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Reforms Protecting Minority Shareholders and Firm Performance: International Evidence

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Abstract: This study investigates the effect of corporate governance reforms protecting minority shareholders on the firm value measured by Tobin's Q. Using the difference-in-differences estimation and a large international sample from 65 countries for the period 2005–2018, the results show that the firm values increase more in the reform countries than non-reform countries relative to pre-reform levels. This positive effect changes for firms with high and low levels of debt. Moreover, the values after reforms increase more for firms located in civil countries and in countries with rule-based reform approaches and low debt enforcement because the reforms strengthening minority shareholder protection are more efficient in those countries. The evidence is robust to accounting-based performance as well.

Keywords: reforms protecting minority shareholders; firm value; corporate governance; leverage; legal origin; corporate governance approaches; debt enforcement

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1. Introduction

Corporate governance (CG) is a set of mechanisms imposing rules and regulations to protect outside investors from expropriation by insiders (La Porta et al. 2000). Following corporate scandals and financial crises, the necessity of reforms on CG practices increased. Since the Cadbury Report for U.K. firms in 1992 and the mandated CG reform of the Sarbanes-Oxley Act (SOX) for U.S. firms in July 2002 were implemented, countries all around the world have been developing CG practices to improve investors' protection. They aim at an effective allocation of capital resources by enhancing investors' confidence in capital markets. The expected outcome is to increase the firm performance and the probability of receiving rate of returns required by investors (Shleifer and Vishny 1997) and thus economic growth (La Porta et al. 1998).

An essential question that arises concerning CG reforms is whether they lead to an increase in corporate performance or not. Next to the expected benefits of CG reforms, there could be economic consequences based on the imposed costs to comply with the either required or proposed changes. Therefore, the net impact of those reforms could be ambiguous. Some scholars demonstrate that, in general, good corporate governance (Baek et al. 2004; Renders et al. 2010; Ammann et al. 2011) and strong investor protection (Claessens et al. 2002; La Porta et al. 2002; Aguilera et al. 2008; Kose et al. 2008; Mclean et al. 2012) lead to a high operating performance and firm value. In a legal framework of investor protection, it is important to address ownership composition. La Porta et al. (1999) show that the ownership structure is highly concentrated for the majority of 27 wealthy economies with the exception of the U.S. and the U.K., where strong shareholder protection exists.

In this study, we are particularly interested in reforms protecting minority shareholders worldwide after the SOX, with the first reform identified in 2007. Therefore, our focus is on the legal systems introducing reforms to limit the opportunistic behavior of controlling shareholders. The introduction of reforms protecting minority shareholders should reduce

the private benefits of control by limiting all possible ways of diverting company assets and cash flows from minority shareholders (Love 2010). Thus, minority shareholders feel more confident about participating in capital markets (Roe 2000). Consequently, outside investors could be willing to invest more because the risk of not getting their required return is diminished (Bae et al. 2012). Based on the fact that outside shareholders are mainly interested in countries with good CG, any improvement in CG practices in companies with a severe principal-principal conflict should lead to an increase in the firm value and an equal wealth distribution among shareholders (Aguilera et al. 2008). When a country implements reforms protecting minority shareholders, it is expected that the cost of expropriation exceeds the benefits as a consequence of severe penalties, so the controlling shareholders have less incentive to expropriate minority shareholders, who also benefit from increasing the firm value.

This study investigates the effectiveness of reforms protecting minority shareholders in the context of the principal-principal conflict and tests whether country-level reforms increase the firm value. Our study is different from the existing studies investigating the effects of CG reforms on the firm value because we examine a direct impact of reforms protecting minority shareholders. Earlier studies that assessed the impact of the reforms on firm performance have focused on the reforms related to board structure and/or independence (Dahya et al. 2002; Dahya and McConnell 2007 for the U.K.; Zhang 2007; Chhaochharia and Grinstein 2007; Bhagat and Bolton 2013 for the U.S.; Price et al. 2011; Black and Kim 2012 for Mexico). Recently, Fauver et al. (2017) show that CG reforms regarding board-level changes increase the firm value using a worldwide sample. Even though we could assume that board-level reforms actually improve the investor protection, these reforms are not clearly or directly shown to improve the minority shareholder protection because the reforms included in Fauver et al. (2017) also exist in countries with very good shareholders protection, i.e., the U.S. and the U.K.

Our sample contains firms operating in 65 countries over the period of 2005–2018. Starting the analysis from 2005 allows us to capture the firms' performance before the implementation of the reforms protecting minority shareholders for which we collect the reform years from the World Bank Doing Business data. Reforms provide exogenous changes in CG, as firms are affected equally, regardless of their controlling shareholders' views on whether the reforms are necessary or not. The difference-in-differences (DID) approach compares the performance of the same firm before and after the reform implementation and the performance of firms located in countries that did not experience reforms protecting minority shareholders. This comparison helps us to identify whether the trend in the firm's performance of treatment firms, after experiencing reforms, is different from that for control firms in the same time period. Using this robust empirical design, we confirm a positive and significant relationship between the reforms and the firm value, which indicates that the firm values in the reform countries increase more than firms in countries without reforms.

We also investigate whether the potential benefit of protecting minority shareholders is different across firms with high and low levels of debt. These reforms are expected to reduce the agency problems between concentrated owners and minority shareholders and an efficient allocation of the capital in good projects with high net present values. However, for firms with high leverage, the benefits of positive net present value projects could be low after fulfilling all debt obligations (Myers 1977). Moreover, a high leverage creates financial distress, which makes firms less attractive to investors (Opler and Titman 1994; Smith and Watts 1992). After the implementation of the reforms, the minority shareholders have more incentives to finance firms because their interests are protected by law. However, they would prefer not to invest in highly leveraged firms because of a reduced return possibility. Our results indeed show that firms with low leverage benefit more from the reforms.

The previous literature on corporate governance regulations and the firm performance has mainly focused on a single-country analysis with or without special interest in minority shareholders protection by considering the fact that every country has different institutional

settings. A worldwide investigation of the effects of reforms aiming to improve the protection of minority shareholders creates an opportunity to exploit cross-country differences. If the protection of minority shareholder reform matters, we would expect such an effect to be more pronounced in those countries with weaker investor protection and required mandatory compliance. Therefore, we evaluate the role of legal origin and CG approaches in the relationship between the reforms. The evidence shows that reforms protecting minority shareholders are more efficient in civil law countries, i.e., in countries with rule-based reform approach. Moreover, when the reforms protecting minority shareholders minimize the agency conflict between concentrated owners and minority shareholders, it would also increase the conflict between shareholders and creditors (Jensen and Meckling 1976; Smith and Warner 1979). Therefore, the reforms in countries with high debt enforcement will be less efficient because higher debt enforcement intensifies the shareholder-creditor conflict even more by decreasing the payoffs to both shareholders and creditors (Fan and Sundaresan 2000; Favara et al. 2017). Our results confirm this expectation.

The remainder of this study is organized as follows: In Section 2, we develop our hypotheses. The data and empirical methodology are discussed in Section 3. Section 4 provides the results and interpretations, and Section 5 concludes.

2. Literature Review and Hypotheses Development

The implementation of corporate governance reforms has deep roots that relate to the historical experiences of the country and structural changes in the global economy, which also determine the nature of the reforms. CG reforms have gained attention over the last two decades due to unusual business practices and major corporate scandals around the world (e.g., BBCI bankruptcy, Enron, Worldcom and Tyco). In some cases, these events led to specific responses and implementation of new rules, laws and practices (e.g., Sarbanes-Oxley Act). These reforms are essential for both developed and developing countries in order to compete in a global economy. Popescu (2019) presents the fact that such regulation should consider not only corporate governance but also corporate social responsibility for their roles in determining financial (and non-financial) performance as the sustainable aspects and practices of entities worldwide. Nevertheless, such reforms will contribute to reaching this aim.

The expected effect of CG reforms is the generation of growth and development. Firstly, the reforms help to provide legitimacy for governments that want to develop a more efficient corporate structure in order to generate better conditions for growth and development. Secondly, reforms tend to contribute to increasing the number of available investment funds by expanding investment opportunities for foreign investors as well as for domestic institutional investors. This covers changing limits on foreign direct investment, facilitating agreements between domestic and foreign companies, and achieving current account convertibility for the repatriation of profits. These reforms not only increase the available investment funds but also contribute to the efficient allocation of such funds. Thirdly, CG reforms promote efficiency among domestic firms and enable them to compete with foreign companies that enter the market. CG reforms tend to increase market pressure for both financial and product markets through opening domestic markets to foreign investors, trade liberalization and FDI liberalization. These measures force domestic firms to be more innovative and to focus on export activities in order to face the competition in the market (Reed 2002).

2.1. Corporate Governance Reforms and Firm Performance

Investor protection is a crucial aspect because, in many countries, expropriation of minority shareholders by the concentrated shareholders is practiced at a large scale. La Porta et al. (2000) argue that the fundamental premise of investor protection is preventing the expropriation of minority investors. The existing literature has demonstrated the implication of investor protection in various aspects. First, strong investor protection results in more accurate financial reporting (Leuz et al. 2003) and more arbitrage (Morck et al. 2000),

both of which contribute to development capital markets. La Porta et al. (1998) show that countries with better investor protection have more extensive and deeper capital markets. Moreover, countries with higher investor protection have a higher valuation of listed firms relative to their assets (La Porta et al. 2002; Claessens et al. 2002). In countries with stronger investor protection, the shareholders are less likely to expropriate firms' resources and more likely to invest in projects that benefit both majority and minority shareholders (Wurgler 2000; Shleifer and Wolfenzon 2002; Bekaert et al. 2010). Therefore, firms can easily access external finance for valuable projects (La Porta et al. 2006). Mclean et al. (2012) show that firms that are located in countries with stronger minority shareholders protection laws benefit more from investment and external finance, and this leads to higher firm performance. Furthermore, they argue that minority shareholders expropriation is the primary channel through which corporate governance affects the firm value.

