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Article

Corporate Governance and Dividend Policy in the Presence of Controlling Shareholders

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Abstract: Based on agency theory, we focused on the influence of corporate governance in the dividend policy of large listed firms with headquarters in continental Europe countries. Previous research focused on the influence of corporate governance on the performance and risk of listed firms, but the influence of corporate governance on the dividend policy has rarely been addressed despite the importance of dividends for shareholders and the implications on the free cash-flow, whose application may be a source of conflicts between managers and shareholders. In this paper, we study the influence of a set of governance mechanisms on the dividend policy over 12 years (2002 to 2013). The results, based on a panel data analysis, support the importance of governance mechanisms toward the protection of shareholders' interests, and reveal that the decisions on whether to pay dividends and how much to pay are grounded on different antecedents.

Keywords: corporate governance; agency theory; dividend policy

1. Introduction

Despite the prevalence of contradictory results, research has focused on the influence of corporate governance on the performance and risk of listed firms (mostly large firms in the United States of America and the United Kingdom, which are those most resembling Berle and Means' description of widely held corporations), but only a limited number of studies have recently addressed the influence of corporate governance mechanisms, including board-based mechanisms (Yarram and Dollery 2015), on dividend policy, and in the context where the presence of controlling shareholders is the norm.

In modern corporations, the separation between property and control (Dalton et al. 1998; Monks and Minow 2008) creates the conditions for divergence of interests, leading to agency costs and the need to introduce mechanisms to minimize those costs while protecting shareholders' interests. Besides the divergence of interests between shareholders and managers, conflicts may also occur between controlling and minority shareholders (La Porta et al. 2000a). A number of rules and recommendations on corporate governance focusing, for instance, on the importance of independent directors or the separation between the CEO and chairperson aim to create the basis for the protection of non-controlling shareholders' interests. The interests of shareholders, among others, include the right to receive dividends proportional to their shareholdings (Berle and Means 1932).

The literature covers the relationship between corporate governance and dividend policy based on different approaches and different contexts (e.g., La Porta et al. 2000b; Gugler and Yurtogly 2003; Adjaoud and Ben-Amar 2010; Jiraporn et al. 2011; Yarram and Dollery 2015; Esqueda 2016; Elmagrhi et al. 2017; Atanassov and Mandell 2018). However, previous research mostly focused on contexts where the widely held corporation model is dominant, which may not reflect the specific agency problems and shareholders' protection occurring elsewhere (La Porta et al. 2000b), which may influence the importance of dividends and the preferences of shareholders regarding dividend policies and other

decisions. Therefore, we aimed to contribute to the ongoing debate (Yarram and Dollery 2015) by analyzing the impact of corporate governance variables, especially those focused on the board of directors, on dividend policy over a period of 12 years (contrasting with cross-sectional research), in corporations listed in continental European countries where the standard is the presence of controlling shareholders (La Porta et al. 2000a), considering size and leverage, among others, as control variables.

Thus, in this context, the objective was studying the influence of governance mechanisms on dividend policy. We based our research on governance literature, identifying the most common structural governance variables and how each contributes to address agency costs. Based on this analysis, we established our research hypotheses considering that better governance will contribute to protecting shareholders' interests and, therefore, to larger dividends. However, the theories and contributions regarding the contribution of dividends to shareholder value differ, including the use of dividends as an alternative to good corporate governance or the signaling theory of dividends.

The results were obtained through panel data analysis applied to 2646 observations from 390 corporations and support the importance of the governance mechanisms toward the protection of shareholders' interests through the payment of dividends, but revealed that relevant differences exist when the analysis was restricted to dividend paying corporations, which implies that the decisions whether to pay dividends and how much to pay are grounded in complementary governance mechanisms. These differences between payment of dividends and the amount of dividends were previously identified by Jiraporn et al. (2011), who focused on a sample of largest listed corporations in the USA. This research confirms the validity of the findings by Jiraporn et al. (2011), although using a different methodology and governance variables, in the continental European context, characterized by the presence of controlling shareholders, and in a more recent time period that includes the most recent international financial crisis (2008/2009), which is a contribution to the existing literature. In either case, research is supportive of the outcome approach to dividends, meaning that better governance leads to higher dividends. However, the underlying reason in the European context may be the pressure by minority shareholders, which is aligned with the arguments by Yarram and Dollery (2015), and with the lack of evidence supporting a negative influence of ownership concentration on dividends.

The results presented in this research, focusing on two different research hypotheses, were obtained from three different panel data analysis models. The first was a Probit model that allows the identification of the differences between the dividend-paying and non-dividend-paying corporations, which revealed that these groups of corporations differ in terms of board diversity and the tenure of its members. The second was a Tobit model that identified the dividends are influenced by the board size, the diversity, the tenure, the number of board meetings, the participation of directors in other boards (network), and the remuneration of the CEO. Finally, we restricted the analysis to the dividend-paying corporations (FGLS model) and found that diversity, number of meetings, the network of the board members, and the remuneration of the CEO are determinants of the dividend yield.

