DOES OWNERSHIP STRUCTURE IMPROVE CREDIT RATINGS?

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Abstract

This study seeks to examine the impact of Block Ownership structure on Credit Ratings in OECD countries. This research seeks to contribute to the extant literature by exploring the effects of Corporate Governance (CG) mechanisms on corporate credit ratings. The study uses a panel data of 200 companies from Anglo American and European countries between 2010 and 2014. The ordinary least square regression is used to examine the relationships. Additionally, to alleviate the concern of potential endogeneity, we use fixed effect regression, two-stage least squares using instrumental variables. The results show there is a negative and significant relationship between block ownership and credit ratings, with a greater significance among Anglo American countries than among European countries. The rationale for this is that Anglo-American system gives preferential treatment to individual shareholders and its accounting tradition leads to a decline in risk and increase in credit ratings. The result is consistent with the multi-theoretical framework predictions derived from the agency and stewardship theories. Future research could investigate credit ratings using other credit rating agencies, selecting a larger sample that includes small, mid-size and large companies. This paper extends, as well as contributes to extant CG literature by offering new evidence on the effect of block ownership on credit ratings between two different traditions. This will be explored by employing firm-level CG mechanisms by accounting for control variables. The findings will help regulators and policymakers in OECD countries in evaluating the adequacy of current CG reforms to prevent management misconduct and scandals.

Keywords: Credit Ratings, Corporate Governance, Audit Committee, OECD, Block Ownership, Standard & Poor's, Culture, Legal System

1. INTRODUCTION

Credit rating (CR) is an important concept that is critical to company performance. Understanding how CG mechanisms can influence CR requires an understanding of how CR work. A CR is an opinion expressed by CR agencies as to a company's ability to meet its financial obligations (Standard & Poor's, 2002). CR is therefore based on how creditworthy the CR agency thinks the firm is (Standard & Poor's, 2002). On deciding the creditworthiness of a company, CR agencies examine its CG structure. If the governance structure is weak, then the CR agencies

would very likely see the firm's financial position as poor and stakeholders in the company as vulnerable to possible losses (Fitch Ratings, 2004). The CR agencies, based on this observation, would, therefore, give the company a poor CR (Fitch Ratings, 2004). Such a CR would alert investors and would-be investors that a particular firm has high-risk levels; while some investors or lenders would see this as an opportunity, they may demand premium rates in order to take on such risk.

In deciding the CR of a company, CR agencies will take three major categories into consideration. The first is the financial ratios and other financial



data of the company. Next, CR agencies will examine the CG mechanisms. Third, these agencies would also take into consideration the economic conditions in which the company operates. National GDP growth will influence the CR of companies in the particular country (Ashbaugh-Skaife et al., 2006). In terms of the financial ratios and other financial data of the company, credit agencies look at several, including leverage, or the total indebtedness of the company, debt to cash flow, and net worth, to determine the profitability and performance of the company (Lundholm and Sloan, 2004). These indicate the credit risk of the company, and so are relevant for credit agencies.

This paper looks specifically at 10 countries, namely, the United States, Ireland, UK, Australia, Canada, France, Germany, Spain, Italy, and Japan, with the aim of examining corporations in each of these countries that use CR and those without CR. These countries are drawn from the Anglo-American or Shareholding CG model and from the Continental European or Stakeholding CG model. It will begin with a consideration of the nature, structure, Anglo-American characteristics of the and Continental European models. Information will be provided on how CG was reformed and its significance for both models. It will also look at the impact of reform on how ownership is seen in the case of both of these models using multi-theoretical framework. The different legal and accounting systems that are attached to these two models have varying effects on firms practicing in the Anglo-American and Continental European traditions, and these effects are shown to impact performance differently for companies in the different models and traditions. It is in this context that this study will look at how block ownership in the two models have an impact on credit ratings obtained from Standard & Poor's (S&P's).

2. CORPORATE GOVERNANCE AND CREDIT **RATINGS: A REVIEW**

2.1 Anglo-American vs. Continental European CG

With the United Kingdom and the United States being a very strong influence with respect to the CG codes, and with the OECD being greatly influenced in its 2004 Principles of CG by the United Kingdom and the United States, the vast majority of codes that have developed within the past few years have used the Anglo-American governance style of good governance (Krenn, 2014). The OECD has insisted that its Principles be the minimum governance principles to be used, although nations could have more stringent governance principles. (AlHares and Ntim, 2017).

However, while some OECD countries were finding it easier to follow the rules and principles laid down in the 2004 Principles of CG, other countries were finding that they had to consider changing their rules, regulations, and standards, as having the right infrastructure was necessary for creating the right business environment that would protect the rights of the shareholders (Todorovic & Todorovic, 2012).

What became apparent was that the OECD countries were different in terms of their legal framework, accounting systems, and Nevertheless, they realised the importance of finding ways of promoting CG. There were really two main CG systems or models among OECD countries, which are commonplace and that oppose each other: the shareholding model and the stakeholder model (Sternberg, 1997; Weimer & Pape, 1999; Vinten, 2001; Letza, Sun & Kirkbride, 2004). These two models are based on shareholding and stakeholding theories. For example, the U.K., U.S., Canada, Ireland, and Australia were based on the shareholding model, while France, Germany, Spain, Italy and Japan followed the stakeholding model. (AlHares, 2017)

Culture plays an important part in the business operations of a company and in its CG. Organisations and their management are heavily dependent on the cultural practices that take place in a country. This explains why the concept of Western culture and its universal modern management methods are no longer considered a reality. As Hofstede (1984) points out, this is because although France, Germany, Sweden and the U.K. are all seen as "Western", their types of management differ because of cultural factors (p. 81).

The rationale for taking this position is that it is specific cultural practices and values that determine the goals of a country and the economic and technical resources that would be used to achieve the goals (Hofstede, 1984, p. 81). Culture is based on how people behave in their particular settings. This being the case, it can be clearly seen that the activities that take place in different countries must, therefore, be determined by the culture of the country.