Earlier studies examining the impact of corporate governance reforms focused on specific countries. In 1992, The Cadbury Committee in the U.K. issued The Code of Best Practice, which covers the suggestions on the structure and duties of corporate boards of directors. Most of the studies generally report little correlation, (Coles et al. 2008), no correlation (Hermalin and Weisbach 1991) or even negative association (Agrawal and Knoeber 1996; De Andres et al. 2005; Cho and Kim 2007) between the board composition and the firm performance. Dahya and McConnell (2007) evaluate the impacts of the Cadbury Report representing an exogenous shock for U.K. firms. The critical question addressed is whether the U.K. firms that came into compliance with the Cadbury Report requirements experienced an improvement in their performances. The authors find that companies that add more outside directors to conform with the Cadbury standards experience a significant increase in the operating performance (ROA). The second part of the analysis considers the recommendation that involves the separation of CEO and Chairman of the Board positions, but the authors find no effect on firm performance or the stock price.

In response to some severe corporate accounting scandals, the U.S. Congress passed the Sarbanes-Oxley Act in July 2002 to strengthen financial reporting and corporate governance. The act aimed to prevent fraudulent accounting and management misconduct and consequently to reestablish investors' confidence in the U.S. market. It enforced additional disclosure requirements and insisted on stronger oversight by proposing substantive corporate governance mandates, a new practice in the federal securities legislation. The impact of this legislation has been under debate for a long time because, despite the declared benefits, the business community had significant concerns about its costs. Zhang (2007) finds that the cumulative abnormal returns of the U.S. firms and foreign firms conforming with SOX are negative and statistically significant. The investigation performed by Chhaochharia and Grinstein (2007) concludes that firms that were less compliant with new governance rules realize a greater value improvement compared to more compliant firms. Similarly, Li (2014) examining the short- and long-term impact of SOX cross-listed foreign private issuers concludes that the costs of the compliance substantially exceed its benefits. On the other hand, Bhagat and Bolton (2013) find a significant negative relationship between board independence and firm performance during the pre-SOX period (before 2002) but a positive and significant relationship in the post-SOX period (after 2002). Between 2003–2007, greater board independence was positively associated with firm performance (Bhagat and Bolton 2019). This outcome is explained by the fact that when a company switches from noncompliant to compliant with SOX requirements, the market response is positive. Moreover, Bhagat and Bolton (2019) show that there is a significant positive relationship between corporate governance and firm performance.

The discussion about the role of strong governance systems indicates that more efficient distributions of capital resources lead to economic growth and intensify the likelihood of investors receiving their required return (La Porta et al. 1999). However, it is not clear how an economy with weak governance can improve investment and encourage economic growth. To investigate this, Price et al. (2011) examine the impact of compliance with Mexico's Code of Best Corporate Practices on the firm performance and financial

reporting transparency to evaluate the efficiency of the reform. In Mexico, as a developing economy with a significant lack of investor protection, concentrated ownership is generally the dominant ownership structure. Issued by the National Banking and Securities Exchange Commission, the aim of the Code was definitely to fortify the corporate governance system in Mexico in order to increase corporate transparency and to gain investor's confidence. Some key specifications of the Code referred to the board structure (reducing the size between 5 and 20 directors and having at least 20% outside directors) and to the design of separate board committees to manage finance, auditing and executive compensation. Mexico showed an evident loyalty to the enhancement of governance transparency by insisting on reporting of compliance with the Code, as well as by improving the rights of minority shareholders in the Securities Market Laws of 2001. Core et al. (2006) show that compliance with the Code showed a dramatic increase over the sample period, from 28% to 79%. The growth in compliance can be explained by the hypothesis of Bushman et al. (2004), which says that when the protection of outside investors' rights increases, their demand for financial and governance transparency also increases. Although compliance with the new Code significantly increased over time, the results show that this is not associated with significant improvement in the firm performance. However, there is one exception: greater audit committee compliance generates significantly better operating performance and market returns.

Based on the fact that independent directors are usually considered to be vital elements of sustainable corporate governance, Black and Kim (2012) employ 1999 Korean law as an exogenous shock to identify whether the board structure has an impact on the firm value. In 1999, as a reaction to the 1997–1998 East Asian financial crisis, Korea implemented new governance rules, which started to be effective entirely in 2001. The law requires large firms to have 50% outside directors and an audit committee with an independent director and at least 2/3 outside members. For smaller firms, the law demands at least 25% outside directors. The authors identify whether there is a considerable change in the market value of large firms relative to smaller firms both in size (Tobin's Q) and in time. Considering the period before, during and after the reform started to be effective, the authors report a significant causal relationship between board structure and the firm value. Although the board independence contributes the most to the increased value of the value, audit committees also have a substantial impact on the performance.

India also experienced CG reforms in 2004 with the adoption of Indian Clause 49. It is classified as significant governance reforms with mandatory provisions, based on different active implementation periods for large, medium- and small-sized firms. Black and Khanna (2007) examine the market reaction of Indian firms to the announcement of the new CG reforms and find positive stock market responses. This result implies that the market accepts that the necessary CG reforms are beneficial and value-enhancing.

The number of studies examining the impact of exogenous changes in CG practices on firm performance is limited, especially for a worldwide sample. The quality of CG could also be affected by several corporate board reforms, which also aim to improve the firm value. These reforms are recommended for greater board independence, audit committee independence and separation between chairman and CEO positions. Scholars give considerable attention to these reforms because they can be used as exogenous shocks for the investigation of the relation between board compositions and firm performance. A unique study by Fauver et al. (2017) investigates the relationship between corporate board reforms and firm value around the world, focusing on 41 distinct countries from 1990 to 2012. The authors conclude that the board reforms have a significant positive impact on the firm value. This finding is in line with the studies that assess the impact of board independence on the firm performance (Luan and Tang 2007; Dahya et al. 2002, 2008; Aggarwal et al. 2010; Liu et al. 2015; Zhu et al. 2016; Uribe-Bohorquez et al. 2018).

2.2. Corporate Governance Reforms Protecting Minority Shareholders and Firm Performance

Improvements in corporate governance aim to mitigate agency conflicts between management and shareholders, which is called the traditional principal-agent problem (Renders and Gaeremynck 2012). On the other hand, the principal-principal agency conflict arises when concentrated shareholders abuse their ownership control to extract private benefits at the expense of minority shareholders (Jensen and Meckling 1976). In the principal-principal agency conflict (Thomsen et al. 2006), concentrated shareholders have the power as well as the incentive to divert corporate resources to themselves. The corporate governance research shows that such conflicts are more pronounced in countries with weak legal protection of minority shareholders (Claessens and Fan 2002; La Porta et al. 2000; Young et al. 2008). Expropriation can happen in different ways: in some countries, the concentrated shareholders directly steal profits, while in other countries, they sell the assets that minority shareholders have financed to another entity they own at a price below the market price (La Porta et al. 2000).

Even though the literature does not provide direct evidence for the positive impact of protecting minority shareholders reform on the firm performance, the arguments mentioned above highlight the possible positive impact of the reforms. When a country introduces reforms, which aim to limit the opportunistic behavior of controlling shareholders, minority shareholders feel more confident, because the risk of not getting a return is diminished (Roe 2000; Bae et al. 2012). As a consequence, the firms benefit more from external finance and increases in performance, suggesting the following hypothesis:

Hypothesis 1 (H1). *Corporate governance reforms protecting minority shareholders have a positive effect on the firm performance.*

2.3. The Role of Financial Leverage

The choice of capital structure is definitely one of the most crucial decisions that managers face because the changes in leverage ratio can influence the financing capacity of the firm, cost of capital, investment strategy, risk and shareholders' wealth but also the performance (Cai and Zhang 2011). In Jensen and Meckling (1976) agency cost model, higher leverage results in higher agency costs based on the conflicting interests between shareholders and debtholders. The conflict is based on the inequality of gains between shareholders and debtholders: once an investment brings returns above the debt value, the shareholders' value increases with additional returns. This will mean that shareholders will benefit more in firms with low leverage with an increase in the firm value after the reforms.

Based on the debt overhang theory of Myers (1977), which implies that higher leveraged firms will forgo positive net present value projects in the future because, in some cases, the outcome of these investments for shareholders is lower than the initial investment after fulfilling all debt obligations. From another point of view, debt can also create financial distress—the "bankruptcy effect". An increase in financial leverage can undermine the expectations of stakeholders, leading to a decrease in the firm market value. Debt is considered a costly mechanism because it diminishes access to credit and increases the cost of the relationship with stakeholders by forcing firms to engage in actions that are detrimental for debt holders and non-financial stakeholders (i.e., employees, suppliers and customers) (Opler and Titman 1994). The literature suggests that higher debt causes greater financial distress, and this lowers corporate performance. Holding a larger amount of debt can be harmful because it increases the risk associated with firms' businesses, making firms less attractive to the investors and consequently reducing their possibilities to raise additional capital in the future (Smith and Watts 1992).

