

The impact of Internal Corporate Governance Mechanisms on Credit Risk at Jordanian commercial banks listed on the Amman Stock Exchange

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Abstract: The aim of this research is to investigate the relationship between Internal corporate governance mechanisms and credit risk using data from 13 commercial banks listed on the Amman stock exchange during the period 2009-2016. Panel data was utilized and the data gathered from 104 annual reports from 13 commercial banks listed on the Amman stock exchange, which analyzed using descriptive statistics, correlation, and regression. Seven main corporate governance variables were analyzed namely: (Board size, Board Independence, CEO /Chairman Separation, Audit Committee Independence, Ownership concentration, Institutional Ownership, and Foreign Ownership) in terms of their relative impact on the dependent variable (credit risk). Furthermore, bank size and debt Ratio were used as a control variable. Based on the results of the study, it has been observed that Internal corporate governance mechanisms variables have a significant effect on credit risk.

Keywords: Corporate Governance, Credit Risk, Panel Data.

1. Introduction

Financial statements are considered the primary source of financial information for investors and other users (e.g., government, employees, consumers and suppliers), and the statements predict that they will represent the company's correct financial position (T. Ulusoy, 2008). Despite the importance of financial statements, there are many aspects of the business that are not fully covered by financial statements (Civan & Dayı, 2014). The financial statements are prepared as required by accounting standards and state that government bonds also useful for anti-collapse role of business, but the company with its much evidence has announced bankruptcy, the main reason behind which there is a conflict of interest between managers and shareholders (Mallin, 2007; T Ulusoy, 2008).

Corporate governance has received considerable attention, especially following the massive costly corporate scandals that have focused on the possibility that many problems with the reason to structural factors. In particular, collapses such as those that occurred at Maxwell Communications Corporation (MCC), Enron, Parmalat and others, suggested that the failure, or inability, of boards of directors to control and monitor business, laxity in accounting standards and an ethos of contented indifference on the part of many business leaders, had played important roles. In response, many committees have been formed (e.g., Cadbury Report 1992, Smith report 2003, Higgs Report 2003) (Cadbury, 1992) conclude many recommendations to reform the corporate governance status. Among the significant recommendations are the board of directors responsible for the risk that faces the company in the business environment. Also, financial power of countries effects the companies risk directly (Ulusoy, 2011)

Corporate Governance (CG) is a system of rules, practices and processes by which a company is directed and controlled (Oecd, 2004). This report is used to balance between many stakeholders the company on long-term, by shareholders, perspective investors, managers, employees, customers, suppliers and government (Council & Britain, 2008). According to the Basel Committee on Bank Supervision, effective corporate governance practices are essential to achieving and maintaining public trust and confidence in the banking system, which is critical for proper functioning of the banking sector and the economy as a whole (BIS, 2014). Because the banking system plays a very important role in the economy, corporate governance is important and risk management is essential in financial institutions (Trinh, Duyen, & Thao, 2015; T. Ulusoy, 2008).

In addition, public policy makers around the world have begun to question the applicability of corporate governance currently applicable to financial institutions. In particular, the role of risk management in financial institutions has been submitted. In a number of recent policy documents, a comprehensive risk management framework is described in conjunction with the proposed governance structure (e.g., (Basel Committee 2008; FSA, 2008; IIF, 2007; Walker, 2009)

Another study, document that about 66% of the Canadian Risk Management and Insurance Management Society has not adopted a risk management strategy and the regulation of corporate governance

has affected the use of risk management; The board and the board are one of the important strategies prior to making decisions based on a risk management approach, and the latest regulations focus on the responsibility of the board to assess risk management (Beasley, Clune, & Hermanson, 2005; Kleffner, Lee, & McGannon, 2003) use the survey to examine the relationship between enterprise risk management and implementation in 123 US companies. Their findings report that a positive relationship between enterprise risk management, on one hand, and; the presence of chief risk officer, independence of the board of directors, the presence of a Big 4 auditor, and firm size. They recommend more researchers are needed to explore the relationship between risk management and corporate governance (Beasley et al., 2005), as well as in practitioner-oriented studies (Marn & Romuald, 2012) have shown to examine the relationship between corporate governance and company performance using panel data from 20 listed companies in Malaysia. They had analyzed five main corporate governance variables were analyzed in terms of their relative impact on corporate performance as defined by Earnings per Share (EPS) namely: board size, board composition, audit committee, CEO status, and Ownership structure. Based on the results of the study, it was observed that the size of the board and ownership structure had a significant effect on firm performance (Marn & Romuald, 2012).

