

## FEATURES OF AN INTEGRATED BANKING RISKS MANAGEMENT SYSTEM

**Nino SAMCHKUASHVILI**

*Georgian National University, 0164, Georgia  
n.samchkuashvili@seu.edu.ge*

**Tamar DUDAURI**

*Georgian Caucasus University, 0164, Georgia  
Tamro\_dudka@yahoo.com*

### **Abstract**

*In the context of modern globalization and the financial crisis caused by the Covid pandemic, the integrated risk management system, which is conditioned and based on the international standard of Basel 3, has become widespread in the banking sector. Therefore, it is important to discuss the features and problems of the integrated banking risk management system, as well as to characterize its key elements and tools and to establish the procedures for its implementation in the banking system.*

**Key words:** *Banking Risks, Integrated Management System, Basel 3 Standards, Commercial Banks, Corporate Governance.*

**JEL Classification:** *F65, G2*

### **I. INTRODUCTION**

At the present stage, fundamental changes are taking place in the banking sector in the face of fierce competition. Regulators around the world have focused on developing more reliable financial services oversight programs and have introduced a number of new initiatives to refine the legal framework. The integrated risk management system has become significant among them. In connection with the amendment of the normative documents of the National Bank of Georgia, which regulates risk management in accordance with Basel 3 standards and the transition to an integrated risk management system in Georgian banks, it is important to cover the essence of the integrated risk management system, its main elements and management tools and also to study the peculiarities and problems of the procedures for the introduction of integrated risk management in banks..

### **II. INTEGRATED RISK MANAGEMENT PROCESS**

In our view, an integrated risk management system means, in terms of risk interrelationships, the comprehensive and effective management of all existing risks that affect the Bank's operations within the Bank's corporate risk management culture and are integrated into the strategic risk management plan. Significant risks include risks whose negative sales results have a material impact on the Bank's consolidated financial performance, existing capital, liquidity or reputation, or its ability to meet the requirements of the regulatory body.

In this regard, the creation of a unified integrated risk management system is of particular interest. The GRC (Corporate Governance, Risk Management and Control Complex) system provides a unified vision for the construction and control of the risk management system in accordance with the Basel recommendations. One of the functions of corporate governance lies in adequate risk management based on risk management service, control complex and internal control information integration. Credit risk management within the framework of the above system is recommended to be implemented based on the internal ratings approach. (Jorion P.,2003).

This approach was formulated within the framework of Basel 2, it amended the Basel Agreement of 1988 (Basel 1) to create a more effective framework for the regulation of bank capital. Basel 2 forced banks to improve their risk management system to reduce pressure on regulatory capital. Banks that meet certain conditions and have the consent of the national regulator are allowed to use their own risk calculation parameters for the purpose of calculating regulatory capital.

The integrated risk management process should include five main stages (see Figure 1): (Doherty N., 2000).

1. Identify risks and assess their significance. The purpose of this phase is to identify all significant risks that affect the Bank's operations. Each identified risk is subject to an assessment of their significance to the

Bank. In order to conduct this assessment, the bank must establish criteria for the significance of the risk.

2. Formation of a significant risk management system. The purpose of this phase is to distribute the risk management functions (or to actualize such allocation) among the officials, subdivisions and collegial bodies of the Bank and to form a methodological framework that regulates risk management.

3. Planning the level of risk impact on the bank's activities. The purpose of this step is to determine the level of target risk of the bank.

4. Determining risk appetite. The purpose of this stage is to approve the Bank and agree with the Supervisory Board on the maximum level of risk that the Bank will be able to assume, as well as to establish a system of limits and restrictions that allow the risk appetite to be determined.

5. Managing the bank's weighted level of risks. The purpose of this stage is to ensure that the Bank's risk level is consistent with its target values, in this regard; the Bank's risk level is periodically assessed and managed by setting or changing limits and limits.

The main tools of the integrated risk management system, in our opinion, are: (Hull J., 2018).

Determining the risk appetite, the target structure of the types of risks important to the bank and the maximum level for all existing risks.