In light of the arguments discussed above, we expect that an increase in the firm's leverage will weaken the positive impact of reforms protecting minority shareholders on the firm performance. The reforms will be more effective for firms with low leverage, and therefore the second hypothesis is as follows:

Hypothesis 2 (H2). *The positive relationship between corporate governance reforms protecting minority shareholders and the firm performance is weakened by financial leverage.*

2.4. The Role of Legal Origin

The law and finance literature suggests that the legal origin is an essential factor that explains a country's investor protection and capital market development (La Porta et al. 1998). Consequently, it is necessary to examine whether and how a country's legal origin affects the relationship between reforms protecting minority shareholders and firm performance. It is argued that firms in civil law countries have poor shareholder protection and corporate governance; therefore, the efficiency of the reforms protecting minority shareholders should be higher in these countries (La Porta et al. 1998). A higher efficiency is explained by the fact that the implementation of such reforms is urgent in civil law countries, since it improves considerably the weak shareholder protection. The reforms diminish the minority shareholders' risk of being expropriated, and they finance firms more because their rights are protected by the law; as a consequence, firm performance increase. The reforms would be less efficient in common law countries because in such countries, the shareholders' protection is already strong and the implementation of the reforms may not add much to the power of minority shareholders and have an adverse effect on performance by not decreasing the agency costs much. Therefore, a relevant hypothesis is as follows:

Hypothesis 3 (H3). *The positive relationship between corporate governance reforms protecting minority shareholders and the firm performance is more pronounced in civil law countries.*

2.5. The Role of Corporate Governance Approaches

Although corporate governance reforms are adopted all over the world, countries differ in reform approaches. There are two main reform approaches: "rule-based" and "comply-or-explain". The rule-based approach, based on the assumption of "one size fits all", requires mandatory compliance. The one-size-fits-all mandatory regimes implicitly assume that the same recommendations are efficient for all types of firms (Romano 2005). The comply-or-explain mechanism assumes that it is not possible to adopt a one-size-fits-all approach because companies subject to the corporate governance reforms differ in terms of size, structure and organization (MacNeil and Li 2006). It is based on the idea that the fundamental determinants of the type and severity of agency costs are companies' ownership and control structures, which differ across countries and industries, and that corporate governance practices should reflect such differences (Chen and Nowland 2010). Voluntary compliance offers the possibility to choose whether to comply or not with the reforms, but also it requires firms to explain the adoption of an alternative approach (Aguilera and Cuervo-Cazurra 2004; Haxhi and Van Ees 2010). The effectiveness of these reform approaches is still under debate because the rule-based approach induces the risk of being overregulated while the comply-or-explain regulations work as suggestions and do not have enough power. Some scholars argue that the comply-or-explain approach is flexible and more beneficial, while the rule-based approach usually does not add value and creates additional costs for firms (Adams et al. 2010). Others say that the comply-or-explain approach does not lead to an increase in firm value because firms intentionally do not comply with the reforms to avoid corporate governance improvements (Zadkovich 2007). Recent literature argues that the comply-or-explain approach leads to improvements in firm value because firms have the possibility to adopt personalized governance practices based on firm-specific circumstances (Luo and Salterio 2014), but the comply-or-explain approach is also associated with a greater increase in firm value than rule-based reforms (Fauver et al. 2017). However, based on the argument above, the outcome related to the effect of reforms protecting minority shareholders could be different, as we state as follows:

Hypothesis 4 (H4). *The positive relationship between corporate governance reforms protecting minority shareholders and the firm performance is more pronounced in countries with a rule-based CG approach.*

2.6. The Role of Debt Enforcement

Reforms protecting minority shareholders from management abuse and controlling shareholders intend to strengthen the position of minority shareholders. Specifically, the reforms minimize the agency conflict between concentrated owners and minority shareholders. However, once the power of minority shareholders increases, it leads to the strengthening of the conflict between shareholders and debt holders. The agency theory argues that this conflict induces agency costs in the form of exaggerated dividend payments, asset substitution, and underinvestment (Jensen and Meckling 1976; Smith and Warner 1979). In particular, excessive dividend payments result in wealth transfers from creditors to shareholders; as a consequence, the company escapes from the burden of debt at the expense of creditors. Higher debt enforcement intensifies the shareholder-creditor conflict by decreasing the payoffs to both shareholders and creditors (Fan and Sundaresan 2000; Favara et al. 2017).

In a recent study, Favara et al. (2017), discussed the implications of debt enforcement on investment, assets growth and risk-taking across 41 countries. The outcomes of the study show that a lower debt enforcement results in more investment, higher asset growth and less risk-shifting. As suggested by Myers (1977), the conflict between shareholders and creditors encourages firms to practice underinvestment, and this leads to a significant decrease in firm performance due to rejecting positive NPV projects. In countries with low debt enforcement, this conflict is weakened, and companies invest more than in countries with high debt enforcement. As discussed by Favara et al. (2017), imperfect debt enforcement firstly increases the probability of recovery in default and then decreases the underinvestment as well as asset substitution generated by agency conflicts. In turn, firms will perform better in countries with low debt enforcement.

In light of the arguments and studies discussed above, we expect that stronger debt enforcement will create more conflicts between shareholders and debt holders with the reforms protecting minority shareholders. Therefore, these reforms will be more effective for firms located in countries with weak debt enforcement. Our next hypothesis is therefore as follows:

Hypothesis 5 (H5). *The positive relationship between corporate governance reforms protecting minority shareholders and the firm performance is weakened by high debt enforcement.*

3. Data and Methodology

3.1. Data Collection and Sample

Based on a large worldwide sample, this study aims to investigate the impact of reforms protecting minority shareholders on the firm value during the period of 2005–2018. The data for the reforms are extracted from The World Bank (2020) database, which contains a score for the minority shareholder protection mechanism within a country in each year. The mechanism is measured based on the extent of disclosure, liability, legal rights, ownership and control. We compute annual changes in these scores to identify the year of a reform regarding shareholder protection that took place. The annual change in many cases shows an increase in the score, but for a few cases scores decrease as well. Since the reforms are a continuous process, we take into account all changes possible. The magnitude of the annual change in scores varies, indicating that it is not necessarily the first reform that has a higher change in the scores. Therefore, we try to capture all changes if a country experiences more than one reform during the sample period. The rating method slightly changed in 2014, due to the addition of new parameters. However, we managed to compute the changes from 2015 accordingly because the score in 2014 was provided by two methods, old and new.

The main data sources of the firm-level data are Compustat Global Fundamentals, Compustat North America and Thomson Reuter's DataStream. The investigation considers only non-financial and non-utilities firms, both active and inactive. Therefore, financial companies (SIC codes from 6000 to 6990), as well as utility companies (SIC codes from 4900 to 4999), were excluded. In order to make the sample more comparable across countries, firms with negative sales, negative book value of equity and those with total assets less than $10 million were excluded. The country-level data used were World Bank Database and the study by Djankov et al. (2008). The final sample consists of a balanced panel data of 246,418 firm-year observations for 31,020 distinct companies from 65 countries covering the period between 2005 and 2018. All firm-level variables are winsorized at the 1% and 99% level to control possible outliers. The detailed definitions and sources of all variables are shown in Table 1.

Table 1. Definitions and sources of variables.

Variable Name	Definition	Source
Tobin's Q	Book Value of total assets minus total common equity plus market capitalization divided by total assets.	Compustat and Datastream
Leverage	The ratio of book value of total long-term debt plus short-term debt to book value of total assets.	Compustat
Size	Logarithm of total assets.	Datastream
Net Working Capital (NWC)	Ratio of current assets minus current liabilities to total assets.	Compustat
Capital expenditures (CAPEX)	Ratio of capital expenditures to total assets.	Compustat
Sales Growth	The growth in total sales calculated using the formula: (Sales[t] − Sales[t − 1])/Sales [t − 1].	Compustat
R&D	Ratio of research and development expenses to total assets.	Compustat
Reform Dummy	A dummy variable taking the value of "0" if the country did not experience an improvement in investor protection score, "1" if there is an improvement, "2" if there is the second improvement and "−1" if the reform leads to a decrease in the score.	World Bank (Doing business)
Civil Dummy	A dummy variable taking the value of "1" for civil law and "0" for common law.	La Porta et al. (1999)
Comply-or-explain Dummy	A dummy variable taking the value of "1" if the country reform approach is *comply-or-explain* and "0" if the reform approach is *rule-based*.	Fauver et al. (2017)
Debt Enforcement	Debt enforcement index taking values from 6.60 to 96.1 for each country.	Djankov et al. (2008)

3.2. Sample Distribution

Table 2 illustrates the sample distribution and the mean of the dependent variable Tobin's Q by year. The Full Sample column refers to all countries included in the analysis. The No reforms column refers to the countries which did not experience reforms protecting minority shareholders in the presented years, while the column entitled At Least One Reform refers to the countries which experienced such reforms at least once. Although the analyzed time period is from 2005 to 2018, the reforms were first identified in 2007. Overall, it can be noticed that the mean value of Tobin's Q for countries that experienced reforms (1.946) is higher than the mean for the countries that did not experience reforms in

the presented years (1.543). This difference illustrates the possible positive impact of the reforms on firms' performance.

Table 2. Smple distribution and the firm values by year.

	Full Sample		No Reforms		At Least One Reform	
Fiscal Year	**N**	**Mean**	**N**	**Mean**	**N**	**Mean**
2005	13,534	1.612	13,534	1.612	-	-
2006	14,971	1.662	14,971	1.662	-	-
2007	15,456	1.691	14,052	1.661	1404	1.989
2008	15,101	1.512	13,466	1.377	1635	2.623
2009	15,279	1.244	13,020	1.226	2259	1.345
2010	15,858	1.541	12,757	1.432	3101	1.990
2011	16,323	1.598	12,633	1.424	3690	2.195
2012	16,746	1.523	12,572	1.390	4174	1.926
2013	16,995	1.610	10,731	1.543	6264	1.724
2014	17,168	1.700	9805	1.665	7363	1.747
2015	17,126	1.778	9289	1.629	7837	1.954
2016	17,277	1.771	9162	1.622	8115	1.939
2017	17,580	1.944	9020	1.747	8560	2.151
2018	18,070	1.893	9052	1.804	9018	1.982
Total	227,484	1.656	164,064	1.543	63,420	1.946

This table presents the number of observations and the mean of the dependent variable Tobin's Q by year.