Some other aspects of corporate governance in banks, such as board characteristics and CEO pay and ownership, have been addressed in a few recent academic studies (e.g., (Hassan & Abdulhakim, 2015)) aimed to explore the relationship between the mechanisms of governance (the independence of the board of directors, the size of the board, the dual role of the chief executive officer, the quality of the audit committee) and the performance of companies registered in the Saudi stock market. To achieve this objective, the study relied on the analysis of the annual reports of a sample of (140) Saudi companies registered during the year (2013). The study also used the method of correlation and regression to analyze the relationship between the variables of the study. The results of the study indicate that there is a noticeable interest in the good governance practices in the Saudi business environment, as well as a positive relationship of significant significance between the quality of the review committees and the independence of the board members and the efficiency of the value added. While there is a significant correlation between the size of the Board of Directors, the duplication of the role of the Chief Executive Officer and the efficiency of value added (gross value added, value added of capital in kind and value added of intellectual capital) (N. Hassan & M. Abdulhakim, 2015).

This work is aim to determine the relationship between the internal corporate governance mechanisms and credit risks at Jordanian commercial banks listed on the Amman Stock Exchange. The following are the research objectives:

To find out the influence of board size on banking risk (the number of members of the Board of Directors each year).

To determine the influence of audit committee on banking risk (the proportion of an independent (non-executive) of Committee to the total number of Audit Committee).

To know the relationship between board Independence and banking risk (by the ratio of independent members (non-executive) in the board).

To determine the relationship between CEO\ Chairman Separation status and it's the influence of banking risk.

To know the proportion of ownership concentration on banking risk (the percentage of shares owned by the largest shareholders).

To determine the influence of the proportion of company's ownership on banking risk (the proportion of bank shares owned by companies).

To find out the influence of foreign ownership on banking risk (the percentage of the shares of owned by foreign investors to total issued shares).

Jordan is a small country with limited resources; its financial market is aiming for the principles of equality, transparency, and effectiveness. However, forces regulatory bodies to adopt a sequence of legislative, economic and financial reforms that intended to promote transparency, accountability and the rule of law in the economic life of the country (JFED, 2003). In 2005, the Jordan Securities Commission (JSC)'s announced the first Jordanian corporate governance codes for corporations listed in the ASE, which The Jordanian Securities Authority issued the corporate governance decision in 2008 and the application is in 2009, the Central Bank of Jordan issued the Governance Guide in 2008 and the banks started to work it in 2009.

Therefore, researches on corporate governance and risk management have been interested in the recent academic literature emphasized the impact of board strengths and stakeholder behaviours on the management of bank capital risk, credit risk, and liquidity risk (McNulty, Florackis, & Ormrod, 2012; Salhi & Boujelbene, 2012; Tsorhe, Aboagye, & Kyereboah-Coleman, 2011; Zhong, Gribbin, & Zheng, 2007). This work investigates on the assessment of the link existing between Internal corporate governance mechanisms on credit risks. Moreover, we have used in this model to comprises two control variables related to variables characteristics; namely the bank size, and debt Ratio that it shows the effect of independent variables with

