

Corporate Governance and Bank Performance: Evidence from Macedonia

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ABSTRACT – *The role of banks is integral and significant to the economic development and private initiative of any country. Therefore, we can read different and opposing studies in economic literature about various bank corporate governance regimes and issues. Given the renewed attention on the corporate governance in banks with the global financial crises, this paper investigates the relevance of board size, board composition and CEO qualities in the Macedonian banks and their performance. Thus, the following paragraphs will elaborate on the development of hypotheses to test whether good corporate governance structure can contribute towards higher banks performance measured by Return on assets (ROA), Return on equity (ROE), Cost-Income ratio and Capital adequacy ratio (CAR). We find that board size is only positively related to the bank's profitability measures by ROA. Further, the research indicates negative association between board independence and ROA and ROE. Also, the results stress that banks in Macedonia which is managed by powerful CEOs that hold this position for a longer period are more profitable than those with CEOs serving their first four-years tenure. In addition, it is important to highlight that our research findings and insights is different and more important than some other studies, both practical and theoretical, as the primary object of study is commercial banks from insufficiently explored financial system and developing economy.*

KEY WORDS: *bank performance, board composition, board size, corporate governance, diversity*

Theoretical background

There is not company without corporate governance, and there is not corporate governance without company. Every company has a corporate governance (Steger and Amann, 2008, p. 3). Corporate governance has a long history. In his book *An inquiry into the nature and causes of the wealth of nations*, Adam Smith criticised the corporate form of business because of the separation of ownership and management. Karl Marx and Adam Smith did not agree on much, but they both thought that the corporate form of organisation was unworkable, and for remarkably similar reasons (Monks and Minow, 2003, p. 195). Nevertheless, academic interest about corporate governance issues arises after publishing a pathbreaking book about separation of control and ownership in the corporations, wrote by Berle and Means (1932). They showed that shareholder dispersion creates substantial

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managerial discretion, which can be abused. This was the starting point for the subsequent academic thinking on corporate governance (Tirole, 2006, p. 15). However, if management was the focal point for the 20th century, corporate governance is set to be the primary focus for the 21st century (Tricker, 2012). The term *corporate governance* derives from an analogy between the government of cities, nations or states and the governance of corporations (Becht, Bolton and Röell, 2003, p. 2). Word *governance* is ancient, and comes from the Greek word for steering (Carrol and Bucholtz, 2009, p. 123) but the phrase *corporate governance* is young.

In the wave of recent corporate scandals, corporate governance practices have received tremendous attention from all interest group inside and outside from corporations. Increased media coverage has turned *transparency, managerial accountability, corporate governance failures, weak boards of directors, hostile takeovers, protection of minority shareholders, and investor activism* into household phrases (Tirole, 2006, p. 15). The governance of the corporation is now as important in the world economy as the government of countries (Wolfensohn, 1999, p. 38). Fine corporate governance from the banking perspective ensure that banks will operate in a safe and sound manner, and their every-day operations will comply legal norms and regulations while protecting the interests of agents (primary shareholders and depositors). The efforts for establishing good corporate governance arrangement in banks are associated with better performance in banks and national economies. Eight principles of governance which support every good system of corporate governance are: transparency, rule of law, participation, responsiveness, equity, efficiency and effectiveness, sustainability and accountability (Crowther and Aras, 2009, pp. 26-30)

Good governance is an essential point for establishing the better investment and institutional environment which is fundamental for success of competitive companies and new venture creations. In this way, good corporate governance in banks facilitates the entrepreneurial success and extent the life-cycle of business entities. In particular, the countries that have implemented sound corporate governance practices generally experienced a vigorous growth of corporate sector and grasp more ability in attracting capital to lubricate the economy (Sheikh and Wang, 2012). *McKinsey quarterly* surveys suggest that institutional investors will pay as much as 28% more for the shares of well governed companies in emerging markets (Thomsen, 2000). Many scholars until now examined relationship between corporate governance and company performance from different perspectives². Hence, previous studies in this field were serious basis about proper shaping of this empirical research for Macedonian banks.

Before assessing the role of banks in corporate governance, we must first define what we mean by this term. The Cadbury committee define the corporate governance as the system by which companies are directed and controlled (Cadbury, 1992, p. 15). Yet, while shareholders delegate substantial powers to management, they need assurance that power will not be abused. *How do shareholders know that the assets they own are not being mismanaged, or even embezzled?* (Monks and Minow, 2004, p. 196). One of the most exploited definition

² See Shleifer and Vishny (1997), Gompers, Ishii and Metrick (2003), Drobetz, Schillhofer and Zimmerman (2004), Finegold, Benson and Hecht, (2007), Lin and Lee (2008) Bebchuk, Cohen and Ferrel (2009) and Bauer, Eichholtz and Kok (2010) for deeply and better understanding of the corporate governance issues and various firm performance ratios.



about corporate governance written by Shleifer and Visny, give the answer on question about shareholders security. They define corporate governance in terms of financial interests of investors. In particular, they refer to corporate governance as dealing in which suppliers of finance to corporations assure themselves of getting a return on their investment (Shleifer and Visny, 1997, p. 737). Board members who *rock the boat* might find they *are left out in the cold* (Carrol and Bucholtz, 2009, p. 128). From business ethics perspectives, corporate governance can be considered as an environment of trust, ethics, moral values and confidence - as a synergic effort of all the constituents of society (Crowther and Aras, 2009). Our integral and eclectic definition considers the corporate governance as a system which ensures that a company is run in the best (*bona fide*) strategic direction for all stakeholders.

Financial markets essentially involve the allocation of resources. They can be thought as the *brain* of the entire economic system, the central locus of decision-making: if they fail, not only will the sector's profits be lower than they would otherwise have been, but the performance of the entire economic system may be impaired (Stiglitz, Jaramillo-Vallejo and Park, 1993, p. 23). Therefore, the important of banks as dominant *players* in financial *games* is critical for other economic agents. The banking sector is not necessarily totally corporate. Banking as a sector has been unique and the interests of other stakeholders appear more important to it than in the case of non-banking and non-finance organisations. In the case of traditional manufacturing corporations, the issue has been that of safeguarding and maximising the shareholder's value. In the case of banking, the risk involved for depositors and the possibility of contagion assumes greater importance than that of consumers of manufactured products. Banks due atypical contractual relationship, in their corporate governance model should include the depositors and shareholders (Macey and O'hara, 2003). Further, the involvement of government is extremely higher in banks due to importance of stability of financial and economic system as well as because enlarged interest of all economic agents. Stability of banks as a dominant figure in whole financial systems contribute for good functioning of national economy and promotes economic growth (Hermes, 1994; Levine, 1997; Rajan and Zingales, 1998; Wurgler, 2000). Good corporate governance plays a vital role in underpinning the integrity and efficiency of financial markets (Ghillyer, 2012, p. 88). The Basel Committee on banking supervision (BCBS) placed emphasis on establishing and improving the corporate governance of financial entities, as well as compliance with supervisory standards. According to BCBS (2006), corporate governance for banking organisations is arguably of greater importance than for other companies, given the crucial financial intermediation role of banks in an economy.

Globalisation and the increased demand for better corporate governance are two major trends affecting banking; and the two trends are inexorably intertwined. Good corporate governance depends on the board of directors and top management setting the proper culture and tone for the organisation (Gup, 2007). Board of directors is elected by the shareholders as the ultimate decision-making body of the banking organisation which has the responsibility of formulating adequate, effective bank policies and strategies. A higher cost of capital will hamper and hurt economic development. The governance of banking companies may be different from that of unregulated, nonfinancial companies for several reasons. For one, the number of parties with a stake in an institution's activity complicates the governance of financial institutions. In addition, investors, depositors and regulators



have a direct interest in bank performance. On a more aggregate level, regulators are concerned with the effect governance has on the performance of financial institutions because the health of the overall economy depends upon their performance (Adams and Mehran, 2003, p. 124).

