

IMPACT OF LEGAL ENFORCEMENT ON THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND CORPORATE PERFORMANCE

Vanessa Mendes De Luca¹
 Alan Diógenes Góis²
 Márcia Martins Mendes De Luca³
 Jislene Trindade Medeiros⁴

Abstract

Objective: To evaluate the impact of legal enforcement on the relationship between corporate governance and corporate performance.

Method: The sample consisted of 4,447 public firms (24,025 observations) from 61 countries, for which data covering the period 2010-2018 were available in the databases of Thomson Reuters Eikon and the World Bank. In addition to descriptive statistics and correlation analysis, regressions on panel data were used to determine the effect of law enforcement on the relationship between corporate governance and corporate performance.

Results/Discussion: The results showed that the country's law enforcement should be considered when evaluating the impact of corporate governance mechanisms on corporate performance of public firms, since the results indicated that firms headquartered in countries with efficient law enforcement are engaged in higher levels of corporate governance that result in better corporate performance.

Contributions: The study highlights the relevance of law enforcement to research on corporate governance, by presenting thus, evidence that law enforcement, by promoting better corporate governance strategies, contributes to reducing agency conflicts between agent and principal, resulting in better corporate performance. Therefore, managers and policy makers looking to adopt new corporate governance strategies need to take in account the impact of law enforcement. The adoption of corporate governance practices may not produce the expected effects in countries with weak law enforcement.

Keywords: Legal enforcement. Corporate governance. Corporate performance.

¹ vanessa.deluca.wps@gmail.com. Universidade de Fortaleza, Fortaleza, Ceará. Brazil. <http://orcid.org/0000-0002-9587-0978>

² alandgois@hotmail.com. *In Memoriam*. <http://orcid.org/0000-0003-3534-6557>

³ marciammadeluca@gmail.com. Universidade Federal do Ceará, Fortaleza, Ceará. Brazil. <http://orcid.org/0000-0002-9995-5637>

⁴ jjslenetm@gmail.com. Universidade Federal do Ceará, Fortaleza, Ceará. Brazil. <http://orcid.org/0000-0003-0941-0228>

■ DOI: <http://dx.doi.org/10.14392/asaa.2021140110>

■ Received: 02/16/2021. Submitted to the new round: 06/30/2021. Accepted: 09/27/2021

1 INTRODUCTION

Corporate governance concerns the set of rules, institutions and practices that minimize agency costs and the divergence between social and private returns in business activity (Monks & Minow, 1996), generally grounded in Agency Theory (Jensen & Meckling, 1976), which in turn deals with the conflict of interest between agent and principal, extending to other contexts, including conflicts of interest between majority and minority shareholders and between creditors and managers.

In the literature, several mechanisms of corporate governance are proposed, classified into two groups: internal and external (Weir, Laing, & McKnight, 2002). Internal mechanisms generally concern the structure of the board of directors, while external mechanisms are, in turn, related to the corporate control market (Weir et al., 2002).

The internal mechanisms strictly depend on the company's strategies, which, by adopting better governance practices, aim at not expropriating shareholders' rights, attracting new investors and creating value for shareholders (Cumming, Filatotchev, Knill, Reeb, & Senbet, 2017). However, academic literature reveals that the effects of adopting best corporate governance practices can be influenced by external attributes, such as the characteristics of the company's host country (Armstrong, Barth, Jagolinzer, & Riedl, 2010; Filatotchev, Jackson, & Nakajima, 2013).

In this context, law enforcement stands out as a relevant feature, being also considered a watershed between developed and developing countries, suggesting that the efficiency of a national judicial system is capable of generating more wealth for its economy and ensuring greater governance in the business environment (Berglöf & Claessens, 2006).

Legal enforcement refers to the activity aimed at ensuring compliance with the legislation of a specific area, and in countries whose legislation is based on traditions (Common Law), there is greater enforcement in relation to governance; it is noteworthy that in this matter the system French legal is considered one of the weakest (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000).

Based on academic literature, this study proposes to analyze the impact of law enforcement on the relationship between corporate governance and business performance. Thus, it is conjectured that the stronger the legal enforcement of a country, the better and more efficient the governance practices of its companies will be, thus generating benefits (improved business performance) for investors and other stakeholders.

To achieve the goal, 4,447 publicly traded companies (24,025 observations) from 61 countries were analyzed, whose data, from 2010 to 2018, are registered at Thomson Reuters Eikon and the World Bank. Corporate governance is measured by the Governance Pillar of the Thomson Reuters ESG Scores (Baldini, Dal Maso, Liberatore, Mazzi, & Terzani, 2018; Velte, 2017). Law enforcement (DeFond & Hung, 2004; Leuz, Nanda, & Wysocki, 2003; La Porta et al., 1998, 2000) is measured by the Rule of Law and Control of corruption indicators, as used by Kaufmann, Kraay and Mastruzzi (2011) and made available by the World Bank (Armstrong et al., 2010). Business performance, in turn, is measured by Return On Assets (ROA), according to Siddiqui (2015).

This study contributes to enriching both the accounting literature, especially with regard to the object of Financial Accounting, as well as studies in the field of Business Law and International Law, because, as already mentioned, corporate governance produces diverse and far-reaching effects in the area of business, constituting a vast field of interdisciplinary research (Cumming et al., 2017). Thus, divergent implications may occur (Heracleous, 2001; Huang, 2010; Lin & Hwang, 2010; Siddiqui, 2015), calling into

question the effect of corporate governance on aspects such as value creation and protection of interests, considering different countries and different legal contexts.

The legal enforcement of countries can be relevant to explain the efficiency or inefficiency of corporate governance. Armstrong et al. (2010) point out that weak enforcement influences the pattern of ownership and control, in addition to affecting corporate governance mechanisms, which can weaken them or make them inefficient. As several researches separately analyze corporate governance and enforcement as independent variables (Dharmapala & Khanna, 2012; Jia, Ding, Li, & Wu, 2009), this one fills a gap by trying to understand the effect of legal enforcement on corporate governance and the moderating effect of legal enforcement on the relationship between corporate governance and business performance.