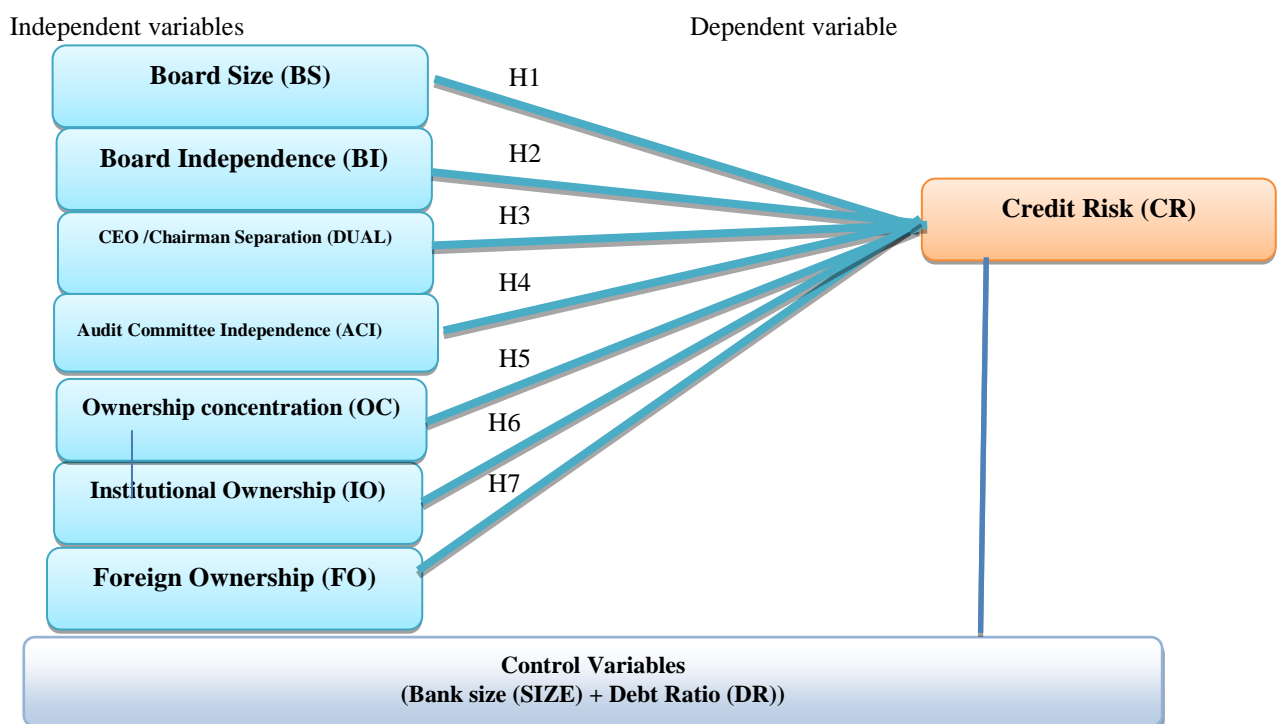
dependent variables. Further, the findings of this study could prove significant to regulators, investors, academics and others who argued that good corporate governance is important for raising investor assurance and market liquidity. With the compliance focusing on corporate governance presented by the Jordanian authorities, such as the Report of Finance Committee on Corporate Governance, the Jordanian Code of Corporate Governance and Jordanian stock exchange listing requirements. So, this paper will approach the impact of Internal corporate governance mechanisms on credit risk at Jordanian commercial banks listed on the Amman stock exchange.

The paper proceeds as follows. In Section 2 hypotheses and conceptual framework Section 3 we show research methodology. Section 4 describes empirical analysis and the results of the analysis. The final section provides a summary and conclusion.

2. Conceptual Framework and Hypotheses

2.1. Conceptual Framework

Figure (1) is shown to suggested for study mode conceptual frameworks are formed as below:



2.2. Study Hypothesis

H1:Credit risk is positively related to board size.

H2:Credit risk is positively related to the fact that chief the executive officer is a separate entity from the chairman of the board.

H3:Credit risk is positively related to a higher proportion of independent non-executive directors.

H4:Credit risk is positively related to a higher proportion of independent directors in the audit committee.

H5: Credit risk is positively related to the proportion of ownership concentration.

H6:Credit risk is positively related to the proportion of Institutional ownership.

H7:Credit risk is positively related to the proportion of foreign Ownership.

3. Research Methodology

This study is considered of the applied studies, which is based on private data of Jordanian banks, the study adopted the descriptive analytical approach in attempting to make meaningful inferences relating to the relationship of corporate governance variables and credit risk of the chosen sample.

3.1. Society and the research sample

The study population consisted of all Jordanian commercial banks listed on the Amman Stock

Exchange, and their number (13) banks, the study relied on series of the annual of Corporate Governance reports and financial statements of the commercial banks during the period (2009 -2016), where they were collected 104 annual reports from 13 commercial banks in Amman.

