BOARD CHARACTERISTICS AND FIRM VALUE: EVIDENCE FROM COLOMBIA

CARACTERÍSTICS OF THE BOARD OF DIRECTORS AND VALUE OF THE CORPORATION: EVIDENCE FORM COLOMBIA

ABSTRACT

This study examined the relationship between attributes of the board of directors such as size and independence with the value of the company (measured through the Tobin Q) through a panel of data composed of companies listed on the Stock Exchange of Colombia during the 2001-2013 Period. The empirical results do not show a relationship between the attributes of the board of directors analyzed and the value of the company. This can be explained in a small market of small companies, the laws of protection of shareholders and the presence of family businesses in the sample.

KEYWORDS

Corporate governance, Board size, Board independence, Firm value

JEL CLASSIFICATION

G30, G32, G38, L25

RESUMEN

Este estudio examinó la relación entre atributos de la junta directiva como el tamaño y la independencia con el valor de empresa (medido a través de la Q de Tobin) mediante un panel de datos compuesto de empresas listadas en la Bolsa de Valores de Colombia durante el período 2001-2013. Los resultados empíricos no muestran una relación entre los atributos de la junta directiva analizados y el valor de la empresa. Esto puede explicarse por su mercado de capitales relativamente pequeño e ilíquido, las débiles leyes de protección de los accionistas y la presencia de empresas familiares en la muestra.

PALABRAS CLAVE

Gobierno corporativo, Tamaño de junta, Independencia de la junta, Valor de la empresa

CLASIFICACIÓN JEL

G30, G32, G38, L25

1. INTRODUCTION

Corporate governance has been widely studied in literature as a mechanism to address the agency problem (Eisenhardt, 1989; Tirole, 2001; Williamson, 1984). The corporate failures of the late 90´s and early 00´s questioned the effectiveness of existing corporate governance systems and structures as vehicles for monitoring management (Claessens & Yurtoglu, 2013). Scandals such as Enron, WorldCom and Parmalat showed the inadequacies of the current corporate governance system and since then new corporate governance measures have been developed and implemented. The main objective of these initiatives has been to develop strong principles for corporate governance that focus on transparency and proper corporate management. One of such initiative was the OECD Principles of Corporate Governance issued in 1999. This was later adopted in 2003 by corporate governance institutions in Latin American countries as a model for the development of the White Paper for Corporate Governance for Latin America.

Colombia, one of Latin America`s more stable economies, can be regarded as being closely related to the continental European model of corporate governance. However as most Latin American countries, it presents significant differences when compared with Europe, i.e. smaller capital markets (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000a, 2000b), weaker protection of shareholders due to a weaker legal system (Klapper & Love, 2004; La Porta et al., 2000b) and higher ownership concentration (Gutiérrez & Pombo, 2009; Gutiérrez, Pombo, & Taborda, 2008).

Since 2003 the Colombian Association of Chambers of Commerce (*Confecámaras*), the Colombian Stock Exchange (*BVC*) and the Securities and Banking Commission (*Superintendencia financiera*) have taken the leadership role for corporate governance development in Colombia. Several documents and laws on this topic have been issued and/or enforced over the last decade with the White Book of Corporate Governance and Law 964 of 2005 being the most prominent ones (OECD, 2017). Their focus has been on improving corporate governance practices because it is believed that better governance practices provide better shareholder protection, thus decreasing cost of capital and providing access to external funding which in turn should propel economic development (Chong & López-de-Silanes, 2007).