For the business environment, the contribution of the study is also highlighted by considering the relevance of the legal enforcement theme for corporate governance and, consequently, for the ability to attract foreign investments and growth of business performance. When adopting strategies to improve corporate governance, managers and policy makers must consider the impact of legal enforcement, as the adoption of a governance mechanism may not be effective in an environment where compliance with legislation is considered weak.

2 CORPORATE GOVERNANCE AND LAW ENFORCEMENT

Corporate governance is essential in the business environment, given the separation between ownership and control, as well as the resulting agency problems (Lin & Hwang, 2010). Jensen and Meckling (1976) note that agency conflicts occur when shareholders (principal) delegate decision rights to managers (agent) in the expectation that agents' attitudes will maximize the owners' wealth (principal).

Eisenhardt (1989) highlights the importance of associating complementary perspectives when considering agency conflicts and the many problems observed in a corporate structure. In this sense, Admati (2017) expands the environment in which such problems are observed, stating that the separation between ownership and management exacerbates conflicts of interest between those responsible for controlling the firm and others, including shareholders, creditors, employees, suppliers, clients, public agencies and civil society.

Corporate governance deals with the mechanisms adopted to align the interests of managers with those of investors and other stakeholders. A good corporate governance structure helps ensure the proper use of company resources in the best interests of its owners, resulting in benefits such as better performance (Brown & Caylor, 2009; Huang, 2010) and creation of value for shareholders (Lerner & Schoar, 2005; Cumming et al., 2017).

The control mechanisms of good governance can be classified into internal and external, that is, according to the environment (Gill, Vijay, & Jha, 2009; Hitt, Ireland, & Hoskisson, 2007). Internal mechanisms are generally directly related to the structure and functioning of the board of directors, considered the main body of corporate governance, which acts in the conduct of matters related, for example, to the requirements of shareholders regarding the performance of the organization, the assessment of strategies and reporting and accountability (Sonsini, 2011). With regard to external control, capital market controls, the performance of investment funds, institutional investor and shareholder activism, in addition to the legal and regulatory environment stand out (Hitt et al., 2007).

When adopting good corporate governance practices, the company must consider the internal and external mechanisms jointly. Thus, for example, less pressure from the capital market and the country's le-

gal system increases the importance of establishing better internal mechanisms of corporate governance (Claessens & Yurtoglu, 2013). In this sense, Klapper and Love (2004) also note that corporate governance practices must take into account the level of investor protection in each country.

Although Agency Theory has restricted its attention mainly to conflicts between two groups of actors (shareholders and managers), Filatotchev et al. (2013) mention that the business environment in which these actors play their roles is important and must be observed. Jensen (1993) highlights the legal system as one of the control forces to minimize problems between managers and shareholders. Legal systems offer different levels of investor protection, and thus influence the agency costs faced by shareholders in different countries (La Porta et al., 1998).

Admati (2017) states that laws and regulations can help alleviate conflicts of interest in the business environment, but such institutions are subject to a good information and control environment. It is noteworthy, therefore, that the effectiveness of corporate governance practices is linked to their adequacy to the broader organizational environment (Aguilera, Judge, & Terjesen, 2016), including the legal scenario.

Thus, the legal protection of shareholders, for example, includes both the rights provided for in laws and regulations, as well as the effectiveness of their application. La Porta et al. (1998, 2000) argue that countries with strong investor protection have a more developed stock market, better corporate governance and greater valuation of companies.

Enforcement is as or more important than the existence of the law (Cicogna, Toneto Junior, & Vale, 2007), and the proper application and observance of legislation are related to the concept of legal enforcement. Laws and the quality of enforcement by a country's regulatory bodies and courts are essential elements for corporate governance (La Porta et al., 1998) and, consequently, for the development of the national economy (Berglöf & Claessens, 2006). Lerner and Schoar (2005) warn that legal enforcement has a critical impact on the firm's contractual relations, suggesting that investors in countries with low legal enforcement have more difficulty and higher costs in enforcing contracts, largely due to the inability to law enforcement.

Based on La Porta et al. (2000), Licht, Goldschmidt and Schwartz (2005) assert that generally legal enforcement differences are more adequately described by the proposition that some countries protect all investors better than others, and not by the proposition that some countries protect only investors while other countries protect only creditors.

When investor rights, such as shareholder voting and creditors' recovery and liquidation rights, are extensive, and regulators and courts enforce them through proper law enforcement, investors are more likely to "finance" companies. In contrast, when the legal system does not protect external investors, corporate governance and also the capital market do not work well (La Porta et al., 2000).

The effectiveness of applying and complying with legal mechanisms depends on the general and specific control and inspection environment (Berglöf & Claessens, 2006). Admati (2017) emphasizes that in countries where the legal system is much less developed and the level of enforcement is low, some type of political intervention, inefficiency and corruption in the courts can usually also be observed, also pointing to a weak police and judicial system. In these countries, the "rule of law", which, in its broadest sense, means that people must obey the legislation and must be governed by it (O'Donnell, 2004), is not adequate, resulting, for example, in the low quality of contract execution by firms (Kaufmann et al., 2011).

Still on the control and inspection of the environment, Banerjee (2011) asserts that the extent of inspection of the observance of laws and regulations is considered a measure of the degree of government monitoring, as well as the severity of the punishment for its violation. Pache and Santos (2010) state that regulatory authorities function as a key contingency that can coerce organizations, due to their

legal power, and thus affect companies' compliance with accepted or desirable practices. The extent of enforcement varies from country to country.

Licht et al. (2005) warn that the classification of legal systems must be carefully analyzed, that there is diversity and convergence in corporate governance systems, and that, therefore, a systematic analysis of the law's interface with social institutions must be carried out. Thus, considering that companies are legally sanctioned by the State and the regulatory environment (laws and regulations) creates standards of responsibility and reinforces the norms of legitimacy of organizational practices (Edelman & Stryker, 2005), it can be said that this environment, including legal enforcement, influences the adoption of corporate governance practices (Aguilera et al., 2016).