The corporate governance of banks in developing economies is important for several reasons. First, financial system in developing economy, generally, has dominant banking characteristics from that reason that financial sector is too bank-centric. Second, as financial markets are usually underdeveloped, banks in developing economies are typically the most important source of finance for the majority of companies. Third, as well as providing a generally accepted means of payment, banks in developing countries are usually the main depository for the economy's savings. Fourth, many developing economies have recently liberalised their banking systems through privatisation/disinvestments, mergers and acquisitions, financial liberalisation, reducing the role of economic regulation and reducing foreign capital restrictions. Consequently, managers of banks in these economies have obtained greater freedom in how they run their banks (Arun and Turner, 2004). Finally, the best confirm for importance of corporate governance for banks in developing countries, especially in Eastern Europe, is a statement of Managing director of Croatian banking association Zoran Bohacek who says that, *is not a question of whether we need corporate governance, but how to do it and survive.*

Legal framework

Corporate governance of Macedonian banks is a crucial item which is worth considering with great importance by the economists nowadays, as the banks are firm foundation of the economy of a country. This notation emphasises the importance of good corporate governance which can be achieved with a stable law regulating this subject i.e. in a stable institutional and legal environment which guarantee investor protection *lege artis*.

Historically, the basics of the corporate governance of the banks in the Republic of Macedonia were integral part of the Law of Banks and Savings-Banks (Official Gazette of the Republic of Macedonia, no. 31/93, 78/93, 17/96, 29/96, 30/97, 17/98, 37/98, 25/00). This Law does not clearly define the responsibilities of the Managing board and Executive committee which encouraged confusion and institutional instability. Taking into account the flaws of the above mentioned Law, the Law of Banks was established in the 2000 (Official Gazette of the Republic of Macedonia, no. 63/00, 37/02, 41/02, 32/03, 51/03, 85/03). Article 54 of this Law, states that the governing bodies of a bank are the following: Shareholders assembly, Managing board, Executive committee, Risk Management board, Audit board as well as other authorities established by the statute. In this case, the supervision of the activities taken by the bank is performed by the Managing board which is in charge of carrying out the same activities. Finally, the recently used law concerning the establishment, management, supervision and financial activities of banks is the Law of Banks enacted in 2007 (Official Gazette of the Republic of Macedonia, no. 67/07, 88/2008, 118/2008, 42/2009, 90/09, 67/10, 26/13, 13/14). The previously mentioned Law (Article 82) supports the two-tier board system consisted of Shareholders assembly, Supervisory board, Managing board, Risk management board, Audit boards as well as other authorities established by the statute. According to this Law (Article 88), the Supervisory board is consisted of at least 5, but not more than 9



members; (Article 92) the Managing board is consisted of at least 2, but not more than 7 members. Unlike the previously mentioned Laws, this act makes clear distinction between the responsibilities of the boards.

With regard to the Law of Banks as a *lex specialis*, there are few more laws and bylaws that need to be considered when regulating the activities of the banks. One of the important laws is the Law on Obligations (Official Gazette of the Republic of Macedonia, no. 18/01, 78/01, 4/02, 59/02, 5/03, 84/08, 81/09, 161/09) which concerns the relation between the banks and third parties. Additionally, the Law on Securities (Official Gazette of the Republic of Macedonia, no. 95/05, 25/07, 86/07, 123/07, 140/07, 146/07, 7/08, 45/09, 57/10, 135/11, 13/13, 188/13) is applied for regulation of the methods and conditions for issuance and trading of securities; the manner and conditions for proper functioning of the securities market and authorised market participants, disclosure obligations of joint stock companies with special reporting obligations; members of management, directors and individual shareholders; prohibited acts in connection with the operation of securities etc. Moreover, of a great importance is the Manual on corporate governance of the shareholding companies in Macedonia, 2008, as well as the OECD Principles of corporate governance, 2004, especially useful for the super listed bank. Other guidelines for corporate governance which can be used for reforming of the banking sector in Macedonia are: White paper on corporate governance in South East Europe, 2003; Developing corporate governance codes of best practices, 2005; The EU approach to corporate governance, 2008; The International accounting standards; Basel standards set recommendations issued by the Basel Committee on banking supervision to bank regulators which defines the minimum standards that need to be implemented by the banks for risk management, and so on.

Brief overview and evolution of the banking sector in Macedonia

Macedonia has inherited the banking system from former Yugoslavia in state ownership and with a structure in correlation with the prevailing planned economy. However, the reconstruction of the banking system started relatively late, in 1995, writing-off the old foreign currency saving, assets and liabilities in terms of foreign loans and sanation of the biggest Macedonian Bank. In the process of economic transition, Macedonian banks experienced a number of reorganisations such as forced mergers, bail-outs, and changes in management. However, the *heart* of Macedonian economy is still the commercial banks.

In 2011, the activities of the banks continued to grow, although at a slower pace compared to the previous year, as reflected positively to the further increase of the degree of financial intermediation in the country. The growth of the deposits noticed a slowdown, which generally corresponds to the slowdown of the economic growth in this period. What is more, the economic entities continued to save more money in local currency. As well as that, Macedonian banking system is stable, with high solvency and capitalisation, which is further improved during 2011. Macedonian banks has not been in a need of state financial support in the past few years and hence there was no formal or informal state capital intervention in the domestic banking sector (NBRM, 2012).

Macedonian banking and financial sector is quite modestly developed. At the end of 2011, the banking industry in Macedonia consisted of seventeen banks and eight savings



banks. For analytical purposes, the National Bank (NBRM) groups the banks into three groups, according to the size of their assets: small, medium and large banks. Banking network is spread over almost all cities in the country and consists of 413 business units (which includes the headquarters of banks), but the main concentration of the network remained in the capital city. Compared with the previous year, the number of the business units fell by twenty-three. In the banking sector the downward trend of the number of employees continued. In 2011, the number of employees in banks fell by 41. Additionally, continued the trend of quality improvement in regard to the qualification structure of the employees in the banking system (NBRM, 2012).

Due to the overwhelming importance for Macedonian economy, bank operations and corporate governance are regulated by previously mentioned laws and bylaws. Concretely, according to the legal acts, each bank in Macedonia has established its own corporate governance structure compatible with the nature and scope of activities performed. The four most important bank's authorities have a total of 304 members and they representing 5.1% compared with the total number of employees in the banks at the end of 2011. Nevertheless, most of these people are members of the Supervisory board (102 members). Given the statutory requirement that at least one third of the members of the Supervisory board must be independent members; these individuals participate with 34.7% of the total number of members of the board (or a total of 34 people). In terms of the functioning of the Managing board, in a ten banks this board is consisted of two members, as the legal minimum is, and in the remaining seven banks, of three to five members. All of banks have special organisational risk management unit, while fourteen banks have special organisational unit for the control of concordance with the regulations (NBRM, 2012) and guidelines incorporated in Basel standards.

When taking into account the ownership structure of banking system, the financial institutions have dominant share in ownership structure of banking system. The foreign investments have increased almost double in 2011. Thirteen out of seventeen banks in Macedonia have dominant foreign ownership. Concentration of banking system, measured through Herfindahl-Hirschman index is relatively high in all segments of the banking operations. Despite the reduction of the Herfindahl-Hirschman index, at the end of 2011, there are still segments in which the concentration is above acceptable upper limit. Highest concentration is observed in loans and deposits, while the concentration of credits for companies is slightly above acceptable level. Only in total assets and deposits of enterprises, concentration is within the acceptable level (NBRM, 2012). Hence, the nature and scope of competition practice is still serious *headache* for central bank authorities as the most important question for future developing of banking system.

Literature review and hypotheses development

In 1919, Michigan Supreme Court in the case of *Dodge v. Ford Motor Co.* ruled that a business exists for the profit of shareholders and the board of directors should focus on that objective (Ferrel, Fraedrich and Ferrel, 2013, p. 41). Board serves as a bridge between shareholders and managers (Cadbury, 2002) playing a major governing role in the corporate governance framework. In accordance to banks, during good times, a board sets tone and direction. It oversees and supports management efforts, tests and probes recommendations



before approving them and make sure that adequate controls and systems are in place to identify and address concerns before they become major problems. During bad times, a board that is active and involved can help a bank survive if it is able to evaluate problems, take corrective actions, and when necessary, keep the institution on track until effective management can be reestablished and the bank's problem resolved (Greuning and Bratanovic, 2003, pp. 42-43).