The ownership structures among countries using the Anglo-American CG model are different from those using the Continental European CG model. In differentiating between the Anglo-American and Continental European governance models, one must pay attention as to who the owners are, how much power these owners possess, and more specifically, to how the shareholders, particularly minority shareholders, are protected from majority shareholders. A common idea is that where there is poor shareholder protection, ownership tends to be rather concentrated, with minority shareholder rights not protected. Besides, the legal tradition of the countries play a major role in determining the ownership structures (La Porta, Lopez-de-Silanes, & Shleifer, 1999). These authors contend that "the quality of investor protection, as measured either by the shareholder rights score or by legal origin, is a robust determinant of the incidence of widely held firms" (La Porta et al., 1999, p. 511).

2.2 Multi-Theoretical Framework

2.2.1Agency Theory

First, it is expected that when agency theory is applied to CG and CR, CR would be positive in the presence strong governance. Would-be lenders are impressed with good CG systems, as agency problems which arise between ownership and control, from conflicts of interest between controlling and noncontrolling shareholders, and from self-interested managers, would be greatly reduced or eliminated.

Second, investors are also concerned with maximising their investments, and they choose companies with a good CR. A good CR is based to a great degree on the absence of risk, and, as noted above, where there is much conflict in the principalagent relationship, there is much systemic risk

(Garmaise & Liu, 2005). It would follow that a company with a good CG structure and with appropriate mechanisms for reducing this conflict, would also be a company that would have good CR. Governments, investors, banks, and brokers all use CR to determine creditworthiness. The CG structure of an organisation can, therefore, indicate to an investor whether a company would make a good investment choice (Ahmad, Rashmi, Bakshi, & Saha, 2009).

Third, it was noted that where there is good CG and a separation of the roles of CEO and chair of the board, organisations are more likely to be viewed more positively, as the detrimental effect of this duality is removed. In many organisations, the removal of this duality brings about better CG. It is expected that CR are more positive than where there is better CG (Elbannan, 2009; Jiraporn, Kim, Kim, Kitsabunnarat, 2012). Fourth, CR are said to affect the ability of an organisation to borrow and so organisations that have poor governance and that are highly leveraged would very likely have low CR. As Elbannan (2009) points out, organisations that have poor governance are more likely to have poor CR. According to agency theory, if there is good CG, then there is likely to be good CR for the firm.

2.2.2 Stewardship Theory

First, in terms of CR, one would expect that since shareholders have great trust in a manager, and since the manager, according to this theory, is working to improve corporate wealth, then it is likely that CR would also be high. This would be supported by the fact that shareholders are pleased with the organisation's performance and with the wealth, they are accruing from their investment. Good performance is associated with higher CR (Elbannan, 2009).

Second, it was shown that stronger internal control was also associated with higher CR. Firms that have greater internal control would be able to make good decisions about managing their operations (Elbannan, 2009). These firms would be different from firms that have a speculative-grade rating, that are smaller size, and that have lower profitability (Elbannan, 2009). As noted, firms that have weak internal control also have "lower cash flows from operating activities, net losses in the current and prior fiscal year, higher income variability and higher leverage than firms compared to a firm with highquality controls" (Elbannan, 2009, p. 127). Third, there would be less cost and therefore higher CR associated with a firm, where managers take the stewardship approach because there would be less need for the same stringent CG mechanisms that would be required from firms viewed under an agency theory.

2.3 Block Ownership and Credit Ratings: literature review and hypotheses development

Block holders are seen as having the potential to negatively affect a firm's CR, but small block holders may be thought of as not having the potential for affecting CR to any great extent. However, according to Ashbaugh-Skaife et al. (2006), the number of block holders that owned at least 5% ownership in a firm was negatively associated with the overall CR of a

firm. One possible reason for this is that several small block holders could easily join forces and be considered the equivalent of a large block holder group. It was also revealed that lower CR was positively associated with weaker shareholder rights in terms of takeovers by block holders. The theories that can be applied here are stewardship theory and agency theory, for good governance is expected to show the shareholders being protected, and to good governance preventing the CEO and management form promoting their interests and not those of the shareholders.

The characteristics of CR is a result of its stability, timeliness, and accuracy in measuring risk (DeHaan, 2017). Credit rating agencies perform a significant role in evaluating the creditworthiness of borrowers (Wiener-Fererhofer, 2017). The quality of working capital accruals and the timeliness of earnings were also shown to be positively associated with CR. Board independence, ownership of stock by board members and board expertise were all seen to have possible associations with firm governance and CR (Ashbaugh-Skaife et al., 2006). However, the level of CEO power on the board was associated with negative CR. Ashbaugh-Skaife et al. (2006) found that when a firm moves up on the governance scale, it doubles its probability of receiving an investmentgrade CR.

Block holders also present risk based on asymmetry problems when CG principles are not followed. Agency theory shows that the separation of ownership and control brings to the fore the principal-agent problem. Block holders violate this theory, as they represent their interests at the expense of minor shareholders. As Matthies et al. (2013) observe, agency risk and information risk result, thereby weakening violating governance and having a negative impact on CR. This leads us to propose the following hypothesis:

H1: There is no statistically significant relationship between the block ownership and Credit Ratings.

3. RESEARCH FRAMEWORK

3.1 Data collection procedure

This study uses the OECD CG Principles (2004) to investigate the quality of CG practices in the companies used in the sample. CG data are obtained manually from annual reports. Annual reports are the main source of information for this study, and the assumption is made that the internal CG variables presented are reliable. The rationale for this is that the information provided by management to the shareholders must be accurate. Therefore, 200 annual reports for the companies provide the majority of data.

The annual reports were obtained from the Perfect Information Database and companies' website. When annual reports were not readily available, and when data was not available on in the Perfect Information Database, the company was contacted directly through a phone call or email, or through the companies' website.