The effect of a country's regulatory environment, also known as the legal system, has been analyzed from several perspectives. Levine (1999), for example, examined the effect of the legal environment on financial development as well as long-term economic growth. The results revealed that financial intermediaries (those who in the financial system bridge investors and borrowers) are more developed in countries with a legal system that gives greater priority to creditors in their claims against companies in cases of bankruptcy or corporate reorganization. Likewise, countries with the system that most effectively enforces contracts develop financial intermediaries better than those where contract enforcement is weaker, suggesting that the legal and regulatory environment is positively correlated with economic growth.

The themes of legal enforcement and corporate governance, represented by CEO performance, were studied by DeFond and Hung (2004), who found that strong law enforcement is associated with improved sensitivity to executive performance, consistent with good practices of corporate governance, which requires legal enforcement institutions capable of protecting the property rights of shareholders.

After analyzing private equity investments made in developing countries, Lerner and Schoar (2005) observed that transactions vary according to the legal enforcement of each nation: investments in highly supervised and Common Law countries generally use convertible preferred shares, and transactions have greater appreciation and return; and in countries with low legal and civil law enforcement, transactions are carried out with common shares and depend on shareholder control and the board of directors.

Chen, Chen and Wei (2009) analyzed the influence of the level of legal investor protection in the relationship that examines the effect of corporate governance on the cost of capital in companies in emerging markets. The result reveals that corporate governance has a negative effect on the cost of equity in these markets, being more pronounced in countries that provide relatively weak legal protection.

Jia et al. (2009) analyzed the enforcement of the China Security Regulatory Commission (equivalent to the Securities Commission) with publicly traded companies listed on the Chinese stock exchange. The results showed that in these companies the board of directors plays an active role when they face oversight actions, indicating effective governance, and that companies with a greater number of members on the board of directors are more likely to suffer more severe sanctions imposed by said regulatory commission.

When investigating the reactions of the European capital market to the adoption of international accounting standards (International Financial Reporting Standards – IFRS), Armstrong et al. (2010) identified an incremental negative reaction in companies domiciled in countries with the Code Law system, suggesting that in this legal environment companies have a weaker application of standards in the sphere of accounting.

Chen, Li and Shapiro (2011) found that in the Organization for Economic Cooperation and Development (OECD) countries, good corporate governance practices (active board of directors, separation between president and CEO, significant presence of external directors and board of directors with two

levels) do not mitigate the negative effect of expropriation of controlling shareholders in Asian emerging economies, as governance practices are primarily designed to resolve conflicts between shareholders and management, rather than conflicts between controlling shareholders and minority shareholders. The authors also mention that in developed economies, the expropriation of controlling shareholders can be minimized by legal means and market mechanisms, resorting to legal protection of their property rights; however, in emerging economies, weak legal and financial institutions make this option less effective and may even further empower controlling shareholders.

Based on a study of corporate governance in emerging markets, Claessens and Yurtoglu (2013) warn about the importance of legal enforcement, which, although difficult to codify, can be obtained through the efficiency of the application and enforcement indexes and the absence of corruption in the country. These indicators can show much greater differences than mere formal rights. These two scholars found that, on average, legal enforcement is twice as high in developed countries as in emerging markets and transition economies; and that corruption is much less, but with great variation. Some emerging markets, such as Chile, Singapore and Hong Kong, show higher indicators than many developed countries, while others show dramatically lower indicators, especially due to the high level of corruption (Nigeria and Kenya, for example).

Based on previous studies of corporate governance based on the Agency Theory, Filatotchev et al. (2013), after an analysis of agency relationships in different institutional contexts, suggest that researchers should take a holistic view when considering the results of board performance, ownership concentration and executive incentives, depending on the legal system and institutional characteristics of the country.

Given the above, based on the literature presented (Chen et al., 2011; Claessens & Yurtoglu, 2013; Filatotchev et al., 2013; Lerner & Schoar, 2005), and considering that the way the environment deals with laws and regulations determines the effectiveness of corporate control mechanisms, as recommended by the main and classic studies of Agency Theory (Eisenhardt, 1989; Jensen, 1993; Jensen & Meckling, 1976), the following research hypothesis is formulated:

Hypothesis 1: the positive relationship between corporate governance and business performance is greater in countries with greater legal enforcement.

3 METHODOLOGY

The research population includes non-financial companies listed in capital markets. To select the sample, some criteria were defined: (i) companies must have governance data at Thomson Reuter Eikon for at least one of the financial years of the analysis period (2010-2018) (5,484 companies); (ii) companies must belong to countries that have data in the World Bank regarding national governance indicators and the Gross Domestic Product (4,748 companies); and (iii) companies must have economic and financial data to measure the variables under study (4,447 companies). And the delimitation of the analysis period from 2010 to 2018 is because it is a period after the last global financial crisis, which erupted in mid-2007, going until mid-2009 (Scott, 2012).

To meet the general objective and enable the testing of the research hypothesis, the study applies three types of analysis (univariate, bivariate and multivariate). The univariate analysis employs descriptive statistics (average, standard deviation, minimum and maximum), in order to make it possible to understand the behavior of the dependent, independent and control variables. Bivariate analysis applies Pearson's correlation to identify correlations between variables and possible multicollinearity problems. Multivariate analysis is carried out through multiple regression analysis with panel data, random effects

and robust errors, to analyze the impact of legal enforcement on corporate governance, as well as the joint impact of legal enforcement and corporate governance on business performance.

It is noteworthy that multiple regression with panel data, random effects and robust errors were adopted after the performance of the Breusch-Pagan and Hausman tests, which indicated the adequacy of random effects, and the White test, which indicated that error terms are not homoscedastic. In addition, the outliers were identified using the Blocked Adaptive Computationally Efficient Outlier (BACON) algorithm and suppressed with the winsorization of continuous variables in the 1st and 99th percentiles.