The board of directors and its effectiveness as a governance mechanism is one of the most widely studied topics in corporate governance literature (Lorsch, 2017). Research has focused on board characteristics such as size (Goel & Sharma, 2017; Moreno, Lagos, & Gómez, 2017; Orozco, Vargas, & Galindo-Dorado, 2018), composition (García Martín & Herrero, 2018; Goel & Sharma, 2017; Moreno et al., 2017), diversity (Hassan & Marimuthu, 2018; Moreno-Gómez, Lafuente, & Vaillant, 2018; Rafinda, Rafinda, Witiastuti, Suroso, & Trinugroho, 2018), CEO duality (Tang, 2017; Teti, Dell'Acqua, Etro, & Volpe, 2017) and frequency of meetings and their relationship to firm value and/or performance, with size and composition being the most studied aspects. Literature presents contradicting arguments on the relationship between board characteristics such as board size and composition and firm value. Some works have shown that as board size increases it becomes less efficient due to slower decision-making (Eisenberg,

Sundgren, & Wells, 1998; Jensen & Meckling, 1976; Mak & Kusnadi, 2005; Yermack, 1996). Nevertheless, others mention that size is not related to firm value by arguing that size is dependent on each individual firm's reality (need of advising or monitoring, size, age, etc.) (Coles, Daniel, & Naveen, 2008; Wintoki, 2007).

On board composition, agency theory literature proposes a larger percentage of independent members since it leads to greater board independence and better monitoring. Literature again presents conflicting evidence, Coles et al. (2008) findings contradict this view by reporting that a larger percentage of inside members leads to better business knowledge and thus to better advising, therefore leading to higher firm value. Klapper and Love (2004) argue that such conflicting evidence on board size and composition and their relationship with firm value can be attributed to either each firm's reality and/or legal/macroeconomic environment.

Governance reforms, most of them based on the Sarbanes-Oxley Act, have been published and implemented globally over the last decade. There is very little empirical evidence on Sarbanes-Oxley's effectiveness or its impact on firm value (positive results via better shareholder protection) (Basu & Dimitrov, 2010; Wintoki, 2007).

Research is limited on both governance reforms and their impact on value and corporate governance in Colombia. Sarbanes-Oxley, in its quest to improve governance among companies set certain requirements on governance vehicles such as the board of directors. These requirements were followed and sometimes copied by governing bodies in different countries. The Colombian Securities and Banking Commission (*Superintendencia Financiera*) issued the Governance Law (*Ley 964*) of 2005 in which requirements were set on both board size and composition. The expected results of this law were improvement in governance (shareholder protection), which would help foreign investment to increase, thus prompting economic development. This paper adds to literature by providing evidence of the impact of governance reforms (based on Sarbanes Oxley) on firm value with data from Colombia. It also provides evidence of the relationship between board attributes such as size and composition and firm value for an emerging market such as Colombia.

This study examined the relationship between board attributes such as board size and composition with firm value (measured using Tobins Q) for Colombia with a panel of data composed by listed companies in the Colombian Stock Exchange between years 2001 and 2013. Empirical results for Colombia show no relationship between board attributes and firm value, which among other reasons can be explained by its relatively smaller and illiquid capital market, weak shareholder protection laws and presence of family firms among those observed. The rest of this work is organized as follows: in the second part hypotheses are constructed from the literature review that relates aspects of the board of directors such as size and independence to the value of the company. Subsequently, the methodology used is presented; in the fourth part, the results are presented and, finally, conclusions and future recommendations for research related to corporate governance and company value are presented.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1 Board Size and Firm Value

Literature on the relationship between board size and firm value offers mixed findings. Fama and Jensen (1983) believes that as board size increases decision-making becomes slower and with free-riding problems, it becomes less efficient leading to lower corporate value. There are many works provide evidence of such argument and find that smaller boards are related to higher firm value (De Andres, Azofra, & Lopez, 2005; Eisenberg et al., 1998; Gill & Mathur, 2011; Kumar & Singh, 2013; Mak & Kusnadi, 2005; Nguyen, Rahman, Tong, & Zhao, 2016; Ujunwa, 2012; Yermack, 1996). Other studies have shown that both very large and very small board sizes affect value positively (Coles et al., 2008; Jackling & Johl, 2009; Mishra & Kapil, 2018; Mishra & Kapil, 2017; Raheja, 2005). These works support that there is no optimal board size, since board size tends to depend on either advising or monitoring needs and this changes from company to company. Other researchers have found that there is no significant relationship between board size and company value (Bonn, 2004; Boone, Field, Karpoff, & Raheja, 2007; Di Pietra, Grambovas, Raonic, & Riccaboni, 2008; Lehn, Patro, & Zhao, 2009).

