#### AICEI PROCEEDINGS

# Creating a Market Oriented Organizational Structure as a Key to Overcoming the Financial Crisis – A Comparative Study

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#### **Abstract**

The interconnectedness and the ever-growing interdependency of the European countries had set in motion a vast number of processes that ultimately led to the infamous financial crisis. Now, as we are taking the first steps out of this tight spot, it is of significant importance to look back and examine some of the factors that have aided certain companies to prevail during the crisis. Therefore, the purpose of this paper is to provide a theoretically based review and analysis of the organizational effectiveness of a selected number of medium sized banks in South East Europe (SEE), with particular emphasis on the role of organizational structure during and after the financial crisis period. The main result of this comparative study is to substantiate the underlying hypothesis of the research, which is to examine the positive link between the market driven organizational structure and organizational effectiveness.

Keywords: Organizational structure, organizational effectiveness, banking

#### 1. Introduction

The events that occurred in the midst of the economic crisis and stirred quite a heated debate over cause and effect, are failing to give way to forward thinking and solutions for economic recovery. However, the path to growth, even some years down the line, is still slow and fragile. This is due, in part, to the increased interconnectivity of the countries in the era of globalization. Such a condition has attracted considerable attention from researchers and policy makers. Yet, although they have made significant advances in examining the devastating effects of the financial crisis and its aftermath, most of these studies have concentrated on examining the macroeconomic perspective of the crisis. We believe that there is a need to take a look at the more practical aspects at an organizational level, such as the different types of organizational structure aimed at improving financial performance.

This study is focused on a comparative analysis of the more intricate factors within banking operations, from an organizational and managerial aspect. It is based on evaluating financial performance using a sample of comparable banks with operations in South Eastern Europe. The countries included in this research are at different stages of European Union (EU) accession, in order to reflect the lower impact of the crisis in the countries that are EU member countries (Romania and Bulgaria) compared to the candidate countries (Macedonia and Serbia). However, this is not the primary target for differentiation in this research, as these countries have similar gross domestic product (GDP) per capita levels. This aspect is used only to the extent of assessing whether the organizational structure of the banks helps in achieving stable or better effectiveness during a period of turmoil.

For this purpose, organizational effectiveness is measured through performance indicators such as profitability, return on equity (ROE) and return on assets (ROA). Therefore, this comparative study focuses on the following research questions:

A: Is there any impact of the type of organizational structure on organizational effectiveness?

B: Does organizational structure aid banks to sustain organizational effectiveness in periods of turmoil?

### 2. Brief Literature Review: the Banking Sector in Transition Economies

In the general sense, most of the research on the impact of the financial crisis on the banking sector has been focused more broadly on the European Union or the USA. It is only more recently that studies such as those of Gardo and Martin (2010) and Gallego, Gardó, Martin, Molina, and Serena (2010) have come to light.

Gardo and Martin (2010) are among the first who base their research on countries from South-Eastern, Eastern and Central Europe. by assessing the state of the banking sector in the period from before the crisis until its occurrence. They concluded that although the crisis was manifested more severely in other regions, the Central European and South East European (CESEE) countries have shown rather heterogeneous developments, those with highest economic imbalance were most affected. A similar perspective on this issue was given by Gallego et al. (2010) by conducting a comparative study of the impact of the crisis of countries in Latin America and those of the CESEE. The research showed that countries showed resistance in succumbing to the devastating effects, only to be followed by a sharp downturn in early 2009. During that period, the region was still undergoing some of the transitional changes that started taking place by the end of the 1990s. The most dramatic changes took place in the past decade, with many structural and democratic reforms, economic integration and regional cooperation, and even though the expected outcomes of the crisis were not felt so severely, the region was yet lagging in the recovery rate of other more developed regions.

