

RISK MANAGEMENT IN BANKING INDUSTRY

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Abstract

In this research paper we will explore the risk management in banking. Accurate risk measurement enables banks to develop a risk management strategy. Risk Management in banking programme provides an overview of risk governance and long-term value creation in light of new regulations, final Basel III (Basel IV) and special resolution regimes with bail-in debt.

Keywords: risk management, banking industry, Basel III, Basel IV

JEL Codes: F65, G32, O16

1. Introduction

Risk management evolved from a strictly banking activity, related to the quality of loans, to a very complex set of procedures and instruments in the modern financial environment. In general, banking risks fall into four categories: financial, operational, business, and event risks. Financial risks in turn comprise two types of risk. Pure risks - including liquidity, credit, and solvency risks - can result in loss for a bank if they are not properly managed. Speculative risks, based on financial arbitrage, can result in a profit if the arbitrage is correct or a loss if it is incorrect. The main categories of speculative risk are interest rate, currency, and market price (or position) risks (World Bank Group).

Risk management has always been a critical area for banking industry but it has acquired a new found meaning in the post-2008 credit crunch era as an increasing number of financial institutions are willing to go that extra mile to

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ensure they understand the element of risk well enough. There are all sorts of advanced mathematical tools, analytics and approaches to understand market behavior better and it would be important for any financial institution to know which ones might fulfill their needs depending on the kind of risks they might be liable to face. There have been a lot of changes in regulatory banking institutions facing a plethora of emerging risks in an increasingly interconnected and complex global industry.

The banking industry sector is characterized by intensive competition considering both the cost and the products. For this reason, the banks are forced to identify and adopt new and more efficient ways to fight their competitors and to gain more customers that will be retained and loyal. In this way, banks make efforts to reduce costs and make better offers by screening borrowers and differentiating the prices accordingly so as to maximize the profits and minimize the losses-risks. Risk management in banking contains a combination of processes and models, results of scientific research, that banks base on them to implement risk based policies and practices. Risk Management strategy is an everyday process of identifying, evaluating, operating and monitoring risks and aim to immune the company from the potential hazards.

Banking is the intermediation between financial savers on one hand and the funds seeking business entrepreneurs on the other hand. As such, in the process of providing financial services, banks assume various kinds of risk both financial and non-financial. The main aim of management of banks is to maximize expected profits taking into account its risk. This calls for an active management of the risk in order to get the desired results. Risk management is therefore an attempt to reduce the volatility of profit which has the potential of lowering the value of shareholders' wealth.

2. Literature review

There is a growing volume of literature investigating risk management in the banking industry. Due to the financial crisis during the period 2007–2009, great attention has been paid to the risk-taking behavior of the banking industry by the government as well as by banking regulatory authorities. The greatest impact of the crisis has been on the banking industry where some banks which was hitherto performing well suddenly announced large losses with some of them going burst. The Basel Committee is just one of a plethora of international

bodies and groupings which now set standards for financial activity around the world, in the interests of protecting savers and investors and maintaining financial stability.

Risk Management is described as the performance of activities designed to minimize the negative impact of uncertainty regarding possible losses (Schmidt and Roth, 1990). Risk management techniques have made a lot of progress since the best practices were defined by various think – tanks and regulatory bodies (Bessis, 2010). Also, Bessis (2010) indicates that the goal of risk management is to measure risks in order to monitor and control them, and also enable it to serve other important functions in a bank in addition to its direct financial function. Concern and discussions in banking circle are often dominated by personal experiences of staff and customers, as well as corporate strategies of banks for dealing with uncertainty and risk management (Onyiriuba, 2016).

Chatterjee (2014) argues why risk management requires a whole new different approach in the existing market conditions and introduces readers to advanced tools and techniques with far greater relevance in context of today's financial realities.

There are two broad risk management strategies open to financial institutions (Hull, 2015). According Hull, one approach is to identify risks one by one and handle each or separately. This is sometimes referred to as risks decomposition. The other is to reduce risks by being well diversified. This is sometimes referred to a risk aggregation. Both approaches are typically used by financial institutions.

3. Methodology

In the research and development of this paper a qualitative and quantitative methodology has been implemented. To achieve the object of this paper, the risk management in banking data has been collected.

4. Analysis and discussion

Risk management in banking has been transformed over the past decade, largely in response to regulations that emerged from the global financial crisis and the fines levied in its wake. Banks are obliged to establish a comprehensive and reliable risk management system, integrated in all business activities and

providing for the bank risk profile to be always in line with the established risk propensity. Risk management system comprises (National Bank of Serbia):

- ✓ Risk management strategy and policies, as well as procedures for risk identification and measurement, i.e. for risk assessment and risk management;
- ✓ Appropriate internal organization, i.e. bank's organizational structure;
- ✓ Effective and efficient risk management process covering all risks the bank is exposed to or may potentially be exposed to in its operations;
- ✓ Adequate internal controls system;
- ✓ Appropriate information system;
- ✓ Adequate process of internal capital adequacy assessment.

The importance of bank risk management, however, is not confined only to minimize costs. Permanent concern to minimize exposure to risk management has positive effects on employee behavior that are more rigorous and conscientious in carrying out the work tasks, it is not negligible either psychological effect to deter fraudulent activities. The existence of adequate programs for prevention and control banking risks contributes to impose banking institution in the community, little or no experience of such conditional admission or participation in programs such bank inter-bank associations or obtain higher qualifications in the banking authority.