As mentioned before, empirical evidence provides mixed results on the relationship between board size and firm value. The conflicting evidence on the relationship between board size and firm value in which there is no apparent agreement within the literature on the nature of such a relationship. Given that other studies are not conclusive, this study analyzes three different hypotheses on the relationship between board size and value for Colombia:

H_{1a}: Larger Boards affect value negatively.
H_{1b}: Board size has no impact on firm value.
H_{1c}: Larger boards affect value positively.

2.2 Board Composition and Firm Value

Literature on board composition and its relationship to firm value is mostly focused on board independence, which is measured as the percentage of independent members. Klapper and Love (2004) argue that governance mechanisms are needed in providing shareholder protection in countries where legal shareholder protection is weak. They argue that in these environments better monitoring is needed. Outside directors (independent) are believed to be better monitors of management and thus a larger proportion of them within the board should have a positive impact on firm value (Fama & Jensen, 1983; Jenwittayaroje & Jiraporn, 2019).

Very limited evidence comes from outside the US and UK, especially from emerging economies. Sarbanes-Oxley recommends a larger number of independent members so that value can be optimized through better monitoring by the board. This is supported by the belief that independent directors are less prone to be entrenched or allied with managers, enabling them to perform better monitoring and even better advising (Dalton, Daily, Johnson, & Ellstrand, 1999; Giráldez & Hurtado, 2014; Jackling & Johl, 2009).

Empirical evidence provides support by showing that under special circumstances boards with a higher proportion of independent members add value

to shareholders (Bird, Huang, & Lu, 2018; Brickley, Coles, & Terry, 1994; Byrd & Hickman, 1992; Giráldez & Hurtado, 2014; Hermalin & Weisbach, 1988; Mohapatra, 2016). Coles et al. (2008) contradict this argument by mentioning that complex companies such as ones with R&D issues need more advising than monitoring and therefore value is created when a larger number of insiders (who provide advice) are present in boards.

Another line of thought in the literature suggests that there is no single ideal board composition (Vu, Phan, & Le, 2018). Researchers argue that composition should be based on corporate reality and the internal need for advising and monitoring should determine the need for independent members (Denis & Sarin, 1999; Harris & Raviv, 2008; Lehn et al., 2009). Since the empiric evidence suggests a positive relationship between board independence and firm value the following hypothesis is stated for Colombia:

H_2: There is a positive relationship between board independence (measured by the percentage of independent directors) and firm value for Colombia.

2.3 Corporate Governance Reforms and Firm Value

Sarbanes-Oxley Act was published in 2002 as a result of the corporate scandals of the beginning of the 2000´s with an aim to ensure better shareholder protection. Large exchanges such as NYSE and LSE made corporate governance recommendations as listing requirements. While NYSE used mainly SOX, LSE took recommendations from the Cadbury Report. Literature on the impact of Sarbanes-Oxley on governance and value is still scarce with most of the research conducted on board dynamics such as trends in board size and board composition. Findings show that boards are getting more diverse and more independent but presents no compelling evidence with regard to their resulting impact on firm value (Basu & Dimitrov, 2010; Linck, Netter, & Yang, 2008; Wintoki, 2007). Literature is almost non-existent regarding the impact of corporate governance laws on firm value in emerging markets such as Colombia.

Colombian Corporate Governance Law 964 of 2005 sets out the requirements for both board size and composition. According to this Law, boards should have no less than 5 and no more than 10 members with at least 25% of should be independent. This Law provides a detailed definition for board independence. In the context of Latin America, Price, Román, and Rountree (2011) in their research on Mexican governance codes implementation show that even though more firms comply with the code guidelines, there is no relationship between this code compliance and firm value. An explanation for these results can be the fact that Mexico shows large ownership concentration, lack of protection against insider trading and weak minority shareholder protection (Klapper & Love, 2004; Price et al., 2011).

