion

The development of management accounting theory and methodology has been greatly influenced by numerous studies conducted in Russia, which have helped shape the understanding of this field [28-35]. Our findings are in line with key research in the area, particularly regarding management accounting models centered on organizational control and performance [36]. These studies emphasize the importance of developing effective budgeting systems within enterprises [37-40] and incorporating tools like the balanced scorecard [41-44].

Furthermore, our research supports the significant role that communication plays in management accounting decision-making processes [45]. It also aligns with studies focusing on the performance evaluation function of management accounting [28, 46]. The changing landscape of management accounting, particularly in response to crises, is well documented by scholars [47-52]. Our study contributes to this conversation by exploring how management accounting systems can adapt to economic uncertainty and ensure the resilience of accounting practices in the face of crisis events.

Conclusion

This study demonstrates that management accounting, in the context of economic crisis processes, stands as a distinct and vital area of accounting. Through a conceptual and methodological approach, we established that the evolution of management accounting is influenced by a combination of accounting, analytical, institutional economics, and information-technological factors. A central factor identified in our research is the cyclic nature of economic development, which underpins macroeconomic systems and drives crisis processes. This cyclical characteristic has significantly shaped the evolution of accounting and economic thought, highlighting the need for the development of management accounting methodologies suited to such unstable conditions.

The methodology for management accounting in economic crises is grounded in accounting and analytical procedures. These methods ensure the reliability of decision-making, accounting for negative macroeconomic factors. The practical applications of the study's findings, including the developed management accounting standard for supporting business models, accounting models, and reserve budgets to mitigate unforeseen crisis costs, offer actionable solutions.

Overall, the proposed regulations enhance the stability of economic entities in volatile macroeconomic conditions, offering a pathway to more resilient management accounting practices in the face of crisis-driven uncertainty.

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References

1. Shafiq A, Rezaee H, Jan Rahmani M. The Role of the Government's Development Budget on Afghanistan's Economic Growth over the Years (2003 to 2018). *Arch of Pharm Pract.* 2020; 11(1): 193-202.
2. Teymouri MR, Sadeghi M. Investigating the Effect of Firm Characteristics on Accounting Conservatism and the Effect of Accounting Conservatism on Financial Governance. *Arch Pharm Pract.* 2020; 11(1): 124-33.
3. Butler SA, Ghosh D. Individual differences in managerial accounting judgments and decision making. *Bri Account Rev.* 2015; 47(1): 33-45.
4. Burns J, Scapens RW. Conceptualizing management accounting change: an institutional framework. *Manag account Res.* 2000; 11(1): 3-25.
5. Davison J. Visualising accounting: an interdisciplinary review and synthesis. *Account Bus Res.* 2015; 45(2): 121-65.
6. Ezzamel M, Willmott H, Worthington F. Manufacturing shareholder value: The role of accounting in organizational transformation. *Account Organ Soc.* 2008; 33(2-3): 107-40.
7. Nagar V, Yu G. Accounting for crises. *Am Econ J Macroecon.* 2014; 6(3): 184-213.
8. Schleicher T, Walker M. Are interim management statements redundant? *Account Bus Res.* 2015; 45(2): 229-255.
9. Johnson TH, Kaplan RS. Relevance lost: the rise and fall of management accounting; 1987.
10. Shirokova G, Bogatyreva K, Beliaeva T. Entrepreneurial orientation of Russian firms: The role of external environment. *Форсайт.* 2015; 9(3 (eng)).
11. Yakubiv V. Accounting and analytical methods of diagnostics improvement for enterprises' organizational development. *Економічний часопис-XXI.* 2015; (3-4 (1)): 68-71.
12. Bobryshev AN, Yakovenko VS, Tunin SA, Germanova VS, Glushko AY. The concept of management accounting in crisis conditions. *J Adv Res Law Econ.* 2015; 6(3 (13)): 520.
13. Magretta J. Why business models matter; 2002.
14. Metius MR, Perera MHB. Accounting Theory: translated from the English. Under the editorship of Y. V. Sokolov, I. A. Smirnova. M: Audit: UNITY; 1999. p. 663.
15. Osipchuk GV, Povetkin SN, Ashotovich A, Nagdalian IA, Rodin M.I, Vladimirovna I, et al. The Issue of Therapy Postpartum Endometritis in Sows Using Environmentally Friendly Remedies. *Pharmacophore.* 2019; 10(2): 82-4.
16. Luft J, Shields MD. Mapping management accounting: graphics and guidelines for theory-consistent empirical research. *Account organ soc.* 2003; 28(2- 3): 169-249.
17. Anderson SW, Lanen WN.. Economic transition, strategy and the evolution of management accounting practices: the case of India. *Account Organ Soc.* 1999; 24(5-6): 379-412.
18. Pushkin SV, Nagdalian AA, Rzhepakovsky IV, Povetkin SN, Simonov A, Svetlakova EV. AFM and CT Study of Zophoba Smorio Morphology and Microstructure. *Entomol Appl Sci Lett.* 2018; 5(3): 35-40.
19. Blinov AV, Yasnaya MA, Blinova, AA, Shevchenko IM, Momot EV, Gvozdenko AA, et al. Computer Quantum-Chemical Simulation of Polymeric Stabilization of Silver Nanoparticles; 2019.
20. Robson K. Inflation accounting and action at a distance: the Sandilands episode. *Account Organ Soc.* 1994; 19(1): 45-82.
21. Küpper HU, Mattessich R. Twentieth century accounting research in the German language area. *Account Bus Financ Hist.* 2005; 15(3): 345-410.
22. Davis-Friday PY, Rivera JM. Inflation Accounting and 20-F Disclosures: Evidence from Mexico. *Accounting Horiz.* 2000; 14(2): 113-35.
23. Nagdalyan AA, Oboturova AP, Povetkin SN, Ziruk IV, Egunova A, Simonov AN, et al. Adaptogens Instead Restricted Drugs Research for An Alternative Itemsto Doping In Sport. *Res J of Pharma Biol and Chem Sci.* 2018; 9(2): 1111-6.
24. Konchitchki Y. Inflation and nominal financial reporting: Implications for performance and stock prices. *Account Rev.* 2011; 86(3): 1045-85.
25. Litvin DB, Popova SV, Zhukova VA, Putrenok EL, Narozhnaya GA. Monitoring of the parameters of intra-industrial differentiation of the primary industry of the traditionally industrial region of southern Russia. *J Adv Res Law Econ.* 2015; 6(3 (13)): 606.