Table 3 illustrates the sample distribution by country. Although the sample consists of 65 countries, during the presented time period, only 36 experienced reforms protecting minority shareholders: 21 countries experienced such reforms twice, 15 only once and the remaining 29 did not have such reforms in the presented time period. By looking at the countries that experienced reforms, the highest mean values of Tobin's Q can be noticed in Chile (3.532) and Indonesia (2.756); moreover, the values of debt enforcement is relatively low for those countries at 40.9 and 25.1, respectively. By contrast, the lowest mean values of Tobin's Q can be noticed in Lithuania (0.828) and Colombia (0.990), while the values of debt enforcement are 58.7 and 64.8, respectively. Even though Tobin's Q is influenced by a large number of factors, by comparing the values of the four countries presented above, it can be seen that Tobin's Q is higher for countries with low debt enforcement and lower for countries with high debt enforcement.

Table 4 presents descriptive statistics for all the variables involved in the analysis, including the number of observations, mean, median, minimum, maximum and standard deviation. Tobin's Q ratio has a minimum value of 0.440 and a maximum of 9.457. The Tobin's Q higher than 1 indicates that the firm's value is higher than the book value of firm's assets. The mean value of Tobin's Q is 1.656, suggesting that, on average, the value of the companies included in the sample is higher than their book value of assets. The mean value of leverage is 0.202, indicating that on average, the firms included in the sample are not highly leveraged. There is a large variation of debt enforcement index, with a minimum of 6.60 and a maximum of 96.1. This indicates that there are countries that have higher debt enforcement compared to others.

Table 3. Sample distribution by country/territory.

Country/Territory	N	Reform Year	Tobin's Q	Leverage	Size	Debt Enforcement
Argentina	562	-	1.264	0.199	5.291	35.8
Australia	7854	-	1.678	0.146	4.667	87.8
Austria	661	-	1.314	0.232	6.325	78.0
Belgium	988	-	1.559	0.211	6.117	90.8
Botswana	67	2009	1.721	0.077	4.012	69.7
Brazil	1839	-	1.306	0.278	6.801	13.4
Bulgaria	373	-	1.169	0.261	4.549	46.0
Canada	8859	2013	1.539	0.198	5.681	93.2
Chile	1288	2011	3.532	0.245	5.998	40.9
China	25,010	2007; 2015	2.440	0.186	6.198	43.6
Colombia	243	2010	0.990	0.149	6.679	64.8
Croatia	609	2010; 2017	1.144	0.245	5.360	45.0
Czech Republic	79	2013	1.245	0.724	6.422	40.7
Denmark	1120	-	2.246	0.223	5.549	76.7
Egypt	850	2009; 2015	1.354	0.194	5.167	28.6
Finland	1430	-	1.572	0.237	5.780	92.4
France	6067	-	1.433	0.208	5.849	54.1
Germany	5783	-	1.511	0.189	5.594	57.0
Greece	2120	2009; 2013	1.036	0.323	5.034	53.8
Hong Kong	1538	2015	1.434	0.165	6.356	88.3
Hungary	141	-	1.417	0.201	6.001	46.7
Indonesia	3542	2010	2.756	0.270	5.293	25.1
Ireland	849	2015; 2016	1.758	0.217	6.959	89.9
Israel	3167	-	1.780	0.238	4.933	66.2
Italy	2318	-	1.403	0.261	6.179	45.3
Jamaica	37	-	2.391	0.125	4.323	69.0
Japan	36,646	-	1.175	0.193	6.014	95.5
Jordan	635	-	1.289	0.184	4.089	44.5
Kazakhstan	80	2011; 2012	1.265	0.187	6.042	31.4
Korea	12,839	2013; 2015	1.277	0.243	5.595	88.1
Kuwait	793	2014	1.248	0.202	5.643	55.9
Latvia	170	-	0.873	0.245	4.126	49.3
Lithuania	282	2012; 2016	0.828	0.254	4.347	58.7
Malaysia	9477	2014; 2018	1.118	0.199	4.586	48.4
Mexico	1040	2007	1.531	0.239	7.192	72.6
Morocco	411	2011; 2012	1.673	0.217	5.096	41.9
Namibia	13	-	0.969	0.056	3.974	45.2
Netherlands	1513	2013	1.744	0.226	6.700	94.9
New Zealand	974	-	1.682	0.218	5.195	90.7
Norway	1536	-	2.294	0.274	5.951	91.8
Oman	576	-	1.323	0.191	4.477	53.5
Panama	56	2014	2.042	0.284	8.616	43.0
Peru	709	2007; 2012	0.992	0.187	5.478	41.8
Philippines	1294	-	1.870	0.215	5.498	17.5
Poland	3292	2007	1.299	0.180	4.518	67.7
Portugal	460	-	1.177	0.372	6.690	82.3
Russian Federation	1287	2017	2.442	0.277	7.072	39.0
Saudi Arabia	1014	2009; 2017	2.110	0.202	6.295	40.6
Singapore	6191	-	1.150	0.194	4.876	96.1
Slovak Republic	47	-	1.340	0.157	5.975	58.9
Slovenia	253	2009	.8835	0.273	5.821	52.3
South Africa	2373	-	1.581	0.180	5.770	39.8
Spain	1261	2014	1.611	0.295	6.759	82.0
Sri Lanka	1469	2012; 2017	1.272	0.235	4.018	45.7
Sweden	3447	2007; 2011	2.005	0.182	5.093	86.0

Table 3. *Cont.*

Country/Territory	N	Reform Year	Tobin's Q	Leverage	Size	Debt Enforcement
Switzerland	2067	2015	1.881	0.172	6.479	60.4
Thailand	5369	2009; 2018	1.497	0.221	4.665	54.9
Tunisia	342	2009; 2010	1.541	0.270	4.30	56.6
Turkey	2396	2009; 2014	1.352	0.228	5.447	6.60
Ukraine	127	2010	0.946	0.132	6.524	17.5
United Arab Emirat.	469	2014; 2015	1.162	0.187	6.247	21.8
United Kingdom	10,981	-	1.634	0.165	5.380	92.3
United States	38,115	-	1.998	0.198	6.130	85.8
Venezuela	86	-	0.515	0.130	5.599	13.1
Total	227,484	-	1.656	0.203	5.713	72.8

This table provides the number of observations by country as well as the mean value for the main variables: Tobin's Q, Leverage and Size. Debt Enforcement is a country-level index. The column Reform Year specifies which countries experienced reforms protecting minority shareholders and in which years. Ireland experienced in 2015 a reform that lowered the protecting minority shareholders score. This is the only country that experienced a reform with a negative impact on the score. The detailed definition of the variables is shown in Table 1.

Table 4. Panel A. Descriptive statistics by variable.

	N	Mean	Median	Min.	Max.	Std. Dev.
Tobin's Q	227484	1.656	1.212	0.440	9.457	1.384
Leverage	227484	0.203	0.178	0.000	0.676	0.174
Size	227484	5.713	5.549	2.461	10.562	1.819
NWC	227484	0.197	0.176	−0.346	0.806	0.230
CAPEX	227484	0.048	0.030	0.000	0.301	0.054
Sales Growth	227484	0.155	0.060	−0.803	4.321	0.586
R&D	227484	0.019	0.000	0.000	0.314	0.049
Reform Dummy	227484	0.386	0.000	−1.000	2.000	0.673
Civil Dummy	227484	0.566	1.000	0.000	1.000	0.496
Comply-or-Explain Dummy	214092	0.323	0.000	0.000	1.000	0.467
Debt Enforcement	227484	72.84	85.800	6.600	96.10	23.43

This table provides the mean, median, min, max and standard deviation for all variables involved in the analysis. The firm-level variables are winsorized at both 1% and 99% levels. The detailed definition of the variables is shown in Table 1.

We illustrate the correlation coefficients in Appendix A. Reform dummy and Tobin's Q are positively correlated (0.11394), highlighting the possibility that reforms have a positive effect on Tobin's Q. Moreover, Leverage, Civil Dummy, Comply-or-Explain Dummy and Debt Enforcement are all negatively correlated with Tobin's Q, highlighting the possible negative impacts of all those variables on Tobin's Q. Overall, the results indicate that none of the independent variables are highly correlated with each other.

3.3. Regression Specification and Research Design

We use the following regression equation to test our hypotheses.

$$\begin{aligned} \text{Tobin's}Q_{i,t} = \beta 0 \; & + \beta 1 \text{ Reform Dummy}_{c,t} + \beta 2 \text{ Reform Dummy}_{c,t} \times \text{Leverage}_{i,t} \\ & + \beta 3 \text{ Leverage}_{i,t} \\ & + \beta 4 \text{ Reform Dummy}_{c,t} \times \text{Civil Dummy}_{t} \text{ or (Comply} - \text{or} \\ & - \text{Explain Dummy}_{t} \text{ or Debt Enforcement}_{c,t}) + \beta 6 \text{ Size}_{i,t} + \beta 7 \text{ NWC}_{i,t} \\ & + \beta 8 \text{ CAPEX}_{i,t} + \beta 9 \text{ Sales Growth}_{i,t} + \beta 10 \text{ R\&D}_{i,t} \\ & + \text{CountryF.E.} + \text{IndustryF.E.} + \text{YearF.E.} + \varepsilon_{i,t} \end{aligned}$$

where i, c and t refer to firm, country and year, respectively.

The main goal of this study is to identify whether the reforms protecting minority shareholders generate an increase in the firm value, which is measured by Tobin's Q. Following prior research in the field of corporate governance reforms, scholars claim that Tobin's Q is a reliable proxy for firm performance (Agrawal and Knoeber 1996; Vafeas 1999; Coles et al. 2008; Black and Kim 2012; Zhu et al. 2016; Ciftci et al. 2019). For our main hypothesis, β1 is expected to be positive. To identify the causal impact of reforms protecting minority shareholders on the firm value, a (DID) research design is employed. This design relies on the assumption that the dependent variable will have a similar trend across treated groups and a similar trend across control groups. However, Tobin's Q trend for treatment firms after experiencing reforms protecting minority shareholders will be different from that for control firms. The sample covers 65 distinct countries, but not every country experienced such reforms, which are in the control group.