This paper proceeds with the literature review and hypotheses development in Section 2. Section 3 presents and supports the variables used in the research, the data sources, and the analysis methods. The results (that cover the three above-mentioned panel data analysis models) and discussion are provided in Sections 4 and 5, respectively, and Section 6 contains the conclusions, contributions, and limitations of this research.

2. Literature Review

Corporate governance can be defined as “the set of mechanisms that influence the decisions made by managers when there is a separation of ownership and control” (Larcker et al. 2007, p. 964), setting the rules defining who has control, who receives which share of the value created, and who bears the risks inherent to the activity (Blair 1995; Boubaker and Labégorre 2009). Research on this field has focused on governance mechanisms' contribution to mitigating agency costs resulting from the separation between ownership and management, aiming to prevent managers from following strategies based on their private benefits (La Porta et al. 2000a; Jiraporn et al. 2011), be it their personal

financial interests (Westphal and Graebner 2010), self-satisfaction, or prestige (Berle and Means 1932), or, in general terms, to prevent managers from making “non-value-maximizing investment choices” (La Porta et al. 2000b, p. 4).

The conflict of interests between ownership and management is especially relevant in contexts where the dispersion of shareholdings prevails. As noted by La Porta et al. (2000b), this is only common in large companies in the USA and the U.K. and, in contexts where the presence of dominant shareholders is common, the focus shifts to the expropriation of minority shareholders, also known as private benefits of control (Gugler and Yurtogly 2003; Adjaoud and Ben-Amar 2010), which can be alleviated by the presence of a second large shareholder or aggravated in the presence of pyramidal ownership structures (Gugler and Yurtogly 2003), and may lead to control rights that exceed the shareholding rights (Faccio and Lang 2002), not neglecting the role of multiple large shareholders (Boubaker et al. 2017). In the presence of dominant shareholders, governance mechanisms are also relevant. For instance, independent directors can advocate in favor of minority shareholders' interests (Yarram and Dollery 2015). La Porta et al. (2000b) summarized these perspectives in terms of the conflict between insiders (managers and controlling shareholders) and outsiders (namely, non-controlling/minority shareholders).

From both perspectives of agency conflicts, the concept of “shareholders' interests” emerges. Berle and Means (1932) pointed out that shareholders' interests include, among others, the maximization of profits (while maintaining a reasonable risk level) and the proportional distribution of a high percentage of those profits through payment of dividends, whereas Monks and Minow (2008) highlighted that shareholders have the right to sell their shares at any moment and that this is the only right that is unequivocally performed by the shareholders in modern organizations, which implies that any actions to limit this right will conflict with the interests of the non-controlling shareholders. Blair (1995) and Jiraporn et al. (2011), in turn, simply referred to shareholders' wealth maximization.

La Porta et al. (2000b), Jiraporn et al. (2011), and Yarram and Dollery (2015) noted the existence of vast literature and theories focusing on dividend policy. In the context of corporate governance, agency theory has received specific attention by researchers (Jiraporn et al. 2011). The study of the relationship between dividends and corporate governance is a recent research topic (Yarram and Dollery 2015) that can be addressed under two distinct approaches: the substitution approach and the outcome approach (La Porta et al. 2000b; Adjaoud and Ben-Amar 2010; Jiraporn et al. 2011; Yarram and Dollery 2015; Elmagrhi et al. 2017). Under the substitution approach, dividends can play a role as substitutes for governance mechanisms contributing to mitigating agency costs and managerial entrenchment through the reduction of the free cash flow (Jiraporn et al. 2011), thus limiting managers' decisions based on their own interests and implying that the corporation, to finance new projects, will resort to financial markets that act as an additional layer of control (Jiraporn et al. 2011). In this context, “governance quality should be a substitute for dividend payments in the way that better-governed firms are associated with lower agency costs resulting from the separation of ownership and control” (Adjaoud and Ben-Amar 2010, p. 649), which implies that the need to use dividends to attenuate agency costs decreases in the presence of better governance. The alternative approach considers dividends as an outcome of good governance. Under this approach, better governance, for instance, due to pressure by minority shareholders (Yarram and Dollery 2015), implies higher dividend payouts (Jiraporn et al. 2011). Jiraporn et al. (2011) stated that this approach is grounded on the importance of free cash flows to support managers' perquisites. Although Adjaoud and Ben-Amar (2010) considered previous research as being inconclusive on which of the alternative approaches prevails, based on a literature review especially considering the arguments by Adjaoud and Ben-Amar (2010), Jiraporn et al. (2011), and Yarram and Dollery (2015), better governance positively influences the dividend payout (outcome approach), supporting the first research hypothesis:

Hypothesis 1 (H1). *A positive relationship exists between corporate governance quality and the dividend policy.*