3.2. Data analysis

The data for the study variables will be collected from the annual reports of the study banks for the period of study 2009-2016 and Statistical analysis will be employed in this study in order to examine the relationship among variable, to test the hypotheses and validate the findings. The data collected will be analysed using the Eviews6 to perform the correlation test, the regression test, and the descriptive statistical analysis.

3.3. The Measure of the unsystematic risk

This section aims to present the empirical model of the study. The dependent variable (credit risk). The Seven independent variables include: -: Board size, Board Independence, CEO /Chairman Separation, Audit Committee Independence, Ownership concentration, Institutional Ownership, and Foreign Ownership. Finally, this model also comprises two control variables related to variables characteristics; namely the bank size and debt Ratio. The empirical model is as follow:

$$\text{CREDR} = \beta_0 + \beta_1(\text{BS}) + \beta_2(\text{BI}) + \beta_3(\text{DUAL}) + \beta_4(\text{ACI}) + \beta_5(\text{OC}) + \beta_6(\text{IO}) + \beta_7(\text{FO}) + \beta_8(\text{SIZE}) + \beta_9(\text{DR}) + \epsilon$$

3.3.1. Dependent Variable (Credit Risk (CR):

Credit risk considered as one of the main risks because it is connected with all activities (Spuchřáková, Valašková, & Adamko, 2015). It is measured by the ratio of non-performing loans to total loans (Kolapo, Ayeni, & Oke, 2012).

3.3.2. Independent Variables (Internal Corporate Governance Mechanisms):

The Board Size (BS): The board of directors consider an important part of the governance structure of companies. It refers to the number of members of the Board of Directors each year (Aebi, Sabato, & Schmid, 2012; Hutchinson, Seamer, & Chapple, 2015), where the studies indicate (Huang & Wang, 2015) there is a relationship between board size and credit risk.

Board Independence (BI): Institutional investors play an active role in the governance of banks. It is calculated by the ratio of independent members (non-executive) members of the Board of Directors to the total number of Board members (Al-Smadi, 2013a; Christy, Matolcsy, Wright, & Wyatt, 2013; Hutchinson et al., 2015).

CEO \Chairman Separation (SEPA): It means to separate between the Chairman and the Chairman of the Executive Director where it will be used (Dummy Variables) take the value 1 in case of separation and value (0) if the positions are not separated between them (Hearn, 2011)

Independence of the Audit Committee (IAC): The role of the board involves the formulation and supervision of strategic objectives. It is concluded the proportion of an independent (non-executive) of Committee to the total number of Audit Committee (Christensen, Kent, & Stewart, 2010; Marn & Romuald, 2012).

Ownership Concentration (OC): It is the concluded percentage of shares owned by largest shareholders who own 5% or more of the bank's shares (Christy et al., 2013), where the study confirmed (Al-Smadi, 2013a) the existence of a significant impact of ownership concentration on credit risk.

Companies Ownership (CO): It is measured by the proportion of bank shares owned by companies (Marn & Romuald, 2012)

Foreign Ownership (FO): It is measured by the percentage of the shares of owned by foreign investors to total issued shares (Al-Amarneh, 2014; Al-Smadi, 2013a).

3.3.3. Control Variable

It was added in order to control the relationship between independent variables and dependent variables, view the effect of independent variables with dependent variables, as well as reduce random errors in the model through previous studies (Liao, Mukherjee, & Wang, 2015; Obradovich & Gill, 2013; Tahir, Rehman, & Rehman.Naveed, 2015; Yaseen & Al-Amarneh, 2015), and the most important of these variables

bank size and debt ratio.

4. Empirical Analysis

4.1. Descriptive statistical analysis

The summary of the descriptive statistics for the panel data in all Jordanian commercial banks listed on the Amman Stock Exchange is reported in Table (1). It shows the distribution of credit risk and Internal corporate governance mechanisms variables (Board size, Board Independence, CEO /Chairman Separation, Audit Committee Independence, Ownership concentration, Institutional Ownership, and Foreign Ownership). furthermore, control variables (bank size and debt Ratio).

