

# Importance of Corporate Governance: Evidence from Kosovo's Banking Sector

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CroEconSur

Vol. 23

No. 2

December 2021

pp. 5-32

Received: February 27, 2021

Accepted: May 19, 2021

Research Article

doi:10.15179/ces.23.2.1



## Abstract

This study identifies and assesses the impact and effect of corporate governance (CG), as a good practice mechanism, as well as some specific financial indicators on the performance of the banking sector in Kosovo. The data used in the research are defined as secondary data that include nine (9) commercial banks and cover the period 2013–2020. The analysis applied to data processing is the dynamic approach through 2SLS estimation for the dependent variables ROA, ROE, and NIM. The results obtained at the end of the study show that all variables applied in this research, depending on the variable defined for evaluation, have a significant impact on the performance of the banking sector. The results also show that the most adequate measure for assessing a bank's performance is the net

interest margin (NIM). This research paves the way for debate and discussion on the governing structures of financial institutions and policymakers.

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**Keywords:** bank's profitability, corporate governance, 2SLS

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**JEL classification:** G21, G30, C26

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## 1 Introduction

The principle of corporate governance (CG) stands as one of the crucial matters that have practically preoccupied the core segment of modern financial theory. The recent global financial crisis of 2008–2009 brought a considerable number of researchers who paid attention to the need of conducting research and assessments on the effectiveness of CG, its components, and their impact on bank performance. Thoughts on the causes of the crisis differ, attributing the crisis to various factors, such as the US housing bubble and increasing securitization on the one hand, while other opinions find the reasons for this crisis in audit unethical behavior, nontransparent disclosure of financial evidence, and other issues related to poor CG function.

Consequently, following these viewpoints, it is apparent that the significance of CG is crucial for banking sector organizations. In the age of a globalization environment of doing business, it is challenging for banks to keep intermediating for organizations. To further reinforce the view on the significance of CG, we ought to underline the fact that the results of many studies show that a certain country cannot have economic growth if it does not have a developed financial system, namely, banking system since it is considered a key promoter of economic growth. The Basel Committee on Banking Supervision (BCBS, 2006) has emphasized the importance of effective CG and its components in directives for banking institutions to gain public confidence. Furthermore, Caprio and Levine (2002) stress that banks play a facilitating and assisting central role for better control of businesses, both in terms of the role of a creditor or as an owner of

the business. Therefore, CG instruments can be considered a security tool for all players through a transformation into a benchmark of transparency, accountability, and improving monitoring efficiency.

However, the complexity of the banking industry is currently discernible in terms of reducing disproportionate information, but fortunately, there are available instruments that can be used to improve the suitable flow of evidence and the quality of financial reporting. In this context, BCBS in the outline of a document entitled “Enhancing CG for Banking Organizations” suggests that the structure of the board is an important part of a bank’s efforts to promote transparency, accountability, and effective regulatory reform. Based on the guidelines of corporate governance principles for banks, with regard to CG implementation in Kosovo, the Central Bank of Kosovo (CBK), as the sole regulatory body of the financial sector, has required a strict application of this reference, while in May 2012, it approved the regulation on the CG of banks and reviewed it in August 2019 (CBK, 2019).

The purpose of this regulation is to reinforce the regulatory framework linked to good CG practices for banks licensed in Kosovo, as an important factor in maintaining the sustainability and stability of the banking sector as a whole. Moreover, the regulation sets out the minimum requirements for the bank’s shareholders, the board of directors, and the CEOs vis-à-vis their responsibilities toward CG practices.

To conduct this research, we have employed a dataset with 9 out of 10 banks, and the period of analysis covers the years from 2013 to 2020. Specifically, we propose to analyze the following research questions (RQ):

- Does the effectiveness of bank governance improve after the financial crisis?
- Do banks in Kosovo implement CG mechanisms as defined by the regulatory authority?