Since Colombia shows characteristics similar to Mexico, specifically on capital market size, legal environment (civil law), poor law enforcement and weak shareholder protection the author expects the results to support (Price et al., 2011) by finding that corporate governance reforms or recommendations have no impact on value. In this sense, the following hypothesis in stated:

H_3: Law 964 of 2005 has no significant relationship with firm value.

3. METHODOLOGY

3.1 Sample and Data

The sample is composed by 406 year-observations of companies listed in the Colombian Stock Exchange (BVC) during the period between 2001 and 2013. The economatic database and registries of the Colombian Securities and Banking Commission (SF) were used to obtain the historical accounting information. Current information on board of director's size and composition was downloaded from *Superintendencia Financiera de Colombia* (SFC) and annual reports. Information on stock prices and trading volume were downloaded from DataStream, Bloomberg and BVC.

3.2 Research Model

The objective of this paper was to analyze the relationship between characteristics of boards, the corporate governance reform of Law 964 and the value of the company. For this, regression models by ordinary least squares (OLS) were estimated in an unbalanced data panel for the period 2001-2013.

$$TOBIN'SQ = \beta_0 + \beta_1 B_SIZE + \beta_2 B_INDEPENDENCE + \beta_3 LAW964 + \beta_4 FAMILY + \beta_5 F_SIZE \quad (1)$$

TOBIN'SQ was the dependent variable and is used to approximate the value of the company (Coles et al., 2008; Yermack, 1996). The independent variables were the size (B_SIZE) and the independence of the board (B_INDEPENDENCE), in addition to the corporate governance reform of Law 964 (LAW964).

Control variables were family property (FAMILY), company size (F_SIZE), country growth (GROWTH), liquidity of shares (LIQUIDITY), lag of variable TOBIN'SQ (LAG_TOBIN ') SQ) and the year of observation (YEAR). These control variables have been included since there is evidence that relates them to the value of the company. Prior research mentions that as firms grow they have more needs for contracting and thus require larger boards (Coles et al., 2008). In small, imperfect, illiquid markets such as Colombia, liquidity has a direct impact on price (Ahn, Cai, & Yang, 2018). GROWTH approximates the possibilities of growth, studies have shown that the value of the company increases when there are greater possibilities to grow (Kraft, Schwartz, & Weiss, 2018). Regarding the ownership structure (FAMILY), literature presents mixed evidence on the impact that family ownership has on firm value.

Multiple studies argue that due to a decrease in the monitoring costs in the firm that arise from family ownership the relationship between this two must be positive (Anderson & Reeb, 2003; Beehr, Drexler Jr, & Faulkner, 1997; Daily & Dollinger, 1992; Matthews & Fialko, 2001). On the other side other academics argue that the relationship is the opposite because a new agency conflict arises (Dyer, 2006; Gallo, Tàpies, & Cappuyns, 2004; Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001). Finally, the size of the company is related to the value, the greater the size, the higher the valuation in the market (Siahaan, 2017). Table 1 shows the operationalization of the variables.

Table 1. Operationalization of the variables

Dependent variable	
TOBIN'SQ	Relationship between market price and book value of company assets (Equity market value + book value of liabilities/replacement "book" value of assets).
Independent variable	
B_SIZE	Number of board members.
B_INDEPENDENCE	Board independence. Defined as the percentage of independent board members.
LAW964	Dummy variable that shows whether the observation was either before (0) or after the implementation of such law (1).
Control variables	
FAMILY	Variable dummy that shows whether the company is family owned (1) or not family owned (0).
F_SIZE	Logarithmical value for the total number of sales for each year.
GROWTH	Variable to control for the growth that the country is having in its economy. The information was taken from the World Bank database and shows the growth of GDP in Colombia for this period.
LIQUIDITY	Variable that takes values from 1 to 5 depending on how liquid the company´s stock was in that year. The greater the number the greater the liquidity that it had.
YEAR	Variable dummy that indicates the year of the observation.