The measurement of CR can be carried out by examining the default frequencies with which companies in the same classification are denied credit, and by investigating the changes in CR that

take place as prices and returns on stocks and bonds are adjusted (Jorion & Zhang, 2007). Estimations of default probabilities for individual rating categories can, therefore, be made on the basis of default frequencies. However, when agencies assign CR, they define those ratings in terms of the quality of credit the individual firm has, and do not use a specific default probability for the individual rating categories (Matthies, 2013). Consequently, we decided to assign CR to firms based on Standard & Poor's compilations of long-term issuer CR. Standard & Poor's ratings range from best to worst as follows: AAA, AA+, AA, AA-, A+, A-, BBB+, BBB, BBB-, BB+, BB, BB-, B+, B, B-, CCC+, CCC, CCC-, CC, C, RD, SD and D. It is important to note that rating scales are ordinal, and not cardinal, meaning that credit quality is shown to increase as the categories decline down the scale. Moody's CR methodology could be applied as it uses selected financial ratios from consolidated Balance Sheets and Income Statements from firms (Wiener-Fererhofer, 2017).

The firm-level data includes firm size, measured by log of total assets, sales growth, audit committee number, CG committee number, and leverage, as well as year dummies and country dummies. The countrylevel data includes stock market capitalisation, corruption index, inflation, GDP per capita, Hofstede's culture variable (masculinity and power distance), population and exchange rate. These include the country's legal system, whether common law or civil law. Countries with common law systems tend to have better protection for shareholders than countries with civil law systems. The accounting system used, whether based on international or local accounting standards, is also important, as different systems have different reporting requirements and notions of acceptable practice. The CG system used, whether Anglo-American or Continental-European, also has different requirements and different protections for shareholders. A country's GDP gives an indication of the prosperity and size of the economy, and the level of investment in the economy. The level of corruption in the country, its inflation rate and the treatment of shareholders' rights are all factors that are significant to investors, affecting the amount of caution that an investor should exercise when investing in a particular economy. Population size, culture, and cultural variables are important factors that shed light on an economy. This information is accessed from the World Bank website and other global sources of financial information on countries, as well as from the World Federation of Exchanges. Hofstede's cultural variables also help identify the manner in which companies in particular countries approach business dealings.

3.2 Sample

The sampled firms used in this paper are drawn from companies that are listed in the World's Biggest Public Companies listing, FORBES Global 2000 Leading Companies (Forbes, 2000). The sample is made up of 200 companies that were taken from ten, or 29.4%, of the 34 OECD countries. The 200 companies represent both the Anglo-American tradition, including companies from Australia, Canada, Ireland, the UK and the US, and the Continental European tradition,

which includes companies from France, Germany, Italy, Japan and Spain. These companies are drawn from ten industries, namely, basic materials, consumer goods, consumer services, financials, healthcare, industrials, oil and gas, technology, telecommunications, and utilities, as shown in Table 1 below. The period of focus is 2010 to 2014, resulting in 1,000 firm-year observations. The study looks at how CG mechanisms impact the CR of these firms in the various industries mentioned above.

The rationale for selecting countries from both traditions, from these various industries, and for these years is to show how companies from these different traditions and industries performed after the financial crisis. This information is ascertained using secondary data obtained from the websites and financial reports of the companies. The sample was stratified, drawn from large, medium and low firms based on their total assets and sales as part of the FORBES 2000 information provided.

An inclusion criterion of the companies taking part in the study was that they had experienced the global financial crisis, and data was available for a period after this event. (De Haan, 2017) An exclusion criterion was that any firms that had independent variables missing that were necessary for the analysis would be eliminated from the sample. Utility firms and firms from the financial industry were also excluded, as these industries have a different capital structure and are heavily regulated, which is likely to impact their governance structures differently than firms in other industries (Yermack, 1996; Weir et al., 2002; Cheng, 2008).

3.3 Variables measurement and regression model

Table 1 summarises all variables used in conducting the empirical study. Data on CR is taken from the long-term issuer CR by Standard and Poor's. Going from highest to lowest, this agency agrees on the following broad ratings: premier, high grade, upper medium grade, lower medium, non-investment grade, speculative, highly speculative, substantial risks, extremely speculative, default imminent, and lastly, in default. Standard and Poor's agrees that a premier CR is reserved for companies with long-term AAA.

The independent variables that would be used is ownership structure measured by block ownership (BO), which is measured by the ratio of a total number of ordinary shares held by block shareholders with at least 5%, to the total number of ordinary shares. The difference in ownership structure is seen as important to costs. For example, Anderson, Mansi, and Reeb (2003) point out that costs are affected by ownership structure. The rationale for this is that when there is much manager-shareholder conflict, there is a greater need for surveillance, which increases costs (Anderson et al., 2003). In founding family ownership situations, agency costs are lower, as the interests of managers and owners become more aligned (Anderson et al., 2003). Anderson et al. (2003) find that there were fewer conflicts between those who owned the companies and those who were lenders to the company. This may be due to the fact that there was a significant investment of family resources in the companies (Anderson et al., 2003).

Table 1. Variables definition and measurement

CG variable (Ownership Structure)						
ВО	The ratio of total number of ordinary shares held by block shareholders with at least 5%, to the total number of ordinary shares					
Credit Ratings	Firm long-term credit rating obtained from Standard & Poor's (S&P's) ratings ranging from AAA (highest rating) to D (lowest rating- debt in payment default). These ratings reflect S&P's assessment of the creditworthiness of the debtor with respect to its senior debt obligations					
	Control variables					
SG	The ratio of current year's sales minus previous year's sales, all divided by previous year's sales					
FS	Natural logarithm of the book value of total assets					
AC	Total number of Audit Committee					
CGC	Total number of CG Committee					
LVG	The ratio of total debt to total assets					
CGY	The rise in the stock price divided by the original price of the security					
SMC	The market value of the shares outstanding					
CORR IDX	The misuse of public power for private benefit					
INF	The rate at which the general level of prices for goods and services is rising					
GDPC	Gross domestic product (GDP) divided by number of people in the country					
POP	People living in a country					
POWD	The degree to which the less powerful members of a society accept and expect that power is distributed unequally					
ANGL	A dummy variable for Anglo American countries (1), Continental countries (0)					
CON	A dummy variable for each country: UK (DU UK). US (DU US)					
Y	A dummy variable for each year of the ten years from 2010-2014, 2010 (DU 10), 2014 (DU14)					

Control variables that were thought to be able to influence CR were incorporated. For example, firm size was shown as a logarithm of the total assets in each year. The country information would be obtained from global sources, such as country statistics, and company information would be obtained from company websites as well as from annual reports. A valuation model and panel data from companies in the United States, Ireland, UK, Australia, Canada, France, Germany, Spain, Italy, and Japan will be used. This study set out to examine the how Institutional ownership influence CR and how country characteristics moderate the relationship between CR and firm value.