26. Gerasimov AN, Gromov YI, Gulay TA. Forecasting the indicators of socioeconomic development of the North Caucasus federal district. *Aktual'ni Problemy Ekonomiky. Actual Probl Econ.* 2015; (163): 243.
27. Fischer S. The role of macroeconomic factors in growth. *J Monet Econ.* 1993; 32(3): 485-512.
28. Bulgakova SV. Management accounting: methodology and organization: monograph, S. V. Bulgakova; Voronezh State University. – Voronezh: Voronezh State University Publishing; 2008. p. 200.
29. Vakhrushina MA. Problems and prospects of managerial accounting development in Russia. *Mezhdunarodnyi bukhgalterskii uchët. Int Account.* 2014; (33): 12-23.
30. Kaverina OD. The administrative account: systems, methods, and procedures, O. D. Kaverina. – Moscow: Finance and Statistics; 2004. p. 352.
31. Kerimov VE. Modern concept of management accounting. VE Kerimov RV. Sorokina. *Bull Financ Univ.* 2011; 3 (63):13-8.
32. Kizilov AN. Accounting (management) accounting: tutorial. A. N. Kizilov, M. N. Karaseva. – Moscow: Eksmo; 2006. p. 320.
33. Trukhachev VI, Kostyukova EI, Bobryshev AN. Development of management accounting in Russia. *Rev ESPACIOS.* 2017;38(27):30.
34. Sapozhnikova NG, Batishcheva YA, Steklova TN, Demchenko IA, Kalnaya AY. Improvement of assessment mechanism of agricultural enterprises creditworthiness in conditions of national specificity. *J Adv Rese Law Econ.* 2017; 8(2 (24)): 581-90.
35. Nazarov D, Sidorova M. Public significance of accounting: Russian original concept. International Conference on Accounting, Auditing and Taxation, December, Tallin Estonia, ISBN 978-1-60595-204-8, Destech Publications; 2014. pp. 36- 42.
36. Otley DT. The contingency theory of management accounting: achievement and prognosis. In *Readings in accounting for management control* (pp. 83-106). Springer, Boston, MA; 1980.
37. Covalleski MA, Dirsmith MW. Budgeting as a means for control and loose coupling. *Account Organ Soc.* 1983; 8(4): 323-40.
38. Selimov MA, Nagdalian AA, Povetkin SN, Statsenko EN, Litvinov MS, Mishvelov AE. (2019). Investigation of CdCl₂ Influence on Red Blood Cell Morphology; 2019.
39. Nagdalian AA, Oboturova NP, Budkevich RO, Selimov MA, Demchenkov EL. Study of the influence of the electrohydraulic effect on the structure and mechanical properties of muscular tissue using atomic-force microscopy. *Res J of Pharm Biol and Chem Sci.* 2016; 7(2): 517-23.
40. Nuzhnaya KV, Mishvelov AE, Osadchiy SS, Tsoma MV, AM RS, Kurbanova KA, et al. Computer simulation and navigation in surgical operations. *Pharmacophore.* 2019; 10(4).
41. Martinsons M, Davison R, Tse D. The balanced scorecard: a foundation for the strategic management of information systems. *Decis support syst.* 1999; 25(1): 71-88.
42. Libby T, Salterio SE, Webb A. The balanced scorecard: The effects of assurance and process accountability on managerial judgment. *Account Revi.* 2004; 79(4): 1075-94.
43. Qu SQ, Cooper DJ. The role of inscriptions in producing a balanced scorecard. *Account Organ Soc.* 2011; 36(6): 344-62.
44. Kaplan RS, Norton DP. The balanced scorecard: measures that drive performance. *Harv Bus Rev.* 2005; 83(7): 172.
45. Jönsson S. Relate management accounting research to managerial work! *Account Organ Soc.* 1998; 23(4): 411-34.
46. Erokhi V, Endovitsky D, Bobryshev A, Kulagina N, Ivolga A. Management accounting change as a sustainable economic development strategy during pre-recession and recession periods: evidence from Russia. *Sustainability.* 2019; 11(11): 3139.
47. Johansson T, Siverbo S. Why is research on management accounting change not explicitly evolutionary? Taking the next step in the conceptualisation of management accounting change. *Manag account res.* 2009; 20(2): 146-62.
48. Burritt RL, Schaltegger S. Sustainability accounting and reporting: fad or trend? *Account Audit Accountability J.* 2010.
49. Babich OV, Mityuchenko LS. Role of accountability management in activity of industrial enterprises. *Int Rev Manag Market.* 2016; 6(6S).
50. Parker LD. Qualitative management accounting research: Assessing deliverables and relevance. *Crit perspect account.* 2012; 23(1): 54-70.
51. Busco C, Scapens RW. Management accounting systems and organisational culture. *Qual Res in Account Manag.* 2011.
52. Scapens RW. Understanding management accounting practices: A personal journey. *Br Account Rev.* 2006; 38(1): 1-30.