This study contributes and advances the literature by extending the relationship between CG, financial indicators, and banking performance using data from recent years in Kosovo and explaining it in terms of the institutional environment. The study also uses quantitative panel data to conceptualize the objectives of the impact of CG factors on the bank's performance. Furthermore, the study addresses the performance of the banking business from three perspectives or points of view. First, from a theoretical perspective, it contributes to a better evidence-based understanding of CG. The paper provides quantitative empirical evidence to resolve the dilemma regarding the specified relationship, especially given the contradictory results of previous studies. Second, the original empirical contribution of this paper stems from using data for Kosovo's banking sector to reveal how CG components and certain financial indicators affect governance improvement using a 2SLS evaluation of the instrumental variables (IV) with endogenous regressors. Finally, from a policy viewpoint, it contributes to the redesign of sector policies in the financial industry and the support of this industry by identifying specific initiatives to address the environment and institutional asymmetry. Solid governance practices are important to have effective bank systems that are critical to accomplish and sustain a higher level of public confidence in the banking system (Fernández Sánchez, Odriozola Zamanillo, & Luna, 2020).

In regard to the selected parameters for the analysis conducted in the study, the dynamic panel data estimation approach is based on the study of Mishra and Nielsen (2000), who applied adequate econometric 2SLS evaluation to estimate the components of CG and their correlation with the performance of banks. The paper is organized into sections and subsections as follows: Section 2 introduces the literature background and hypothesis development. Section 3 presents data on the banking sector in Kosovo and the selection of empirical methodology. Section 4 presents the empirical findings and discussions, while Section 5 provides the conclusions and implications.

## 2 Theoretical Background

### 2.1 Banking Performance Indicators and Hypothesis Development

Many researchers have dealt extensively with the factors that influence the profitability of banks and have found the issue engaging and challenging. A considerable number of empirical studies involving the treatment of profitability analyze specific countries or focus on an analysis of panel countries. While some studies are conducted for specific countries, such as Croatia (Kundid, Škrabić, & Ercegovac, 2011), Japan (Lui & Wilson, 2010), or Turkey (Anbar & Alper, 2011), there are also substantial studies that have investigated bank profitability in panel countries (in groups), such as Menicucci and Paolucci (2016), who investigated European Union banks, or the studies of Petria, Capraru, and Ihnatov (2015), who examined Central and Eastern Europe, and Tmava, Berisha, and Mehmeti (2019), who investigated the degree of profitability for Western Balkan countries, etc. Thus, as mentioned earlier, many authors have applied different factors, and based on these principles, we have developed our hypotheses for the banking sector in Kosovo.

#### The Natural Logarithm of Total Assets

The factor that is considered specific to a particular banking sector is “bank size”, or the natural logarithm of total assets. The natural logarithm asset for each financial institution analyzes the ratio of the internal rate to external rates in bank lending (Meriç, Kamışlı, & Temizel, 2017). This indicator also serves as a measure of a bank's capital strength for a certain year. Therefore, based on similar principles we have developed the hypothesis, as follows:

*H1: There is an association between the natural logarithm of total assets and bank performance.*

## Equity to Liabilities Ratio

A crucial issue and concern after the shock of the global financial crisis of 2008 were the quality of the bank's capital and liquidity. In this context, equity-to-liabilities is selected as an important variable for treatment to investigate its influence on the degree of profitability. The study conducted by DeAngelo and Stulz (2015) argues that a higher level of this ratio creates optimal opportunities for bank productivity.

*H2: There is an association between equity-to-liabilities and bank performance.*

## Liquidity Ratio

In conjunction with this study, we have considered that liquidity is an important indicator to investigate because if banks maintain sufficient liquidity, they can overcome potential shocks in certain situations. From one viewpoint, a "comfortable ratio" of liquidity reduces the level of risk and can reduce the cost of financing and linearly increase profits (Vogiazas & Alexiou, 2014), while from another perspective, liquid assets bring low returns, which reduces the rate of profitability.

*H3: There is an association between liquidity and bank performance.*

## 2.2 Characteristics of Corporate Governance and Development of Hypotheses

From a productivity point of view, the neo-institutional philosophy says that large boards are more effective at monitoring management and promoting shareholder benefits. Boards also decrease the asymmetry of information among managers and different stakeholders vis-à-vis the quality of financial reporting. Furthermore, the neo-institutional philosophy concludes that larger boards are more effective in providing better and more expert advice because some board directors have firm-



## Board Diversity

There is an insignificant number of studies regarding board composition from a gender perspective. However, according to the study conducted by Pathan and Faff (2013), gender diversity improves the performance of banks. Board diversity and configuration from a productivity outlook are seen as improving board efficiency (Carter, D'Souza, Simkins, & Simpson, 2010; Lucas-Pérez, Mínguez-Vera, Baixauli-Soler, Martín-Ugedo, & Sánchez-Marín, 2015), notably in those cases where board members have different experiences, varied attributes, and various characteristics. Some features are demographic issues including the aspects of gender, age, and ethnicity, while others are features such as level of education and profession.