Table 1: Descriptive statistic

Variables	Mean	Max	Min	Stdev
CR	9.16	22.40	1.84	4.11
BS	10.7	14.0	6.0	1.8
BI	37.2	77.8	0.0	15.8
DUAL	10	9.62	94	90.4
ACI	59.5	75.0	20.0	15.5
OC	59.7	88.5	21.3	20.1
IO	8.37	91.86	0.00	13.26
FO	35.2	89.1	0.0	29.7
SIZE	21.4	24.0	19.5	1.0
DR	85.7	93.5	78.0	2.6

The table above shows the descriptive statistics of the variables used in the study. The mean of credit risks was (9.16%), with standard deviation (4.11%). While, The mean value (10.7) The board size with standard deviation (1.8). Regarding board independence, the sample means the value of (37.2%) shows that the ratio of independent non-executive directors (BI) is slightly close to the half of the total number of the directors, with standard deviation (15.8%) , With regards to shows that the duality, where the number of observations of duality was (10), which formed (9.62%) of all observation, while the number of observations of no duality was (94), which formed (90.4%) of all observation. We can note that, almost, all bank appeared no duality, except for (Bank of Jordan) appeared duality throughout the whole period. Also, the means of audit committee independence was (59.5%), with standard deviation (15.5%) shows that the audit committee is mostly composed by independent non-executive directors. For Ownership Concentration, the mean values were (59.7%), with standard deviation (20.1%). The mean of institutional ownership was (8.37%), with standard deviation (13.26%). With regards to the mean of foreign ownership was (35.2%), with standard deviation (29.7%).

Furthermore, the bank size shows that the mean value (natural logarithm of total assets) was (21.4), with standard deviation (1.0). While, shows that the mean of debt ratio was (85.7%), with standard deviation (2.6%).

4.2. Correlation analysis

4.2.1. Testing for unit root

While working with time series data we need to test them for stationary. This test is processed to determine if there is a systematic change in either the mean or the variance in the data, if not it should be treated appropriately, to misleading estimates and spurious regression. The verification of unit root is done in practice by using unit root tests such as Dickey-Fuller, Augmented Dickey-Fuller(Dickey & Fuller, 1979) and Phillips-Perron tests(Phillips & Perron, 1988). Augmented Dickey-Fuller test is employed which requires the estimation of the following equation

$$\Delta Y_t = \alpha + \beta Y_{t-1} + \sum_{i=1}^n \gamma_i \Delta Y + \varepsilon_t$$

The lag order n is chosen to satisfy the criteria of no autocorrelation. The null hypothesis of presence of non-stationary behaviour is essentially the test of weather $\beta = 0$ or no.

Table 2: Unit Root test

Variables	ADF	Prob.	PP	Prob.
CR	-5.710185* (-3.495677)	0.0000	-3.089204** (-2.889753)	0.0305
BS	-4.517483* (-3.495021)	0.0003	-4.686141* (-3.495021)	0.0002
BI	-5.220080* (-3.495021)	0.0000	-5.251809* (-3.495021)	0.0000
DUAL	-1.390667 (-2.582041)	0.5841	-4.284275* (-3.495021)	0.0008
ACI	-3.374349** (-2.889753)	0.0141	-3.504684* (-3.495021)	0.0097
OC	-3.535327* (-3.495021)	0.0089	-3.550544* (-3.515047)	0.0085
IO	-5.983363* (-3.495021)	0.0000	-5.961360* (-3.495021)	0.0000
FO	-2.716004*** (-2.581890)	0.0747	-2.951841** (-2.889753)	0.0430
SIZE	-2.822654*** (-2.581890)	0.0586	-2.965003* (-2.889753)	0.0416
DR	-3.937684* (-3.495021)	0.0026	-3.957503* (-3.495021)	0.0024

(*) p<0.01, (**) p<0.05, (***) p<0.10.

The results of the stationary test of Unit Root show that the (CR, BS, BI, OC, IO and DR) are stationary at level, since the significant level (Prob.) corresponding to variables are less than 0.01. The variables (ACI, FO and SIZE) are stationary in different significant levels (0.01, 0.05 and 0.10), these results according to ADF test, with almost similar to PP test. Moreover, ADF test appears (DUAL) series with unit root, while this result rejected by PP test, which show that (DUAL) is stationary at (0.01) significant level. These results show that the null hypotheses of the unit root existence (non- Stationary) are rejected, which indicate that all mentioned variable are stationary at the level during the study period.

