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The Main Determinants of Bank's Stability. Evidence from Romanian Banking Sector

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Abstract

Through this paper we aim to identify the main determinants of a bank's stability and if the differences between commercial and co-operative banks. Co-operative banks, were not analysed in great detail in the financial literature as opposed to credit unions or even commercial banks. Both commercial and co-operative banks represent credit institutions that use different approaches for their core operational processes. Taking into consideration these specific characteristics, we want to identify if there are any differences among the main determinants of their financial stability. At the end of our analysis, we could draw the conclusion that the models we tested were fitted only for co-operative banks, while for commercial banks we didn't identify any significant factors, between the selected variables. Thus, the financial stability of co-operative banks is mainly influenced by two factors represented by GDP growth and interbank offering rate for 3 months.

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1. Introduction

Today's economies are based on production, trade and consumption. The financial resources are the elixir that contributes to the development of new businesses by creating growth opportunities, employing workers and in turn support other businesses and local, state and government institutions. People, companies, organizations and even

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public institutions try to find financial resources in order to satisfy different kind of necessities. Nowadays, regular people have difficulties in accessing financial loans in comparison to companies, organization or public institutions.

Going back in history, we know that the first credit union appeared in order to satisfy the financial necessities of a specific category of people: farmers. This event took place in Germany around the year 1869. Coming back to our days, it is still difficult for a farmer to obtain financial resources for working his land. We realise that this new financial institution is the result of a social and financial necessity. After all, the necessity is the mother of all inventions. Living in a world that is permanently changing, the humanity has experienced during its evolution various stages of development. Loads of information and facts constantly appear and happen in all aspects of life, including the financial and economic world.

In 2008, the financial world was characterized by a series of structural shifts during the financial crisis. Important banks and financial institutions (e.g. Lehman Brothers, Merrill Lynch, Wachovia) had gone bankrupt or recorded huge losses, releasing a high risk on the financial market, known as systemic risk. Consequently, a lot of instability appeared on financial and banking sectors.

One of the cause for the crisis is represented by financial globalization which is able to cause financial instability across the world and to increase the danger of a major global recession, because these “progressive interaction and integration of economies and societies around the world” (Dilip, 2003, p.12) created international interdependence. Globalization is one of the most questionable worldwide phenomena, having both positive and negative meaning due to the high degree of risk and volatility.

Taking into account the latest transformations underwent by credit institutions, we aim through this paper to analyze the main determinants and driven factors for financial stability of a commercial bank and a co-operative bank. This scientific paper comprises seven sections: the first section represents the introduction, where we emphasized the context that determined the selection of this theme, the second section covers the main literature review on the researched topic, section three describes briefly the methodology used, section four presents the data and the statistic variables necessary in order to produce the results, section five highlights the main findings of the research, section six concludes the paper and the last section includes the references used for writing the paper.

2. Litarature review

The history of risk management was established six decades ago, in 1945, when Leavens suggested a quantitative method for risk measurement. Afterwards, a large number of authors focused their attention on the most used measure for quantifying the risk, namely Value at Risk, which can be computed based on three types of operations: historical simulation, variance-covariance and Monte Carlo simulation.

Another development direction for the risk measurement was about creating different types of models in order to estimate the volatility of instruments traded on financial markets: Autoregressive Conditional Heteroscedasticity model (Engle, 1982) or Generalized Autoregressive Conditional Heteroscedasticity model (Bollerslev, 1986). These models were further developed by researchers.

Two of the most commonly used models for identifying the vulnerability of a corporation, according to Altman (2000), is represented by Z-Score model and ZETA® credit risk model. The author highlights the huge potential of ZETA model for analyzing the financial stability not only for a corporation, but also for a financial institution.

The idea of using a more simplified measure for assessing the financial stability motivated Mercieca et al. (2007) to develop the Z-score. They discovered through their paper, where they analyzed the effect of diversification over the bank’s performance, that the diversification has no benefit. The majority of researchers were interested to see if the risk is different in banking industry, according to the activity developed by each bank. About this, Lepetit et al. (2008), discovered that there are no differences, in risk diversification, between banks which are engaged into large and diversified activities (e.g. commercial banks) and banks which are serving only few core clients (e.g. co-operative banks or universal banks). Z-score presents several advantages, but in the same time disadvantages. According to Čihák (2007), the main advantage of this measure is represented by the easily computation for a financial institution or corporation. On the other side, the main disadvantage of this method is represented by the fact that it does not catch the correlation between financial institutions (contagion relation).

By developing the idea furthermore, Groeneveld and De Vries (2009), applied the Z-score to two types of banks: commercial banks and co-operative banks, in order to quantify the financial stability of these two between the years