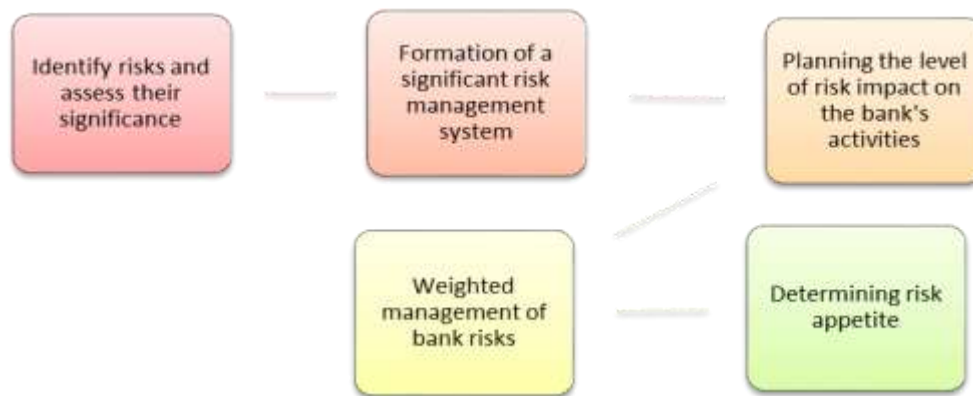


Fig. 1. Integrated risk management process

Management of economic capital (using aggregate level of risk calculations, which are estimated in the calculation of economic capital and their distribution among the bank's subdivisions for use according to the types of risks;

Build an effective organizational structure and methodological support system to ensure the accuracy and reliability of the management process evaluation.

Formalized risk indicators, their assessment and forecasting, as well as risk stress testing.

Formation of weighted risk indicators of the bank and their forecasting taking into account the stress-testing indicators.

Proactive analysis of emerging risks and multilevel reporting.

An integrated risk management system can be thought of as a set of elements necessary for effective functioning.

### III. THE MAIN GOALS OF THE BANK

The main goal of introducing an integrated risk management system in banks is:

- Ensuring sustainable development of the bank within the framework of the implementation of the development strategy;
- Ensuring and protecting the interests of shareholders, creditors, customers and other stakeholders;
- Strengthening the Bank's competitive advantages as a result of aggregate risk understanding and strategic planning, taking into account the level of risk taken;
- Improving the efficiency of capital management and increasing the market value of the bank;

- Increase investor credibility at the expense of a transparent risk management system.

The process of developing and introducing an integrated risk management system in Georgian commercial banks should be carried out in stages. These stages may vary in banks according to different indicators, such as the size of the bank, the number of employees involved in the implementation process, the level of involvement of external specialists and consulting companies, and more. Nevertheless, in general, in our opinion, it is possible to distinguish three main stages of the introduction of an integrated risk management system in Georgian commercial banks (see Figure 2):

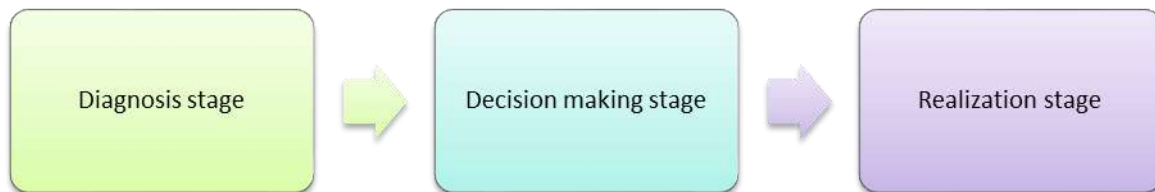


Figure 2. Three main stages of introduction of an integrated risk management system in commercial banks

The first stage is the diagnostic stage, which analyzes and describes the discrepancy between the current state of risk management and the desired goals to be achieved in the future, or the best risk management practices.

The good thing about going through this stage is that the diagnostics provide an objective basis for evaluating the bank's financial performance. The comparative analysis methodology is used to describe the breakthrough between the current level of system development and the desired goals to be achieved in the future. The end result of the diagnostic phase should be the development of proposals that will set out the conclusions, namely the difference between the target and current indicators, the methods to ensure relevant best practice, and the costs to implement it.

The second stage is the decision-making stage, in which the board of directors or the bank's management decides whether the bank should comply with all the best practices in all parameters, as well as select one of the alternative risk management options to be implemented in the bank's management system.