From a productivity point of view, it is assumed that board efficiency can have significant improvements when the board members are of different genders (Carter et al., 2010). In terms of legitimacy, boards with the highest gender diversity enable more stable macro-environmental links for companies and stakeholders, and increase the legitimacy of the company and the credibility of the board (AlHares & Ntim, 2017). Several studies have shown that board diversity has a positive effect on the voluntary application of corporate governance principles, which has not been examined in any study yet for the Kosovo case. This research study seems to be the first one in Kosovo to investigate the effect of board diversity on CG. Therefore, based on this fact, our hypotheses regarding gender diversity will be equally a novelty and an added value in this field of research.

*H5: There is an association between board member diversity (females) and bank performance.*

*H6: There is an association between board member diversity (males) and bank performance.*



## Independent Committees

Referring to the agency theory, establishing independent board committees secures additional control mechanisms and, as a result, protects the interests of shareholders. Therefore, in this context, in conformity with Cadbury's proposal for the formation of independent supervisory committees, the CBK through secondary legislation has made it mandatory for all banks to establish independent committees, and these committees should meet at least once a year. Depending on their tasks and responsibilities, the committees assess the reporting process, internal controls, credit risk, audit practice, conflicts of interest, and the level of the compliance function in place. Weir, Laing, and McKnight (2002) argue that the audit committee, as an additional inner control mechanism, operates under the umbrella of the board structure. Its impact would be to improve the quality of the company's field management and, consequently, its performance.

Accordingly, the last variable applied in the context of this study is the supervisory subcommittee as an essential component of good governance practices. Therefore, to confirm that the institution is meeting the objectives set out in terms of reliable financial reporting, operational efficiency, as well as compliance with laws and regulations, the bank needs to implement an efficient and reliable system of internal control monitored by the board, CEO, and subcommittee body "e.g., *audit committee, credit risk management committee, etc.*" (Arouri, Hossain, & Muttakin, 2011). Thus, the hypothesis of the study in this respect is:

*H7: Subcommittees have a significant positive influence on bank performance.*

## 3 Econometric Analysis

### 3.1 Data and Sample

The sample consists of nine (9)<sup>1</sup> commercial banks that conduct their business activity in Kosovo. It is worth noting that from the defined sample only one

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<sup>1</sup> Banka Ekonomike, Banka Kombëtare Tregtare, Banka për Biznes, Is Bank, Komercijalna Banka, Nova Ljubljanska Banka-Prishtina, Procredit Bank Kosovo, Raiffeisen Bank Kosovo, and TEB Paribas Kosovo.

commercial bank is 100 percent domestically owned, while the other commercial banks are foreign-owned. Only one commercial bank was excluded from the sample because it did not have the data according to the defined format and the period included in the analysis. The panel data used are strongly balanced and are provided by the audited financial reports including the period 2013–2020, which in total amounts to nine (9) groups with 72 observations. Data for corporate governance are provided by the annual reports of each bank in particular. Based on previous studies conducted by Adams and Mehran (2012) and Pathan and Faff (2013), corporate governance data should be evaluated from the declared day of reporting. Our data on corporate governance consist of four (4) general dimensions, analyzing the size of the board of directors, the diversity by female and male composition, as well as the number of other supervision subcommittees.

### **3.2 Variables**

Based on the reviewed literature so far, to evaluate the performance of the bank, there are two approaches: a) structured approach, which focuses on maximizing profit or minimizing the cost, against which the performance of the bank is evaluated, and b) unstructured approach, which refers to the evaluation of bank performance through some financial ratio. Therefore, grounded in these two approaches, our research will also be based on the structured approach using a number of financial indicators. To test the assumptions set out and specified in the second section, the dynamic approach was used to examine the effect of corporate governance and certain business ratios on bank productivity. The corporate governance structure applied in the study is the board size, male board composition, female board composition, the number of board subcommittees, as well as the natural logarithm of total assets, equity-to-liabilities, and liquidity as explanatory variables.