Jiraporn et al. (2011) considered that previous research, based on agency predictions, has produced inconsistent results. Gugler and Yurtogly (2003, p. 735) stated that “the effects of control structures on the dividend pay-out ratio are more ambiguous” because poor governance can lead to lower dividend payout in corporations with controlling shareholders but as Gugler and Yurtogly (2003, p. 735) also noted, because smaller shareholders “may anticipate expropriation”, they may “demand higher dividends” from these corporations. In the presence of controlling shareholders, Gugler and Yurtogly (2003, p. 733) considered dividends as “an ideal device for limiting rent extraction of minority shareholders”, implying that shareholders are remunerated accordingly to their cash flow rights instead of their control rights. Yarram and Dollery (2015) also addressed the importance of ownership structure and its impact on agency conflicts. Thus, despite this research being focused on a context characterized by concentration of ownership, the following research hypothesis is proposed:

Hypothesis 2 (H2). *The concentration of ownership negatively influences the dividend policy.*

As noted before (Adjaoud and Ben-Amar 2010; Yarram and Dollery 2015; Cooper and Lambertides 2018), one of the implications of higher dividends is the need to resort to financial markets to finance new value generating investments. Debt is considered a governance mechanism (Day and Taylor 2004; Larcker et al. 2007) and, as Day and Taylor (2004, p. 80) pointed out, banks can contribute to limit the behavior of insiders by “accurately pricing the associated risks”, “selling loans to third parties”, “taking collateral”, or by the direct or indirect “influence [on] managerial decisions” with the purpose of avoiding non-value creating decisions. With the substitution approach, high dividends occur in a context of poor governance and leverage is a consequence of poor governance, but with the outcome approach, high dividends occur in a context of good governance and leverage is a consequence of good governance (Jiraporn et al. 2011). In this context, the positive relationship between leverage and dividends is expected, but it raises some endogeneity concerns that must be addressed in data analysis.

According to La Porta et al. (2000b) and Yarram and Dollery (2015), in contexts of good protection of shareholders, the existence of good growth opportunities could be considered by the shareholders as an acceptable reason to decrease dividends. Similarly, noting that the relationship between higher growth opportunities and lower dividends was already documented in previous literature, Huang and Paul (2017) observed, specifically focusing on the preferences of institutional investors, that high dividends are preferred in companies with low growth opportunities, whereas for companies presenting high growth opportunities, the need to fund that growth justifies the dividends being low or nonexistent.

Luoma and Goodstein (1999) referred to the importance of the legal context in the regulated sectors and Jiraporn et al. (2011) referred to differences from regulated and non-regulated sectors extending to dividends. Conversely, Barney (2001) considered the specificities of each corporation being more relevant than the differences between sectors. Concerning the legal context, La Porta et al. (2000a) reported that the agency problems vary across legal regimes, and stated that corporations in civil law countries present higher dividend payouts. Adjaoud and Ben-Amar (2010) and Esqueda (2016) considered that dividends could be used by corporate insiders to send a signal regarding to the financial markets; thus, the interpretation of the signal has to consider the corporate governance context.

As Yarram and Dollery (2015, p. 270) noted, size is often used to account for the level of agency costs due to the “higher degree of separation of ownership and management”. Simultaneously, larger corporations (specially the listed corporations) have more obligations regarding disclosure of information, which is associated with lower information asymmetry. For this reason, dividends are not as important as a source of information for the market (Yarram and Dollery 2015). Based on these two arguments, size can be positively or negatively related with dividends.

Finally, previous research (e.g., Gugler and Yurtogly 2003; Jiraporn et al. 2011) revealed differences between the decisions on dividend payment and on the amount of dividends.

3. Variables, Data, and Methods

3.1. Variables

Different approaches can be used for the empirical operationalization of corporate governance. One of the most common (followed by rating systems, governance indexes, and governance research) relies on structural indicators that can be produced by external observers (Larcker et al. 2007), and usually focuses on the composition and independence of the board of directors, the remuneration of directors and managers, shareholdings, and auditor independence (Schmidt and Brauer 2006). The use of structural indicators, as argued by Schmidt and Brauer (2006), can be considered simplistic. These have a limited impact on the effectiveness of the boards of directors, but, although alternative measures can be adopted (for instances based on interviews), the problem is that it would be difficult to operationalize for large samples (Larcker et al. 2007).

For the purposes of this research, we grouped the corporate governance variables into “board of directors”, “executive committee”, “CEO”, and “anti-takeover”. We also included control variables according to the literature. All variables are presented in Table 1.

Table 1. Variables used in the research, identifying the supporting literature and the expected relationship with dividends.