The study of corporate governance is complicated by the fact that the structure, role and impact of boards have been studied from a variety of theoretical and practical perspectives. Numerous studies are dedicated on detection a link between corporate governance and performance, including the board of director's characteristics such as financial dependence of directors, remuneration, diversity, size, independence, personal backgrounds, director service to other boards, etc. However, they are also many studies which investigate corporate governance in banks as *differentia specifica*. These aspects for corporate governance in banks are the new impulse for the academic researchers and policy makers in their mission to investigate and highlight the importance of board of director's characteristics on the bank performance. However, it is important first to access to corporate governance issues in non-financial firms, and then to review the previous literature and findings in the field of bank organisations. In this research, have been used qualitative and quantitative data to penetrate an in-depth understand kind of relations between corporate governance and financial performance of banks. Specifically, were used statistical and econometric models for obtain and processing information about respondents.

Board size

Board size is one of the most elaborated attribute in the literature and, in general, the relationship between board size and performance is found to be inversely related. There is the statement which suggests that *only an odd number of people can lead a corporation, and three are too many* (Vance, 1983, p. 33). Board size refers to the number of directors on the board. Generally, this number may vary depending to firm size and differ significantly across various industries and countries (Dehaene, De Vuyst and Ooghe, 2001). Hence, *one board size do not fits all*.

Today, numerous theoretical or empirical studies suggest that larger boards lead towards worse firm performance (Jensen, 1993; Yermack, 1996; Eisenberg, Sundgren and Wells, 1998; Dalton, Daily, Ellstrand and Johnson, 1999; Singh and Davidson, 2003; Mak and Kusnadi, 2005; de Andres, Azofra and Lopes, 2005; Cheng, 2008). This negative implication is caused by larger costs, increased asymmetric information, lower productivity, inadequate coordination and ineffective communication channels. When a board has more (than ten) members, it becomes more difficult for them all to express their ideas and opinions in the limited time available. A smaller board will be most likely to allow directors to get to know each other well, to have more effective discussions with all directors contributing, and to reach a true consensus from their deliberations (Lipton and Lorsch, 1992, pp. 65-68). Smaller boards also avoid the *groupthink* in decision-making process. *Spencer Stuart Board Index* (2008) reports that worldwide, board size has been shrinking over the years and that there is a continued trend towards smaller boards. Importantly, Pathan and Skilly (2010) document that board size of large and medium sized banks decreases in the period after Sarbanes-



Oxley while small bank board size remains stable, more independent and therefore took less risk. Smaller boards in bank organisations are believed to be associated with better governance quality and bank performance or not related with these outcomes (Erkens, Hung and Matos, 2012). Moreover, de Andres and Vallelado (2008) investigate 69 banks from 6 developed countries and show an inverted U-shaped relation between bank performance from the one side, and board size and outside board composition from the other side. Thus, the excessive (not optimal) inclusion of *more and more* outside directors did not result in positive bank performances. Likewise, Grove, Patelli, Victoravich and Xu (2011) report for a concave relationship between financial performance and board size in US commercial banks during crises. In search of the optimal board size in Russian banks, Pokrashenko (2012) confirm the U-shaped relationship between board size and performance and noted that optimal board size is between 6 and 11 directors. Besides this useful suggestion, as we pointed out before, we must keep in mind *premises* that one size do not fits all.

Contrary to the previous findings, large board size improves corporate performance through enhancing the ability of the company to establish external connection with the environment and providing, on that way, rare resources for company operations (Bacon, 1973; Dalton, Daily, Johnson and Ellstrand, 1999; Kiel and Nicholson, 2003; Anderson, Mansi and Reeb, 2004; Coles, Daniel and Naveen, 2008³; Arslan, Karan and Eksi, 2010; Sheikh and Wang, 2012; Chang and Dutta, 2012⁴). These studies found that board size have a positive impact on the stock market performance of company. In fact, *the greater the need for effective external linkage, the larger the board should be* (Pfeffer and Salancik 1978, p. 172). Therefore, they are studies which reveal that larger boards is, on average, positively related with the bank performance i.e. larger boards lead to increased wealth of bank holding companies (Adams and Mehran, 2012) and better market performance (Kutubi, 2011). Hence, as pointed out by Subrahmanyam, Rangan and Rosenstein (1997), Booth, Cornett and Hassan (2002) and Adams and Mehran (2003), banks have larger and more independent boards than other (industrial and public utility) organisations.

In sum, literature remains inconclusive but we support view that organisations with smaller boards performs better and, on that way, secure the financial health. Correspondingly for our bank analyses, the following are the hypotheses that will be tested empirically with regard to the impact of the board size:

H_{1a}: The size of the Supervisory board is significantly and negatively related to bank profitability measured by ROA.

H_{1b}: The size of the Supervisory board is significantly and negatively related to bank profitability measured by ROE.

H_{1c}: The size of the Supervisory board is significantly and negatively related to bank efficiency measured by CIRATIO.

³ The authors provide evidence that complex firms have larger boards with more outside directors. Also, they find that the relation between Tobin's q and board size is U-shaped. In other words, this paper suggests that either very small or very large boards are optimal in respect to firm value.

⁴ Interestingly, Chang and Dutta (2012) investigate corporate governance issues and dividend policy and finds that firms with large board favor higher dividend payments to the stockholders.



H_{1a}: The size of the Supervisory board is significantly and positively related to bank capital requirement measured by CAR.

Board composition

Once upon a time a directorship was a sinecure, involving an occasional meeting, some supportive questions, a fee and lunch - but not now. More is expected of directors and members of all governing bodies than ever before, and the difference (positive or negative), directors can make to their companies is arguably greater than ever. The role of a director is crucial, challenging and potentially highly rewarding (Tricker, 2003, p. 1). Optimal board composition leads to better performance. Hence, board composition is seen as a one of the main and most elaborated aspects in corporate governance texts.

Board composition is an important governance mechanism because the presence of non-executive directors represents an effective tool of monitoring the actions of the executive directors and of providing that they take policies which will enhance shareholders wealth by using low-cost mechanism (Fama, 1980; Coughlan and Schmidt, 1985). Non-executive directors are independent from the everyday company operations and from top managers. Board independence means the proportion of independent non-executive directors relative to the total number of directors.

Empirical researches present mixed results about relationship between company performance and board independence from different perspective. Advocates of board of director reforms support outside view in board composition i.e. situation when independent boards take a more active role in promoting the performance of the company (Schellenger, Wood and Tashakori, 1989; Barnhart, Marr and Rosenstein, 1994⁵; Beasley, 1996⁶; Dehaene, De Vuyst and Ooghe, 2001; Peng, 2004; Krivogorsky, 2006; Dahya and McConnell, 2007; Eklund, Palmberg and Wiberg, 2009; Nguyen and Nielsen, 2010; Sheikh and Wang, 2012). Regarding to the banks, almost do not exist papers which identified a strong positive relationship between the percentage of independent directors and performances of banks but exist a papers which suggest insignificant relations between bank performance and board composition in term of outside director presence (Pi and Timme, 1993; Adams and Mehran, 2012). Despite these general conclusion, Kutubi (2011) suggest statistically significant positive relationship between board independence and bank performance measured by Tobin's q. Further, Mishra and Nielsen (2000) show that greater proportion of independent outside directors could ensure that CEO compensation programs are properly aligned with the goals of the bank shareholders. Additionally, Adams and Mehran (2012) find that banks do not appear to be systematically choosing ineffective corporate governance structures.

⁵ Barnhart, Marr and Rosenstein (1994) analyse the effect of board composition on firm performance. The output of this research is very significant (and unique) for corporate governance literature from the methodological approach and results. In particular, authors indicate a significant curvilinear relation between board composition and performance.

⁶ This paper examines the effects of board composition in both fraud and non-fraud companies. Specifically, the results suggest that non-fraud firms have boards with significantly higher presence of outside directors than fraud firms and *vice versa*. Interestingly, the role of audit committee in mitigating this state is minor and does not significantly affect the likelihood of fraudulent activities.



Also, they reports for stable board composition of large banking firms, in a time span of thirty years, with the fraction of non-insiders directors⁷ which gravitates around 0.85.