Initially, through Equation 1, the relationship between corporate governance and legal enforcement is investigated. β_1 is expected to have a positive sign, indicating that legal enforcement (ENF) positively influences corporate governance (GOV).

$$GOV_{it} = \beta_0 + \beta_1 ENF_{it} + \Sigma \text{Controles}_{it} + \epsilon_{it} \quad (\text{Equation 1})$$

In Equation 1, the dependent variable is corporate governance (GOV), which is measured through the corporate governance pillar (GOV) of the Thomson Reuter Eikon ESG (Environmental, Social and Governance) index. The pillar of corporate governance (GOV) is formed by three categories (Management, Shareholders and CSR Strategy). These categories include 54 assertions (32, 12 and 8, respectively), and the higher the GOV, the higher the corporate governance.

The independent variable is the legal enforcement (ENF), obtained by the factor analysis of the standardized values of the Rule of Law and Control of Corruption indicators, proposed by Kaufmann et al. (2011), and made available by the World Bank (DeFond & Hung, 2004; Leuz et al., 2003; La Porta et al., 1998), in which the greater the ENF, the greater the country's legal enforcement.

The control variables are company size (TAM: natural log of the asset), indebtedness (END: ratio of total debt to asset), sales growth (CRES: proportional variation of sales revenue), operating cash flow (FCO: ratio between operating cash flow and asset), loss (PREJ: binary variable, where "1" means that the company had a loss in the previous period, and "0" means the opposite), and economic development of the country measured through the Gross Domestic Product (GDP: natural logarithm of the Gross Domestic Product), as adopted in the studies by La Porta et al. (1998, 2000), Brown and Caylor (2009), Kaufmann et al. (2011), Anderson and Gupta (2009) and Aguilera et al. (2016). It is noteworthy that the natural logarithm was used in the variables company size and Gross Domestic Product to minimize the discrepancy between observations and problems with outliers, as indicated by Wooldridge (2016).

Through Equation 2, it is possible to test whether Hypothesis 1 should be rejected or not, and adopts as a dependent variable the business performance measured by means of Return on Assets (ROA), represented by the ratio between net income before extraordinary items and the asset (Siddiqui, 2015).

$$ROA_{it} = \beta_0 + \beta_1 GOV_{it} + \beta_2 ENF_{it} + \beta_3 (GOV \times ENF)_{it} + \Sigma \text{Controles}_{it} + \epsilon_{it} \quad (\text{Equation 2})$$

It is expected that β_3 has a positive sign, meaning that companies with better corporate governance practices (GOV) and headquartered in countries with high legal enforcement (ENF) present greater business performance (ROA). And as a robustness test, legal enforcement is also measured through the legal system (COM) according to the definition of JuriGlobe, being a binary variable, where the value "1" means Common Law and "0" means a different case (Civil Law, Muslim Law and Mixed Law).

4 RESULTS ANALYSIS

In order to understand the composition of the sample, an analysis is initially carried out by country, region, legal system and enforcement (Table 1).

Table 1 – Sample composition

Country	Region	Legal System	Enforcement	Observations (%)
South Africa	Africa	Mixed Law	-2.795	2.68
Germany	Europe	Civil Law	1.3822	2.27
Saudi Arabia	Asia	Muslim Law	-3.0512	0.19
Argentina	Latin America	Civil Law	-4.4903	0.07
Australia	Oceania	Common Law	1.6595	7.82
Austria	Europe	Civil Law	1.4354	0.36
Bahrein	Asia	Mixed Law	-2.2686	0.02
Belgium	Europe	Civil Law	0.5662	0.61
Bermuda	Anglo-Saxon America	Common Law	-0.372	0.14
Brazil	Latin America	Civil Law	-3.5869	0.35
Canada	Anglo-Saxon America	Common Law	1.6805	5.91
Kazakhstan	Asia	Civil Law	-4.9319	0.03
Chile	Latin America	Civil Law	0.3354	0.5
China	Asia	Mixed Law	-4.3388	3.58
Singapore	Asia	Mixed Law	1.8308	1.16
Ciprus	Europe	Mixed Law	-0.4915	0.06
Colombia	Latin America	Civil Law	-4.0458	0.13
South Korea	Asia	Mixed Law	-1.2023	2.49
Denmark	Europe	Civil Law	2.2704	0.65
Egypt	Africa	Mixed Law	-4.4133	0.17
United Arab Emirates	Asia	Mixed Law	-1.1283	0.16
Spain	Europa	Civil Law	-0.4745	0.96
United States of America	Anglo-Saxon America	Common Law	0.744	28.14
Philippines	Asia	Mixed Law	-4.527	0.44
Finland	Europe	Civil Law	2.254	0.78
France	Europe	Civil Law	0.5411	2.51
Greece	Europe	Civil Law	-2.329	0.32
Hong Kong	Asia	Mixed Law	1.2378	2.86
Hungary	Europa	Civil Law	-1.7038	0.1
India	Asia	Mixed Law	-3.6415	1.83
Indonesia	Asia	Mixed Law	-4.7352	0.77
Ireland	Europe	Common Law	1.1097	0.89
Israel	Asia	Mixed Law	-0.7594	0.35
Italy	Europe	Civil Law	-2.3463	0.71
Japan	Asia	Mixed Law	0.5281	11.43
Kuwait	Asia	Mixed Law	-2.479	0.09
Luxembourg	Europe	Civil Law	1.7812	0.24
Macao	Asia	Mixed Law	-1.4386	0.09
Malaysia	Asia	Mixed Law	-2.3141	1.22
Morocco	Africa	Mixed Law	-3.7719	0.05
Mexico	Latin America	Civil Law	-4.4103	0.78
Norway	Europe	Civil Law	2.1206	0.45
New Zealand	Oceania	Common Law	2.2814	0.73
Oman	Asia	Mixed Law	-2.1315	0.03

Netherlands	Europe	Civil Law	1.8526	1.04
Panama	Latin America	Civil Law	-3.6992	0.03
Papua New Guinea	Oceania	Mixed Law	-4.9659	0.06
Peru	Latin America	Civil Law	-4.366	0.12
Poland	Europe	Civil Law	-1.6956	0.48
Portugal	Europe	Civil Law	-0.4149	0.18
Qatar	Asia	Mixed Law	-0.9588	0.11
Kenya	Africa	Mixed Law	-4.9433	0.01
United Kingdom	Europe	Common Law	1.3549	7.91
Czech republic	Europe	Civil Law	-1.3469	0.07
Russia	Europe	Civil Law	-4.9659	0.79
Sweden	Europe	Civil Law	2.2123	1.4
Switzerland	Europe	Civil Law	1.9399	1.76
Thailand	Asia	Civil Law	-3.7303	0.68
Turkey	Asia	Civil Law	-3.1496	0.18
Ukraine	Europe	Civil Law	-4.9465	0.03
Zimbabwe	Africa	Mixed Law	-4.9659	0.03

Note. Enforcement corresponds to the average of the years analyzed.