Source: This study

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Panel A of Table 1 shows a summary of the descriptive statistics for the variables in the model that included all observations in one dataset. Table 2 shows the T-tests that were generated, having as fixed variable LAW964. This test shows if there is a significant difference between pre and after law periods for each variable. Panel B and C of Table 1 presents the descriptive statistics for the variables from before and after LAW964 respectively.

Average TOBIN'SQ for the complete sample is 1.06 with a standard deviation of 0.63. It varies from a minimum of 0.1 to a maximum of 4.48. It rises from an average of 0.85 for 2001 to 2005 (before LAW964) to 1.16 for 2006 to 2013 (after LAW964); this change is statistically significant. B_SIZE shows a similar pattern. From 2001 to 2009 Colombian boards had an average of 5.93 directors with a standard deviation of 1.49. B_SIZE varied from a minimum of 2 to a maximum of 10. Again, as with TOBIN'SQ the difference of the means for B_SIZE from before and after the LAW964 appears is statistically significant, average B_SIZE grew from 5.75 (2001 to 2005) to 6.02 (2006 to 2013).

B_INDEPENDENCE shows an average of 41% with a standard deviation of 22%. These results range from a minimum of 0% (no independent directors on the board) to a maximum of 100% (all directors are independent). Average percentage

of independents changes from 33% for data prior to 2005 to 45% for data later than 2005. A two-sample t test with equal variances shows the difference to be significant. It is important to report that 28 observations from 2006 to 2013 are below the mandatory 25% minimum proportion of independent directors required by the law. This finding might imply lack of control by the governing agency responsible for overseeing law implementation. FAMILY is only present in 23% of the samples having less importance, with 20% in the period before the law implementation, than after with 24%. This difference is insignificant.

F_SIZE presents an average of 15.64 with a standard deviation of 4.35, again showing large variability of the sampled data. It goes from an average of 13.23 (2001 to 2005) to an average of 16.83 (2006 to 2013). These results show an important increase (statistically significant) in the size of listed firms, which is consistent with both the growth of the Colombian economy during that period but also the listing of the Colombian oil company (now the largest listed company in Colombia). GROWTH presents an average of 4.49% with a standard deviation of 1.62% it goes from an average of 4.12% to an average of 4.67%. This difference is significant and is consistent with the growth of the Colombian economy. Finally, LIQUIDITY presents an average of 3.78 with a standard deviation of 0.98 This large difference shows that there is an important variability in the liquidity of firms, which confirms the fact that Colombia, as many other countries has a small and illiquid market where companies show different levels of liquidity.

Table 1.Descriptive statistics

	Obs.	Mean	SD	Min.	Max.
Panel A. Complete sample					
TOBIN'SQ	406	1.06	0.63	0.10	4.48
B_SIZE	406	5.93	1.49	2.00	10.00
B_INDEPENDENCE	406	0.41	0.22	0.00	1.00
GROWTH	406	4.49	1.62	1.65	6.90
LIQUIDITY	406	3.78	0.98	3.00	5.00
F_SIZE	406	15.64	4.35	7.32	24.93
FAMILY	406	0.23	0.42	0.00	1.00
Panel B. Before LAW964					
TOBIN'SQ	134	0.85	0.53	0.10	4.48
B_SIZE	134	5.75	1.47	2.00	10.00
B_INDEPENDENCE	134	0.33	0.20	0.00	1.00
GROWTH	134	4.12	1.10	1.68	5.33
LIQUIDITY	134	3.66	0.94	3.00	5.00
F_SIZE	134	13.23	3.80	7.32	21.70
FAMILY	134	0.20	0.40	0.00	1.00
Panel C. After LAW964					
TOBIN'SQ	272	1.16	0.66	0.22	4.14
B_SIZE	272	6.02	1.49	3.00	10.00
B_INDEPENDENCE	272	0.45	0.22	0.00	1.00
GROWTH	272	4.67	1.80	1.65	6.90
LIQUIDITY	272	3.84	0.99	3.00	5.00