At this place is very important to highlight the results of study made by Rosenstein and Wyatt (1997). They investigate the stock market reaction of announcements about inside director appointments and find significantly negative reaction when inside directors own less than 5% of the firm's common stock, significantly positive when their ownership level is between 5% and 25%, and insignificantly different from zero when ownership exceeds 25%. These results underline the benefits of rare inside director's expert knowledge, but only when managerial and outside shareholder interests are closely aligned.

On the other side, promoters of insider dominated boards find an inverse association between board independence and firm value. Board independence also matter to the board size, growth and nature of ownership. Hence, Prevost, Rao and Hossain (2002) proof that the proportion of outsiders on the board is positively associated to board size, negatively related to future growth and nonlinearly related to inside ownership. Additionally, other authors recognise that companies which add independent director (independent boards) tend to decrease corporate performance, especially stock market performance (Arslan, Karan and Eksi, 2010). Moreover, Shan and Xu, (2012) investigate the question of board independence and, on general, did not find significant relationship in terms of performance. In regard to the financial firms, Erkens, Hung, and Matos (2012) provide some evidence that banks with the independent boards is faced with worse stock market positions during the crises period. Wang, Lu and Lee (2012) used modified data envelopment analysis (DEA) for estimation of bank performance and reveal a negative impact from board size and outside director presence. Interestingly, Subrahmanyam, Rangan and Rosenstein (1997) investigates the effects and role of outside and independent directors in market of corporate control activities and find that abnormal market returns have significantly and negative association with ratio of independent outsiders in every regression.

In general, we agree with Daily and Dalton (1993) arguments and therefore we suppose that board with many independent directors show a high effectiveness and enhance performance. Here from, the hypotheses to test the significance of the impact of board composition are defined with the following statements:

H_{2a}: The Supervisory board independence is significantly and positively related to bank's profitability measured by ROA.

H_{2b}: The Supervisory board independence is significantly and positively related to bank's profitability measured by ROE.

H_{2c}: The Supervisory board independence is significantly and positively related to bank's efficiency measured by CIRATIO.

H_{2d}: The Supervisory board independence is significantly and positively related to bank's capital requirement measured by CAR.

Board diversity as an integral composition issue has recently caught the attention of scholars, managers, shareholders and government. The reason for this conclusion probably lies in the possibilities for exchanging different ideas and using expert knowledge, especially

⁷ The category of non-insiders directors is considered as any of the directors who are not currently an officer of the banking firm's headquarters.



in declining periods. Today various stakeholder groups began to emphasise the concept of board diversity as the *one best way*. Arguments for diversity in the boardroom are both economic and ethical (Van der Walt and Ingley, 2003). Board diversity usually is positive related with financial ratios. Conversely, board diversity can also generate various costs associated with coordination problems and decision-making times (Forbes and Milliken, 1999). Further, board diversity may corrode cohesion and lead to a less cooperative and conflicts within group (Lau and Murnighan, 2005). In particular, Hagedorff and Keasey (2008) suggest that occupational, tenure and age diversity add value for banks whilst gender diversity did not create the economic value for shareholders. In addition, they conclude that the board with multiple directorships tends to be ineffective in pursuing his monitor function. Our paper examines board's exhibit heterogeneity due to personal background such as education (Ph.D. holds) (Berger, Kick and Schaeck, 2013), legal background (citizenship) and gender. Qualified women's and foreigners on boards should increase corporate performance through different expertise, advice, better judgment and proper decisions. Naturally, it is necessary to provide empirical evidence for this intuitive/conventional wisdom and *ex ante* conclusions. In other words, it is important to consider glass ceiling phenomenon in bank board's i.e. whether women in Macedonian banks are able to break the *glass barriers* in bank hierarchy.

CEO qualities

Power of CEO is determined by the CEO tenure (Graefe-Anderson, 2009; Dikolli, Mayew and Nanda, 2009; Wulf, Stubner, Miksche and Roleder, 2010; Horstmeyer, 2011). The effect of a powerful CEO can be counterbalanced by other executives (Berger, Kick and Schaeck, 2013). Therefore, it is obvious that powerful CEO has a negative impact on bank performance. Consequently, the significance of the impact of CEO qualities will be tested through the following hypotheses:

H_{3a}: The CEO Power is significantly and negatively related to bank's profitability measured by ROA.

H_{3b}: The CEO Power is significantly and negatively related to bank's profitability measured by ROE.

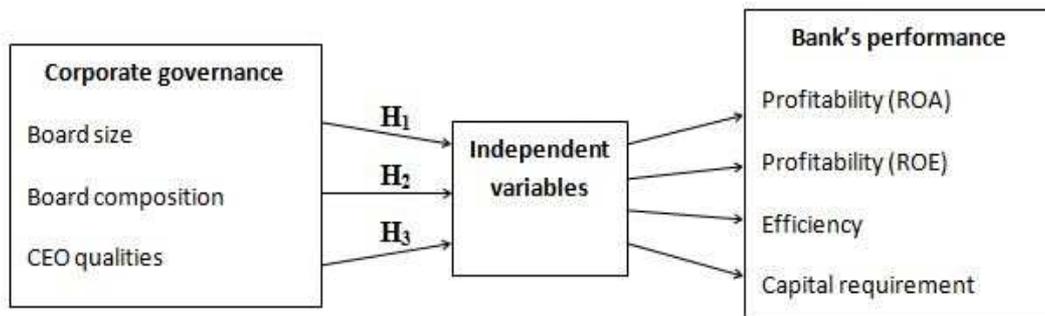
H_{3c}: The CEO Power is significantly and negatively related to bank's efficiency measured by CIRATIO.

H_{3d}: The CEO Power is significantly and positively related to bank's profitability measured by CAR.

Financial dependence of CEO (Kesner, 1987; Suklev, 2011) also can be used as a discipline mechanism which ensures better performance for banks. To the extent that CEO and other board members own stakes of the company, they develop shareholder-like interests and are less likely to engage in behavior that is detrimental to shareholders, particularly during crises period (Fama, 1980; Demsetz and Lehn, 1985; Fenn and Liang, 2001; Arslan, Karan and Eksi, 2010). The CEO will then have the same objectives as the shareholder and, on this way, financial or non-financial organisations can mitigate principal-agent problem and agency cost. In addition, Morck, Shleifer and Vishny (1988) reveal that if the percentage of the manager's stakes moves from 0 to 5%, performance goes up from 5 to 25%. If the percentage exceeds 25%, performance improves but very slowly. According to Adams and Mehran

(2003), CEO's of financial companies has lower ownership (2.3%) that CEO's of non-financial organisations (2.9%). This level of CEO ownership in banks, corresponding with mentioned percentages which accelerate bank performance in the study of Morck, Shleifer and Vishny (1988).

Figure 1. The framework for the relationship between the corporate governance and bank's performance



Empirical research

The model

In this section is investigated the relation between the corporate governance with the bank's performance using ordinary least squares (OLS) regressions. Four measures are used to observe bank performance: **Return on assets (ROA)** calculated as profit after taxes divided by total assets of a bank; **Return on equity (ROE)** calculated as profit after taxes divided by total equity of a bank; **Cost-Income ratio** which is used as a quick test of efficiency which reflects the non-interest costs as proportion of net income; and **Capital adequacy ratio (CAR)** expressed as proportion of financial capital to the risk-weighted assets. These four measures represent the dependent variables in the study.

The board structure in this paper is described in three dimensions: board size, board composition and CEO qualities. It is important to note that the banking system in Macedonia exhibits two-tier corporate governance composed of Supervisory (SB) and Managing board (MB). Since the responsibilities of the members in the Supervisory board are attributed greater importance for the bank's corporate governance, the Supervisory board is given preference to study its composition and size. Hence, the majority of independent variables are derived from the data collected about the Supervisory board, while few of them relate to the Managing board. Nonetheless, since the CEO always acts as President of the Managing board and more importantly bears much of the responsibility for the bank's performance, his qualities are given specific importance in the study and are analysed within a separate dimension.