4.2.2. Multicollinearity Test

To test the existence of multicollinearity phenomena between model variables, Pearson correlation coefficients calculated between independent (predictor) variables, the results of testing multicollinearity between independents variables are explained by correlation matrices and VIF test as following:

Table 3: Correlation matrix for predictor variables

	BS	BI	DUAL	ACI	OC	IO	FO	SIZE	DR
BS	1.000								
BI	-0.533**	1.000							
DUAL	-0.123	-0.039	1.000						
ACI	-0.164	0.126	-0.156	1.000					
OC	-0.406**	-0.017	0.124	-0.129	1.000				
IO	0.105	0.142	-0.304**	0.146	-0.212*	1.000			
FO	-0.259**	-0.038	0.293**	-0.171	0.769**	-0.429**	1.000		
SIZE	0.347**	-0.121	-0.136	0.359**	-0.275**	-0.069	-0.128	1.000	
DR	0.081	0.017	0.068	0.062	-0.001	0.254**	-0.085	0.116	1.000

(**) Significant at 0.01, (*) Significant at 0.05

The above table shows that maximum value of correlation coefficient (0.769) occurred between (OC and FO), this value may indicate there is no multicollinearity problem, otherwise the values were less than or equals (± 0.769), which means there were no perfect relationship between variables. In the statistical literature the value (0.80) and more considered as an indicator of multicollinearity existence (Gujarati & Porter, 2004).

To ensure the above result, variance factor inflation (VIF) was calculated, the results in the following table.

Table 4: VIF for independent and control variables.

Variable	VIF
BS	2.375
BI	1.650
DUAL	1.271
ACI	1.415
OC	3.390
IO	1.553
FO	3.324
SIZE	1.589
DR	1.156

The table is shown that all VIF values were greater than (1) and less than (10). This gives evidence that there is no multicollinearity among all predicted variables (Gujarati & Porter, 2004).

4.2.3. Regression analysis and hypothesis Results

4.2.3.1. Regression analysis

This part of study deals with regression results of explained variables (credit, liquidity, capital adequacy and operating risks) and the explanatory variables (BS, BI, DUAL, ACI, OC, IO, FO, SIZE and DR) of the study. The results of regression generated from fixed and random effect models. The results were as following:

H1: There is no statistically significant impact for governance mechanisms (BS, BI, DUAL, ACI, OC, IO and FO) on the credit risks of the Jordanian banks.

Table 5: Regression results

Variable	Co-eff	Std Error	T-value	P-value*
BS	0.395	0.107	3.703	0.000
BI	-0.045	0.011	-4.084	0.000
DUAL	2.989	0.910	3.283	0.001
ACI	-0.035	0.016	-2.237	0.028
OC	0.017	0.016	1.042	0.300
IO	0.034	0.013	2.596	0.011
FO	-0.010	0.013	-0.772	0.442
SIZE	-0.532	0.409	-1.301	0.197
DR	-0.529	0.095	-5.591	0.000
Constant	53.994	9.792	5.514	0.000
R-squared	0.388			
Adjusted R-squared	0.329			
F-statistic	6.609			
Prob*(F-statistic)	0.000			
D-W	1.796			

*Significant at 0.05 level.

4.2.3.2. Hypothesis Results

Hypothesis 1 shows that credit risk is positively related to board size. With regard to the corporate governance variable (independent variable); board size (BS) as illustrated in table has a significant effect on credit risk (at $p < 0.05$) with where coefficient value equals (0.395) is significant with ($t = 3.703$) and ($P\text{-value} = 0.000$). Therefore, a significant positive relationship between board size and credit risk means that a smaller board size influences better credit risk.

Hypothesis 2 underpins that credit risk is positively related to the fact that chief the executive officer is a

separate entity from the chairman of the board. With regards to the corporate governance variable; independent non-executive directors (INEDB) has a significant effect on credit risk (at $p < 0.05$), where coefficient value equals (-0.045) is significant with ($t = -4.084$) and ($P\text{-value} = 0.000$). Therefore, a significant positive relationship between Board Independence and credit risk.

Hypothesis 3 reveals that: Credit risk is positively related to a higher proportion of independent non-executive directors. With regards to the corporate governance variable; (DUAL) has a significant effect on credit risk, where the coefficient value equals (2.989) is significant with ($t = 3.283$) and ($P\text{-value} = 0.001$).