F_SIZE	272	16.83	4.11	8.71	24.93
FAMILY	272	0.24	0.43	0.00	1.00

Source: This study

Table 2.Difference of means test LAW964

	Before		After		Mean test
	Mean	SD	Mean	SD	P-value
TOBIN'SQ	0.85	0.53	1.16	0.66	0.000***
B_SIZE	5.75	1.47	6.02	1.49	0.090*
B_INDEPENDENCE	0.33	0.20	0.45	0.22	0.000***
GROWTH	4.12	1.10	4.67	1.80	0.000***
LIQUIDITY	3.66	0.94	3.84	0.99	0.080*
F_SIZE	13.23	3.80	16.83	4.11	0.000***
FAMILY	0.20	0.40	0.24	0.43	0.350

Source: This study

4.2 Regression Analysis

For the regression analysis, the model of equation [1] was used. Next, the results are presented in Table 5. Results showed an R-squared of 0.7654 (Column a), suggesting that 76.54% of the variations of TOBIN'SQ are explained by the independent variables. There was no problem of multi-collinearity since the highest correlation is 0.51 (see correlation matrix in Table 3), which is lower than the maximum acceptable level (0.8) of multi-collinearity (Gujarati & Porter, 2008). This provides validity to regression results.

Results from running the regression with datasets from before and after LAW964 show results with R-squared changing from 0.5863 (Column e) to 0.8227 (Column f). However, in both data samples (before and after LAW964) the independent variables (B_SIZE, and B_INDEPENDENCE) show no statistically significant relationships with TOBIN'SQ, which means that those variables do not appear to be related to firm value and therefore assessments on the hypotheses can be inferred.

Results show B_SIZE to be positively related to value (0.02) but this relationship is not only very small (magnitude of the coefficient) but also not significant. This supports H_{1b} by providing evidence of no significant relationship (linear or nonlinear) between firm value (TOBIN'SQ) and B_SIZE for Colombia. Complementary regressions support these results by showing both low and insignificant magnitude coefficients.

Table 3. Correlation matrix

	1.	2.	3.	4.	5.	6.	7.
1. TOBIN'SQ	1						
2. B_SIZE	0.050	1					
3. B_INDEPENDENCE	0.080	0.090	1				
4. GROWTH	0.030	-0.050	-0.070	1			

5. LIQUIDITY	-0.100	0.030	0.230	0.030	1		
6. F_SIZE	0.250	0.410	0.510	-0.090	0.140	1	
7. FAMILY	-0.170	-0.130	-0.240	0.040	0.010	-0.240	1

Source: This study

Results also show no significant relationship between B_INDEPENDENCE (percentage of independent directors) and firm value (TOBIN'SQ) (coefficient at -0.08). This result contradicts H_2, which expected the relationship to be both positive and significant.

Results show a positive significant relationship between LAW964 and TOBIN'SQ (coefficient at 0.24 with 1% significance). This result contradicts previous literature (Price et al., 2011; Wintoki, 2007) as it shows a positive relationship between corporate governance reform and firm value. As reported before the research used law as an aggregate measure of change in corporate governance and results show that there is a significant impact in firm value. However, when looking at specific components, i.e. B_SIZE and B_INDEPENDENCE, results find them not related to firm value. FAMILY, a control variable showed to be not related to firm value at any level, which indicates that there appears to be no relationship between the fact that a company is family owned and its value.

It is important to report the possibility of reverse causation between firm value (TOBIN'SQ) and B_SIZE, meaning that good or bad results might drive shareholders to either change their boards of directors or even appoint more directors for either advise or control. In order to check against reverse causation, the author ran two further regressions, one with a lag of one period between B_SIZE and TOBIN'SQ and another one with TOBIN'SQ as an independent variable and B_SIZE (presented in Column d in **¡Error! No se encuentra el origen de la referencia.**) as the dependent variable and found no significant relationship between these two variables. The results showed no reverse causation, which provides robustness to the results.

Other two regressions in Columns b and c were made to show how the final regression was generated. The first of them (b) was made without taking into consideration both the lagged value of the TOBIN'SQ (LAG_TOBIN'SQ) and the dummy variables. This regression showed a very low R-squared indicating that either the lagged value or the dummy variables were needed. Column c included the lagged value of TOBIN'SQ (LAG_TOBIN'SQ) but not the year dummy effect (which does not include time varying effects).