#### 2.1. Changes in Ownership Structure

When referring to the SEE countries, one of the most important elements of the transformation from the state owned banking system into a new organizational form was the introduction of the privatization process and the entrance of foreign investors. Foreign banks as owners, introduced new standards and practices, tighter supervision, new banking products and consequently, stronger competition. Policy makers

stimulated this process since it was presumed to have a positive impact on both stability and efficiency of the local banking system.

The research by Fries and Taci (2005) in the post-communist countries showed evidence that the foreign banks transferred their know-how, stimulated competition, and proved to be reliable credit sources. Other studies also examined the performance of foreign banks in transition economies, by analysing data on efficiency and profitability, and comparing it to that of domestic banks (Bonin, Hasan &Wachtel, 2005; Havrylchyk & Jurzyk, 2006). The authors' research on banks in Central and South - East Europe concluded that the foreign-owned banks were not only more cost-efficient, but also provided better service.

However, the global crisis, did in fact pose a challenge to the sustainability of the banks present within the region. Why? Because of their problems "back home". Therefore, the deleveraging of their home markets and the worsened financial situation pulled down the stability of the SEE region. It created greater uncertainty, as studies by De Haas and Van Lelyveld 2010), and Popov and Udell (2010) have shown. They state that the lending to the foreign banks' subsidiaries depended largely on the financial strength of their parent banks. Until now, the majority of the banks within the SEE region are foreign owned, and have endured the prolonged effects of the financial crisis.

### 2.2. Some Approaches to Determining the Organizational Effectiveness of Banks

In order to proceed with the methodology of the paper, we shall look into some aspects of determining organizational effectiveness. This has proven a struggle for many researchers in suggesting a commonly acceptable and unified approach. Some of the proposed models by various scholars classify four general categories for determining organizational effectiveness, namely: 1) multiple constituency 2) internal process 3) a systems approach and 4) a goal approach. Regarding this specific paper and in evaluating bank organizational effectiveness in general comparative studies, the most common approach is the goal-based approach, suggested by David and Stanley (1999). It comprises of measuring organizational effectiveness in terms of the accomplishment

of business goals and objectives. Similar to the use of financial data when measuring a bank's performance.

However, we do emphasize the importance of internal variables such as leadership, communication and structure, as suggested by Cameron (1983) in describing the internal process model. This is in partly supported by the opinion of Likert (1967) that there are intervening (objective, motivation, morale, etc.), causal (strategies, skills, management decisions, etc.) and the end result (achievement, profit, etc.) variables. Also, there are other models that consider leadership elements being a soft part of the organization, while the "organizational structure: is a hard or formal part of the organization" (Bojadziev, Tomovska, Stefanovska, & Nikolovska, 2011, p. 7). Apart from such distinctions between models and variables in measuring effectiveness, we shall mainly focus on the organizational structure as an important factor.

### 2.3. Organizational Structure and Its Impact on Organizational Effectiveness

Though many definitions can be found for organizational structure, one can emphasize the following aspects: task allocation, supervision and coordination directed at achieving organizational goals (Pugh, 1990). More broadly, organizational structure is the means to pass down mission as an organization's basic purpose and scope of operations (Bateman & Snell, 1999). Even so simply put, choosing the optimal organizational structure within a company is not as simple, since there is a need for a multi-criteria selection approach, as Biggiero and Laise (2003) argue in their research. They point out that albeit different organizational theories propose different selection criteria; they are in fact compatible (non-mutually contradicting).

Unfortunately, there has been limited research in providing a conclusion as to which organizational structure is best suited for achieving better performance results. Furthermore, the relationship between organizational structure and effectiveness, even though with a long history and viewed from different aspects, has been brought up more recently in the context of organizational design. This is a field specifically devoted to studying the links between environment,

organizational structure, and organizational outcomes, which is in many respects an emerging field (Csaszar, 2012).

Despite this, a fairly recent paper by Csaszar (2012) shows some evidence that organizational structure does in fact influence organizational effectiveness. In his study he examines mutual funds, and has taken omission and commission errors as performance results. The author analysed the impact of a centralized and decentralized organizational structure on those performance indicators, to come to the conclusion that "decentralized structures accept more projects, make fewer omission errors, and make more commission errors than centralized structures" (Csaszar 2012, p. 30). In this regard, a relationship between the impacts of different types of structures and effectiveness is reflected.