Ordinary least squares (OLS) regression would be used to test our hypothesis. The dependent variable in these regressions is the CR. Since it may be influenced by past performance, growth, ownership characteristics and CG characteristics, among others, all of these variables are included in the regression analysis to control for confounding factors (Han et al., 2015). A year and industry dummies would be used in all regressions in order to control for the year and the industry. The correlation analysis would be carried out with all variables.

$$CR_{it} = \alpha_0 + \beta_1 BO_{it} + \sum_{i=1}^{n} \beta_i FCONTROLS_{it} + \sum_{i=1}^{n} \beta_i CCONTROLS_{it} + \varepsilon_{it}$$
(1)

4. THE RESULT OF THE RESEARCH

4.1 Descriptive analysis and bivariate correlations

The block ownership figure is derived by taking the total number of ordinary shares that are held by block shareholders with at least 5% of the total number of ordinary shares. Panel A of Table 2 reports the descriptive analysis of data relating to the independent variable. For example, block ownership (BO) is between 5% and 100% with a mean of 43.5%. Panel B of Table 2, reports the CR having a mean of 16.12 with a standard deviation of 2.881 and with a minimum of 9 and maximum of 23. Panel C of Table 2 presents the control variables, which are considered to have an influence on CR among block owners. These variables were therefore incorporated into the figures in order to give a more accurate account of their influence on CR. For example, sales growth (SG) reveals the mean of 7.52% and standard deviation of 17.72%. The minimum value is -43.14% and the maximum is 238.65%. What this shows is that there is a wide difference in sales growth between companies.

Firm Size (FS), which is derived as the logarithm of the book value of total assets, has a mean value of 4.2724, ranging from 2.4641 to 5.8757. The number of audit committees (AC NO) is seen as having a range from 2 to 8. The number of CG committees (CGC NO) is between 1 and 9.

The presence of audit committees and CG committees are important in limiting CR since the committees are responsible for ensuring that good governance is achieved, with agency theory showing a natural conflict between owners and managers. Both committees are looking after the interests of all the shareholders, while the block owners would be interested in looking after their own short-term goals. Therefore, it is expected that both committees, as responsible for monitoring the work of the managers, would see to it that the block owners do not take advantage of the situation. Corruption Index (CORR IDX) range from 1.59 to 1.94 with a mean of 1.848. In terms of Power Distance (POWD), the mean value is 1.63 and the median value is 1.59, with the standard deviation being only .113. The minimum is .144 and the maximum value is 1.83. Thus, our findings

suggest that our sample has been carefully chosen and thereby minimizing the possibility of being bias in selecting the sample.

Table 2. Summary descriptive statistics of the independent and control variables

Variables	Mean	Median	Std, Dev.	Min	Max			
Panel A: Independent (Corporate governance (CG)/ownership characteristics) variable								
BO (%)	.435	.4552	.245	.05044	1.0			
Panel B:Dependent Variable (Credit Ratings)	16.12	16	2.881	9	23			
Panel C: Control variables								
SG	.0752	.0434	.1772	4314	2.3865			
FS	4.2724	4.2116	.6170	2.4641	5.8757			
AC NO	4.28	4.00	1.114	2	8			
CGC NO	3.75	4.00	1.328	1	9			
SMC	6.2165	6.2505	.5672	4.7808	7.4204			
CORR IDX	1.848	1.869	.088	1.59	1.94			
INFL	-1.611	-1.69	.606	-2.69	0.0			
POP	82,042,575.4	62,051,376	83,685,858.43	4,560,155	318,857,056			
LVG	.6043	.6151	.1762	.0257	1.2544			
ANG	.5	.5	.5	0	1			
GDPC	4.646	4.66	.086	4.462	4.83			
POWD	1.63	1.59	.113	1.44	1.83			

Notes: Variables are defined as follows: Block Ownership (BO), Sales Growth (SG), Firm Size (FS), Audit Committee No. (AC), Corporate Governance Committee No. (CGC NO), Stock Market Capitalisation (SMC), Corruption Index (CORR IDX), Inflation (INFL), Population (POP), Leverage (LVG), Anglo American (ANG), GDP per Capita (GDPC), Power Distance (POWER D)

Table 3 shows results of correlation matrices for these study variables in order to examine multicollinearities among variables. The coefficients of Pearson's and Spearman's are used as a robustness check, the direction and the magnitude of coefficients shows in correlation matrices are almost the same, indicating non-existence of non-normality problems. Additionally, the coefficient of both Pearson's and Spearman's shows that the level of correlation among variables used are relatively weak, indicating nonexistence of serious multicollinearity problems. Moreover, the values of Variance Inflation Factor (VIF) reported in Table 4, less than 10, indicating that there is no serious multicollinearity problems (Field, 2009). The presence of heteroscedasticity was also tested using Breusch-Pagan test and the p-value is 0.166, indicating that heteroscedasticity is not present in this model. It can also be noted from table 3 that there is a negative association between Block ownership and control variables POP, LVG & POWD. And the positive association between Block ownership and control variables FS, AC NO, CGC, SMC, CORR IDX, INFL, ANG, GDPC, and IND.