Bank productivity assessment is done through return on assets (ROA), return on equity (ROE), and net interest margin (NIM). A large number of empirical

studies (Lozano-Vivas & Pasiouras, 2010; Casu & Girardone, 2010; Barth, Lin, Ma, Seade, & Song, 2010) have applied the designed approach to evaluate banks' productivity. The reason for our focus on the issue of efficiency to costs lies in the statement that corporate governance is conceived as an internal body whose goal is to maximize the value of the bank (Denis, 2001).

**Table 1:** Variable Descriptions and Expected Sign

Variable		Denomination	Acronym	Sign
Dependent variable	Profitability	Return on assets	ROA	
		Return on equity	ROE	
		Net interest margin	NIM	
Explanatory variables	Bank-specific factors	Natural logarithm of assets	LA	+/-
		Equity-to-liabilities	EL	+
		Liquidity	LR	-
		Board size	BS	+/-
		Board composition (male)	BCM	-
		Board composition (female)	BCF	+
	Board subcommittees	BSC	+/-	

Source: Authors' compilation.

### 3.3 Empirical Estimation

To estimate the efficiency of commercial banks, different models, approaches, or techniques are used with the sole purpose of achieving the most sustainable results. Some studies conducted by Andres and Vallelado (2008), Pathan and Faff (2013), and Liang, Xu, and Jiraporn (2013) have used the dynamic regression approach (2SLS GMM estimator) for their analysis, while other authors such as Fahlenbrach and Stulz (2011) or Beltratti and Stulz (2012) have used cross-sectional data to estimate over a short time, including the period 2007–2008. Therefore, our study also applied a mixed approach, using OLS and 2SLS estimators based on the study of Mishra and Nielsen (2000). However, using the dynamic panel approach is more relevant in the context of this study, as the instrumental variables 2SLS estimator calculates the endogeneity and instrumental weak issues arising from the correlation between corporate governance and bank performance. In the following, we will introduce the dynamic panel equation.

$$Y_{it} = \alpha + \beta Y_{it-1} + \delta X_{it} + \vartheta_i + \varepsilon_{it} \quad (1)$$

Based on the basic formulation of the equation, in our concrete case applying the dynamic panel data estimation would be:

$$Y_{it} = \sum_{j=1}^p \alpha_j Y_{i, t-j} + X_{it} \beta_1 + \vartheta_i + \varepsilon_{it} \quad (2)$$

In addition, because of the equations presented above, we will present the concrete equation for bank performance – BP<sub>it</sub> (ROA<sub>it</sub>, ROE<sub>it</sub>, and NIM<sub>it</sub>).

$$BP_{i,t} = \alpha + \mu(BP)_{i,t} + \beta_1(LA_{it}) + \beta_2(EL_{it}) + \beta_3(LR_{it}) + \beta_4(BS_{it}) + \beta_5(BCM_{it}) + \beta_6(BCF_{it}) + \beta_7(BSC_{it}) + \vartheta_i + \varepsilon_{it} \quad (3)$$

Empirical studies on the application of the dynamic approach, namely 2SLS estimation, have determined the  $N > T$  condition that is a fundamental requirement. Equation 3 includes the remaining dependent variable as well as other explanatory variables, and based on this requirement, the use of OLS regression could provide inconsistent estimates. Allowing fixed-effect with time dummies ( $\mu_{it} = f_i + \rho_i + \varepsilon_{it}$ , where  $f_i$  displays the fixed effects of the bank-level at invariant times,  $\rho_i$  represents time dummies, and  $\varepsilon_{it}$  is the successively uncorrelated error term), we can eliminate the bias of the invariant variable in the group. Still, there is a clear problem of bias as the remaining dependent variable (ROA<sub>it</sub>, ROE<sub>it</sub>, and NIM<sub>it</sub>) is connected to the error term  $\varepsilon_{it}$  because of its association with the time-invariant component of the error term  $f_i$ . Here, the use of the OLS approach for estimating fixed effects – the least squares dummy variable (LSDV) – makes a one-sided estimation of the constants because the dependent variable remains associated with the error term, even if it is assumed that the term error is not itself interrelated (Greene, 2003).