Although corporate governance reforms are adopted all over the world, there is no unified database where the countries report the new reforms. In order to identify the reforms for each country, we use the World Bank data, namely the Investor Protection score from Doing Business database, which increases when countries adopt reforms aiming to strengthen minority investor protections. The variable Reform Dummy takes the value "0" when the score does not change (no reforms adopted), "1" when the score increases after the adoption of reforms, "2" when there is a second improvement and "−1" when there is a reform that decreases investor protection score. When a reform is implemented, the Reform Dummy keeps the value of "1" for all subsequent years till the end of the period or till the next improvement. This approach allows one to implement the DID design by comparing the firm value for the years before implementing the reform with Tobin's q in the years subsequent to the reforms.

4. Results

4.1. Firm Value and Reforms Protecting Minority Shareholders

In this section, we examine a direct relationship between reforms protecting minority shareholders and the firm value. Table 5 reports the results from our regression analyses, which help to highlight the individual impact of reforms on the firm value. Models 1 and 2 present Ordinary Least Square (OLS) and firm fixed effects regressions for the impact of the reforms on the firm value by using the full sample. In Models 3 and 4, we exclude the U.S. and the U.K. firms, which cover a large number of observations, and there were no reforms in these two countries. In Model 5 and 6, we exclude Japan and China in addition to the previous two countries for the same reasons.

The estimated coefficients of Reform Dummy are positive and statistically significant at 1% level in all regressions. The effect is economically significant: Tobin's Q increases, on average, by 7.73% and 10.7% following the reforms (7.73% = 0.128/1.656 and 10.7% = 0.177/1.656, where 0.128 and 0.177 are the estimated coefficients of the reform dummy in Models 1 and 2, respectively, and 1.656 is the mean Tobin's Q in Panel A of Table 4). The results do not change when we exclude the U.S. and the U.K. firms in Models 3 and 4, and then Japan and China in Models 5 and 6. The economic significances drop by half in these last two models. This evidence indicates that reforms protecting minority shareholders have a positive impact on the firm value. In other words, firms perform better after the reforms are implemented, but also firms located in the reform countries at least once perform better than firms located in countries that did not experience reforms protecting minority shareholders during the sample period. The positive effect is explained by the fact that such reforms strengthen the position of minority shareholders by protecting them from management abuse and controlling shareholders. This evidence supports our Hypothesis 1.

Table 5. Reforms and the firm value.

	Full Sample	Full Sample	No U.S. and U.K.	No U.S. and U.K.	No U.S., U.K., JAP, and CHN	No U.S., U.K., JAP, and CHN
	(1)	(2)	(3)	(4)	(5)	(6)
Reform Dummy	0.128 ***	0.177 ***	0.149 ***	0.177 ***	0.043 ***	0.052 ***
	[0.010]	[0.011]	[0.010]	[0.011]	[0.012]	[0.012]
Leverage	−0.323 ***	−0.277 ***	−0.272 ***	−0.282 ***	−0.297 ***	−0.157 ***
	[0.041]	[0.043]	[0.050]	[0.051]	[0.064]	[0.061]
Size	−0.004	−0.200 ***	−0.024 ***	−0.200 ***	0.043 ***	−0.054 ***
	[0.004]	[0.012]	[0.005]	[0.014]	[0.007]	[0.016]
NWC	0.610 ***	0.365 ***	0.560 ***	0.246 ***	0.403 ***	0.246 ***
	[0.035]	[0.036]	[0.041]	[0.040]	[0.049]	[0.045]
CAPEX	2.157 ***	1.851 ***	1.998 ***	1.788 ***	1.944 ***	1.801 ***
	[0.105]	[0.081]	[0.118]	[0.088]	[0.143]	[0.105]
Sales Growth	0.074 ***	0.013 **	0.017 **	−0.028 ***	0.020 **	−0.015 *
	[0.007]	[0.006]	[0.007]	[0.007]	[0.008]	[0.008]
R&D	5.068 ***	1.663 ***	5.680 ***	1.897 ***	6.229 ***	1.740 ***
	[0.181]	[0.278]	[0.282]	[0.359]	[0.313]	[0.407]
Constant	0.882 ***	2.631 ***	0.994 ***	2.498 ***	0.634 ***	1.688 ***
	[0.115]	[0.067]	[0.124]	[0.076]	[0.138]	[0.083]
R-squared	0.216	0.727	0.219	0.735	0.176	0.74
Observations	227,484	227,484	178,388	178,388	116,732	116,732
Firm F.E.	No	Yes	No	Yes	No	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	No	Yes	No	Yes	No
Country F.E.	Yes	No	Yes	No	Yes	No

This table presents the estimations of the effect of reforms protecting minority shareholders on the firm value. The dependent variable, the firm value, is measured using Tobin's Q. The detailed definition of the variables can be seen in Table 1. All firm-level variables are winsorized at both 1% and 99% levels. The robust standard errors clustered at the firm level are shown in parentheses. ***, ** and * indicate the significance at the 1%, 5% and 10% level, respectively.

The results suggest that control variables have significant impacts on firm value. Firm size has, except in Model 1, a significant negative effect. Halkos and Tzeremes (2007) argue that big firms have lower performance because of complex, rigid, hierarchical structures, which generate high agency costs and diminish performance. Sales growth is positively related to the value. As argued by prior studies, a firm that experiences an increase in sales will experience an increase in performance due to the additional income that the company generates (Yazdanfar 2013). The net working capital (NWC) positively affects the firm value. High levels of NWC indicate that a firm has enough money to meet its current obligations and invest in new projects, which leads to an increase in performance (Fazzari and Petersen 1993; Aktas et al. 2015). Capital expenditures (CAPEX) have a positive impact on the firm value, and this effect is in line with the findings in the paper by Fauver et al. (2017). Prior literature argues that a high level of capital expenditures illustrates the firms' possibility to undertake new projects and investments in its physical assets, technology and operations and thus leads to an increase in the performance (McConnell and Muscarella 1985). Research and development intensity (R&D) has a positive effect. R&D intensity reflects the firms' innovativeness and helps firms to increase performance (Andras and Srinivasan 2003).

4.2. Effect of the Firm Leverage

In this section, we examine the role of leverage in the effect of reforms protecting minority shareholders on the firm value. There are two possible theories to explain why the outcome would be different from the level of debt in the firms' capital structure. First, higher leverage causing an increase in agency costs of debt could decrease the benefits of a decrease in agency costs between managers and shareholders. Second, Debt Overhang Theory introduced by Myers (1977) argues that debt is a costly mechanism for firms. Therefore, firms with a high level of debt have the incentive to abandon the future positive NPV projects because the outcome of these projects can be lower than the initial investment, after executing all debt obligations.

Table 6 reports the regression results with the joint effects between reforms and leverage on firm performance. The coefficients of the interaction between Reform Dummy and Leverage are negative (−0.526 and −0.172) and statistically significant at 1% levels with and without firm fixed effects. These findings imply that the positive relationship between reforms and firm performance is weakened with an increase in leverage. Although the reforms increase the performance of firms with low levels of leverage (0.240 and 0.216), for highly leveraged firms. the reforms are not so efficient. Model 1 shows that the performance decreases for firms with high leverage after complying with the reforms (0.240 + (−0.526) = −0.286), but the firm fixed effects, the interaction variable, indicates an increase in the value for firms with high leverage, although the increase is significantly lower than for firms with low leverage. These results are in line with previous research demonstrating the negative impact of leverage on the firm performance (Lang et al. 1996; Cai and Zhang 2011; Giroud et al. 2012; Fauver et al. 2017; Doan and Nguyen 2018; El Ghoul et al. 2019) and support the Hypothesis 2.

Table 6. Reforms, the firm value and the role of leverage.

	(1)	(2)
Reform Dummy	0.240 ***	0.216 ***
	[0.016]	[0.016]
Leverage	−0.139 ***	−0.210 ***
	[0.040]	[0.045]
Reform Dummy × Leverage	−0.526 ***	−0.172 ***
	[0.052]	[0.047]
Size	−0.005	−0.201 ***
	[0.004]	[0.012]
NWC	0.583 ***	0.359 ***
	[0.035]	[0.036]
CAPEX	2.148 ***	1.846 ***
	[0.105]	[0.081]
Sales Growth	0.074 ***	0.013 **
	[0.007]	[0.006]
R&D	5.150 ***	1.650 ***
	[0.181]	[0.278]
Constant	0.854 ***	2.622 ***
	[0.115]	[0.067]
R-squared	0.218	0.727
Observations	227,484	227,484
Firm F.E.	No	Yes
Year F.E.	Yes	Yes
Industry F.E.	Yes	No
Country F.E.	Yes	No

This table presents the estimations of the effect of reforms protecting minority shareholders on the firm value and the effect of leverage. The dependent variable, the firm value, is measured using Tobin's Q. The detailed definition of the variables can be seen in Table 1. All firm-level variables are winsorized at both 1% and 99% levels. The robust standard errors clustered at the firm level are shown in parentheses. *** and ** indicate the significance at the 1% and 5% level, respectively.

4.3. Effects of Legal Origin, Corporate Governance Approach and Debt Enforcement

This section provides the results from the analysis on the differential impacts of reforms protecting minority shareholders on the firm value based on three country-level comparisons: (1) countries' legal origin, (2) comply-or-explain and ruled based corporate governance approach and (3) low and high debt enforcement. We incorporate the roles of those country-level variables by creating dummy variables, which then are interacted with the reform dummy.