#### 3. Methodology and Analysis

In order to assess the influence of the organizational structure on the performance of specific banks, this research was conducted by using primary data from three banks: ProCredit, SocieteGenerale, and Sparkasse. They all are part of a holding group, thus falling under the foreign-owned bank ownership structure. We have considered them from a regional aspect (SEE), with operations in four specific countries: Macedonia, Serbia, Romania and Bulgaria. The countries used in this research were chosen based on their region and their status in terms of EU accession: Romania and Bulgaria are members of the European Union, whereas Serbia and Macedonia are in the pre-accession process.

The study encompasses annual financial data ranging from 2007 to 2011, for a total of 12 subsidiaries, presented as consolidated annual results per bank group, or as an average performance result per bank group. For the purpose of this study, indicators such as profitability, ROE and ROA have been used as measures of organizational effectiveness.

Based on the analysed data, the study is comprised of three parts. In the first part, we analysed the banking sector performance in the selected countries in order to gain a perspective of the regional environment of the banks operations. In the second part, we analysed the organizational structure of the banks based on the publicly provided

information made available by the chosen banks within each country, in order to assess whether there are different types of organizational structures among the bank groups. In the third part, we assessed the financial data selected as a performance indicator for the purpose of this study.

#### 3.1. Cross Country Situational Analysis

After the financial crisis and according to the most recent data from the World Bank, there has been an annual growth in GDP of merely 2 % in both 2010 and 2011 in the SEE countries. In 2012, the SEE countries showed signs of a double –dip recession, with almost no GDP growth, with Serbia being the most affected with a GDP almost half of that of the other countries summarized GDP (South East Europe Regular Economic Report No.3, Wold Bank, 2012, pg. 4)

We have selected the data relevant to the countries included in this research for the past two years and the prospects for 2013 (See Table 1). Individual economic growth in the years after the crisis varies among the SEE countries, with the largest contractions depicted in Macedonia and Serbia by about 1.1.% and 1.6 % respectively.

Also afflicted with high unemployment levels (highest among EU countries), and stagnation in consumption, tough recovery is expected for the whole region. Even with the signs of the gradual increase of economic growth in the SEE as a group, these countries will remain in recession for the year as a whole.

**Table 1.** Economic growth rates

	2011	2012	2013
Macedonia	2.8	0.0	1.0
Bulgaria	1.7	0.8	1.8
Serbia	1.6	-2.0	2.0
Romania	2.5	0.6	1.6
SEE6	2.2	-0.6	1.6
EU11	1.5	-0.4	-0.1

Source: South East Europe Regular Economic Report, No.3, 2012 p. 4.

Modest growth has been shown in eleven EU countries as well, which have expanded by about 1.6% in 2011, with Romania leading with 2.5 %, followed by Bulgaria with 1.7%.

In this volatile external environment, all the above mentioned countries are expected to have a very modest increase in 2013 of about 1,2%, however, there is a situation of heightened uncertainty since the labour market outlook seems still unfavourable according to the World Bank statistical data. Also, the aforementioned signals potential turbulences in the financial sector.

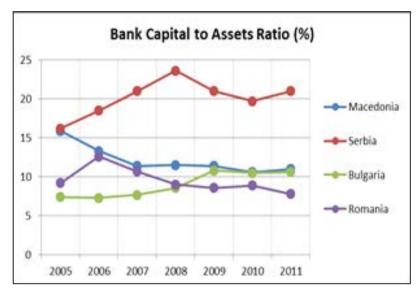
#### 3.1.1. The Banking Sector in Selected Countries

The countries in the region are highly integrated within Western Europe through trade, labour, and finance, the latter being the fastest transmitter of the Eurozone troubles. Some of the selected countries have adopted the Euro, whist others peg to it. The data shown below are likely to portray the most immediate effects of the crisis (see Graph 1 and Graph 2). In 2008, the rapid credit growth came to a halt when the crisis began; and the banks within the region saw foreign funding dry up with some runs on deposits.