Hypothesis 4 supports that Credit risk is positively related to a higher proportion of independent directors in the audit committee. With regards to the corporate governance variable; independent non-executive directors in the audit committee (ACI), the table has a significant effect on credit risk (at $p < 0.05$), where coefficient value equals (-0.035) is significant with ($t = -2.237$) and ($P\text{-value} = 0.028$). Therefore, a significant positive relationship between (ACI) and credit risk.

Hypothesis 5 supports that Credit risk is positively related to the proportion of ownership concentration. With regards to the corporate governance variable; ownership concentration (OC), the table has shown has no significant effect, where coefficient value equals (0.017) is not significant with ($t = 1.042$) and ($P\text{-value} = 0.300$). This means that higher ownership concentration no significant effect on credit risk.

Hypothesis 6 shows that Credit risk is positively related to the proportion of Institutional ownership. With regards to the corporate governance variable; Institutional ownership in the audit committee (IO), the table has a significant effect on credit risk (at $p < 0.05$), where coefficient value equals (0.034) is significant with ($t = 2.596$) and ($P\text{-value} = 0.011$). Therefore, a significant positive relationship between Institutional ownership and credit risk.

Hypothesis 7 supports that Credit risk is positively related to the proportion of foreign Ownership. With regards to the corporate governance variable; foreign Ownership (FO), the table has shown has no significant effect, where coefficient value equals (-0.010) is not significant with ($t = -0.772$) and ($P\text{-value} = 0.442$). This means that higher foreign Ownership no significant effect on credit risk.

Finally, (SIZE) has not significant effect, where coefficient value equals (-0.532) is not significant with ($t = -1.301$) and ($P\text{-value} = 0.197$), and (DR) has significant effect, where coefficient value equals (-0.529) is significant with ($t = -5.591$) and ($P\text{-value} = 0.000$)

Moreover, (D-W = 1.796) indicates there is no serial correlation, where Durbin-Watson value nearby (2) indicate there is no serial correlation between error terms.

From the results presented by adjusted R-square, the percentage of Performance expressed by all the variables above the equation is the coefficient of determination equal to (0.388), which means that about (38.8%) of the variation in credit risks is explained by the model. The significance value of the F statistic ($F = 6.609$) is ($\text{Prob } F = 0.000$) less than 0.05, which means that the effect of independent variables aggregated is significant on credit risk.

Table 6: Summary of the research result

Hypothesis	Hypothesis statement	p	Results
H1	Credit risk is positively related to board size	0.000	Accept
H2	Credit risk is positively related to the fact that chief the executive officer is a separate entity from the chairman of the board.	0.000	Accept
H3	Credit risk is positively related to a higher proportion of independent non-executive directors.	0.001	Accept
H4	Credit risk is positively related to a higher proportion of independent directors in the audit committee.	0.028	Accept
H5	Credit risk is positively related to the proportion of ownership concentration	0.300	Reject
H6	Credit risk is positively related to the proportion of Institutional ownership	0.011	Accept
H7	Credit risk is positively related to the proportion of foreign Ownership	0.442	Reject

*Represent the significance at the 5% level

5. Conclusions

This study was conducted using data collected from annual reports of 13 Jordanian banks listed on Bursa Amman for the period of 2009 to 2016. This research focused on all Jordanian commercial banks. The statistical method used for this study was Panel data analysis. Three hypotheses were developed by the researchers based on past studies (refers to table 4).

The results show that the first hypothesis which suggests that the Internal corporate governance mechanisms had an effect on credit risk with R Square, the coefficient of determination equal to (0.388), which means that about (38.8%) of the variation in credit risks, which means that the effect of independent variables aggregated is significant. This result is consistent with those found in prior research (Al-Smadi, 2013b; Huang & Wang, 2015; Hutchinson et al., 2015) While different with (Al-Zamel, 2015; Eling & Marek, 2014).

In the light of the previous results, the study has the following recommendations: Jordanian central bank should find ways to enhance the banks size, through consolidation and merger, which in turn will reduce the monopoly of few banks over the banking industry and will alleviate the unsystematic risk, the study also recommend the Jordanian commercial banks are to enhance the covenant quality in a way that would not contract more debt constraints.

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