Each of the independent variables is briefly explained in turn. The size of **Supervisory board (SBSIZE)** and the size of **Managing board (MBSIZE)** are both measured using a natural logarithm of the total number of members in each of them, which is aligned with the studies of de Andres, Azofra and Lopez (2005) and Jackling and Johl (2009). Board composition as a dimension of the board structure is represented with the following



variables: **Supervisory board Independence (SBINDEPEND)** which reflects the number of non-executive members as proportion of total number of members in the board; **Foreign members of Supervisory board ratio (FSBRATIO)** defined as proportion of members that have not acquired Macedonian citizenship to the total number of board members; **Women members of Supervisory board ratio (WSBRATIO)** which, similarly, is defined as proportion of the women members to the total number of members in the board; and **Supervisory board educational ratio** expressing the proportion of members in the Supervisory board holding Ph.D. The third dimension, described with the CEO qualities, includes the following measures as dummy variables: dummy for CEO to distinguish whether the CEO is **foreign** citizen (given value 1) or not (given value 0); dummy for **CEO ownership** which gets value 1 if the CEO owns bank's shares and 0 if not; and dummy variable for the **CEO power** expressed as the longevity of the CEO serving on this position (value 1 for more than a four-year term or value 0 for exactly one term). The other variables inputted in the study are not directly related to the board structure, and are, thus, grouped as control variables. These include: **Bank's age (AGE)** calculated as a natural logarithm of the difference between the principle year of analysis and the year of bank's foundation; **Credits/Deposits ratio (CDRATIO)** defined as proportion of bank's total credits lend to its clients to the total deposits it keeps; and **Bank's nature (BANTURE)** used as a dummy variable to denote whether the bank is a subsidiary of a multinational bank (given value 1) or not (given value 0). Description of all these variables is presented in Table 1.

Table 1. Definition of variables

Variable	Definition
<i>Measures of bank performance (dependent variables)</i>	
Return on assets (ROA)	Profit after taxes/Total assets
Return on equity (ROE)	Profit after taxes/Total equity
Cost-Income ratio (CIRATIO)	Non-interest costs/Net income
Capital adequacy ratio (CAR)	Financial capital/Risk-weighted assets
<i>Measures of board structure (independent variables)</i>	
Board size:	
Size of Supervisory board (SBSIZE)	natural logarithm of the total number of members in the Supervisory board
Size of Managing board (MBSIZE)	natural logarithm of the total number of members in the Managing board
Board composition:	
Supervisory board independence (SBINDEPEND)	proportion of non-executive members in the Supervisory board
Foreign members of Supervisory board ratio (FSBRATIO)	proportion of foreign members in the Supervisory board
Women members of Supervisory board ratio (WSBRATIO)	proportion of women members in the Supervisory board
Supervisory board educational ratio	proportion of members in the Supervisory board holding



(EDUSBRATIO)	Ph.D.
CEO qualities:	
Dummy for CEO (CEO)	1: if the CEO is foreign citizen; 0: if otherwise.
Dummy for CEO ownership (CEOOWN)	1: if the CEO owns bank's shares; 0: if otherwise.
Dummy for CEO power (CEOPOWER)	1: if the CEO serves longer than one-term (4 years); 0: if otherwise.
<i>Control variables (independent variables)</i>	
Bank's age (AGE)	natural logarithm of the difference between the principle year of analysis and the year of bank's foundation
Credits/Deposit Ratio (CDRATIO)	Credits/Deposits
Dummy for Bank's nature (BNATURE)	1: if a bank is subsidiary of a multinational bank; 0: if otherwise

Because of the large number of independent variables used in the study, three multiple regression analyses with limited variables have been developed in order to assess the relationship. Each of the analysis uses a multiple regression model stated with the following equation:

$$y_i = \alpha + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_n x_{ni} + \delta_1 d_{1i} + \delta_2 d_{2i} + \dots + \delta_n d_{ni} + \epsilon_i$$

Where:

i represents the cross-sectional dimension of the data;

y_i represents the dependent variables in the model;

$x_{1i}, x_{2i}, \dots, x_{ni}$ represent the independent variables;

$d_{1i}, d_{2i}, \dots, d_{ni}$ represent the dummy variables;

α denotes the slope coefficient;

$\beta_1, \beta_2, \dots, \beta_n$ and $\delta_1, \delta_2, \dots, \delta_n$ denote the coefficients of the independent and dummy variables respectively;

ϵ_i represents the error term.

Firstly, a specific model was developed to assess the relation between the size of the Supervisory and Managing board with the bank's performance, which can be expressed with the following regression equation:

$$y_i = \alpha + \beta_1 * SBSIZE + \beta_2 * MBSIZE + \beta_3 * AGE + \epsilon_i$$

Next, another one was developed particularly to measure the relation between the board structure with the bank's performance and is stated with:

$$y_i = \alpha + \beta_1 * SBINDEPEND + \beta_2 * FSBRATIO + \beta_3 * WSRATIO + \beta_4 * EDUSBRATIO + \epsilon_i$$



The last of the models developed is to measure the relationship between the CEO qualities defined as dummy variables with the bank's performance using the following equation:

$$y_i = \alpha + \beta_1 * CDRATIO + \delta_1 * CEO + \delta_2 * CEOOWN + \delta_3 * CEOPOWER + \delta_4 * BNATURE + \epsilon_i$$

Different methods are available to solve for the parameters in the given equation, but the most simple one is by using pooled ordinary least squares (OLS), which is demonstrated in prior studies such as Boone, Field, Karpoff and Raheja (2007), Coles, Daniel and Naveen (2008) and Linck, Netter and Yang (2008). This method minimises the sum of squared vertical distances between the observed responses in the dataset and the responses predicted by the linear approximation to estimate the unknown parameters in the regression model.

Sample and data

The sample used in the development of the model includes 15 out of 17 banks, thus representing 88% of its statistical population. The data collected for the study are extracted from several sources, including the official websites of the National bank of the Republic of Macedonia (NBRM) and the Macedonian securities exchange commission, the official sites of the banks in question, and the financial and proxy statements published by the banks at the end of the year. In this way, the numerical data to calculate the dependent variables and some of the control variables are derived from the financial statements, the data about the board size and composition are extracted from the official sites of the banks and the official site of NBRM, the information for the CEO qualities are predominantly based on the publications on the website of the Macedonian securities exchange commission, while the data for some variables such as the bank's age and its ownership structure come from the proxy statements and some web pages on the bank's official websites. The empirical data used as inputs in the study for the banks have been observed for the 2008-2011 period with a total number of 60 observations.

Analysis, findings and concluding remarks

The findings from the first regression model (see in Table 2A) demonstrate that the size of both, the Supervisory and the Managing board, are positively related to the bank's profitability measured by ROA. It means that any increase in the number of members in one of these boards is likely to result in increased bank's profitability. This may be explained by the fact that the appointment of new members in each of the two boards will produce stronger decision-making process that may boost bank performance. In this way, the hypothesis stated as H_{1a} is rejected. With regard to the impact on the profitability measured by ROE, none of the variables in the model has significant relation, which reflects H_{1b} to be unsupported. Furthermore, a significant and positive relationship exists between the size of the Managing board and the Cost-Income ratio, which implies that the Macedonian banks with larger Managing board will be able to improve bank's efficiency better than those with smaller one. In relation to the capital requirement measured by the Capital adequacy ratio, the banks with smaller Managing board tend to hold a larger percentage of their liquidity assets against their risk-weighted assets as implied through the significant and negative



relation. A reasonable explanation for this could be that the smaller Managing board cannot efficiently manage risk of the bank's capital because the lack of financial expertise, which subsequently leads towards increased risk aversion. No significant relationship has been demonstrated between the size of Supervisory board and CIRATIO, which implies that the hypothesis H_{1c} cannot be supported. However, the size of the Supervisory board exerts significantly negative effects on the Capital adequacy ratio and thus the hypothesis H_{1d} is rejected. The analysis also examines the impact of bank's age as a control variable on each of the dependent variables and proves that there is a significant and positive relationship only to the capital requirement. That is, the Macedonian banks usually tend to increase the financial capital held for liquidity purposes over time. Importantly, the assessment of this model demonstrates no significance in the relation between bank's age and its profitability, which means that the commonly used rationale that the old banks perform better results does not necessarily apply in the case with Macedonia.