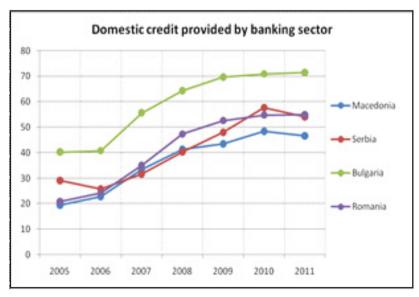
However, annual domestic credit growth averaged 25 % between 2006 and 2008, fuelled by foreign capital flows into the financial sector. After 2008 when the crisis hit home, the credit provided by the banking sector still showed progression, although with a lower growth. The banks within the countries had to adjust to the credit crunch that reflected lower demand as well as problems of asset quality due to parent bank deleveraging. Macedonia showed the slowest growth in the following years of around 9%, lagging behind the other countries in the region. The highest credit offering growth was measured in Bulgaria amounting to 71.6%, followed by Romania, leaving Macedonia and Serbia somewhere in the middle with an average of about 50 %.

This was motivated partly by plentiful global liquidity, partly by the region's economic prospects and political stability, and largely by prospects of eventual EU membership for Western Balkan countries. However, as mentioned previously, despite the slow but certain growth of credit provided by the banking sector, there was still an issue of the asset quality.

Graph 1: Bank Capital to Assets Ratio



Graph 2: Domestic credit provided by banking sector



Source: World Bank, stylized data from database

Although the Eurozone crisis has been contained to date, the SEE banking systems are still battling the existence of high nonperforming loans, low credit growth, eroding capital, and minimal profitability. High levels of nonperforming loans (NPLs) show that the loan quality has deteriorated, and banks have chronic difficulties in writing off NPLs because ineffective insolvency regimes generally preclude a rapid resolution of problem loans. This is one of the main reasons that the banks' ability to resume lending has deteriorated and shown slower growth. The most affected by such banking decisions were the small and medium enterprises (SME) (which comprise the majority of companies within the region). Larger banks seem reluctant to give credit to such enterprises, whereas medium sized banks found a niche market in this aspect, however with more stringent processing. As shown in Graph 3 bellow, the amount of non-performing loans within the region has soared, in some countries to a staggeringly steep progression. Since 2008, the average percentage of non-performing loans in the countries was around 6%, while in 2011, it showed an increase of yet another 6%. In 2011, the highest increase was noted in Albania, Serbia and Bulgaria, and Romania with 14.4%, 18.6%, and 13.5% respectively. On the other hand, Macedonia has shown the least increase in non-performing loans, ensuring higher stability in this aspect.

Bank non - performing loans to total gross loans (%) 20 18 16 Macedonia 14 12 Serbia 10 Bulgaria 8 6 Romania 4 2 0 2005 2006 2007 2008 2009 2010 2011

Graph 3: Bank non-performing loans to total gross loans (%)

Source: World Bank, stylized data from database

#### 3.2. Organizational Structure of the Bank Groups

As mentioned previously, the three analysed banks are each a part of a specific bank holding group. As such, it is safe to state that the parent bank's structure is primarily regional (geographical). This is primarily attuned with the bank's overall strategy and mission, and aimed at the diversification of the asset portfolio, increasing market share and achieving better performance results. However, taking into consideration organizational structures of the bank subsidiaries at country level, the organizational structure is formal and functional. From the assessment of the organizational structures of ProCredit, Sparkasse and SocieteGenerale, it is clear that they are divided into divisions and departments that reflect to some extent a market driven organizational structure. This implication arises from the fact that SocieteGenerale has two separate divisions for different client types (retail and corporate), but with no further departmentalization. In Sparkasse, on the other hand they fall under a joint division (legal entities division) with then a further departmentalization according to legal entity size.