The most representative countries in the sample are Australia, Canada, the United States, Japan and the United Kingdom, which together account for 61.3% of the observations. As for the legal system, approximately 51% of countries are considered Civil Law; that is, in these countries, political entities were largely inspired by Roman Law, giving precedence to written law, which is considered to have low legal enforcement (La Porta et al., 1998).

However, considering the precepts of Armstrong et al. (2010), some of the countries with the Civil Law system (Denmark, Finland, Norway and Sweden) have high legal enforcement, with adequate application and observance of legislation, protecting investors, which is reflected in economic development. Despite of that, according to academic literature (Armstrong et al., 2010; DeFond & Hung, 2004; Leuz et al., 2003; La Porta et al., 1998), countries characterized as Common Law are those with the greatest legal enforcement, with the exception of Bermuda, thus making it possible to use the legal system as a proxy for enforcement. Next, descriptive statistics are used to analyze the behavior of the variables of interest to the study (Table 2).

Table 2 - Descriptive statistics

Variable	No. of observations	Average	Standard deviation	Minimum	Maximum
ROA	24025	0.0396	0.1032	-0.9289	0.3050
GOV	24025	0.4978	0.2108	0.0768	0.9303
ENF	24025	0.2729	1.8350	-5.0846	2.3863
COM	24025	0.5138	-	0.0000	1.0000
TAM	24025	22.1733	1.5231	16.4676	26.9686
CRES	24025	0.1009	0.4874	-0.9796	6.1694
END	24025	0.2554	0.1828	0.0000	0.9480
FCO	24025	0.0876	0.0851	-0.6511	0.3744
PREJ	24025	0.1572	-	0.0000	1.0000
PIB	24025	28.7006	1.4743	24.1056	30.6007

Note. ROA: Business performance; GOV: Corporate Governance; ENF: Legal Enforcement; COM: Common Law; TAM: Company size; CRES: Sales growth; END: Indebtedness; FCO: Operating cash flow; LOSS: Loss; GDP: Economic development.

It is observed that companies have a positive average performance, which may be a reflection of (1) good governance practices, since the average corporate governance is approximately 50%; and (2) the country's legal enforcement, as the average of ENF is positive, and, as mentioned above, more than half of the sample is based in Common Law countries, which are characterized by a high level of enforcement.

As the sample includes companies that at some time responded to the ESG questionnaire from Thomson Reuters, it is assumed that all of them are large. Thus, the sample presents companies with average assets of 13 billion dollars (TAM = 22.17). In addition, they are growing companies (CRES = 0.10), with low indebtedness, as debt represents, on average, a quarter of their assets (END = 0.25), and that efficiently use their assets, as the FCO is 8.76%, and the maximum reported by the sample is 37.44%. Furthermore, only approximately 16% of the sample showed losses in the previous year.

Before analyzing the influence relationships, and thus concluding about the rejection or not of the research hypothesis, and understanding the behavior of the variables, the Pearson correlation was performed.

Table 3 – Pearson Correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	1							
(2)	0,0415 ^(a)	1						
(3)	-0,0823 ^(a)	0,0073	1					
(4)	0,1200 ^(a)	0,2760 ^(a)	-0,1110 ^(a)	1				
(5)	0,01230 ^(c)	-0,0517 ^(a)	-0,0043	-0,0765 ^(a)	1			
(6)	-0,1530 ^(a)	0,0150 ^(b)	-0,0462 ^(a)	0,2290 ^(a)	-0,0426 ^(a)	1		
(7)	0,6030 ^(a)	0,0672 ^(a)	-0,0340 ^(a)	0,0336 ^(a)	-0,0458 ^(a)	-0,1020 ^(a)	1	
(8)	-0,0232 ^(a)	0,0002	0,1060 ^(a)	0,1020 ^(a)	0,0201 ^(a)	0,0740 ^(a)	0,0272 ^(a)	1

Note. ^(a) $p < 0,01$, ^(b) $p < 0,05$, ^(c) $p < 0,1$.

(1): ROA = Business performance; (2) GOV = Corporate Governance; (3) ENF = Legal Enforcement; (4) TAM = Company size; (5) CRES = Sales growth; (6) END = Indebtedness; (7) FCO = Operating cash flow; (8) GDP = Economic development.

Without considering the other factors, corporate governance (GOV) does not have a significant correlation with legal enforcement (ENF), but, despite of that, it presents a positive correlation. This fact is not consistent with what the academic literature reports (Aguilera et al., 2016; Berglöf & Claessens, 2006; La Porta et al.; 1998, 2000), as it is expected that the greater the enforcement of a country, greater is corporate governance.

Analyzing corporate governance (GOV) and legal enforcement (ENF) with business performance (ROA), it is observed that only corporate governance has a positive correlation with business performance, consistent with Bhagat and Bolton (2008) and Brown and Caylor (2009). Legal enforcement, in turn, has a negative correlation with business performance, diverging from the precepts of Elango and Lahiri (2014) and La Porta et al. (1998). However, Elango and Lahiri (2014) argue that a higher enforcement level leads to greater competition, negatively impacting performance. To test the hypothesis, multiple regression with panel data with random effects and robust errors was used (Table 4).