We argue that firms from civil law countries have weak shareholder protection, and if the investor protection matters, the efficiency of the reforms protecting minority shareholders should be higher in civil law countries. The corporate governance approach could create a different outcome because managers have incentives to intentionally avoid complying with regulations created by such reforms. These incentives are driven by the fact that the reforms aim to limit the opportunistic behavior of controlling shareholders and by introducing severe penalties that lead to a high cost that exceeds the benefits of expropriation. Firms with severe principal-principal conflicts take advantage of the flexibility of the comply-or-explain system and continue to expropriate minority shareholders; thus it results in less improvements in corporate governance and lower firm performance. Considering the fact that reforms increase the power of shareholders, the conflict between shareholders and creditors increases as well and leads to agency costs. A higher debt enforcement intensifies shareholder-creditor conflict by decreasing the payoffs of both shareholders and creditors. Consequently, higher debt enforcement leads to lower firm performance.

Table 7 reports the results. For each country-level variable, the first models include the country, industry and year fixed effects, and the second models control firm and year fixed effects. Models 1 and 2 compare the effect of protecting minority shareholders on the firm value between civil and common countries. Since we keep the country fixed effects in the regressions, we did not include time-invariant dummy variables identifying civil law countries in our models. The coefficients of the reform dummy are positive and significant at 1% levels, which indicates that the reforms positively affect the value of firms located in common law countries. However, the coefficients of the interaction variable between reform dummy and civil dummy are positive (0.199 and 182 in Models 1 and 2, respectively) and significant. These results indicate that the positive effect of the reforms on the performance is significantly stronger in civil law countries relative to common law countries. This is in line with our expectation with Hypothesis 3.

Models 3 and 4 in Table 7 are for measuring the difference in the effect of the reforms between comply-or-explain and ruled-based CG approaches. The coefficients of the reform dummy are also positive and significant in these two models. This finding indicates that the reforms positively affect the firm value in countries with rule-based CG approach. The firm value is around 30% higher after the reforms in those countries. On the other hand, the interaction between the reform dummy and comply-or-explain dummy is negative and statistically significant (-0.12 and -0.136), indicating that the positive effect of the reforms is weaker in countries with comply-or-explain reform approach. Taken together, the outcomes suggest that reforms protecting minority shareholders have a positive impact on the firm performance in both rule-based and comply-or explain countries, but the efficiency of the reforms is much higher in rule-based countries, which is consistent with our Hypothesis 4.

We examine the effect of Debt Enforcement with Models 5 and 6. The coefficients of the reform dummy are positive and statistically significant, which indicates that reforms are more efficient in countries with low or weak debt enforcement. Nevertheless, the coefficients of the interaction between Reform Dummy and Debt Enforcement are negative (-0.004 within both regressions) and statistically significant at 1% levels. This outcome indicates that the positive effect of reforms protecting minority shareholders is weaker in countries with high debt enforcement. This finding also supports our Hypothesis 5.

Table 7. Reforms, the firm value and country-level determinants.

	Legal Origin Civil vs. Common Law		CG Approaches Comply-or-Explain vs. Ruled-Based		Debt Enforcement High vs. Low	
	(1)	(2)	(3)	(4)	(5)	(6)
Reform Dummy	0.087 ***	0.083 ***	0.301 ***	0.302 ***	0.480 ***	0.447 ***
	[0.019]	[0.019]	[0.018]	[0.020]	[0.031]	[0.033]
Leverage	−0.135 ***	−0.193 ***	−0.126 ***	−0.166 ***	−0.140 ***	−0.209 ***
	[0.040]	[0.045]	[0.041]	[0.046]	[0.040]	[0.045]
Reform Dummy ×	−0.531 ***	−0.197 ***	−0.544 ***	−0.221 ***	−0.522 ***	−0.170 ***
Leverage	[0.051]	[0.047]	[0.055]	[0.050]	[0.051]	[0.047]
Reform Dummy ×	0.199 ***	0.182 ***	−0.112 ***	−0.136 ***	−0.004 ***	−0.004 ***
Country Level Var.	[0.018]	[0.019]	[0.018]	[0.020]	[0.000]	[0.000]
Size	−0.005	−0.205 ***	−0.011 ***	−0.225 ***	−0.005	−0.207 ***
	[0.004]	[0.012]	[0.004]	[0.013]	[0.004]	[0.012]
NWC	0.582 ***	0.361 ***	0.591 ***	0.371 ***	0.581 ***	0.360 ***
	[0.035]	[0.036]	[0.036]	[0.037]	[0.035]	[0.036]
CAPEX	2.143 ***	1.851 ***	2.107 ***	1.906 ***	2.149 ***	1.857 ***
	[0.105]	[0.081]	[0.106]	[0.085]	[0.105]	[0.080]
Sales Growth	0.073 ***	0.012 *	0.077 ***	0.020 ***	0.073 ***	0.012 *
	[0.007]	[0.006]	[0.007]	[0.006]	[0.007]	[0.006]
R&D	5.128 ***	1.552 ***	4.999 ***	1.512 ***	5.149 ***	1.644 ***
	[0.181]	[0.279]	[0.183]	[0.282]	[0.181]	[0.277]
Constant	0.967 ***	2.642 ***	1.049 ***	2.732 ***	0.752 ***	2.655 ***
	[0.116]	[0.067]	[0.104]	[0.070]	[0.115]	[0.067]
R-squared	0.218	0.727	0.225	0.728	0.218	0.727
Observations	227,484	227,484	214,092	214,092	227,484	227,484
Firm F.E.	No	Yes	No	Yes	No	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	No	Yes	No	Yes	No
Country F.E.	Yes	No	Yes	No	Yes	No

This table presents the estimations of the effect of reforms protecting minority shareholders on the firm value. The dependent variable, the firm value, is measured using Tobin's Q. The detailed definition of the variables can be seen in Table 1. All firm-level variables are winsorized at both 1% and 99% levels. The robust standard errors clustered at the firm level are shown in parentheses. *** and * indicate the significance at the 1% and 10% level, respectively.

4.4. Reforms Protecting Minority Shareholders and Accounting Performance

In Table 8, we run OLS regressions where the dependent variable is the return on equity as the proxy of financial accounting performance rather than market-based performance. We include country, industry and year fixed effects in all regressions. Country dummies capture the effects of the dummies of three country-level variables. The main finding in all models of Table 8 is that firms' accounting performances in addition to the stock market performance improved in countries with reforms protecting minority shareholders more than countries without reforms. However, the increase in the return on equity is less for firms with high leverage than those with low leverage. Firms in countries with civil claw and rule-based CG approaches benefited more than firms in countries with common law and comply-or-explain CG approaches. Accounting performance also improved after

reforms in countries with low debt enforcement. However, we do not find any significant differences in the performance improvement between countries with low and high debt enforcement. Overall, all the results we find in the previous section, except the ones with debt enforcement, are confirmed, and we find strong support for all of our hypotheses, except Hypothesis 5, even though the accounting performance still increases in countries with low debt enforcement.

Table 8. Reforms and accounting performance, return on equity.

	(1)	(2)	(3)	(4)	(5)
Reform Dummy	0.003 *	0.015 ***	−0.001	0.013 ***	0.015 ***
	[0.002]	[0.003]	[0.004]	[0.003]	[0.005]
Leverage	−0.021 **	−0.001	0.00	0.001	−0.001
	[0.010]	[0.011]	[0.011]	[0.012]	[0.011]
Size	0.057 ***	0.057 ***	0.057 ***	0.057 ***	0.057 ***
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
NWC	0.208 ***	0.205 ***	0.205 ***	0.204 ***	0.205 ***
	[0.007]	[0.007]	[0.007]	[0.008]	[0.007]
CAPEX	0.313 ***	0.312 ***	0.312 ***	0.296 ***	0.312 ***
	[0.021]	[0.021]	[0.021]	[0.022]	[0.021]
Sales Growth	0.024 ***	0.024 ***	0.024 ***	0.024 ***	0.024 ***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
R&D	−2.159 ***	−2.151 ***	−2.153 ***	−2.148 ***	−2.151 ***
	[0.046]	[0.046]	[0.046]	[0.047]	[0.046]
Reform Dummy × Leverage		−0.056 ***	−0.057 ***	−0.057 ***	−0.056 ***
		[0.010]	[0.010]	[0.010]	[0.010]
Reform Dummy × Civil Dummy			0.022 ***		
			[0.004]		
Reform Dummy × Comply-or-Explain Dummy				0.008 **	
				[0.004]	
Reform Dummy × Debt Enforcement					0.00
					[0.000]
Constant	−0.333 ***	−0.336 ***	−0.324 ***	−0.085 **	−0.336 ***
	[0.020]	[0.020]	[0.020]	[0.039]	[0.020]
R-squared	0.229	0.229	0.229	0.231	0.229
Observations	227,428	227,428	227,428	214,045	227,428
Year F.E.	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes
Country F.E.	Yes	Yes	Yes	Yes	Yes

This table presents the estimations of the effect of reforms protecting minority shareholders on the accounting performance, which is measured by Return on Equity, which is the ratio of Earnings Before Interest and Taxes to the book value of common equity. The detailed definitions of the other variables can be seen in Table 1. All firm-level variables are winsorized at both 1% and 99% levels. The robust standard errors are shown in parentheses. ***, ** and * indicate the significance at the 1%, 5% and 10% level, respectively.