4.2 Regression analysis

Table 4 represents the findings of the OLS analysis of block ownership on CR. It shows a statistically significant and negative relationship between block ownership and CR, thereby providing empirical support for H1. This negative relationship suggests that an increase in block ownership will be accompanied by a decrease in CR. This is also consistent with the findings of Holderness (2003), as block owners could have special benefits that are not available to other shareholders. This could happen as block owners could have special control over management, and they can use their position for firm takeover (Barclay and Holderness, 1989). Also, block owners could be directors of the firm (Holderness, 2003). Block owners have the potential to be beneficial to firms, as they are able to require more monitoring of the firm as they seek more information about their investments (Jensen, 1993). Besides, it could also be the case that national legal systems influence the kinds of ownership rights that firms within a country could hold (Mallin et al., 2010). Therefore, agency theory can be used to discuss the relationship between block ownership and CR.

Table 3. Pearson's and Spearman's correlation matrices of the variables

Variable	ВО	SG	FS	AC NO	CGC NO	SMC	CORR IDX	INFL	POP	LVG	ANG	GDPC	POWD	CGY	MAS
ВО	1	.031	011	.020	.058**	.054*	.114***	010	.031	064**	.207***	.134***	108***	.024	.005
SG	015	1	-110***	102***	044	076**	.016	.033	026	090***	.035	.013	063*	011	030
FS	.061*	116***	1	.320***	.224***	.320***	.014	.014	031	.214***	148***	046	.211***	.052	.018
AC NO	.096***	101***	.303***	1	.156***	.336***	.319***	.063**	.182***	.116***	.058	.112***	020	036	.087***
CGC	.064**	043	.227***	.156***	1	.102***	.296***	132***	092***	.045	.352***	.323***	370***	037	081***
SMC	.232***	155***	.269***	.393***	.086***	1	.292***	.030	.611***	002	.097***	.113***	.239***	.029	.038
CORR IDX	.199***	.199***	060 [*]	.211***	.311***	.248***	1	.141***	241***	169***	.495***	.614***	412***	.025	.019
INFL	.053*	.053*	015	.014	058*	.058*	.184***	1	.003	023	087***	057*	.104***	.115***	.237***
POP	050	107***	.239***	.182***	097***	.536***	305***	079**	1	.154***	416***	486***	.514***	.014	110***
LVG	081**	101***	.196***	.108***	.022	043	198***	036	.160***	1	150***	216***	.079**	.023	039
ANG	.264***	.056*	147***	.058*	.352***	.176***	.508***	.103***	433***	181***	1	.680***	728***	031	.047
GDPC	.228***	.055*	068**	.107***	.333***	.154***	.668***	041	495***	227***	.719***	1	581***	.001	.213***
POWD	128***	088***	.194***	026	350***	.178***	524***	.002	.501***	.063**	629***	512***	1	.029	349***
CGY	.036	.114***	.038	.115***	.037	.104***	.106***	014	014	133***	.132***	.165***	099***	1	.087***
MAS	.009	020	024	008	139***	014	014	.078**	089***	.028	070**	014	354***	.058*	1

Notes: the upper right half of the table shows Pearson's parametric correlation coefficients, whereas the bottom left half of the table contains Spearman's non-parametric correlation coefficients. **, and * denote correlation is significant at the 1%, and 5% level, respectively (two-tailed tests). Variables are defined as follows: Block Ownership (BO), Sales Growth (SG), Firm Size (FS), Audit Committee No. (AC), Corporate Governance Committee No. (CGC NO), Stock Market Capitalisation (SMC), Corruption Index (CORR IDX), Inflation (INFL), Population (POP), Leverage (LVG), Anglo American (ANG), GDP per Capita (GDPC), Power Distance (POWER D)

Table 4. OLS Regression Results of Block Ownership on Credit Ratings (Dependent Variable)

	All firm years	2010	2011	2012	2013	2014
Adjusted R ²	.382	.325	.335	.330	.429	.380
Standard Error	2.246	2.405	2.318	2.348	2.147	2.241
Durbin- Watson	.542	2.212	2.128	2.088	2.290	2.157
F-Value	17.810(.000)***	4.056(.000)***	4.217(.000)***	4.215(.000)***	5.974(.000)***	4.890(.000)***
No. of Observations	784	155	156	159	159	155
Constant	-3.642(.000)***	-1.425(.157)	861(.391)	173(.862)	.870(.386)	-2.875(.005)***
		Inde	pendent Varia	bles		
Block Ownership	566(.572)	563(.575)	757(.451)	811(.419)	.343(.732)	1.284(202)
			ontrol Variable			
Firm Size	8.493(.000)***	3.787(.000)***	4.496(.000)***	3.954(.000)***	3.469(.001)***	2.165(.033)**
Sales Growth	-2.171(.030)**	-1.604(.111)	-1.971(.051)*	.162(.871)	496(.621)	463(.644)
Audit Committee No.	644(.519)	-1.391(.167)	907(.366)	.369(.713)	.032(.974)	121(.904)
Corporate Governance Committee No.	1.643(.101)	.298(.767)	.356(.722)	1.142(.256)	1.558(.122)	.877(.382)
Leverage	-7.968(.000)***	-2.628(.001)***	-2.390(.019)**	-3.529(.001)***	-4.719(.000)***	-3.734(.000)***
Capital Gain Yield	-1.245(.214)	-1.841(.068)*	1.830(.070)*	788(.432)	1.678(.096)*	2.597(.011)**
Stock Market Capitalisation	.345(.730)	.708(.480)	.331(.741)	.312(.756)	2.489(.014)**	-1.932(.056)*
Corruption Index	2.021(.044)**	442(.660)	.103(.918)	.639(.524)	.687(.494)	.436(.664)
Inflation	.655(.513)	1.793(.076)*	.054(.957)	.056(.956)	-2.476(.015)**	1.635(.105)
GDP Per Capita	1.184(.237)	1.027(.306)	.469(.640)	663(.509)	-1.423(.157)	2.215(.029)**
Population	784(.434)	.215(.830)	470(.639)	-1.225(.223)	-2.245(.027)**	1.968(.052)*
Masculinity	6.888(.000)***	1.108(.270)	.738(.462)	.787(.433)	1.822(.071)*	4.183(.000)***
Power Distance	2.658(.008)***	.659(.511)	.431(.667)	.658(.512)	058(.954)	2.464(.015)**
Anglo American	.314(.753)	.261(.795)	.445(.657)	.492(.624)	-1.025(.307)	.181(.856)
2010	1.644(.101)	-	-	-	-	-
2011	.825(.410)	-	-	-	-	-
2012	.547(.585)	-	-	-	-	-
2014	.179(.858)	-	-	-	-	-

Notes: coefficients are in front of parenthesis. ***, ** and * denote p-value is significant at the 1%, 5% and 10% level, respectively. Also, year 2013 are excluded from the regression analyses. It is used as base year, respectively, for purposes of comparison.