Variables	Description	Supporting Literature	Expected Relationship
Board of Directors			
BoardSize	Number of directors	McNulty et al. (2013), Larcker et al. (2007), Grove et al. (2011), Felício et al. (2014), Elmagrhi et al. (2017)	Inverse U-shaped relationship
PercIndep	Percentage of independent directors	Westphal and Graebner (2010), Monks and Minow (2008), Wintoki et al. (2012), Elmagrhi et al. (2017)	Positive
PercWomen	Percentage of women in the board as a proxy for diversity of the board	Kim et al. (2009), Vieito (2012), Elmagrhi et al. (2017)	Positive
Tenure	Average number of years in the board as a proxy for diversity of the board	Muth and Donaldson (1998), Larcker et al. (2007)	Negative
DirectSkills	Percentage of directors with specific skills related to the industry or corporate finance as a proxy for diversity of the board	Schmidt and Brauer (2006)	Positive
BoardMeet	Number of board meetings during the year	Van Essen et al. (2013), Larcker et al. (2007), Elmagrhi et al. (2017)	Positive
AuditC	The board has an audit committee	Van Essen et al. (2013), McNulty et al. (2013), Elmagrhi et al. (2017)	Positive
NominC	The board has a nominations committee		
RemC	The board has a remuneration committee		
ExtBoards	Average number of participation in other boards	Larcker et al. (2007), Vieito (2012)	Negative
Executive Committee			
PercExec	Percentage of executive directors	Muth and Donaldson (1998), Davis et al. (1997)	Negative
CEO			
RemCEO	The corporation has a policy of alignment of interests via remuneration of the CEO	Vieito (2012), Larcker et al. (2007)	Positive
Dual	CEO is also the Chairperson	Wintoki et al. (2012), McNulty et al. (2013), Elmagrhi et al. (2017)	Negative

Table 1. Cont.

Variables	Description	Supporting Literature	Expected Relationship
FormCEO	Chairperson was previously the CEO	Quigley and Hambrick (2012)	Negative
Anti-takeover			
IndReel	Members of the board are elected individually	Monks and Minow (2008), Wintoki et al. (2012)	Negative
FavTak	Corporation has a policy that does not limit takeovers	Larcker et al. (2007)	Positive
EqualVote	Voting rights aligned with the shareholdings	Van Essen et al. (2013)	Positive
Shareholdings			
LShare	Percentage owned by the largest shareholder		
L5Share	Percentage owned by the shareholders with 5% or more of the shares (accumulated)	Larcker et al. (2007), Van Essen et al. (2013)	Negative
C5Share	Number of shareholders with 5% or more of the shares		
Control Variables			
Leverage	Total debt over common equity	Adjaoud and Ben-Amar (2010), Yarram and Dollery (2015), Boubaker et al. (2017)	Positive
GrowthOpp	Ratio of the market value plus total liabilities over total assets	Adjaoud and Ben-Amar (2010)	Negative
Sector	Activity sector	Larcker et al. (2007), Van Essen et al. (2013)	Mixed
EU	Corporation headquarters in a European Union (EU) country	Van Essen et al. (2013)	Positive
Euro	Corporation headquarters in a euro-area country	Van Essen et al. (2013)	Positive
Crisis	Crisis years	McNulty et al. (2013)	Negative
Size	Size of the corporation (Ln Total Assets)	Pathan (2009), Van Essen et al. (2013)	Mixed
Dependent Variable			
Divid	Dividend per share as a percentage of the share price	Gugler and Yurtogly (2003), Brown and Caylor (2004)	

3.2. Data

We focused on listed firms in continental European countries, thus avoiding the differences in the legal systems and ownership concentration from continental Europe and the Great Britain and Ireland (where shareholders protection is considered better, the financial markets are more important, and shareholders dispersion is higher). The existing differences in ownership and control were explored by Faccio and Lang (2002). However, differences can still be found among the continental European countries (La Porta et al. 2000a), which could lead to further grouping of the Latin, Germanic, and Scandinavian countries. Nevertheless, the concentration of ownership is high. For instance, in France, which is included in the sample, the presence of a controlling shareholder often occurs (Boubaker and Labégorre 2009).

The data were collected from Datastream and Amadeus (shareholdings) databases that were accessed through CEFAGE (Universidade de Évora, Portugal) and ISEG—Lisbon School of Economics and Management. The governance specific data were obtained through the Datastream's supplement Asset4. Most of the data were collected from December 2014 to January 2015, covering the period from 2002 to 2013 (12 years). Jiraporn et al. (2011), for instance, used data for the period 2001 to 2004. Whenever we needed to collect additional data, the list of corporations and period were matched with those from the initial data collection. Corporations from the banking and insurance sectors were not included in the analysis.

A first analysis of the data revealed that data were not available for all corporations in all years under analysis. Additionally, the sample is not representative of all corporations listed during the period because it covers only the largest corporations. However, we considered these corporations as relevant because they are under additional scrutiny and can be regarded as examples by other

corporations in terms of governance and dividend policies. Nonetheless, in the analysis of the results, the observations of Börsch-Supan and Köke (2002) regarding sample selectivity should be considered.

3.3. Data Analysis

Considering the characteristics of the data, we opted for a panel data analysis. There are numerous advantages associated with panel data analysis (Donaldson and Davis 1991; Larcker and Richardson 2004; Larcker et al. 2007) including those related with endogeneity and omitted variables (Börsch-Supan and Köke 2002), and the possibility of capturing the within and between variation (Cameron and Trivedi 2010). Jiraporn et al. (2011), additionally, used a two-stage least squares regression to address endogeneity concerns and, based on their results, considered that “endogeneity does not pose a serious problem” (p. 254).