A within-group estimator (LSDV), after transforming the data into deviations from the firm average, to eliminate firm-specific fixed effects, is unreliable either because the residual-dependent variable transformed or the transform error term is negatively related (Nickell, 1981). The results presented in Bruno (2005) strongly support the bias-corrected LSDV estimators based on bias and root mean squared



## 4 Econometric Findings

The first finding is that banks operating in Kosovo have proven to be implementing CG mechanisms, as defined by good practices from the BCBS and CBK. What is significant to mention is that all banks have established independent committees (e.g., audit committee, CRM<sup>2</sup> committee, compliance committee, ALCO<sup>3</sup> committee, etc.), ranging from 1 as the smallest number and 8 as the largest. The other issue that needs to be underlined is that female representation on the board is not at the desired level. Table 2 reports the summary of certain statistics that include the mean, the smallest value, the largest value, and the standard deviation of the dependent and independent variables.

**Table 2:** *Summary of Descriptive Statistics*

	Obs.	Smallest	Largest	Mean	Std. Dev.
ROA	72	-.0397	.0427	.0157	.0124
ROE	72	-.1454	.3271	.1375	.0854
NIM	72	.0009	.0767	.0410	.0145
LA	72	5.0291	9.4798	6.5153	1.3856
EL	72	.0761	1.5569	.1582	.1714
LR	72	.1677	1.8139	.4297	.2170
BS	72	5.000	11.000	6.6805	2.2444
BCM	72	3.000	8.000	5.1254	1.5916
BCF	72	0.000	3.000	1.5972	1.1586
BSC	72	1.000	8.000	4.5741	1.9698

Source: Authors' calculations.

The outputs presented in the summary of statistics show moderate heterogeneity between the performance results for commercial banks operating in Kosovo. This investigation could indicate that the environment in which these intermediary institutions operate is the same, but their performance has a moderate mark of heterogeneity. The results of the analysis show that the lowest value achieved of the *return on assets ratio* has a coefficient of -0.039, the highest value achieved has

2 Credit risk management committee.

3 Asset-liability committee.



**Table 3:** Correlation Matrix

	ROA	ROE	NIM	LA	EL	LR	BS	BCM	BCF	BSC
ROA	1.000									
ROE	0.905**	1.000								
NIM	0.608**	0.603**	1.000							
LA	-0.368	-0.478*	-0.664**	1.000						
EL	-0.501*	-0.320	-0.333**	0.110	1.000					
LR	-0.542**	-0.392	-0.495**	0.253	0.764**	1.000				
BS	-0.299	-0.363	-0.258	0.443**	0.311*	0.136*	1.000			
BCM	-0.338**	-0.351**	-0.289*	0.426**	0.242*	0.160*	0.859**	1.000		
BCF	0.095	0.204	0.116	0.256*	0.267	0.036	0.729**	0.287**	1.000	
BSC	0.012	0.007*	0.070	-0.119	0.161	0.028	0.242**	0.046	0.411**	1.000

Note: \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively.

Source: Authors' calculations.

The outputs for bank productivity parameters are seen to be linked with the other explanatory variables as follows: the *return on assets ratio* has a negative association with a significance level of 5 percent with *liquidity* and *the number of board members*, while there is also a negative correlation at a significance level of 10 percent with the *equity capital to bank liabilities ratio*. *Return on equity* has a significant negative correlation of 5 percent with *male board composition* and a positive correlation with the *number of subcommittees* of the bank. In addition, the last parameter used as an evaluator of bank productivity is the *net interest margin*, which has a significant adverse correlation of 5 percent with *natural logarithm assets*, *liquidity*, and *equity-to-liabilities*, and an adverse correlation with a significance level of 10 percent with the explanatory variable *male board composition*. The other correlations are presented in detail in Table 3.

Before analyzing the results of dynamic panel analysis, the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was performed. The outputs of this test indicate that the data have variations and do not have heteroskedasticity since the result of the hettest chi2 (1) is 121.06 and with probability  $Prob > chi2 = 0.0024$ .



**Table 4:** Estimation Tests

<b>Breusch-Pagan/Cook-Weisberg test for heteroskedasticity</b>			
	chi2	df	p-value
	121.06	--	0.0024

Source: Authors' calculations.

Moreover, to check the stability of the examination through the OLS regression, we have applied the *F*-test for all three issues, and in all factors, the *F*-test outcomes prove that all factors separately have a value less than <10. These results are presented in Table 6. To analyze the serial correlation of the data, the Durbin-Watson test was used, where the results in all three evaluation factors have a greater rate than 1.7, which means that they are within defined intervals. The interval that proves that the data do not have autocorrelation is 1.5 to 2.5, and the results of our analysis are exactly within this interval.