Table 5. Regression analysis

	(a) TOBIN'SQ	(b) TOBIN'SQ	(c) TOBIN'SQ	(d) B_SIZE	(e) TOBIN'SQ	(f) TOBIN'SQ
Constant	0.5600***	-0.0140	0.3100***	4.0600***	-0.2100	-0.3562
	0.1350	0.3180	0.1030	0.9441	0.3100	0.1075

B_SIZE	0.0217	0.0440	0.0250		-0.0007	0.0178
	0.0159	0.0510	0.0150		0.0344	0.0164
B_INDEPENDENCE	-0.0812	-0.0110	-0.1000	-1.1342	-0.3252	-0.0154
	0.1034	0.3220	0.1300	0.7536	0.3206	0.0813
LAW964	0.2400***	0.1600*	0.0470	-0.7584		
	0.0621	0.0960	0.0580	0.6933		
F_SIZE	0.0300*	0.0300*	0.0110	0.1077	0.0313	0.0300***
	0.0103	0.0170	0.0070	0.0948	0.0198	0.0099
FAMILY	-0.0207	-0.1740	0.0500*	-0.4553	-0.0358	-0.0154
	0.0279	0.1210	0.0310	0.3483	0.0808	0.0303
GROWTH	0.0112	0.0220	0.0300***	-0.0299	0.0483	0.0085
	0.0124	0.0150	0.0100	0.0363	0.0294	0.0133
LIQUIDITY	0.0184	0.0370	0.0240	0.4100*	0.0136	-0.0102
	0.0268	0.0730	0.0260	0.1925	0.0393	0.0274
LAG_TOBIN'SQ	0.7800***		0.7009***	-0.0567	0.5200***	0.8200***
	0.0808		0.0830	0.2372	0.1527	0.0637
YEAR	YES	YES	YES	YES	YES	YES
TOBIN'SQ				0.3919		
				0.2828		
R^2	0.7654	0.1531	0.7370	0.2489	0.5863	0.8227
Adj. R^2	0.7522	0.1382	0.7302	0.2067		

Notes. Six regressions are show in which (a) is conclusive regression and the other 5 are complementary. (e) and (f) are regressions for years before and after law implementation. While (b), (c) and (d) are without lagged value of Tobin`s Q, without year dummy variables and B_SIZE as dependent. All these regressions are useful to prove the results obtain in column (a). Standard errors below coef (*pr>0.1.**pr>0.05, ***pr>0.01).

Source: This study

5. SUMMARY AND CONCLUSIONS

This paper analyzed three main corporate governance issues within the Colombian context. First whether board size has any impact on firm value, second whether more independent boards lead to higher firm value and last whether the adoption of the Corporate Governance law (Law 964 of 2005) had a positive impact on firm value. Results show that board size is not significantly related to firm value for Colombia. They also show that board composition is not related to firm value, thus providing evidence to conclude that there is no relationship between board structure variables such as size and composition and firm value for Colombian listed companies. Implementation and adoption of Law 964 of 2005 shows a significant positive relationship with firm value.

This paper adds to literature by providing evidence of the relationship of board characteristics and governance reforms on value for an emerging market such as Colombia. This paper is valuable for regulators in their quest to assess the impact of Corporate Governance laws; it is also valuable for investors (both foreign and local) in assessing risk for equity investments in Colombia by showing them that board characteristics are not related to firm value.

Since literature on corporate governance is still limited for emerging markets there are numerous opportunities for research. Aspects of corporate governance deserving further study are variables such as ownership structure, management compensation and other board dynamics. The latter could include board diversity (gender ratios, cultural bias, and mix of professional backgrounds), board capital (defined as the ability of board directors to both monitor and advise companies (Jermias & Gani, 2014)), frequency of meetings, and board member age. Greater knowledge of these factors will be valuable in the quest for understanding emerging markets and their drivers for value creation.

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