Considering the characteristics of the dependent variable, the analysis posed a challenge as dividends are either zero or positive, which means that this characteristic has to be considered in the choice of the analysis methods. Before handling the details about the dividends, in a first analysis, we studied the characteristics of corporations paying dividends based on a Probit model (Baltagi 2015). Adjaoud and Ben-Amar (2010) addressed their data using a random-effects Tobit model, which was also recommended by Baltagi (2015). Gugler and Yurtogly (2003), referring to the specific characteristics of this variable, also applied a Tobit model (verifying that the dividends were zero in nearly 30% of the observations), but excluding observations from non-dividend-paying corporations, the authors obtained stronger results. Accordingly, we also repeated the analysis excluding the observations corresponding to the absence of dividends using a random effects model with a feasible generalized least-squares (FGLS) and robust standard errors, which was also used by Pathan (2009).

4. Results

According to the description presented in the preceding sections, in the first stage of analysis, we used a Probit model to study the differences between dividend paying and non-paying corporations. The results are presented in Table 2.

Table 2. Results of the regression based on a Probit model for all corporations. The independent variables are BoardSize, PercIndep, PercWomen, Tenure, DirectSkills, BoardMeet, AuditC, NominC, RemC, ExtBoards, PercExec, RemCEO, Dual, FormCEO, IndReel, FavTak, EqualVote, LShare, L5Share, C5Share, Leverage, GrowthOpp, EU, Euro, Crisis, Size, and Sector. The dependent variable is a dummy variable distinguishing dividend paying and non-paying corporations. Sector dummy variables were included. The data cover the period from 2002 to 2013 and refer to the corporations established in the continental European countries that were listed and included in the Datastream’s Asset4 supplement. Data cover 2646 observations from 390 corporations.

Log Likelihood = -651.36604		Wald $\chi^2 = 127.06$
DumDiv	Coefficient	Prob > $\chi^2 = 0.0000$
		Standard Error
BoardSize	0.458	0.301
PercIndep	0.003	0.003
PercWomen	0.014 **	0.007
Tenure	0.236 ***	0.034
DirectSkills	-0.001	0.003
BoardMeet	-0.020	0.015
AuditC	0.557	0.469
NominC	0.052	0.242
RemC	-0.793 *	0.454
ExtBoards	0.092 *	0.051
PercExec	-0.007	0.007
RemCEO	0.126	0.210

Table 2. Cont.

Log Likelihood = -651.36604		Wald $\chi^2 = 127.06$
DumDiv	Coefficient	Prob > $\chi^2 = 0.0000$
		Standard Error
Dual	0.041	0.201
FormCEO	0.258	0.240
IndReel	0.020	0.140
FavTak	0.215	0.251
EqualVote	-0.421 *	0.219
LShare	-0.708	2.863
LShare ²	-0.497	2.946
L5Share	1.295	2.768
L5Share ²	-0.520	2.252
C5Share	-0.094	0.112
Leverage	-0.000	0.003
GrowthOpp	0.656 ***	0.194
EU	0.790 *	0.439
Euro	0.192	0.344
Crisis	0.619 ***	0.136
Size	0.481 ***	0.110
_cons	-8.053 ***	1.861
/lnsig2u	1.083	0.198
sigma_u	1.719	0.170
rho	0.747	0.037
LR test of rho = 0: chibar2 = 375.07		Prob ≥ chibar2 = 0.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The results revealed that the payment of dividends is more likely in corporations with higher diversity in the board, as measured by the percentage of women, with higher average tenure of the board members, and when corporations have higher growth opportunities (measured by Tobin’s Q). A positive relationship exists between size and payment of dividends. Finally, given the specific context of the international financial crisis, the results revealed that during the crisis years, corporations were more likely to pay dividends. Regarding the activity sector, the results revealed that corporations of the automobile, oil and gas, technologies and traveling and leisure sectors, were less likely to pay dividends. In the second stage of the analysis, the data were analyzed resorting to a Tobit model, meaning that the regressions included the corporations that did not pay dividends and the dividend yield of the dividend paying corporations. The results are presented in Table 3.

Table 3. Results of the regression based on a Tobit model for all corporations. The independent variables were BoardSize, PercIndep, PercWomen, Tenure, DirectSkills, BoardMeet, AuditC, NominC, RemC, ExtBoards, PercExec, RemCEO, Dual, FormCEO, IndReel, FavTak, EqualVote, LShare, L5Share, C5Share, Leverage, GrowthOpp, EU, Euro, Crisis, Size, and Sector. The dependent variable was Divid. Sector dummy variables were included. The data covered the period from 2002 to 2013 and included the corporations established in the continental Europe countries that were listed and included in the Datastream’s Asset4 supplement. Data cover 2646 observations from 390 corporations.