Table 2A. *Effects of board size on bank performance*

	ROA	ROE	CIRATIO	CAR
C	-0.146930*** (0.036525)	-0.376426* (0.220806)	1.080552*** (0.294811)	0.609368*** (0.121774)
SBSIZE	0.056854** (0.021467)	0.103667 (0.129774)	-0.216034 (0.173268)	-0.138791* (0.071570)
MBSIZE	0.032109** (0.015318)	0.088306 (0.092604)	0.276174** (0.123641)	-0.276880*** (0.057071)
AGE	0.001694 (0.005875)	0.032068 (0.035518)	-0.067618 (0.047423)	0.045025** (0.019588)
R²	0.25	0.08	0.10	0.41
No. of observations	60	60	60	60

Signs *, ** and *** denote statistical significance at 10%, 5% and 1% level, respectively. Robust standard errors are reported in parentheses.

From the assessment of the variables in the second model (see in Table 2B), it is visible that there is a significant impact in negative direction of the board's independence measured by the proportion of non-executive members seated in the Supervisory board to bank's profitability measured by ROA and ROE. Such conclusion strikes with numerous studies on this topic, including the study in the field of agency theory, and leads the hypotheses H_{2a} and H_{2b} to be unsupported. However, the findings show that there is a positive association of the proportion of non-executive members to the Cost-Income ratio, implying that an increase of this proportion in the Supervisory board of Macedonian banks is likely to boost bank's efficiency. This subsequently leads to the conclusion that the hypothesis stated as H_{2c} cannot be rejected. The results also suggest the existence of a positive dependence of Supervisory board independence on the Capital adequacy ratio, meaning that the bank will usually prefer risk aversion and therefore hold more liquidity assets as result of the increase of outsiders within the board. The hypothesis H_{2d} thus cannot be rejected. The assessment of the regression model also yields results that prove the existence of a significant and negative



relationship between the proportion of female members of the Supervisory board and bank's performance measured by ROA, implying to the conclusion that the banks in Macedonia with a large proportion of women do not perform better results than the others. In addition, the findings reveal a statistically significant and strong positive association of the Women members of Supervisory board ratio to the Cost-Income ratio, which suggests that the presence of female members in the Supervisory board may still be justified that they can bring competences to improve supervision that is likely to boost bank's efficiency. No significant relationship has been demonstrated in the relationship between the Foreign members of Supervisory board ratio and Supervisory board educational ratio as independent variables and the dependent variables.

Table 2B. Effects of board independence on bank performance

	ROA	ROE	CIRATIO	CAR
C	0.034611*** (0.012728)	0.129448 (0.083492)	0.490905* (0.278364)	0.129339** (0.056086)
SBINDEPEND	-0.107632*** (0.031599)	-0.422532** (0.207277)	1.720315** (0.691062)	0.351122** (0.139239)
FSBRATIO	0.008632 (0.017053)	-0.028457 (0.111958)	-0.199803 (0.372937)	0.001963 (0.075141)
WSBRATIO	-0.073939*** (0.026459)	-0.014992 (0.173555)	1.241374** (0.578634)	-0.103572 (0.116586)
EDUSBRATIO	-0.035476 (0.025361)	-0.067783 (0.166352)	0.507813 (0.554619)	-0.047632 (0.111748)
R²	0.25	0.08	0.10	0.41
No. of observations	60	60	60	60

Signs *, ** and *** denote statistical significance at 10%, 5% and 1% level, respectively. Robust standard errors are reported in parentheses.

When measuring the impact of the CEO qualities on bank's performance (see in Table 2C), the results suggest a significance and positive association of the number of terms serving as CEO and bank's profitability measured by ROA and ROE. It means that the banks in Macedonia managed by CEOs that hold this position for a longer period of one four-year term are more profitable than those with CEOs serving their first term as such. The hypotheses H_{3a} and H_{3b} thus cannot be supported. Further in this analysis, there is a significant and negative impact of the length of term on bank's efficiency measured by the Cost-Income ratio and on the capital requirement measured by the Capital adequacy ratio as well. The first relationship proves the statement that the CEOs that serve their first term at this position are better in improving bank's efficiency than those serving longer, while the latter one the statement that the CEOs with less history (record) in the bank are more adverse towards the risk and therefore would manage to hold larger portion of their potential for lending. In this case, the hypothesis H_{3c} cannot be rejected and hypothesis H_{3d} is rejected. It can be explained by the fact that the CEO needs time to learn all of the preferences and politics of the bank in order to improve his decision-making abilities towards bank's risk management. In addition to these findings, the assessment of this model also reveals a



significant and negative relationship between the nationality of CEO and the profitability measured by ROE. In other words, the banks with foreign CEO do not necessarily perform better results in the return of the capital invested by their owners. The analysis also demonstrates that the Credits/Deposits ratio has a significant and negative impact on the Capital adequacy ratio, implying that a reduced Credits/Deposits ratio is likely to trigger an increase in the portion of lending potential held by the bank. Logically, the reduced number of CDRATIO provoked by the reduced amount of money in form of credits to the customers results in increase of the liquidity assets and thereby CAR. For the impact of the ownership by the CEO and the status of a bank as a subsidiary or an independent financial institution, the probabilities in the analysis to each of the dependent variables show that there is no significance.

Table 2C. Effects of the CEO qualities on bank performance

	ROA	ROE	CIRATIO	CAR
C	-0.022575 (0.016339)	-0.050484 (0.081246)	1.516647*** (0.335307)	0.431176*** (0.052103)
CDRATIO	0.003358 (0.017645)	-0.005299 (0.087741)	-0.236314 (0.362114)	-0.262123*** (0.056269)
CEO	0.005906 (0.012555)	-0.152681** (0.062428)	-0.102785 (0.257645)	0.007739 (0.040035)
CEOOWN	0.009195 (0.011204)	0.018504 (0.055712)	-0.092073 (0.229926)	0.002504 (0.035728)
CEOPOWER	0.027622** (0.011243)	0.150764*** (0.055905)	-0.532734** (0.230724)	-0.106066*** (0.035852)
BNATURE	-0.003174 (0.009966)	0.030742 (0.049555)	0.079570 (0.204516)	0.028610 (0.031780)
R²	0.25	0.08	0.10	0.41
No. of observations	60	60	60	60

Signs *, ** and *** denote statistical significance at 10%, 5% and 1% level, respectively. Robust standard errors are reported in parentheses.

Despite of the findings and the methodology used in this study, the results and the comments can still be biased because of several limitations including: manipulation of financial statements, undervaluation of assets, use of manipulative policies to record depreciation, adoption of different methods to consolidate accounts and others⁸.

References

- Adams, R. and Mehran, H. (2003). Is corporate governance different for banking holding companies?. *Economic policy review*, 9(1), 123-142.
- Adams, R. and Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of financial intermediation*, 21(2), 243-267.

⁸ For more characteristics of fraudulent behavior, unethical actions and creative accounting in terms of strategic measures, see the study prepared by Chakravarthy (1986).



- Anderson, R.C., Mansi, S. and Reeb, D.M.** (2004). Board characteristics, accounting report integrity and the cost of debt. *Journal of accounting and economics*, 37(3), 315-342.
- Arslan, O., Karan, M.B. and Eksi, C.** (2010). Board structure and corporate performance. *Managing global transitions*, 8(1), 3-22.
- Arun, T.G. and Turner, J.D.** (2004). Corporate governance of banks in developing economies: Concepts and issues. *Corporate governance: An International review*, 12(3), 371-377.
- Bacon, J.** (1973). *Corporate directorship practice, member and committees of the board*. New York: The conference board.
- Barnhart, S., Marr, M. and Rosenstein, S.** (1994). Firm performance and board composition: Some new evidence. *Managerial and decision economics*, 15(4), 329-340.
- Basel Committee on banking supervision (BCBS).** (2006). *Enhancing corporate governance for banking organizations*. Basel: Bank for International settlements.
- Bauer, R., Eichholtz, P. and Kok, N.** (2010). Corporate governance and performance: The REIT effect. *Real estate economics*. 38(1), 1-29.
- Beasley, M.S.** (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review*, 71(4), 443-465.
- Bebchuk, L., Cohen, A. and Ferrell, A.** (2009). What matters in corporate governance?. *Review of financial studies*, 22(2), 783-827.
- Becht, M., Bolton, P. and Röell, A.** (2003). Corporate governance and control. In G.M. Constantinides, M. Harris and R.M. Stulz (Eds.), *Handbook of the economics of finance: Corporate finance*, 1A (pp. 1-109). Amsterdam: Elsevier.
- Berger, A.N., Kick, T. and Schaeck, K.** (2013). Executive board composition and bank risk taking. *Journal of corporate finance* (forthcoming), Available online 13 November 2013.
- Berle, A. and Means, G.** (1932). *The modern corporation and private property*. New York: Macmillan.
- Boone, A.L., Field, C.L., Karpoff, J.M. and Raheja, C.G.** (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of financial economics*, 85(1), 66-101.
- Booth, J.R., Cornett, M.M. and Tehranian H.** (2002). Boards of directors, ownership, and regulation. *Journal of banking and finance*, 26(10), 1973-1996.
- Cadbury, A.** (1992). *The Committee on the financial aspects of corporate governance*. London: Gee and Company.
- Cadbury, A.** (2002). *Corporate governance and chairmanship: A personal view*. New York: Oxford University press.
- Carrol, A.B. and Buchholtz, A.K.** (2009). *Business and society: Ethics and stakeholder management*. Seventh edition. Ohio: Cengage Learning.
- Chakravarthy, B.S.** (1986). Measuring strategic performance. *Strategic management journal*, 7(5), 437-458.
- Chang, B. and Dutta, S.** (2012). Dividends and corporate governance: Canadian evidence. *IUP Journal of applied finance*, 18(4), 5-30.
- Cheng, S.** (2008). Board size and variability of corporate performance. *Journal of financial economics*, 87(1), 157-176.
- Coles J.L., Daniel, N.D. and Naveen, L.** (2008). Boards: Does one size fits all?. *Journal of financial economics*, 87(2), 329-356.