An interesting finding is that ProCredit on the other hand, puts the different sized entities' departments under the operations division. The absence of a corporate and retail division or the lack of a large corporate client division (as the case in SocieteGenerale) in term reflects the mission and strategy of ProCredit, which is to its entirety niche market oriented (servicing the SME's market). As set forth in the organizational chart, this implies that ProCredit is leaning towards a team based organizational structure, but in the aspect of market driven organizational structure, it is the most prominent among the three banks. The organizational charts of the banks can be found in the appendix to this paper.

#### 3.3. Bank Performance Analysis

After the analysis of the financial statements of the selected banks and consolidating the aforementioned performance results (net profit, ROE and ROA), we were better able to form a opinion on the banks' effectiveness.

Graph 4. bellow depicts the consolidated net profit data for the three bank groups. It clearly shows that although the net profit level is highest at Sparkasse, it shows a steep slump in the post crisis period. Societe General, although at a lower level, has a stable net profit line after the financial crisis, with relatively small downward fluctuations. ProCredit has the lowest net profit level, however it is the only bank group that shows only a very small fluctuation in net profit levels, and an upward trend in the financial crisis recovery period. The peaks and troughs of the net profit line also reflect the impact of the financial crisis in the SEE region, which as stated previously in our study, mostly affected these economies during late 2009.

Consolidated Net Profit data per bank group 90,000 80,000 70,000 ProCredit 60,000 Sparkasse 50,000 40,000 Societe Generale 30,000 20,000 10,000 2007 2008 2009 2010 2011

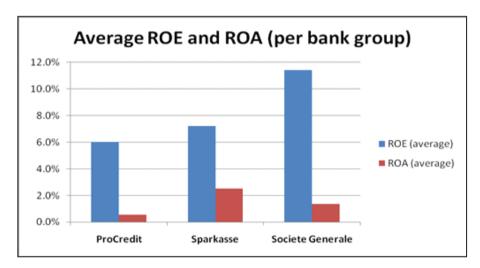
Graph 4: Consolidated net profit data per bank group

Source: Bank financial statement data from selected countries on an annual bassis

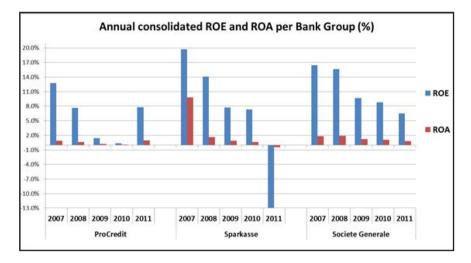
We cannot draw conclusions solely based on the net profit level. A fuller extent of the performance of banks is done through ratio analysis. The two fundamental, and essential ratios, show a very clear picture of the banks' overall corporate health. Therefore, in the following two graphs, there is a representation of the ROE and ROA of

the bank groups. These ratios allow for flexibility when comparing banks since the ROE does not account for asset size. If we take the average ROE and ROA of the 5 year data, it is evident that Societe Generale is the most efficient, however it might be misleading as when the ROE and ROA levels are compared, it might imply that the banks is overburdened with debt (Graph 5). However, if we break down the ROA and ROE data on an annual basis (Graph 6) it clearly indicates that despite the higher ratio levels, ProCredit is the only bank that shows an upward trend in financial recovery from the crisis.

Graph 5: Average ROE and ROA per bank group



Source: Bank financial statement data from selected countries on an annual basis



Graph 6: Annual consolidated ROE and ROA per Bank Group (%)

Source: Bank financial statement data from selected countries on an annual basis

#### 4. Conclusions and Limitations to the Study

The comparative analysis of the banks' organizational structures depicts different types of structure within each bank group, although all of them show some elements of market driven orientation. This is reflected through the divisional allocation of the customer markets (retail and corporate).