At this stage, the management of the commercial bank should decide which methods and methods to improve the risk management system should be used. Strategic goals should be defined, the risk appetite indicator should be determined, the organizational structure and powers of risk management should be reviewed, the development path of each type of risk should be determined, the cost of implementation should be assessed and the optimal solution for the bank selected. The process of evaluating the options usually starts with reducing their number to two or three options, and then selecting the optimal option from among them. This process is the most difficult as it is often necessary to consider multiple variables. The supervisor should try to select the most optimal option, where the existing data, legal barriers, public relations issues, financial results and time frame should be taken into account in the decision-making process.

Managers often face a problem for which there is no unequivocal effective solution at this stage. In such a situation he, as the person responsible for making the decision, has to make a choice that will be optimal at the given stage, but at the same time he must continue to search for a better option in the future.

The third stage is the realization stage, on which the selected option is implemented.

After the completion of the second phase, additional planning is required, as well as understanding and cooperation from the participating specialists. It is necessary for the bank to form a project team to implement the decisions made, ie. A group that will implement an improved risk management system. The project team must work on a work plan approved by its supervisor. It should be chaired by a member of the board of directors or a member of the liabilities and assets committee, otherwise the degree of trust will not be sufficient for successful work. The project team leader may be the CEO, whose functions include managing the risks associated with assets and liabilities. The project team must work in accordance with the classical principles of project management.

The introduction of automated asset and liability management systems includes the installation of new hardware and software package, the creation of new databases and attachments, as well as the introduction of new procedures for the organization of business processes. Introducing New Systems These will be ready-made

software packages, if made to order, is a difficult and risky event for a financial institution and there are many sad examples of this. One of the main reasons is that the sales process leads to radical changes and applies to virtually all areas of the bank's business. Changes of this magnitude, therefore, pose a threat to employees who have a fear of losing their jobs and start making their own plans for the proposed changes. Information-communication activities are especially important at the stage of implementation in the banking system, as most of the employees oppose the expected changes simply because they do not understand the need for these changes. In order to ensure smooth implementation of the decisions made, the manager should explain to employees and sales participants the need for such changes, as well as assist them in organizing and conducting training events and workshops. (Muffee V. W.,2006).

#### IV. CONCLUSION

The aspirations of commercial banks not formally but in fact complied with the recommendations of the Basel Committee in the field of banking supervision, in particular the introduction of a unified corporate and risk management system, will allow them to: 1). Were more competitive at the expense of expanding international relations and cooperation; 2). Get additional tools and improve risk management; 3). Improve innovation potential; 4). Strengthen the professional training of experts; 5). Risk management in accordance with international practice helps them to implement their global strategy.

Thus, when considering the integrated risk management system, it becomes clear that some processes require more attention in the future, as Georgian commercial banks move from risk measurement to their management mode. Technology plays a key role in this process, and in the long run, financial institutions that are able to quickly adapt to dynamically changing financial market conditions will win.