5. Conclusions

This study explores the impact of reforms protecting minority shareholders on the firm performance and how the level of financial leverage and some country-level characteristics, such as the effect of legal origin, reform approaches and the strength of debt enforcement, shape this relationship. The primary outcome indicates that reforms protecting minority shareholders lead to higher performance. By introducing substantial penalties, these reforms limit the opportunistic behavior of controlling shareholders and reduce the risk of expropriation considerably. The minority shareholders feel more confident about getting the return they required. Therefore, they are willing to provide more financial resources for firms in those countries after reforms. Moreover, the reforms do not allow controlling shareholders to take actions that benefit their interests at the expense of minority shareholders and the firm value. The results are consistent with previous findings in the literature that argue that any improvements in corporate governance lead to an increase in the firm

performance because outside investors are mainly interested in firms with superior levels of corporate governance.

The evidence shows that the firm-level moderator, leverage, negatively affects the relationship between reforms and the firm performance. High levels of leverage result in a considerable increase in the agency costs of debt. The reforms aim to mitigate the agency conflicts between managers, controlling shareholders and minority shareholders and decrease the agency costs related to this conflict; for highly leveraged firms, these benefits are outweighed by the increase in agency costs of debt. After the implementation of the reforms, the minority shareholders have more incentives to finance firms because their interests are protected by law. However, they will not invest in highly leveraged firms because they are afraid of not getting a return as a consequence of financial distress based on high leverage levels.

At the country level, the additional analyses highlight the effectiveness of reforms protecting minority shareholders in different institutional environments. Specifically, the results show that the reforms are more efficient in civil law countries, as a consequence of low investor protection in these countries, while in common low countries, the reforms are less efficient, because there, the investors are already protected by the law and additional reforms can lead to overregulation. The analysis proves that the effectiveness of the reform depends on the reform approaches. The reforms protecting minority shareholders are more efficient in rule-based countries because mandatory compliance is required, while in the comply-or-explain systems, the reforms lead to a lower increase in firm performance. Moreover, the debt enforcement has a negative impact on the relationship between reforms and firm performance. Higher debt enforcement intensifies the shareholder-creditor conflict even more by decreasing the payoffs to shareholders. Therefore, the reforms in countries with high debt enforcement are less efficient because of the increase in agency costs based on the conflict between shareholders and creditors.

Overall, this research implies that shareholders and governments should take into consideration that an increase in minority shareholder protection has a significant and positive effect on the firm performance. This should be very important for investors in their decision-making process when allocating their savings into capital markets. On a country level, regulatory institutions can use the results from this research to adapt and develop reforms and shareholder protection mechanisms specifically based on the institutional characteristics of their country. Subsequently, with an adequate protection mechanism created for (minority) shareholders, an attractive business climate can be created, which in turn would improve the economic growth.

This study has some limitations. The analysis is based on a sample period from 2005 to 2018, which includes the financial crisis. The crisis may have influenced the firms' performance negatively. Although we controlled possible differences across years by including year fixed effects, future research can identify whether the impact of reforms on the performance is stronger or weaker during or after the crisis. Another limitation is related to debt enforcement index. Debt enforcement is a time-invariant variable in this study, and future research could construct a time-variant index to capture the variation in the power of debt holders in time.

The scope of our study is limited by corporate governance practices, as it examines the effect of reforms protecting minority shareholders. However, we believe that besides corporate governance, the correlations between information, communication technology, corporate social responsibility and business performance are valuable targets for any business and any economy at present. We hope that our findings will contribute to future discussions aiming to increase our understanding in reaching these targets.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Correlation Matrix.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Tobin's Q	1										
(2) Leverage	−0.1295 *	1									
(3) Size	−0.0332 *	0.2273 *	1								
(4) NWC	0.1630 *	−0.5166 *	−0.2227 *	1							
(5) CAPEX	0.0594 *	0.0900 *	0.0601 *	−0.2019 *	1						
(6) Sales Growth	0.0762 *	−0.0183 *	−0.0241 *	0.0083 *	0.1052 *	1					
(7) R&D	0.2374 *	−0.1708 *	−0.1144 *	0.2938 *	−0.1086 *	0.0476 *	1				
(8) Reform Dummy	0.1394 *	0.0037	0.0028	−0.0407 *	−0.0069 *	0.0034	−0.0842 *	1			
(9) Civil Dummy	−0.0163 *	0.0512 *	0.0996 *	−0.0744 *	−0.0697 *	−0.0562 *	−0.1276 *	0.2990 *	1		
(10) Comply-or-Explain Dummy	−0.0720 *	−0.0409 *	−0.1962 *	−0.0507 *	0.0101 *	0.0249 *	−0.0736 *	−0.0527 *	−0.2400 *	1	
(11) Debt enforcement	−0.1148 *	−0.0433 *	0.0279 *	0.0592 *	−0.0386 *	−0.0094 *	0.1404 *	−0.4187 *	−0.2577 *	−0.0630 *	1

* $p < 0.01$. This table provides the correlation coefficients for the variables involved in the analysis. Each coefficient can take a value between "0" and "1". The detailed definition of the variables is shown in Table 1.

References

Adams, Renee B., Benjamin Hermalin, and Michael Weisbach. 2010. The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature* 48: 58–107. [CrossRef]

Aggarwal, Reena, Isil Erel, Rene Stulz, and Rohan Williamson. 2010. Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. *Review of Financial Studies* 23: 3131–69. [CrossRef]

Agrawal, Anup, and Charles R. Knoeber. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis* 31: 377–97. [CrossRef]

Aguilera, Ruth V., and Alvaro Cuervo-Cazurra. 2004. Codes of good governance worldwide: What is the trigger? *Organization Studies* 25: 415–43. [CrossRef]

Aguilera, Ruth V., Igor Filatotchev, Hovard Gospel, and Gregory Jackson. 2008. An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science* 19: 475–92. [CrossRef]

Aktas, Nihat, Ettore Croci, and Dimitris Petmezas. 2015. Is working capital management value-enhancing? Evidence from firm performance and investments. *Journal of Corporate Finance* 30: 98–113. [CrossRef]

Ammann, Manuel, David Oesch, and Markus M. Schmid. 2011. Corporate governance and firm value: International evidence. *Journal of Empirical Finance* 18: 36–55. [CrossRef]

Andras, Trina L., and Srini S. Srinivasan. 2003. Advertising Intensity and R&D Intensity: Differences across Industries and Their Impact on Firm's Performance. *International Journal of Business and Economics* 2: 81–90.

Bae, Kee-Hong, JaeSeung Baek, Jun-Koo Kang, and Wei-Lin Liu. 2012. Do Controlling Shareholders' expropriation incentives imply a link between corporate governance and firm value? Theory and evidence. *Journal of Financial Economics* 105: 412–35. [CrossRef]

Baek, Jae-Seung, Jun-Koo Kang, and Kyung S. Park. 2004. Corporate governance and firm value: Evidence from the Korean financial crisis. *Journal of Financial Economics* 71: 265–313. [CrossRef]

Bekaert, Geert, Harvey R. Campbell, and Christian Lundblad. 2010. Financial openness and productivity. *World Development* 39: 1–19. [CrossRef]

Bhagat, Sanjai, and Brian Bolton. 2013. Director ownership, governance, and performance. *Journal of Financial and Quantitative Analysis* 48: 105–35. [CrossRef]

Bhagat, Sanjai, and Brian Bolton. 2019. Corporate governance and firm performance: The sequel. *Journal of Corporate Finance* 58: 142–68. [CrossRef]

Black, Bernard S., and Vikramaditya S. Khanna. 2007. Can corporate governance reforms increase firm market values? Event study evidence from India. *Journal of Empirical Legal Studies* 4: 749–96. [CrossRef]

Black, Bernard S., and Woochan Kim. 2012. The effect of board structure on firm value: A multiple identification strategies approach using Korean data. *Journal of Financial Economics* 104: 203–26. [CrossRef]

Bushman, Robert M., Joseph D. Piotroski, and Abbie J. Smith. 2004. What determines corporate transparency? *Journal of Accounting and Economics* 42: 207–52. [CrossRef]

Cai, Jie, and Zhe Zhang. 2011. Leverage change, debt overhang, and stock prices. *Journal of Corporate Finance* 17: 391–402. [CrossRef]

Chen, En-Te, and John Nowland. 2010. Optimal board monitoring in family-owned companies: Evidence from Asia. *Corporate Governance: An International Review* 18: 3–17. [CrossRef]

Chhaochharia, Vidhi, and Yaniv Grinstein. 2007. Corporate governance and firm value: The impact of the 2002 governance rules. *Journal of Finance* 62: 1789–825. [CrossRef]

Cho, Dong-Sung, and Jootae Kim. 2007. Outside directors, ownership structure and firm profitability in Korea. *Corporate Governance an International Review* 15: 239–50. [CrossRef]

Ciftci, Ilhan, Ekrem Tatoglu, Geoffrey Wood, Mehmet Demirbag, and Selim Zaim. 2019. Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review* 28: 90–103. [CrossRef]

Claessens, Stijn, and Joseph P. H. Fan. 2002. Corporate governance in Asia: A survey. *International Review of Finance* 3: 71–103. [CrossRef]

Claessens, Stijn, Simeon Djankov, Joseph P. H. Fan, and Larry H. P. Lang. 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance* 57: 2741–71. [CrossRef]

Coles, Jeffrey L., Naveen D. Daniel, and Lalitha Naveen. 2008. Board: Does one size fit all? *Journal of Financial Economics* 87: 329–56. [CrossRef]

Core, John E., Wayne R. Guay, and Tjomme O. Rusticus. 2006. Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. *Journal of Finance* 61: 655–87. [CrossRef]

Dahya, Jay, and John J. McConnell. 2007. Board composition, corporate performance, and the Cadbury Committee recommendation. *Journal of Financial and Quantitative Analysis* 42: 535–64. [CrossRef]

Dahya, Jay, John J. McConnell, and Nikolas Travlos. 2002. The Cadbury Committee, corporate performance, and top management turnover. *Journal of Finance* 57: 461–83. [CrossRef]