Furthermore, in the case where we apply the 2SLS estimator, we can build instruments for parameters (board size, diversity, and supervision committees) that are potentially endogenous. This practice is one of the main reasons why there is a growing interest in the specifics of boards being endogenously determined by the performance (Hermalin & Weisbach, 2003). Furthermore, using the dynamic data dimension of the panel, we can control response processes timely and identify how the features of the boards of directors affect the productivity of the bank. To test the validity of the model specification, we use the Durbin chi (1) and the Wu-Hausman test for endogeneity, as well as the Hansen *J*-statistics of over-identifying restrictions, which are insignificant (see Table 6) for the instrument validity. Moreover, the results propose that the null hypothesis should be accepted as the instruments are not correlated with residuals and this fact gives us confidence that the model is adequately specified.

**Table 5:** Estimation Results Without Corporate Governance Variables

	OLS regression			Instrumental variables 2SLS		
	ROA	ROE	NIM	ROA	ROE	NIM
<i>Without corporate governance variables</i>						
Constant	.06017 0.000	.52519 0.000	.08373 0.000	.02341 0.000	.21336 0.000	.09132 0.000
LA	-.00243 0.009	-.02571 0.000	-.00605 0.000	-.00139 0.093	-.01418 0.035	-.00746 0.000
EL	.01907 0.084	.06614 0.401	.00072 0.946	.00208 0.007	.00976 0.121	.00284 0.000
LR	.01576 0.074	.07302 0.254	.02294 0.010	.00284 0.011	.00894 0.155	.00266 0.001

Source: Authors' calculations.

Table 5 shows the results according to both estimates excluding corporate governance variables, to check whether the modification of the dependent variable ( $ROA_{i,t}$ ,  $ROE_{i,t}$ , and  $NIM_{i,t}$ ) shows any change in the performance of banks. The results show that LA in both assessments has a significant negative impact on  $BP_{i,t}$ , while equity-to-liabilities and liquid ratio have a significant positive impact on both assessments, except  $ROE_{i,t}$ , in which both cases have turned out to be non-significant. However, what is worth noting in Table 6 is that LA has a significant impact only with the  $NIM_{i,t}$  performance evaluator, while the other two variables do not show any significant change.

**Table 6:** Estimation Results

	OLS regression			Instrumental variables 2SLS		
	ROA	ROE	NIM	ROA	ROE	NIM
Constant	.02825 0.000	.22581 0.000	.10131 0.000	.02239 0.001	.18587 0.001	.09785 0.000
LA	-.00204 0.061	-.02030 0.012	-.00691 0.000	-.00071 0.423	-.00645 0.324	-.00859 0.000
EL	.01909 0.127	.02339 0.795	.00343 0.772	.00198 0.008	.00893 0.044	.00302 0.000
LR	.01483 0.127	.09709 0.168	.02041 0.029	.00189 0.011	.00823 0.074	.00289 0.000
BS	-.00530 0.044	-.02171 0.071	.00943 0.003	-.00822 0.027	-.05118 0.021	-.00916 0.070

BCM	.00399 0.512	01401 0.751	-.00925 0.015	.00625 0.360	.03553 0.521	-.00932 0.065
BCF	.00650 0.308	.01759 0.703	-.00778 0.002	.00971 0.165	.05479 0.335	-.00464 0.007
BSC	.04394 0.052	.00049 0.022	.00136 0.043	.00091 0.152	.01109 0.031	.00112 0.071
Observation	72	72	72	72	72	72
<i>F</i> -test	F (6.36) <i>p</i> =0.001	F (4.63) <i>p</i> =0.003	F (13.95) <i>p</i> =0.001	“- “-	“- “-	“- “-
Durbin-Watson	1.781	1.843	1.903	“-	“-	“-
<i>R</i> -squared	“-	“-	“-	.4813	.5459	.5509
Durbin chi2 (1)	“-	“-	“-	2.529	1.808	2.272
Wu-Hausman	“-	“-	“-	<i>p</i> =.1118 2.398	<i>p</i> =.1787 1.703	<i>p</i> =.1705 2.124
Hansen <i>J</i> -statistics	“-	“-	“-	<i>p</i> =.1247	<i>p</i> =.1949	<i>p</i> =.1802
				.432	.387	.379

Source: Authors' calculations.