#### V. REFERENCES

1. Basel Committee on Banking Supervision. (2006) International Convergence of Capital Measurement and Capital Standards. A Revised Framework Comprehensive Version. <https://www.bis.org/publ/bcbs128.pdf>
2. Barth J. R., Chen L., Yue M., Seade J., Song F.M. (2013). Do bank regulation, supervision and monitoring enhance or impede bank efficiency? Journal of Banking & Finance, Vol. 37, No. 8, pp. 2879-2892. [http://www.auburn.edu/~barthjr/publications/2013/Do%20Bank%20Regulation,%20Supervision%20and%20Monitoring%20Enhance%20or%20Impede%20Bank%20Efficiency\\_Barth\\_2013.pdf](http://www.auburn.edu/~barthjr/publications/2013/Do%20Bank%20Regulation,%20Supervision%20and%20Monitoring%20Enhance%20or%20Impede%20Bank%20Efficiency_Barth_2013.pdf)
3. Cihak, Martin, Asli Demirguc-Kunt, Maria Soledad, Martinez Peria, and Amin Mohseni – Cheraghlou. (2012) Bank Regulation and Supervision of Banks Around the World: A Crisis Update. World Bank Policy Research Working Paper No. 6286. <http://documents.worldbank.org/curated/en/279091468168248726/pdf/wps6286.pdf>
4. Dungey M., Gajurel D. (2015). Contagion and banking crises: International evidence for 2007-2009. Journal of Banking & Finance, Vol. 60, November, pp. 271-283.
5. Doherty N. Integrated Risk Management: (2000) Techniques and Strategies. McGraw-Hill., [http://ppm.your-assets.com.ua/\\_ld/1/110\\_Doherty\\_N.\\_-\\_.In.pdf](http://ppm.your-assets.com.ua/_ld/1/110_Doherty_N._-_.In.pdf)
6. Financial Stability Board.(2016) Implementation and Effects of the G20 Financial Regulatory Reforms 31 August 2016 and Annual Report. <http://www.fsb.org/wp-content/uploads/Report-on-implementation-and-effects-of-reforms.pdf>
7. Jorion P. Ltd, (2003) Financial Risk Manger Handbook. Willey J. & Sons. [https://www.academia.edu/22563949/Financial\\_Risk\\_Manager\\_Handbook\\_Fifth\\_Edition](https://www.academia.edu/22563949/Financial_Risk_Manager_Handbook_Fifth_Edition)
8. Hull J. (2018) Risk Management and Financial Institutions. 5th Edition. Wiley Finance. <http://dl.rasabourse.com/Books/Finance%20and%20Financial%20Markets/%5BHull%5DRisk%20Management%20and%20Financial%20Institutions%28rasabourse.com%29.pdf>
9. Muffee V. W. (2006)Risk management: theory and practice.
- 10.National Bank of Georgia. (2014) On the approval of the regulation on risk management in commercial banks. Order of the President of the National Bank №48 / 04. <https://www.matsne.gov.ge/ka/document/view/2372735?publication=0>
- 11.National Bank of Georgia.(2015) Risk-Based Supervisory Framework of the National Bank of Georgia - General Risk Assessment Program (GRAPE). [https://nbg.gov.ge/fm/%E1%83%96%E1%83%94%E1%83%93%E1%83%90%E1%83%9B%E1%83%AE%E1%83%94%E1%83%93%E1%83%95%E1%83%94%E1%83%9A%E1%83%9D%E1%83%91%E1%83%90%E1%83%A1%E1%83%90%E1%83%91%E1%83%90%E1%83%9C%E1%83%99%E1%83%9D\\_%E1%83%96%E1%83%94%E1%83%93%E1%83%90%E1%83%9B%E1%83%AE%E1%83%94%E1%83%93%E1%83%95%E1%83%94%E1%83%9A%E1%83%9D%E1%83%91%E1%83%90/grape/geo/grape-f.pdf?v=lii05](https://nbg.gov.ge/fm/%E1%83%96%E1%83%94%E1%83%93%E1%83%90%E1%83%9B%E1%83%AE%E1%83%94%E1%83%93%E1%83%95%E1%83%94%E1%83%9A%E1%83%9D%E1%83%91%E1%83%90%E1%83%A1%E1%83%90%E1%83%91%E1%83%90%E1%83%9C%E1%83%99%E1%83%9D_%E1%83%96%E1%83%94%E1%83%93%E1%83%90%E1%83%9B%E1%83%AE%E1%83%94%E1%83%93%E1%83%95%E1%83%94%E1%83%9A%E1%83%9D%E1%83%91%E1%83%90/grape/geo/grape-f.pdf?v=lii05)
- 12.Samchkuashvili N. Darchiashvili N. (2015) Role of National Bank in Georgian Banking System, Yildiz Technical University & American University of Sharjah. Proceedings of the 1st Annual International Conference on Social Sciences. Proceedings Book. Pp. 561-568.
- 13.Speech Sabina Lautenschleger at a seminar of the European Banking Institute (EBI),(2016) organized by the ECB. Frankfurt <https://www.bankingsupervision.europa.eu/press/speeches/date/2016/html/se160127.en.html>
- 14.Word Bank Group. Bankers without Borders. Global Financial Development Report 2017/2018. Pp. 7-11. <https://openknowledge.worldbank.org/bitstream/handle/10986/28482/9781464811487.pdf?sequence=11>
- 15.Word Bank Group. Bankers without Borders. Global Financial Development Report 2017/2018. Pp. 8-9 <https://openknowledge.worldbank.org/bitstream/handle/10986/28482/9781464811487.pdf?sequence=11>