- Coughlan, A. and Schmidt, R.** (1985). Executive compensation, management turnover and firm performance: An empirical investigation. *Journal of accounting and economics*, 7(1), 43-66.
- Crowther, D. and Aras, G.** (2009). Corporate governance and corporate social responsibility in context. In D. Crowther and G. Aras (Eds.), *Global perspectives on corporate governance and CSR* (pp. 1-41). Surrey: Gower Publishing, Ltd.
- Dahya, J. and McConnell, J.J.** (2007). Board composition, corporate performance, and the Cadbury committee recommendation. *Journal of financial and quantitative analysis*, 42(3), 535-564.
- Daily, C.M. and Dalton, D.R.** (1993). *Board of directors leadership and structure: Control and performance implications*. *Entrepreneurship: Theory and practice*, 17, 65-81.
- Dalton, D.R., Daily, C.M., Ellstrand, A.E. and Johnson, J.L.** (1998). Meta analytic reviews of board composition, leadership structure, and financial performance. *Strategic management journal*, 19(3), 269-290.
- Dalton, D.R., Daily, C.M., Johnson, J.L. and Ellstrand, A.E.** (1999). Number of directors and financial performance: A meta-analysis. *Academy of management journal*, 42(6), 674-686.
- de Andres, P. and Vallelado, E.** (2008). Corporate governance in banking: The role of the board of directors. *Journal of banking and finance*, 32(12), 2570-2580.
- de Andres, P.A., Azofra, V. and Lopez, F.** (2005). Corporate boards in some OECD countries: Size, composition, functioning and effectiveness. *Corporate governance: An International review*, 13(2), 197-210.
- Dehaene, A., De Vuyst, V. and Ooghe, H.** (2001). Corporate performance and board structure in Belgian companies. *Long range planning*, 34(3), 383-398.
- Demsetz, H. and Lehn, K.** (1985). The structure of corporate ownership: Causes and consequences. *Journal of political economy*, 93(6), 1155-1177.
- Dikolli, S.S., Mayew, W.J. and Nanda, D.** (2009). *Performance surprises and uncertain managerial ability: Evidence from CEO turnovers*. Working paper, Duke University, Durham, NC.
- Drobetz W., Schillhofer, A. and Zimmermann, H.** (2004). Corporate governance and expected stock returns: Evidence from Germany. *European financial management*, 10(2), 267-293.
- Eisenberg, T., Sundgren, S. and Wells, M.T.** (1998). Larger board size and decreasing firm value in small firms. *Journal of financial economics*, 48(1), 35-54.
- Eklund, J.E., Palmberg, J. and Wiberg, D.** (2009). Ownership structure, board composition and investment performance. *Corporate ownership and control*, 7(1), 117-127.
- Erkens, D.H., Hung, M. and Matos, P.** (2012). Corporate governance in the 2007-2008 financial crisis: Evidence from financial institutions worldwide. *Journal of corporate finance*, 18(2), 389-411.
- Fama, E.** (1980). Agency problems and the theory of the firm. *Journal of political economy*, 88(2), 288-307.
- Fenn, G.W. and Liang, N.** (2001). Corporate payout policy and managerial stock incentives. *Journal of financial economics*, 60(1), 45-72.
- Ferrell, O.C., Fraedrich, J. and Ferrell, L.** (2013). *Business ethics: Ethical decision making and cases*. Ninth edition. Ohio: Cengage Learning.



- Finegold, D., Benson, G.S. and Hecht, D.** (2007). Corporate boards and company performance: Review of research in light of recent reforms. *Corporate governance: An International review*, 15(5), 865-878.
- Forbes, D.P. and Milliken, F.J.** (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of management review*, 24(3), 489-505.
- Ghillyer, A.** (2012). *Business ethics now*. New York: McGraw-Hill.
- Gompers, P., Ishii, J. and Metrick, A.** (2003). Corporate governance and equity prices. *Quarterly journal of economics*, 118(1), 107-156.
- Graefe-Anderson, A.** (2009). *CEO turnover and compensation: An empirical investigation*. Dissertation, Purdue University, West Lafayette.
- Grove, H., Patelli, L., Victoravich, L.M. and Xu, P.T.** (2011). Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks. *Corporate governance: An International review*, 19(5), 418-436.
- Gup, B.** (2007). Corporate governance in banks: Does the board structure matter?. In B, Gup (Ed.), *Corporate governance in banking: A global perspective* (pp. 18-39). Cheltenham, Northampton, MA: Edward Elgar.
- Hagendorff, J. and Keasey, K.** (2012). The value of board diversity in banking: evidence from the market for corporate control. *European journal of finance*, 18(1), 41-58.
- Hermalin, B.E. and Weisbach, M.S.** (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic policy review*, 9(1), 7-26.
- Hermes, N.** (1994). Financial development and economic growth: A survey of the literature. *International journal of development banking*, 12(1), 3-22.
- Hortsmeyer, D.** (2011). *Monitoring the monitors*. Working paper, University of Southern California, Los Angeles, CA
- Jackling, B. and Johl, S.** (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate governance: An International review*, 17(4), 492-509.
- Jensen, M.C.** (1993). The modern industrial revolution, exit and the failure of internal control system. *Journal of finance*, 48(3), 831-880.
- Kesner, I.** (1987). Directors' stock ownership and organizational performance: An investigation of Fortune 500 companies. *Journal of management*, 13(3), 499-508.
- Kiel, G.C. and Nicholson, G.J.** (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate governance: An International review*, 11(3), 189-205.
- Krivogosky, V.** (2006). Ownership, board structure and performance in Continental Europe. *International journal of accounting*, 41(2), 176-197.
- Kutubi, S.S.** (2011). Board of director's size, independence and performance: An analysis of private commercial banks in Bangladeshi. *World journal of social sciences*, 1(4), 159-178.
- Lau, D.C. and Murnighan, J.K.** (2005). Interactions within groups and subgroups: The effects of demographic faultlines. *Academy of management journal*, 48(4), 645-659.
- Law of Banks and Savings-Banks**, *Official Gazette of the Republic of Macedonia*, no. 31/93, 78/93, 17/96, 29/96, 30/97, 17/98, 37/98, 25/00.
- Law of Banks**, *Official Gazette of the Republic of Macedonia*, no. 63/00, 37/02, 41/02, 32/03, 51/03, 85/03.