## 4.1 Discussion of Empirical Findings

Regarding board size, we find a strong negative effect of board size on bank performance in all assessment parameters ( $ROA_{i,t}$ ,  $ROE_{i,t}$ , and  $NIM_{i,t}$ ). The results remain stable at a significance level of 1 percent (see Table 6). The results confirm the hypothesized link between the board size and the evaluation parameters defined in the analysis. As in the studies by Adams and Mehran (2008) and Karkowska and Acedański (2020), we note that the increase in the number of additional directors is related to performance, although the increase in performance shows a diminishing marginal growth. Thus, the significant negative board size coefficient indicates a certain limit to which increasing the number of new directors reduces the performance value of a bank. It is also worth noting that studies by Yermack (1996) and Bhagat and Black (2008) show that board size has a negative impact when the board begins losing its effectiveness as the number of members increases. Moreover, multi-director boards face significant direction, communication, and decision-making problems, as well as the risk of excessive CEO control.

We have also found that the board composition in terms of gender diversity (BCM and BCF) has a negative impact on bank performance at 1 percent and 5 percent of significance, in the assessment according to OLS and 2SLS. Unlike the previous parameter, the results turned out to be significant only for the evaluation parameter  $NIM_{i,t}$ . Thus, this hypothesis is confirmed only for the evaluation parameter  $NIM_{i,t}$ . Based on the importance and professional characteristics of the directors, many studies have underlined that their composition in terms of gender structure also affects the performance of the bank. Therefore, our results are in line with Pathan and Faff (2013), whose results show that gender diversity improves the performance of the bank before the Sarbanes-Oxley Act (SOX), including the period 1997–2006, and indicate a positive impact of gender diversity in two periods before and after the Sarbanes-Oxley Act (SOX), including the period 2003–2006.

Next is the parameter of independent committees that function within the bank as facilitators of good governance practices and protect the interests of shareholders and the bank as a whole. We have found that these committees have a positive impact on bank performance with a significance of 1 percent in the evaluation parameters  $ROE_{i,t}$  and  $NIM_{i,t}$ . Therefore, the hypothesis is confirmed in two parameters, namely, the ratio of return on equity and net interest margin. These facts prove to us that if these committees are independent and perform the tasks assigned responsibly, they have a potential impact on the positive performance of banks. Consequently, the findings of this study are in full accordance with a large number of studies, including Jensen and Meckling (1976), that argues that the independent functioning of committees has a positive effect on the performance of banks.

With regard to the findings for financial indicators included in the study, the natural logarithm of assets has shown a significant impact on bank performance. Specifically, according to OLS, significance is confirmed in all valuation parameters (ROA, ROE, and NIM), while according to 2SLS, significance is found only for NIM, with a significance level of 1 percent and 10 percent. The equity-to-liabilities ratio according to OLS regression has turned out to be insignificant,



organization and functioning of CG. Nevertheless, the Central Bank of Kosovo has regulated this issue through the relevant guidelines, namely, the regulation on corporate governance of banks, which is in full agreement with the supervisory framework defined by the Basel Committee. According to this regulation, CG defines the way the bank is managed through the division of competencies and responsibilities of shareholders, boards of directors, and the CEO.

Finally, we have to underline that the study was conducted on 9 out of 10 banks operating in Kosovo. Moreover, it is noticed that the banks selected in our sample have functional and effective structures based on the CG regulation, which stipulates the division of competencies concerning the management of the bank. This fact has been made possible by the experience and good practices of commercial banks from European Union countries and is considered a motivating factor for the application of the finest corporate governance. Concerning the variables applied in the 2SLS assessment, we have focused on ROA, ROE, and NIM as indicators for measuring the performance of banks. We made this selection after analyzing the up-to-date literature in this field, of course including the variables related to corporate governance. In future studies, it would be of interest to include other factors of corporate governance, such as significant shareholders, number of board meetings, or number of members on subcommittees formed by the board.

### ***Policy implications:***

- The implementation of strong CG practices is considered crucial for a country to have an effective banking system and to maintain a high level of public confidence.
- The recent crisis of 2007–2008 has openly revealed the divergences between the use of ordinary governance practices and the legal practices set out in CG.
- The establishment of independent boards within banks has ensured stability in the banking division, and has improved accountability and transparency.
- Changes in regulatory policies as well as financial motivations for bank executives have improved the effectiveness of governance.

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