Log Likelihood = 5887.0207		Wald $\chi^2 = 394.72$
Divid	Coefficient	Prob > $\chi^2 = 0.0000$
		Standard Error
BoardSize	0.006 **	0.003
PercIndep	0.000	0.000
PercWomen	0.000 ***	0.000
Tenure	0.001 ***	0.000
DirectSkills	0.000	0.000

Table 3. Cont.

Log Likelihood = 5887.0207		Wald $\chi^2 = 394.72$ Prob > $\chi^2 = 0.0000$	
Divid	Coefficient	Standard Error	
BoardMeet	0.001 ***	0.000	
AuditC	0.003	0.004	
NominC	0.002	0.002	
RemC	0.003	0.003	
ExtBoards	-0.001 ***	0.000	
PercExec	-0.000	0.000	
RemCEO	0.004 **	0.002	
Dual	0.000	0.002	
FormCEO	0.002	0.002	
IndReel	-0.001	0.001	
FavTak	0.003	0.003	
EqualVote	0.000	0.002	
LShare	0.023	0.027	
LShare ²	-0.032	0.027	
L5Share	-0.013	0.028	
L5Share ²	0.015	0.023	
C5Share	-0.000	0.001	
Leverage	0.000 ***	0.000	
GrowthOpp	-0.001	0.002	
EU	0.013 ***	0.004	
Euro	0.001	0.003	
Crisis	0.013 ***	0.001	
Size	-0.000	0.001	
_cons	0.001	0.014	
sigma_u	0.014 ***	0.001	
sigma_e	0.024 ***	0.000	
rho	0.265	0.023	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The results presented in Table 3 revealed that some governance variables had statistically significant coefficients, supporting their influence on the dividend yield. In this context, the size of the board, the percentage of women sitting on the board, the average tenure of the board members, the number of meetings, and the alignment of interests through the remuneration of the CEO were all governance variables with statistically positive coefficients, thus positively influencing the dividend yield. The external network of the board members was negatively associated with the dividend yield. Regarding the leverage, headquarters in a European Union member country and the crisis years all contribute positively towards the dividend yield. The number of sectors with lower dividend yields increases. Finally, similar to [Gugler and Yurtogly \(2003\)](#), the results for the dividend paying sample are presented in Table 4.

Focusing on the individual coefficients that were statistically significant, the results revealed that the percentage of women on the board, the number of meetings, and the remuneration of the CEO were the governance variables that positively influenced the dividend yield of the corporations that opted to pay dividends. In turn, the external network of the board members negatively influenced the dividend yield. Leverage, growth opportunities, headquarters in one of the EU countries, crisis, and size presented statistically significant coefficients. Several sectors of activity were relevant in terms of the dividend yield.

In summary, the three analysis models revealed that a number of governance variables influenced the dividend payment and the dividend yield. The results also revealed that some of the variables were common to the different analyses (i.e., the results are robust) whereas some were specific to each of the analysis. The percentage of women on the board was statistically significant in all models and the

effect on dividend was positive. In the three models, the results supported the existence of dividend payment during the recent international crisis.

Table 4. The results of the regression based on a FGLS (feasible generalized least-squares) model for corporations paying dividends in each year. The independent variables are BoardSize, PercIndep, PercWomen, Tenure, DirectSkills, BoardMeet, AuditC, NominC, RemC, ExtBoards, PercExec, RemCEO, Dual, FormCEO, IndReel, FavTak, EqualVote, LShare, L5Share, C5Share, Leverage, GrowthOpp, EU, Euro, Crisis, Size, and Sector. The dependent variable was Divid. Sector dummy variables were included. The data covered the period from 2002 to 2013 and included the corporations established in the continental European countries that are listed and included in the Datastream’s Asset4 supplement. Data covered 2261 observations from 363 corporations.

corr(u _i , X) = 0 (Assumed) Divid	Coefficient	Wald $\chi^2 = 4976.29$ Prob > $\chi^2 = 0.0000$ Robust Standard Error
BoardSize	0.006 *	0.003
PercIndep	0.000	0.000
PercWomen	0.000 ***	0.000
Tenure	0.000	0.000
DirectSkills	0.000	0.000
BoardMeet	0.001 ***	0.000
AuditC	0.002	0.003
NominC	0.002	0.002
RemC	0.003	0.004
ExtBoards	−0.002 ***	0.000
PercExec	−0.000	0.000
RemCEO	0.004 **	0.002
Dual	0.001	0.002
FormCEO	0.002	0.002
IndReel	−0.002	0.001
FavTak	0.001	0.002
EqualVote	0.003 *	0.002
LShare	0.016	0.034
LShare ²	−0.021	0.032
L5Share	−0.013	0.033
L5Share ²	0.017	0.027
C5Share	−0.000	0.001
Leverage	0.000 ***	0.000
GrowthOpp	−0.005 ***	0.002
EU	0.010 ***	0.004
Euro	−0.001	0.003
Crisis	0.012 ***	0.003
Size	−0.002 ***	0.001
_cons	0.042 **	0.013
sigma_u	0.013	
sigma_e	0.024	
rho	0.237	(fraction of variance due to u _i)

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

5. Discussion

This research focused on the influence of corporate governance on the dividend policy of corporations listed in continental European countries. This relationship, according to the literature review, is based on agency theory and the contribution of dividends to minimizing agency costs (substitution approach) or the contribution of better governance to minimizing agency costs (outcome approach) and thereby increasing dividends (La Porta et al. 2000b; Adjaoud and Ben-Amar 2010; Jiraporn et al. 2011; Yarram and Dollery 2015).