Dahya, Jay, Orlin Dimitrov, and John J. McConnell. 2008. Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics* 87: 73–100. [CrossRef]

De Andres, Pablo, Valentin Azofra, and Felix Lopez. 2005. Corporate boards in OECD countries: Size, composition, functioning and effectiveness. *Corporate Governance: An International Review* 13: 197–210. [CrossRef]
Djankov, Simeon, Oliver Hart, Caralee AcLiesh, and Andrei Shleifer. 2008. Debt enforcement around the world. *Journal of Political Economy* 116: 1105–49. [CrossRef]
Doan, Trang, and Nga Q. Nguyen. 2018. Boards of directors and firm leverage: Evidence from real estate investment trusts. *Journal of Corporate Finance* 51: 109–24. [CrossRef]
Fan, Hua, and Suresh M. Sundaresan. 2000. Debt valuation, renegotiation, and optimal dividend policy. *Review of Financial Studies* 13: 1057–99. [CrossRef]
Fauver, Larry, Mingyi Hung, Xi Li, and Alvaro G. Taboada. 2017. Board reforms and firm value: Worldwide evidence. *Journal of Financial Economics* 125: 120–42. [CrossRef]
Favara, Giovanni, Erwan Morellec, Enrique Schroth, and Philip Valta. 2017. Debt enforcement, investment, and risk taking across countries. *Journal of Financial Economics* 123: 22–41. [CrossRef]
Fazzari, Steven M., and Bruce C. Petersen. 1993. Working capital and fixed investment: New evidence on financing constraints. *RAND Journal of Economics* 24: 328–42. [CrossRef]
Giroud, Xavier, Holger M. Mueller, Alex Stomper, and Arne Westerkamp. 2012. Snow and leverage. *Review of Financial Studies* 25: 680–710. [CrossRef]
Halkos, George E., and Nickolaos G. Tzeremes. 2007. Productivity efficiency and firm size: An empirical analysis of foreign owned companies. *International Business Review* 16: 713–31. [CrossRef]
Haxhi, Ilir, and Hans Van Ees. 2010. Explaining diversity in the worldwide diffusion of codes of good governance. *Journal of International Business Studies* 41: 710–26. [CrossRef]
Hermalin, Benjamin E., and Michael S. Weisbach. 1991. The effects of board composition and direct incentives on firm performance. *Financial Management* 20: 101–12. [CrossRef]
Jensen, Michael C., and William H. Meckling. 1976. Theory of the firm: To perform this analysis. Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics* 76: 323–39.
Kose, John, Lubomir Litov, and Bernard Yeung. 2008. Corporate governance and risk-taking. *Journal of Finance* 63: 1679–728.
La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1998. Law and finance. *Journal of Political Economy* 106: 1113–55. [CrossRef]
La Porta, Rafael, Florencio Lopez de-Silanes, Andrei Shleifer, and Robert Vishny. 1999. Corporate ownership around the world. *Journal of Finance* 57: 1147–70. [CrossRef]
La Porta, Rafael, Florencio Lopez de-Silanes, Andrei Shleifer, and Robert Vishny. 2000. Investor protection and corporate governance. *Journal of Financial Economics* 58: 3–27. [CrossRef]
La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 2002. Investor protection and corporate valuation. *Journal of Finance* 57: 1147–70. [CrossRef]
La Porta, Rafael, Florencio Lopez-de-Silanes, and Anderi Shleifer. 2006. What works in securities laws? *Journal of Finance* 61: 1–32. [CrossRef]
Lang, Larry, Eli Ofek, and Rene M. Stulz. 1996. Leverage, investment, and firm growth. *Journal of Financial Economics* 40: 3–29. [CrossRef]
Leuz, Christian, Nanda Dhananjay, and Peter D. Wysocki. 2003. Earnings and investor protection: An international comparison. *Journal of Financial Economics* 69: 505–27. [CrossRef]
Li, Xi. 2014. The Sarbanes-Oxley act and cross-listed foreign private issuers. *Journal of Accounting and Economics* 58: 21–40. [CrossRef]
Liu, Yu, Mihail K. Miletkov, Zuobao Wei, and Tina Yang. 2015. Board independence and firm performance in China. *Journal of Corporate Finance* 30: 223–44. [CrossRef]
Love, Inessa. 2010. Corporate governance and performance around the world: What we know and what we don't. *The World Bank Resrach Observer* 26: 42–70.
Luan, Chin-Jung, and Ming-Je Tang. 2007. Where is independent director efficacy? *Corporate Governance An International Review* 15: 636–43. [CrossRef]
Luo, Yan, and Steven E. Salterio. 2014. Governance quality in a "comply or explain" governance disclosure regime. *Corporate Governance an International Review* 22: 460–81. [CrossRef]
MacNeil, Iain, and Xiao Li. 2006. "Comply or explain": Market discipline and non-compliance with the combined code. *Corporate Governance: An International Review* 14: 486–96. [CrossRef]
McConnell, Jojn J., and Chris J. Muscarella. 1985. Corporate capital expenditure decisions and the market value of the firm. *Journal of Financial Economics* 14: 399–422. [CrossRef]
Mclean, R. David, Tianyu Zhang, and Mengxin Zhao. 2012. Why does the law matter? Investor protection and its effects on investment, finance, and growth. *Journal of Finance* 67: 313–50. [CrossRef]
Morck, Randall, Bernard Yeung, and Wayne Yu. 2000. The information content of stock markets: Why do emerging markets have synchronous stock price movements? *Journal of Financial Economics* 58: 215–60. [CrossRef]
Myers, Stewart C. 1977. Determinants of corporate borrowing. *Journal of Financial Economics* 5: 147–75. [CrossRef]
Opler, Tim C., and Sheridan Titman. 1994. Financial distress and corporate performance. *Journal of Finance* 49: 1015–40. [CrossRef]

Popescu, Christina Raluca G. 2019. Corporate social responsibility, corporate governance and business performance: Limits and challenges imposed by the implementation of Directive 2013/34/EU in Romania. *Sustainability* 11: 5146. [CrossRef]
Price, Richard, Francisco J. Roman, and Brian Rountree. 2011. The impact of governance reform on performance and transparency. *Journal of Financial Economics* 99: 76–79. [CrossRef]
Reed, Darryl. 2002. Corporate governance reforms in developing countries. *Journal of Business Ethics* 37: 223–47. [CrossRef]
Renders, Annelies, and Ann Gaeremynck. 2012. Corporate governance, principal-principal agency conflicts, and firm value in European listed companies. *Corporate Governance An International Review* 20: 125–43. [CrossRef]
Renders, Annelies, Ann Gaeremynck, and Piet Sercu. 2010. Corporate-governance ratings and company performance: A cross-European study. *Corporate Governance An International Review* 18: 87–106. [CrossRef]
Roe, Marc J. 2000. Political preconditions to separating ownership from corporate control. *Stanford Law Review* 53: 539–86. [CrossRef]
Romano, Roberta. 2005. Is regulatory competition a problem or irrelevant for corporate governance? *Oxford Review of Economic Policy* 21: 212–31. [CrossRef]
El Ghoul, Sadok, Omrane Guedhami, Chuck C. Y. Kwok, and Ying Zheng. 2019. Collectivism and the costs of high leverage. *Journal of Banking and Finance* 106: 227–45. [CrossRef]
Shleifer, Andrei, and Robert W. Vishny. 1997. A survey of corporate governance. *Journal of Finance* 52: 737–75. [CrossRef]
Shleifer, Andrei, and Daniel Wolfenzon. 2002. Investor protection and equity markets. *Journal of Financial Economics* 66: 3–27. [CrossRef]
Smith, Clifford W., and Jerold B. Warner. 1979. On financial contracting: An analysis of bond covenants. *Journal of Financial Economics* 7: 117–61. [CrossRef]
Smith, Clifford W., and Ross L. Watts. 1992. The investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Financial Economics* 32: 263–92. [CrossRef]
Thomsen, Steen, Pedersen Torben, and Hans Kurt Kvist. 2006. Blockholder ownership: Effects on firm value in market and control based gover-nance systems. *Journal of Corporate Finance* 12: 246–69. [CrossRef]
Uribe-Bohorquez, María-Victoria, Jennifer Martínez-Ferrero, and Isabel-Maria García-Sánchez. 2018. Board independence and firm performance: The moderating effect of institutional context. *Journal of Business Research* 88: 28–43. [CrossRef]
Vafeas, Nikos. 1999. Board meeting frequency and the firm performance. *Journal of Financial Economics* 53: 113–42. [CrossRef]
The World Bank. 2020. Global Report, Doing Business 2020. Available online: https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020 (accessed on 23 December 2020).
Wurgler, Jeffrey. 2000. Financial markets and the allocation of capital. *Journal of Financial Economics* 58: 187–214. [CrossRef]
Yazdanfar, Darush. 2013. Profitability determinants among micro firms: Evidence from Swedish data. *International Journal of Managerial Finance* 9: 150–60. [CrossRef]
Young, Michael N., Mike W. Peng, David Ahlstrom, Garry D. Bruton, and Yi Jiang. 2008. Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies* 45: 196–220. [CrossRef]
Zadkovich, John. 2007. Mandatory requirements, voluntary rules and "please explain": A corporate governance quagmire. *Deakin Law Review* 12: 23–39. [CrossRef]
Zhang, Ivy Xiying. 2007. Economic consequences of the Sarbanes-Oxley Act of 2002. *Journal of Accounting an Economics* 44: 74–115. [CrossRef]
Zhu, Jigao, Kangtao Ye, Jennifer Wu Tucker, and Kam (Johny) C. Chan. 2016. Board hierarchy, independent directors, and firm value: Evidence from China. *Journal of Corporate Finance* 41: 262–79. [CrossRef]