Table 4 - Regression analysis

		Model 1	Model 2
Corporate governance	GOV		0.013 ^(***)
			(0.003)
Corporate governance x legal enforcement	GOV X ENF		0.003 ^(**)
			(0.002)
Legal enforcement	ENF	0.004 ^(**)	0.004 ^(***)
		(0.002)	(0.001)
Company size	TAM	0.038 ^(***)	0.010 ^(***)
		(0.002)	(0.001)

Sales growth	CRES	-0.007(***)	0.015(***)
		(0.002)	(0.002)
Indebtedness	END	0.027(**)	-0.088(***)
		(0.013)	(0.008)
Operating cash flow	CFO	0.028	0.635(***)
		(0.017)	(0.019)
Loss	PREJ	0.000	-0.040(***)
		(0.003)	(0.002)
Economic development	PIB	-0.002	-0.003(***)
		(0.002)	(0.001)
Intercepto		-0.289(***)	-0.117(***)
		(0.064)	(0.026)
R ² overall		0.078	0.432
R ² between		0.095	0.677
R ² within		0.011	0.165
Chi ²		516.978(***)	2597.979(***)
Breusch-Pagan LM test (p-value)		0.000	0.001
Hausman tests (p-value)		0.547	0.621
White test (p-value)		0.003	0.001
Observations		24025	24025
Companies		4447	4447

Note. () p < 0,1, (**) p < 0,05, (***) p < 0,01. Values in parentheses represent robust standard errors. Model 1: GOV: Corporate Governance; Model 2: ROA: Business performance. ENF: Legal Enforcement; TAM: Company size; CRES: Sales growth; END: Indebtedness; FCO: Operating cash flow; LOSS: Loss; GDP: Economic development.*

Through Chi², it is observed that the models are significant, indicating that at least one of the variables explains governance (Model 1) and/or business performance (Model 2). In this sense, Model 1 seeks to analyze the relationship between corporate governance and legal enforcement, in which a positive relationship between corporate governance (GOV) and legal enforcement (ENF) is observed, suggesting that companies headquartered in high legal enforcement adopt best corporate governance practices. Thus, it appears that the effectiveness of corporate governance practices reflects the adequacy of a country's legal enforcement (Aguilera et al., 2016; La Porta et al., 1998), where laws and regulations help to reduce conflicts of interest (Admati, 2017). It is also observed that larger, more indebted and slower growing companies are those that adopt better corporate governance practices.

Model 2, in turn, seeks to test the research hypothesis, in which a positive relationship is observed between the interaction of corporate governance with legal enforcement (GOV x ENF) and business performance, indicating that companies headquartered in countries of high legal enforcement and that adopt better corporate governance practices present greater business performance. The results indicate that legal enforcement, by promoting the adoption of corporate governance mechanisms and, consequently, greater alignment between the interests of managers and investors, mitigating agency conflicts, contribute to the company's resources being used in a to promote better performance (Brown & Caylor, 2009; Huang, 2010) and greater value creation for shareholders (Lerner & Schoar, 2005; Cumming et al., 2017).

Thus, Hypothesis 1 is not rejected, as it is observed that there is a complementary relationship between corporate governance and legal enforcement, and this relationship may lead to reduced agency costs, greater investor protection and greater contractual guarantees, which has such an impact business performance as national economic performance (Berglöf & Claessens, 2006; Filatotchev et al., 2013; Klapper & Love, 2004; Lerner & Schoar, 2005; La Porta et al., 1998).

As for the control variables, it is observed that they are all significant, with company size (TAM), sales growth (CRES) and operating cash flow (OCF) having a positive relationship with business performance (ROA). However, indebtedness (END), previous loss (PREJ) and economic development (GDP) have a negative relationship with business performance (ROA). Although the results are consistent with the relevant literature, a robustness test was carried out (Table 5), substituting legal enforcement for the legal system, corporate governance than companies headquartered in Civil Law, Muslim Law and Mixed Law countries, and thus better performance.

Table 5 - Robustness test

		Model 1	Model 2
Corporate governance	GOV		0.018(***)
			(0.004)
Corporate governance x common law	GOV COM		0.011(*)
			(0.006)
Common law	COM	0.037(***)	0.009(**)
		(0.007)	(0.004)
Company size	TAM	0.040(***)	0.010(***)
		(0.002)	(0.001)
Sales growth	CRES	-0.007(***)	0.015(***)
		(0.002)	(0.002)
Indebtedness	END	0.023(*)	-0.087(***)
		(0.013)	(0.008)
Operating cash flow	CFO	0.027	0.636(***)
		(0.017)	(0.019)
Loss	PREJ	0.000	-0.040(***)
		(0.003)	(0.002)
Economic development	PIB	-0.008(***)	-0.002(***)
		(0.002)	(0.001)
Intercept		-0.200(***)	-0.121(***)
		(0.065)	(0.026)
R ² overall		0.087	0.431
R ² between		0.102	0.677
R ² within		0.01	0.165
Chi ²		527.032(***)	2562.789(***)
Breusch-Pagan LM test (p-value)		0.001	0.001
Hausman tests (p-value)		0.348	0.415
White test (p-value)		0.001	0.000
Observations		24025	24025
Companies		4447	4447

Note. (*) $p < 0,1$, (**) $p < 0,05$, (***) $p < 0,01$. Values in parentheses represent robust standard errors. Model 1: GOV: Corporate Governance; Model 2: ROA: Business performance.

COM: Common Law; TAM: Company size; CRES: Sales growth; END: Indebtedness; CFO: Operating cash flow; LOSS: Loss; GDP: Economic development.

Based on Table 5, it is observed that the results remained constant. Based on the results of Model 1, it appears that the variable indicating countries with a Common Law (COM) legal system is positive and significant at 1%, suggesting that companies headquartered in countries where corporate governance mechanisms are more oriented towards shareholders, they adopt better corporate governance practices than companies located in countries with Civil Law, Muslim Law and Mixed Law.