The positive significance for Anglo-American means that firms from Anglo-American perform better in terms of CR than firms from Continental countries. This may reflect the fact that this system is greatly influenced by company law and taxation, and that the accounting system used prioritises creditors and tax authorities, as observed in Germany (Radebaugh et al., 2006). On the other hand, the Anglo-American system gives preferential treatment to large investors (Radebaugh et al., 2006). However, there is research that supports the position that increase in CG in Anglo-American accounting tradition leads to a decline in risk and increase in credit risk. According to research, since the Anglo-

American tradition has rigid CG mechanisms established by country practices, heavy emphasis is placed on compliance and disclosure, leading to reduced risk-taking (Jenkinson and Mayer, 2012).

5. ROBUSTNESS ANALYSIS

To conform the robustness of the obtained findings, additional analyses have been carried out. To test for the existence of any possible endogeneity, this study uses fixed effect regression model to address possible firm-level heterogeneity. Therefore, the model to be assessed is identified as:

$$CR_{it} = \alpha_0 + \beta_1 BO_{it} + \sum_{i=1}^{n} \beta_i FCONTROLS_{it} + \sum_{i=1}^{n} \beta_i CCONTROLS_{it} + \delta_{it} + \varepsilon_{it}$$
(2)

The results for model 1 is reported in Table 5 and the results are mostly similar to those in Table 4.

The findings are robust to endogeneity problems that may arise from omitted factors.

Table 5. OLS Regression Results of Fixed Effect of Block Ownership on Credit Ratings (Dependent Variable)

	Fixed Effect	2- Stage Least Squares	Lagged- Effect
Adjusted R ²	.860	.151	.053
Standard Error	.226	.623	.660
Durbin- Watson	1.677	.587	.502
F-Value	115.353(.000)***	4.802(.000)***	2.73(.000)***
No. of Observations	784	784	784
Constant	-2.266(.022)**	-3.848(.000)***	002(.115)
	Independent Variab	le	
Block Ownership	277(.698)	-3.204(.001)***	074(.752)
	Control Variables		
Firm Size	2.173(.022)**	2.404(.007)***	1.437(.473)
Sales Growth	-2.512(.006)***	-2.023(.033)**	932(.328)
Audit Committee No.	-1.377(.184)	776(.286)	-3.328(.007)***
Corporate Governance Committee No.	.563(.401)	2.651(.007)***	.604(.518)
Leverage	-2.631(.006)***	-1.343(.145)	-2.021(.014)**
Capital Gain Yield	223(.722)	-4.575(.000)***	005(.721)
Stock Market Capitalisation	1.122(.218)	.265(.766)	1.74(.061)*
Corruption Index	.062(.733)	1.323(.144)	1.041(.984)
Inflation	.145(.774)	1.738(.066)*	3.535(.000)***
GDP Per Capita	.332(.632)	.171(.845)	.185(.341)
Population	-1.675(.075)*	725(.310)	421(.325)
Power Distance	-	1.216(.220)	1.552(.171)
Masculinity	-	2.223(.025)**	.205(.971)
Anglo American	-	.724(.310)	.853(.637)
2010	2.711(.005)***	1.214(.212)	-
2011	1.870(.050)**	1.274(.188)	2.075(.031)**
2012	.764(.224)	.827(.343)	1.4288(.980)
2014	1.538(.114)	.818(.433)	.133(.657)

The two-stage least squares test is used with the OLS regression in order to correlate the errors that may occur in the dependent variables with the independent variable and to fitting panel data model. The results stay almost the same as the results provided previously in Table 4, suggesting that our results are robust to possible endogeneity issues.

6. CONCLUSIONS

The findings reveal a relationship between block ownership and CR using S&P, as shown in previous studies. The findings reveal that where block holders had ownership in a firm, this was seen as having a negative impact on CR. The rationale for this is that these block holders could force management to take positions that run counter to shareholders' interests. Again, this could be seen as involving agency conflict. The research findings show that fewer block holders were related to high CR. This was based on the particular legal system in which the firm operates. These findings are in line with previous research. For example, it was shown that where block holders owned at least 5% of the stock in a firm, this had a negative impact on the firm's CR. Since block holders tend to have more control, influence, and information than smaller investors, this represents an agency risk and information risk for the firm (Matthies, 2013). This is worse in firms with civil law legal systems, where there is not as much protection for minority rights.

The contribution that this study makes is augmented by the fact that it fills this gap in the existing literature by offering, for the first time, direct evidence on the levels of compliance with CG among firms in different countries based on their traditions, cultures, legal systems and practices. This study has made it possible to compare block ownership among different countries. Based on the empirical, practical and theoretical findings of this study, corporate managers, policy and decision makers and other authorities can recognise the contribution that this study makes towards the improvement of firms' financial operation. For investors, the findings of this study could be important in helping them in their decision-making on investment in companies. This study facilitates this by alerting investors to the relationships that they should be looking at in companies that could reveal whether companies are a good match for their investment needs. Lastly, this study makes a contribution to the field in that it takes a look at the differences and similarities between the various investigated. This study highlights the advantages and disadvantages of companies that operate in the Anglo and Continental traditions and highlights the protections that are provided by the legal traditions in these different countries.

However, there are limitations should be taken into consideration in this study. The sample was consisting of only 200 firms, which were chosen from 10 of the 34 OECD member countries. With the firms drawn from different industries, this meant that there were not many firms from the same industry (Haniffa & Cooke, 2002). Another limitation is that two sectors

of the respective economies were excluded, namely, the utilities and financial sectors. The rationale for deleting these sectors is that they were considered too highly regulated, with capital structures that were often unique to these industries (Haniffa & Cooke, 2002). It is noteworthy that during the same period there were several governance reviews and reports created and published, which could also have influenced the outcome of the study.