However, ProCredit is the only bank with a clear market oriented organizational structure, which is shown through the distinction of the specific customer segments within their customer market (very small, small, and medium enterprises) under the operations division. Also, only in the case of ProCredit is there any evidence of migration from functional towards team structure. This in turn, implies that these departments have higher authority, delegated responsibility and decision making power, thus making them more efficient. As previous similar positions expressed in the literature have shown, such decentralization allows for the acceptance of more projects (Csaszar, 2011) and the use of more soft information (Stein, 2002). Therefore, when we are looking at

organizational efficiency, the rationale behind the reason for ProCredit's lower level of efficiency is that banks with such a specific market (SMEs) are more prone to accept smaller and riskier clients, therefore exposing themselves to a higher level of non-performing loans, as well as higher operational costs.

This indicates that the answer to our first question "A: Is there any impact of the type of organizational structure on organizational effectiveness?" is that there is some signal of a positive relationship existing between organizational structure and effectiveness. However, other underlying factors might play a greater role and should be taken into a consideration, which poses a limitation to this study. We consider this as an advance in in furthering the research, by taking into consideration the organizational context as well as the mission and strategy of the company for their influence on strategy, and in turn, their effectiveness.

In order to answer our second question "B: Does organizational structure aid banks to sustain organizational effectiveness in periods of turmoil", we again look at the effectiveness level of the banks. The study does not come to a conclusive result in regard to whether a specific type of organizational structure provides for the highest performance results. This is reflected through the fact that the efficiency of Societe Generale is the highest, despite them having a more subtle form of market orientation as opposed to ProCredit.

It is however worthwhile pointing out, that only ProCredit shows the fastest recovery after the financial crisis and the only upward trend when it comes to performance results. So it is possible to imply that their structure provided for more sustainable results during and after the period of financial turmoil, however for the purpose of furthering this study, we would take into consideration the specific market sector and it's vitality during the crisis.

All things considered, this study, like other papers in the emerging field of analysing organizational aspects, broadens the pool of information available and gives insight into considerations for future research in order to gain more specific and conclusive results.

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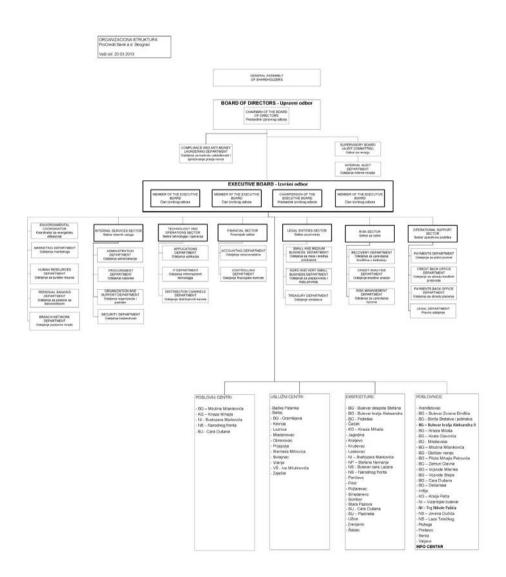
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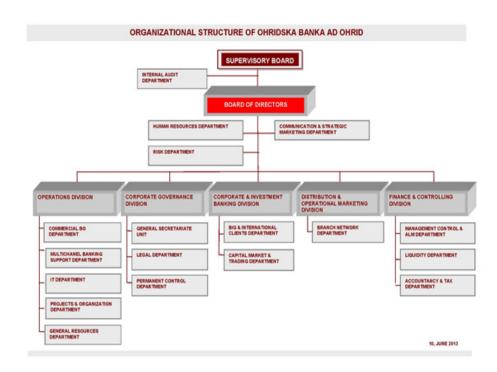
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# **Appendix 1:** Organizational Chart of ProCredit Bank (Source: www.procredit.rs)



## **Appendix 2:** Organizational Chart of Societe Geenrale (Source: www.ohridskabanka.mk)



# **Appendix 3:** Organizational Chart of Sparkasse (Source: www.sparkasse.mk)