- Law of Banks**, *Official Gazette of the Republic of Macedonia*, no. 67/07, 88/2008, 118/2008, 42/2009, 90/09, 67/10, 26/13, 13/14.
- Law on Obligations**, *Official Gazette of the Republic of Macedonia*, no. 18/01, 78/01, 4/02, 59/02, 5/03, 84/08, 81/09, 161/09.
- Law on Securities**, *Official Gazette of the Republic of Macedonia*, no. 95/05, 25/07, 86/07, 123/07, 140/07, 146/07, 7/08, 45/09, 57/10, 135/11, 13/13, 188/13.
- Levine, R.** (1997). Financial development and economic growth: Views and agenda. *Journal of economic literature*, 35(2), 688-726.
- Lin, T.T. and Lee, Y.C.** (2008). Organizational characteristics, board size and corporate performance. *Journal of Global business management*, 4(2), 338-347.
- Linck, J.S., Netter, J.M. and Yang, T.** (2008). The determinants of board structure. *Journal of financial economics*, 87(2), 308-328.
- Lipton, M. and Lorsch, J.** (1992). A modest proposal for improved corporate governance. *Business lawyer*, 48(1), 59-77.
- Macey, J. and O'Hara, M.** (2003). The corporate governance of banks. *Economic policy review*, 9(1), 91-107.
- Mak, Y.T. and Kusnadi, Y.** (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin finance journal*, 13(3), 301-318.
- Mishra, C.S. and Nielsen, J.F.** (2000). Board independence and compensation policies in large bank holding companies. *Financial management*, 29(3), 51-69.
- Monks, A.G.R. and Minow, N.** (2004). *Corporate governance*. Third edition. Malden, MA: Blackwell.
- Morck R., Shleifer, A. and Vishny. R.** (1988). Management ownership and market valuation: An empirical analysis. *Journal of financial economics*, 20, 293-315.
- Nguyen, B.D. and Nielsen, K.M.** (2010). The value of independent directors: Evidence from sudden deaths. *Journal of financial economics*, 98(3), 550-567.
- Pathan, S. and Skully, M.** (2010). Endogenously structured boards of directors in banks. *Journal of banking and finance*, 34(7), 1590-1606.
- Peng, M.W.** (2004). Outside directors and firm performance during institutional transitions. *Strategic management journal*, 25(5), 453-471.
- Pfeffer, J. and Salancik, G.** (1978). *The external control of organizations: A resource-dependence perspective*. New York: Harper and Row.
- Pi, L. and Timme, S.G.** (1993). Corporate control and bank efficiency. *Journal of banking and finance*, 17(2), 515-530.
- Pokrashenko, P.** (2012). *Cost efficiency of Russian banks: The impact of board of directors and executive group*. Working paper, Economics education and research consortium, Moscow.
- Prevost, A.K., Rao, R.P. and Hossain, M.** (2002). Determinants of board composition in New Zealand: A simultaneous equations approach. *Journal of empirical finance*, 9(4), 373-397.
- Rajan, R. and Zingales, L.** (1998). Financial dependence and growth. *American economic review*, 88(3), 559-586.
- Report on banking system of the Republic of Macedonia.** (2012). *National bank of the Republic of Macedonia (NBRM)*, Skopje.
- Rosenstein S. and Whatt. J.** (1997). Inside directors, board effectiveness and shareholder wealth. *Journal of financial economics*, 44(2), 229-250.



- Schellenger, M.H., Wood, D.D. and Tashakori, A.** (1989). Board of director composition, shareholder wealth and dividend policy. *Journal of management*, 15(3), 457-467.
- Shan, Y.G. and Xu, Lei.** (2012). Do internal governance mechanisms impact on firm performance? Empirical evidence from the financial sector in China. *Journal of Asia-Pacific business*, 13(2), 114-142.
- Sheikh, N.A. and Wang, Z.** (2012). Effects of corporate governance on capital structure: Empirical evidence from Pakistan. *Corporate governance*, 12(5), 629-641.
- Shleifer, A. and Vishny, R.** (1997). A survey of corporate governance. *Journal of finance*, 52(2), 737-783.
- Singh, M. and Davidson, W.N.** (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of banking and finance*, 27(5), 793-816.
- Spencer Stuart Board Index.** (2008). Chicago: Spencer Stuart.
- Steger, U. and Amann, W.** (2008). *Corporate governance: How to add value*. West Sussex: John Wiley and Sons.
- Stiglitz, J.E., Jaramillo-Vallejo, J. and Park, Y.C.** (1993). The role of the state in financial markets. *World Bank research observer*, Annual conference on development economics supplement (Proceedings), 19-61.
- Subrahmanyam V., Rangan, N. and Rosenstein, S.** (1997). The role of outside directors in bank acquisitions. *Financial management*, 26(3), 23-36.
- Suklev, B.** (2011). *Korporativno upravljanje*. Skopje: Faculty of Economics.
- Thomsen, M.** (2000). *Surveys reveal investors will pay for good governance*. SocialFunds. <http://www.socialfunds.com/news/article.cgi/article441.html>. Accessed 1 December 2000.
- Tirole, J.** (2006). *The theory of corporate finance*. New Jersey: Princeton University press.
- Tricker, B.** (2003). *Essential director*. London: The Economist Newspaper, Ltd.
- Tricker, B.** (2012). *Corporate governance: Principles, policies and practices*. Second edition. Oxford: Oxford University press.
- Van der Walt, N. and Ingley, C.** (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate governance: An International review*, 11(3), 218-234.
- van Greuning, H. and Brajovic-Bratanovic, S.** (2009). *Analyzing banking risk: A framework for assessing corporate governance and risk management*. Third edition. Washington D.C.: World Bank publications.
- Vance, S.** (1983). *Corporate leadership: Boards, directors and strategy*. New York: McGraw-Hill.
- Wang, W.K., Lu, W.M. and Lin, Y.L.** (2012). Does corporate governance play an important role in BHC performance? Evidence from the US. *Economic modeling*, 29(3), 751-760.
- Wulf, T., Stubner, S., Miksche, J. and Roleder, K.** (2010). *Performance over the CEO lifecycle - A differentiated analysis of short and long tenured CEOs*. Working paper, HHL Leipzig Graduate School of Management, Leipzig.
- Wurgler, J.** (2000). Financial markets and the allocation of capital. *Journal of financial economics*, 58(1-2), 187-214.
- Yermack, D.** (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics*, 40(2), 185-211.



Korporativno upravljanje i performanse banaka: Slučaj Republike Makedonije

REZIME – Uloga banaka je značajna za ekonomski razvoj jedne zemlje, ali uzima i značajnu ulogu u podsticanju privatne inicijative u njoj. Iz tih razloga se može naći veliki broj različitih i suprotstavljenih studija i naučnih radova u oblasti ekonomije koji govore o raznim režimima i problemima korporativnog upravljanja u bankama. Novi pogled na korporativno upravljanje u bankarskom sektoru dat je kroz analizu u ovom radu, uzimajući u obzir posledice velike Svetske ekonomske krize. Tema ovog rada jeste ispitivanje značaja veličine upravljačkog odbora, njegovog sastava i kvaliteta izvršnog direktora u makedonskim bankama uz praćenje njihovih performansi. U paragrafima koji slede se razrađuje hipoteza kojom se testira da li adekvatna struktura korporativnog upravljanja može doprineti višim performansama banaka koje su merene prinosima na aktivu (ROA), prinosima na kapital (ROE), odnosa između prihoda i troškova i racia adekvatnosti kapitala (CAR). Ispitivanje je pokazalo da je veličina upravljačkog odbora pozitivno korelisana sa profitabilnošću banke koja je iskazana kroz ROA. Dalje, istraživanjem se došlo do zaključka o postojanju negativne povezanosti između nezavisnosti upravljačkog odbora i koeficijenta ROA i ROE. Ujedno, rezultati su pokazali da su banke u Makedoniji vođene izvršnim direktorima koji se na toj poziciji nalaze duži vremenski period profitabilnije od onih banaka u kojima izvršni direktori služe svoj prvi četvorogodišnji mandat. Pored toga, važno je istaći da ovo istraživanje ima kako praktični tako i teorijski značaj koji se u mnogome razlikuje u poređenju sa drugim sličnim istraživanjima i studijama, obzirom da je primarni cilj ove studije analiza komercijalnih banaka u nedovoljno istraženom bankarskom sektoru zemlje u razvoju.

KLJUČNE REČI: performanse banke, kompozicija upravljačkog odbora, veličina upravljačkog odbora, korporativno upravljanje, raznolikost

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