By inserting in the model the variables corporate governance (GOV) and the interaction between corporate governance and the Common Law legal system (GOV x COM), it appears that, in addition to

individually, the variables COM and GOV are positive and significant to 5% and 1%, respectively, the interaction variable GOV x COM is also positive and significant at 10%. Therefore, it is inferred that companies headquartered in countries with high enforcement (Common Law legal system) and with better corporate governance practices perform better (Hypothesis 1).

5 FINAL CONSIDERATIONS

The study chose as its general objective the analysis of the effect of legal enforcement on the relationship between corporate governance and business performance. To this end, 4,447 publicly traded non-financial companies (24,025 observations) from 61 countries were analyzed, whose data for the period 2010-2018 are registered at Thomson Reuters Eikon and the World Bank.

Although the sample contains a greater number of countries with the Civil Law legal system, more than 60% of the companies are headquartered in countries with the Common Law legal system, that is, those considered to have high legal enforcement. However, it was observed that using the Rule of Law and Control of Corruption indicators as a proxy for enforcement, it is clear that many countries with the Civil Law legal system, especially the Nordic ones, have high enforcement. Thus, the legal system based on traditions and jurisprudence (Common Law) would not be the only factor to ensure the rights of investors, and, consequently, to assist in the country's development.

When analyzing the relationship between corporate governance (GOV) and legal enforcement (ENF), it was found that companies headquartered in countries with strong legal enforcement adopt better corporate governance practices. Thus, the fact that the company is headquartered in a country where the rules, laws and regulations are effective and complied with helps in the development of better corporate governance practices, with, therefore, greater guarantee of rights for investors, which increases the attractiveness of the country to other investors.

This positive relationship reflects on operational business performance, suggesting that the complementary relationship between corporate governance and legal enforcement results in a reduction in agency costs, greater investor protection and greater contractual guarantees. In other words, business performance is a reflection of better control mechanisms, greater investor protection and greater contractual guarantees, as these aspects reduce the performance of managers in benefit of their own interests.

The research hypothesis was not rejected, demonstrating that governance aspects in the context of the company and the country are relevant for firms to achieve greater performance. Based on this result, it is also recommended that senior executives can, among several relevant internationalization decisions, strategically decide, for example, where to open branches or carry out business combinations.

In this way, and corroborating the precepts of the Agency Theory and its argumentation about the existence of conflicts between the principal and the agent, it also appears that high-level executives, responsible for mitigating bodies of these conflicts, must consider the impact of legal enforcement when seeking better corporate governance practices, as such practices may not be efficient in an environment where compliance with legislation is considered weak. Furthermore, the study demonstrates the importance of the law in the business environment, acting in the standardization of governance within each company and each country.

The composition of the sample stands out as the main limitation, since, although the study presents observations of companies headquartered in 61 countries, 49.7% of the observations are from companies from countries with a Common Law legal system (United States of America, 28.1%; United Kingdom, 7.9%; Australia, 7.8% and; Canada, 5.9%).

For future research, it is suggested to analyze the effects of legal enforcement in the relationship between corporate governance and the quality of accounting information, taking into account that the greater the legal enforcement, better corporate governance practices are adopted and the greater should be the quality of accounting information, helping to attract new investors and helping stakeholders in the decision-making process. It is also recommended that this analysis considers the regulation to which companies are subject, in order to verify whether, in this context – legal enforcement and corporate governance – regulatory aspects influence the quality of information.

REFERENCES

- Admati, A. R. (2017). A skeptical view of financialized corporate governances. *Journal of Economic Perspectives*, 31(3, Summer), 131-150. DOI: 10.1257/jep.31.3.131
- Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2016). Corporate governance deviance. *Academy of Management Review*, 43(1), 1-50. <https://doi.org/10.5465/amr.2014.0394>
- Anderson, A., & Gupta, P. P. (2009). A cross-country comparison of corporate governance and firm performance: do financial structure and the legal system matter? *Journal of Contemporary Accounting & Economics*, 5(2), 61-79. <https://doi.org/10.1016/j.jcae.2009.06.002>
- Armstrong, C. S., Barth, M. E., Jagolinzer, A. D., & Riedl, E. J. (2010). Market reaction to the adoption of IFRS in Europe. *The Accounting Review*, 85(1), 31-61. <https://doi.org/10.2308/accr.2010.85.1.31>
- Baldini, M., Maso, L., Liberatore, G., Mazzi, F., & Terzani, S. (2018). Role of country-and firm-level determinants in environmental, social, and governance disclosure. *Journal of Business Ethics*, 150(1), 79-98. <https://doi.org/10.1007/s10551-016-3139-1>
- Banerjee, D. (2011). On the sufficiency of regulatory enforcement in combating piracy. *Journal of Regulatory Economics*, 40(2), 160-176. <https://doi.org/10.1007/s11149-011-9154-3>
- Berglöf, E., & Claessens, S. (2006). Enforcement and good corporate governance in developing countries and transition economies. *The World Bank Research Observer*, 21(1), 123-150. <https://doi.org/10.1093/wbro/lkj005>
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), 257-273. <https://doi.org/10.1016/j.jcorpfin.2008.03.006>
- Brown, L. D., & Caylor, M. L. (2009). Corporate governance and firm operating performance. *Review of Quantitative Financing and Accounting*, 32(12), 129-144. <https://doi.org/10.1007/s11156-007-0082-3>
- Chen, K. C. W., Chen, Z., & Wei, K. C. J. (2009). Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of Corporate Finance* 15(3), 273-289. <https://doi.org/10.1016/j.jcorpfin.2009.01.001>
- Chen, V. Z., Li, J., & Shapiro, D. M. (2011). Are OECD-prescribed “good corporate governance practices” really good in an emerging economy? *Asia Pacific Journal of Management*, 28(1), 115-138. <https://doi.org/10.1007/s10490-010-9206-8>
- Cicogna, M., Toneto Junior, R., & Valle, M. (2007). O impacto da adesão a padrões mais elevados de governança sobre o financiamento empresarial. *Revista De Administração*, 42(1), 52-63. <https://doi.org/10.1590/S0080-21072007000100005>
- Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: a survey. *Emerging Markets Review*, 15(C), 1-33. <https://doi.org/10.1016/j.ememar.2012.03.002>
- Cumming, D., Filatotchev, I., Knill, A., Reeb, D. M., & Senbet, L. (2017). Law, finance, and the international mobility of corporate governance. *Journal of International Business Studies*, 48(2), 123-147. <https://doi.org/10.1057/s41267-016-0063-7>
- Defond, M. L., & Hung, M. (2004). Investor protection and corporate governance: evidence from worldwide CEO turnover. *Journal of Accounting Research*, 42(2), 269-312. <https://doi.org/10.1111/j.1475-679X.2004.00138.x>