In contrast to Basel I, whose main objective was to create a level playing field for banks, introducing a "one-size-fits-all" framework, Basel II encourages banks to develop risk management systems and to calculate capital requirements on the basis of these systems' outcomes. This approach changed once again in view of the financial turmoil which broke out in 2007-2008.

Basel II brings changes in activity of banks and financial institutions, imposing mandatory capital requirements for banks' exposures. When a bank grants credit, it assumes a risk in its portfolio. To be a global event risk, throughout the bank and real time, it needs a good IT solution set, a set of procedures, well trained people who know what to do when there are early warning signals.

To calculate the necessary capital, Basel II proposes two different approaches:

- The standard approach, which is similar to that proposed by Basel I, but using more refined weights. In addition to the previous agreement,

this approach allows the use of derivatives to mitigate credit risk and reducing capital requirements. Basel II recognizes the techniques for reducing credit risk through collateralization; the guarantors are credit risk derivatives.

- Approach based on internally generated ratings:
 - ✓ Methodology based on internal ratings based (Foundation Internal Rating Based (IRB) approach), which allows a bank to use their own rating system, inclusively using their own calculations on the probabilities of entry in default (PD), but losses when the counterparties to default (LGD) are provided by the supervisory institution.
 - ✓ Methodology based on advanced internal ratings (IRB advanced approach), in which banks calculate their capital requirements on their models, validated by the institution of monitoring, inclusively calculations on the probability of entry in default (PD) and loss if the counterparty enters into default (LGD).

In 2015, the Basel Committee on Banking Supervision, a global standard-setting institution for bank regulation and oversight, issued a request for comments on its proposal to address what is known as step-in risk, or the risk that banks will undermine their solvency by trying to shore up failing non-bank financial institutions (Crayson, 2016).

When a non-bank financial institution affiliated with a bank experiences stress, a sponsoring bank often will lend support in order to avoid the reputational damage that comes from being affiliated with failing institutions. Despite its benefits, this practice can lead to widespread financial instability if the stresses that the non-bank institutions experience spill over into the banking system.

In December 2017, the Basel Committee on Banking Supervision (BCBS) released the final rules on operational risk capital. The final rules came a year later than anticipated and more than three years after the first consultation on operational risk in October 2014.

The BCBS has introduced a single non-model based method for the calculation of operational risk (OpRisk) capital, the Standardised Approach (SA). This will replace all three existing approaches for OpRisk under Pillar 1: the Basic Indicator Approach (BIA), the (Alternative) Standardised Approach

(TSA/ASA) and the Advanced Measurement Approach (AMA). The SA will apply from 1 January 2022. The main objectives of the BCBS in defining these new rules were to improve comparability and simplicity, but neither has been fully achieved. The scope for national discretion and the use of opaque Pillar 2 capital requirements will make it difficult to compare banks, while the new SA is less simple for banks that currently use the less advanced approaches to OpRisk because of the ten year loss data capture requirement. There is also a risk that the new SA will reduce the incentives for robust risk management within the business due to the lack of risk sensitivity in the new approach (KPMG, 2018).

Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. The measures aim to strengthen the regulation, supervision and risk management of banks. Like all Basel Committee standards, Basel III standards are minimum requirements which apply to internationally active banks. Members are committed to implementing and applying standards in their jurisdictions within the time frame established by the Committee. A key objective of the revisions incorporated into the framework is to reduce excessive variability of risk-weighted assets (RWA). At the peak of the global financial crisis, a wide range of stakeholders lost faith in banks' reported risk-weighted capital ratios. The Committee's own empirical analyses also highlighted a worrying degree of variability in banks' calculation of RWA (Bank for International Settlements, 2017).

Basel IV introduces changes that limit the reduction in capital that can result from Banks' use of internal models under the Internal Ratings-Based approach. This includes (Wikipedia):

- A standardized floor, so that the capital requirement will always be at least 72.5% of the requirement under the Standardized approach;
- A simultaneous reduction in Standardized risk weights for low risk mortgage loans;
- Requiring banks to meet higher maximum leverage ratios (an initial leverage ratio maximum is likely to be set as part of the completion of the Basel III package);

A higher leverage ratio for Global Systemically Important Banks (G-SIBs), with the increase equal to 50% of the risk adjusted capital ratio. British

banks alone may have to raise another £50Bn in capital in order to meet Basel 4 requirements. The average Common Equity Tier 1 (CET1) capital ratio for major European banks is estimated to fall by 0.9%, with the biggest impact on banks in Sweden and Denmark of 2.5% - 3%.

5. Conclusion

Risk management activity has experienced exponential growth over the past decade. Banks play a significant intermediation role in the economy, where “confidence” is of paramount importance. Financial risks are also subject to complex interdependencies that may significantly increase a bank's overall risk profile. Operational risks are related to a bank's overall organization and functioning of internal systems, including computer-related and other technologies; compliance with bank policies and procedures; and measures against mismanagement and fraud. Business risks are associated with a bank's business environment, including macroeconomic and policy concerns, legal and regulatory factors, and the overall financial sector infrastructure and payment system. Event risks include all types of exogenous risks which, if they were to materialize, could jeopardize a bank's operations or undermine its financial condition and capital adequacy.

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