REFERENCES

- 1. Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. Journal of financial economics, 94(2), 291-309. https://doi.org/10.1016/j.jfineco.2008. 10.007
- 2. Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: what is the trigger?. Organization Studies, 25(3), 415-443. https://doi.org/10.1177/0170840604040669
- 3. Ahmad, T., Rashmi, P., Bakshi, P. & Saha, A. (2009). An assessment of role of credit ratingsagencies in the corporate governance process: The case for including internal contracts in the formal rating assessment. Science Research Network. Available at http://papers.ssrn.com/so13/papers.cfm? abstract_id=1486679
- AlHares, A. M. (2017). A Cross-Country Study of the Effects of Corporate Governance Mechanisms on Risk-Taking, Credit Rating and Cost of Capital (Doctoral dissertation, University of Huddersfield).
- AlHares, A., & Ntim, C. G. (2017). A Cross-country Study of the Effects of Institutional Ownership on Credit Ratings. International Journal of Business and Management, 12(8), 80. https://doi.org/10.5539/ijbm. v12n8p80
- 6. AlHares, A., Ntim, C.G., & King, D. (2018). Block ownership and companies' R&D intensity: The moderating effect of culture. Corporate Ownership & Control, 15(2), 19-32. https://doi.org/10.22495/cocv15i2art2
- Ashbaugh-Skaife, H., Collins, D. W., & LaFond, R. (2004). Corporate governance and the cost of equity capital. Working paper, University of Wisconsin, and University of Iowa.
- Ashbaugh-Skaife, H., Collins, D. W., & LaFond, R. (2006). The effects of corporate governance on firms' credit ratings. Journal of Accounting and Economics, 42(1), 203-243. https://doi.org/10.1016/j.jacceco. 2006.02.003
- 9. Black, B. S., Kim, W., Jang, H., & Park, K. S. (2015). How corporate governance affect firm value? Evidence on a self-dealing channel from a natural experiment in Korea. *Journal of Banking & Finance*, 51, 131-150. https://doi.org/10.1016/j.jbankfin.2014.08.020
- 10. Bozec, Y., & Bozec, R. (2007). Ownership concentration and corporate governance practices: substitution or expropriation effects?. Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration, 24(3), 182-195. https://doi.org/10.1002/cjas.23
- 11. Chen, C. H., & Al-Najjar, B. (2012). The determinants of board size and independence: Evidence from China. International Business Review, 21(5), 831-846. https://doi.org/10.1016/j.ibusrev.2011.09.008
- 12. Cai, J., Liu, Y., Qian, Y., & Yu, M. (2015). Information asymmetry and corporate governance. Quarterly Journal of Finance, 5(03), 1550014.https://doi.org/10.1142/S2010139215500147
- 13. Cuadrado-Ballesteros, B., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2015). The role of independent directors at family firms in relation to corporate social responsibility disclosures. International Business Review, 24(5), 890-901. https://doi.org/10.1016/j.ibusrev.2015.04.002
- 14. DeHaan, E. (2017). The financial crisis and corporate credit ratings. The Accounting Review, 92(4), 161-189. https://doi.org/10.2308/accr-51659
- 15. Donnelly, R., & Mulcahy, M. (2008). Board structure, ownership, and voluntary disclosure in Ireland. Corporate Governance: An International Review, 16(5), 416-429. https://doi.org/10.1111/j.1467-8683.2008.00692.x
- 16. Driver, C., & Guedes, M. J. C. (2012). Research and development, cash flow, agency and governance: UK large companies. Research Policy, 41(9), 1565-1577. https://doi.org/10.1016/j.respol.2012.04.003
- 17. Elbannan, M. A. (2009). Quality of internal control over financial reporting, corporate governance and credit ratings. International Journal of Disclosure and Governance, 6(2), 127-149. https://doi.org/10.1057/ jdg.2008.32
- 18. Fitch Ratings (2004). Credit policy special report, evaluating corporate governance: the bondholders' perspective, New York.
- 19. Garmaise, M.J & Liu, J. (2005). Corruption, firm governance, and the cost of capital AFA 2005 Philadelphia Meetings Paper. Available at SSRN: http://dx.doi.org/10.2139/ssm.644017
- 20. Guest, P. M. (2009). The impact of board size on firm performance: evidence from the UK. The European *Journal of Finance, 15(4),* 385-404. https://doi.org/10.1080/13518470802466121
- 21. Hofstede, G. (1984). Cultural dimensions in management and planning. Asia Pacific. Journal of Management, January, 81-90. https://doi.org/10.1007/BF01733682