- Dharmapala, D., & Khanna, V. (2012). Corporate governance, enforcement, and firm value: evidence from India. *The Journal of Law, Economics, & Organization*, 29(5), 1056-1084. <https://doi.org/10.1093/jleo/ews011>
- Edelman, L. B., & Stryker, R. (2005). A sociological approach to law and the economy. In R. Swedberg, & N. Smelser (Eds.). *The handbook of economic sociology* (pp. 527-553). Princeton, NJ: Princeton University Press.
- Eisenhardt, K. M. (1989). Agency theory: an assessment and review. *Academy of Management Review*, 14(1), 57-74. <https://doi.org/10.5465/amr.1989.4279003>
- Elango, B., & Lahiri, S. (2014). Do market-supporting institutional characteristics explain firm performance? Evidence from emerging markets. *Thunderbird International Business Review*, 56(2), 145-155. <https://doi.org/10.1002/tie.21608>
- Filatotchev, I., Jackson, G., & Nakajima, C. (2013). Corporate governance and national institutions: a review and emerging research agenda. *Asia Pacific Journal of Management*, 30(4), 965-986. <https://doi.org/10.1007/s10490-012-9293-9>
- Gill, M. S., Vijay, T. S., & Jha, S. (2009). Corporate governance mechanisms and firm performance: a survey of literature. *The Icfai University Journal of Corporate Governance*, 8(1), 7-21.
- Heracleous, L. (2001). What is the impact of corporate governance on organisational performance? *Corporate governance: An International Review*, 9(3), 165-173. <https://doi.org/10.1111/1467-8683.00244>
- Hitt, M. A., Ireland, R. D., Hoskisson, R. E. (2007). *Strategic management: competitiveness and globalization*. Ohio: Thomson/South-Western.
- Huang, C. J. (2010). Corporate governance, corporate social responsibility and corporate performance. *Journal of Management & Organization*, 16(5), 641-655. <https://doi.org/10.5172/jmo.2010.16.5.641>
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- 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/10.1007/978-94-009-9257-3_8
- Jia, C., Ding, S., Li, Y., & Wu, Z. (2009). Fraud, enforcement action, and the role of corporate governance: evidence from China. *Journal of Business Ethics*, 90(4), 561-576. <https://doi.org/10.1007/s10551-009-0061-9>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: methodology and analytical issues. *Hague Journal on the Rule of Law*, 3(2), 220-246. doi:10.1017/S1876404511200046
- Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10(5), 703-728. [https://doi.org/10.1016/S0929-1199\(03\)00046-4](https://doi.org/10.1016/S0929-1199(03)00046-4)
- La Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155. <https://doi.org/10.1086/250042>
- La Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), 3-27. [https://doi.org/10.1016/S0304-405X\(00\)00065-9](https://doi.org/10.1016/S0304-405X(00)00065-9)
- Lerner, J., & Schoar, A. (2005). Does legal enforcement affect financial transactions? The contractual channel in private equity. *The Quarterly Journal of Economics*, 120(1), 223-246. [https://doi.org/10.1016/S0304-405X\(00\)00065-9](https://doi.org/10.1016/S0304-405X(00)00065-9)
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69(3), 505-527. <https://doi.org/10.1162/0033553053327443>
- Levine, R. (1999). Law, finance, and economic growth. *Journal of Financial Intermediation*, 8(1-2), 8-35. doi:10.1006/jfin.1998.0255

Licht, A. N., Goldschmidt, C., & Schwartz, S. H. (2005). Culture, law and corporate governance. *International Review of Law and Economics*, 25(2), 229-255. <https://doi.org/10.1016/j.irle.2005.06.005>

Lin, J. W., & Hwang, M. I. (2010). Audit quality, corporate governance, and earnings management: a meta-analysis. *International Journal of Auditing*, 14(1), 57-77. <https://doi.org/10.1111/j.1099-1123.2009.00403.x>

Monks, R. A., & Minow, N. (1996). *Watching the watchers: corporate governance for the 21st century*. Malden: Blackwell.

O'Donnell, G. (2004). The quality of democracy: why the rule of law matters. *Journal of Democracy* 15(4), 32-46. doi:10.1353/jod.2004.0076.

Pache, A. C., & Santos, F. (2010). When worlds collide: the internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review*, 35(3), 455-476. <https://doi.org/10.5465/amr.35.3.zok455>

Scott, W. (2012). *Financial Accounting Theory*. (6^a ed.) Canadá: Pearson.

Siddiqui, S. S. (2015). The association between corporate governance and firm performance—a meta-analysis. *International Journal of Accounting and Information Management*, 23(3), 218-237. <https://doi.org/10.1108/IJAIM-04-2014-0023>

Sonsini, L. (2011). Tensions in the boardroom in 2011: A perspective from Wilson Sonsini Goodrich & Rosati. *The Corporate Governance Advisor*, 19(2),39-40.

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, 8(2), 169-178. <https://doi.org/10.1108/JGR-11-2016-0029>

Weir, C., Laing, D., & McKnight, P. J. (2002). Internal and external governance mechanisms: their impact on the performance of large UK public companies. *Journal of Business Finance & Accounting*, 29(5-6), 579-611. <https://doi.org/10.1111/1468-5957.00444>

Wooldridge, J. M. (2016). *Introdução à Econometria*. São Paulo, SP: Thomson Learning.