Considering the context of the corporations included in the analysis and the arguments by [Adjaoud and Ben-Amar \(2010\)](#), [Jiraporn et al. \(2011\)](#), and [Yarram and Dollery \(2015\)](#), in the outcome approach, better governance will lead to higher dividends. The results presented in the previous section revealed that a number of governance variables positively influenced the likelihood of dividend payment and the dividend yield, thus supporting Hypothesis 1. The percentage of women on the board of directors ([Kim et al. 2009](#); [Vieito 2012](#); [Elmagrhi et al. 2017](#)), which positively influenced the dividend payment and the dividend yield is a proxy for the higher diversity of the board. This is expected to be a good governance provision, especially to avoid myopia. The tenure of the board members ([Muth and Donaldson 1998](#); [Larcker et al. 2007](#)), in our sample, led to a higher dividend, which contradicts our expectations based on excessive risk avoidance decisions, despite a better knowledge of the corporation and the activity developed (leading, for example, to retaining cash flows to support the activity of the company). The size of the board of directors ([McNulty et al. 2013](#); [Larcker et al. 2007](#); [Grove et al. 2011](#); [Felício et al. 2014](#); [Elmagrhi et al. 2017](#)), until a certain point, is expected to allow higher independence from the CEO, supporting the interests of the shareholders and reducing agency costs, which is supported by the analysis. Similarly, the higher activity of the board, measured by the number of meetings ([Larcker et al. 2007](#); [Van Essen et al. 2013](#); [Elmagrhi et al. 2017](#)), denotes that it is actively monitoring the activity and decisions of the CEO, protecting the interests of the shareholders, and positively impacting the dividend yield. Regarding the external network of the board members ([Larcker et al. 2007](#); [Vieito 2012](#)), the results revealed a negative influence on the dividend yield, which may denote the lack of time to properly monitor the activity of each of the companies or, from a different perspective, as there are corporations where there are controlling shareholders, the external network of the board members may be a mechanism of control (pyramidal structures, for instance) of several corporations. In this context, the private benefits of control may surpass the equal treatment of all shareholders. Finally, the support is inconsistent regarding the importance of aligning the remuneration of the CEO with the shareholders' returns.

According to Hypothesis 2, focused on the importance of the ownership structure (more or less concentrated) toward the dividend policy ([Yarram and Dollery 2015](#)), based on the literature, we expected a negative relationship. The results, however, revealed that none of the analyzed ownership variables contributed to the understanding of the dividend related decisions. Consequently, for the sample under analysis, Hypothesis 2 was not supported. One of problems associated with the high dispersion of shareholders is that none will have the incentive to properly monitor the activities of the company (collective action problem); however, these results may be not linear (meaning that, from a certain percentage, the benefits of additional concentration may be limited).

The literature review highlighted the positive relationship between leverage and dividends ([Adjaoud and Ben-Amar 2010](#); [Yarram and Dollery 2015](#); [Cooper and Lambertides 2018](#)) as a consequence of the reduction in the free cash flow. The results revealed that leverage was not decisive for the decision to pay dividends, but it was relevant for the decision on the dividend yield.

According to [La Porta et al. \(2000b\)](#) and [Yarram and Dollery \(2015\)](#), in contexts with good protection of shareholders, as expected in European countries, the existence of growth opportunities can contribute to decisions to decrease dividends, thus allowing the corporation to invest in value-generating projects. The results, focusing on Tobin's Q as a proxy for growth opportunities support this perspective but revealed that the growth opportunities positively contributed toward dividend payment, implying that the companies that have better growth opportunities are those more often paying dividends.

We considered the influence of sector, context, and size on dividends. The size of the corporation is relevant for distinguishing corporations paying dividends from those that do not. Previous literature examined the magnitude of agency problems in larger corporations, but the results revealed that larger corporations have a higher probability of paying dividends. The context, specifically the corporate headquarters in an EU country, contributes positively to the dividend yield. Finally, the results revealed that the payment of dividends increased during the peak of the international financial crisis, which was relevant for both the dividend paying decisions and the dividend yield, and could be a signal of the

increased pressure of the shareholders to divert money from the corporations for themselves or as a signal sent by the corporations to the market that despite the crisis, their financial situation was solid. An alternative view is that without investment opportunities, it would be natural to distribute the free cash flow to the shareholders.

Finally, based on previous research (e.g., [Gugler and Yurtogly 2003](#); [Jiraporn et al. 2011](#)), the determinants of the decisions on dividend payment may differ from the determinants of the dividend yield. This possibility was explored through the use of different analysis models (Probit, Tobit, and FGLS), and the results revealed that the governance variables that influenced the dividend payment decisions also influenced the dividend yield decisions, but the dividend yield decisions were also influenced by other governance variables.