- 22. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X
- 23. Jiraporn, P., Chatjuthamard, P., Tong, S., & Kim, Y. S. (2015). Does corporate governance influence corporate risk-taking? Evidence from the Institutional Shareholders Services (ISS). *Finance Research Letters*, *13*, 105-112. https://doi.org/10.1016/j.frl.2015.02.007
- 24. Kirkpatrick, G. (2009). The corporate governance financial crisis. Financial Market Trends. https://doi.org/10.1787/fmt-v2009-art3-en
- 25. Kirkpatrick, G. (2004). Improving corporate governance standards: the work of the OECD and the Principles: Organisation for economic cooperation and Development. Available at http://www.oecd.org/corporate/ca/corporategovernanceprinciples/33655111.pdf
- 26. Kleinow, J., & Horsch, A. (2014). The impact of state guarantees on banks' ratings and risk behaviour. *Journal of Governance and Regulation, 3(1).* https://doi.org/10.22495/jgr_v3_i1_p3
- 27. Krenn, M. (2014). Decoupling as a sustainable firm response to pressures for convergence and divergence in corporate governance: The case of codes of good corporate governance. *Journal of Management Policy and Practice*, *15*(4), 103.
- 28. Lacetera, N. (2001). Corporate governance and the governance of innovation: The case of pharmaceutical industry. *Journal of management and Governance*, *5*(1), 29-59. https://doi.org/10.1023/A:1017907119114
- 29. Lai, J. H., & Chen, L. Y. (2014). The valuation effect of corporate governance on stakeholder wealth: Evidence from strategic alliances. *International Review of Economics & Finance, 32*, 117-131. https://doi.org/10.1016/j.iref.2014.01.010
- 30. La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The economic consequences of legal origins. *Journal of Economic Literature*, 46(2), 285-332. https://doi.org/10.1257/jel.46.2.285
- 31. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. *Journal of Law, Economics, and Organisation*, *15*(1), 222-279. https://doi.org/10.1093/jleo/15.1.222
- 32. Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: a critical review of corporate governance. *Corporate Governance: An International Review, 12(3)*, 242-262. https://doi.org/10.1111/j.1467-8683.2004.00367.x
- 33. Louizi, A., & Kammoun, R. (2016). Evaluation of corporate governance systems by credit rating agencies. *Journal of Management & Governance, 20(2),* 363-385. https://doi.org/10.1007/s10997-015-9331-3
- 34. Lundholm, R. J., & Sloan, R. G. (2004). Equity valuation and analysis with eVal. New York, NY: McGraw-Hill.
- 35. Martins, H. C., Schiehll, E., & Terra, P. R. S. (2017). Country-level governance quality, ownership concentration, and debt maturity: A comparative study of Brazil and Chile. *Corporate Governance: An International Review, 25(4)*, 236-254. https://doi.org/10.1111/corg.12192
- 36. Ntim, C. G. (2015). Board diversity and organizational valuation: unravelling the effects of ethnicity and gender. *Journal of Management & Governance, 19(1)*, 167-195. https://doi.org/10.1007/s10997-013-9283-4
- 37. Ntim, C. G., Opong, K. K., & Danbolt, J. (2012). The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa. *Corporate Governance: An International Review, 20(1),* 84-105. https://doi.org/10.1111/j.1467-8683.2011.00891.x
- 38. Ntim, C. G., Opong, K. K., Danbolt, J., & Thomas, D. A. (2012). Voluntary corporate governance disclosures by post-apartheid South African corporations. *Journal of Applied Accounting Research*, *13*(2), 122-144. https://doi.org/10.1108/09675421211254830
- 39. Ntim, C. G., & Soobaroyen, T. (2013). Corporate governance and performance in socially responsible corporations: New empirical insights from a Neo-Institutional framework. *Corporate Governance: An International Review, 21(5)*, 468-494. https://doi.org/10.1111/corg.12026
- 40. Ntim, C. G., Lindop, S., & Thomas, D. A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre-and post-2007/2008 global financial crisis periods. *International Review of Financial Analysis*, *30*, 363-383. https://doi.org/10.1016/j.irfa.2013.07.001
- 41. O'Connor, M., & Rafferty, M. (2012). Corporate governance and innovation. *Journal of Financial and Quantitative Analysis*, 47(2), 397-413. https://doi.org/10.1017/S002210901200004X
- 42. OECD. Available at http://www.oecd.org/finance/financial-markets/42229620.pdf
- 43. OECD (2014). Risk management and corporate governance. Corporate governance, OECD
- 44. OECD (2004). Principles of Corporate Governance. OECD. Available at http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf
- 45. Ozturk, H. (2016). Reliance of Sovereign Credit Ratings on Governance Indicators. *The European Journal of Development Research*, *28*(2), 184-212. https://doi.org/10.1057/ejdr.2014.53
- 46. Radebaugh, L. H., Gray, S. J., & Black, E. L. (2006). International accounting and multinational enterprises. New York, NY: Wiley.

- 47. Sheedy, E., & Griffin, B. (2018). Risk governance, structures, culture, and behavior: A view from the inside. *Corporate Governance: An International Review, 26(1),* 4-22. https://doi.org/10.1111/corg.12200
- 48. Singh, V., & Vinnicombe, S. (2004). Why so few women directors in top UK boardrooms? Evidence and theoretical explanations. Corporate Governance: An International Review, 12(4), 479-488. https://doi.org/10.1111/j.1467-8683.2004.00388.x
- 49. Scafarto, V., Ricci, F., Della Corte, G., & De Luca, P. (2017). Board structure, ownership concentration and corporate performance: Italian evidence. *Corporate Ownership & Control*, 15(1-2), 347-359. https://doi.org/10.22495/cocv15i1c2p4
- 50. Standard & Poor's, (2002). Standard & Poor's corporate governance scores: criteria, methodology and definitions. New York: McGraw-Hill Companies, Inc.
- 51. Sternberg, E. (1997). The defects of stakeholder theory. *Corporate Governance: Scholarly Research and Theory Papers*, *5*(1), 3-10. https://doi.org/10.1111/1467-8683.00034
- 52. Todorovic, Z. & Todorovic, I. (2012). Compliance with modern legislations of corporate governance and its implementation in companies. *Montenegrin Journal of Economics*, *8*(2), Special Issue, 2-27.
- 53. Vinten, G. (2001). Shareholder versus Stakeholder is there a Governance Dilemma?. *Corporate Governance: An International Perspective, 9(1),* 36-47. https://doi.org/10.1111/1467-8683.00224
- 54. Wiener-Fererhofer, A. (2017). Credit rating process: A distinction between family and non-family firms regarding their rating score. *Journal of Family Business Management, 7(3)*, 256-290. https://doi.org/10.1108/JFBM-06-2017-0013
- 55. Weimer, J. and Pape, J. C. (1999). A Taxonomy of systems of corporate governance. *Corporate Governance: An International Perspective, 7(2)*, 152-166. https://doi.org/10.1111/1467-8683.00143
- 56. Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3), 581-606. https://doi.org/10.1016/j.jfineco.2012.03.005
- 57. Zattoni, A., & Cuomo, F. (2008). Why adopt codes of good governance? A comparison of institutional and efficiency perspectives. *Corporate governance: an international review, 16(1),* 1-15. https://doi.org/10.1111/j.1467-8683.2008.00661.x