6. Conclusions, Contributions, and Limitations

The focus of previous research on the contribution of corporate governance to dividends policy was limited. Most of that research focused on shareholders' dispersion context. Some exceptions were identified in Section 2. For instances, [Adjaoud and Ben-Amar \(2010\)](#) examined the relationship between corporate governance and dividend policy in Canada, a country characterized by a high concentration of shareholders and the voluntary adoption of corporate governance practices. [Yarram and Dollery \(2015\)](#) focused on Australia, characterized by unique tax rules regarding dividends, high protection of investors, and high shareholdings concentration, leading to private benefits of control.

Here, we focused on the payment of dividends by listed corporations with headquarters in continental Europe with the objective of identifying whether governance mechanisms would still play a role in the protection of shareholder interests in a context where the presence of controlling shareholders is the norm. In a context where corporations are not widely held, as was the case under analysis in this paper ([Faccio and Lang 2002](#)), specific agency problems emerge, including conflicts between controlling and non-controlling shareholders, which can also be addressed by specific corporate governance arrangements. The specificities of the legal system also influence the level of investors' protection, which cannot be neglected in the analysis and discussion of the results.

Based on the literature review, we considered that corporate governance influences the payment of dividends based on the argument that this is in the best interest of shareholders; therefore, better governance would lead to higher dividends. This argument is supported by agency theory, which characterizes the relationship between managers and shareholders or, in certain contexts, between controlling and minority shareholders. When compared with their counterparts in the USA and the U.K., the corporations from continental Europe are characterized by larger shareholdings that may have private benefits of control, which may influence the payment of dividends. In this context, better governance would discipline the behavior of the controlling shareholders, leading to higher dividends.

Based on [Gugler and Yurtogly \(2003\)](#), we studied three different but complementary models. The first two, including all observations in the analysis, were based on Probit and Tobit analyses to identify the variables that influenced the option to pay dividends and the dividend yield. The third, including only the dividend paying observations in the analysis, revealed results that were mostly consistent with the results from the Tobit analysis. The results from the Probit analysis revealed differences in terms of the decisions to pay (or not) dividends and, after deciding to pay dividends, the dividend yield was explained with the Tobit and FGLS analyses. This would mean that the problem should be analyzed as a sequential decision based on different but complementary criteria, thus requiring additional research on this field. A contribution on this specific topic was presented by [Yarram and Dollery \(2015\)](#) using a three-stage analysis to differentiate the different decisions regarding dividends payout.

Our results revealed the presence of significant relationships between several of the selected governance mechanisms and clearly supported the first of our research hypotheses. However, the second one was not supported. Even in the presence of controlling shareholders, governance

mechanisms are clearly important for stimulating the payment of dividends, thus reducing agency costs (either based on the conflict between property and control or the conflict between controlling and non-controlling shareholders) and supporting the outcome approach of the relationship between corporate governance and dividends. Our results also revealed that the dividend payment decisions and the dividend yield decisions, in the presence of controlling shareholders, are influenced by different governance variables.

Despite these findings, there is still plenty of room for future research. In this field, we highlight the importance of better modeling the relationship between the ownership structure and dividend policy and between growth opportunities and dividend policy, perhaps including literature on the importance dividends as a signal sent to the markets. Finally, as noted, the relationship between leverage and dividends and between the other characteristics of the company and dividends can benefit from additional insights.

In future research, both governance- and dividend-decision-specific variables can be additionally included, especially to control for minority protection in each country, because companies in “countries with stronger shareholder protection pay larger dividends” (Jiraporn et al. 2011, p. 253) and not all countries included in the analysis guarantee the same protection to shareholders. Tax effects may also influence dividend policy (La Porta et al. 2000b), although Jiraporn et al. (2011) found no impact of measures in this field in a single country. The availability of alternative sources of finance in each country should also be considered (Jiraporn et al. 2011) because if there are no financing alternatives, dividends may have to be retained to allow the development of new wealth-creating projects. Jiraporn et al. (2011, p. 254) also argued that “firms pay larger dividends when shareholders’ sentiment favors the payment of dividends”, which implies that the characteristics of shareholders may influence their preferences regarding dividends. In this context, a relationship may exist between the characteristics of the shareholders and the companies’ decisions regarding dividends, especially considering the importance of families as shareholders and in the management positions, as is the case, for example, of France (Boubaker and Labégorre 2009). Life cycle theory (Yarram and Dollery 2015) would also be relevant for future research because mature companies are expected to pay more dividends, which is also consistent with the arguments presented by Huang and Paul (2017).

Regarding the limitations, the first limitation of this research is the exclusive focus on Asset4 information. This means that even if other variables are important for the analysis of corporate governance or the impact on dividend policy, we did not consider those variables. Associated with this limitation is the exclusive focus on listed corporations, which does not consider the importance of non-listed firms and their governance.

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