








The composition of the remuneration committee and the vertical pay gap: the role of proprietary directors in Spain

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Q1 Role of proprietary directors

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Purpose

This study investigates whether the proportion of proprietary directors (blockholders or their representatives) on the board's remuneration committee influences vertical pay inequality in Spanish listed companies and whether this relationship can be conditioned by the concentration of ownership.

Design/methodology/approach

The sample contains information on the individual compensation of 1048 directors of 57 Spanish listed firms during the period 2013–2018 making up an unbalanced panel with 3565 observations. Panel data regressions are used to study how the presence of proprietary directors on the remuneration committee influences the remuneration of directors, focusing not on their absolute remuneration levels, but rather on their relationship to the average remuneration of the organization's employees (as a measure of vertical pay inequality within the company). ~~We~~ The authors also investigate whether this relationship is conditioned by firm ownership concentration.

Findings

The results indicate that the presence of proprietary directors on the remuneration committee acts as a mechanism to reduce vertical pay inequality, even in the context of high ownership concentration.

Originality/value

Unlike the majority of previous research dedicated to the independence of the remuneration committee, this study focuses on the role played by proprietary directors. The results help elucidate the importance of proprietary directors to properly monitor and restrain directors' compensation in contexts of high ownership concentration.

Keywords: Remuneration committee, Director compensation, Spain, Agency theory, Socioemotional wealth theory, Proprietary directors, Vertical pay inequality

1. Introduction

Q6 In recent years, the rising remuneration of managers and directors of large listed companies has caught the attention of both academia and society. In the area of corporate governance, the Remuneration Committee within the boards of directors has been promoted as an important tool for more effectively controlling the remuneration of senior managers

and directors of listed companies. This has been also the case in Spain, where the various codes of good governance recommended establishing an Remuneration Committee made up in its majority by external directors (independent, proprietary or other external directors) [1] until Law 31/2014 finally made Remuneration Committees mandatory for all Spanish listed companies. This law also stipulates that the directors on the Remuneration Committee must be external and at least two of them must be independents. However, since neither the size of the Remuneration Committee nor the number of proprietary or other external directors on the Remuneration Committee are regulated, differences exist in the configuration of the Remuneration Committees, which could have repercussions for supervision and control functions (Fernández *et al.*, 2011; Pucheta-Martínez and Narro-Forés, 2014). Our paper specifically focuses on the role of proprietary directors (representatives of significant shareholders) on the Remuneration Committee.

The Spanish context is ~~characterised~~characterized by a high degree of ownership concentration, which differentiates it from other scenarios such as the Anglo-Saxon context. As a result, proprietary directors are a very important figure in Spanish listed companies, currently holding 32.4% of all board seats (CNMV, 2021). This type of director has both the ability, and a strong incentive, to monitor management (Holderness, 2003). In addition, as indicated by Stein *et al.* (2013), proprietary directors represent the direct supervision of the management team by a major shareholder whose money is at stake. This can lead to proprietary directors becoming more involved in the company, implicating themselves in the company's affairs, while at the same time performing important supervisory and control functions. Although the evidence is scarce (given that this type of director is not common in other contexts), some recent papers (see Agrawal and Nasser, 2019; Nguyen *et al.*, 2022) argue that proprietary directors affect the type and level of managerial compensation in the USA. Our paper focuses, therefore, on the role played by proprietary directors in a high ownership concentration context (Spain) ~~analysing~~analyzing, in this case, whether a greater presence of proprietary directors on the Remuneration Committee serves to avoid excessive remuneration for directors.

Moreover, since the level of ownership concentration of the company can affect the role of proprietary directors, we ~~analyse~~analyze this issue as well. Much of the literature, based on agency theory, emphasizes the risks arising from excessive concentration of ownership, since large shareholders can use their position to obtain private benefits at the expense of minority shareholders (Shleifer and Vishny, 1997; La Porta *et al.*, 2000; Villalonga and Amit, 2006). Nevertheless, other authors such as Heracleous and Lan (2022), employing a broad interpretation of the socioemotional wealth theory (Gómez-Mejía *et al.*, 2007), highlight the benefits of a high level of ownership concentration, suggesting that the presence of a large shareholder can guide corporations in pursuing longer-term, and societally legitimate patterns of action.

Therefore, the objective of this study, based on a sample of Spanish listed companies for the period 2013 to 2018, is to analyze whether the presence of proprietary directors on the Remuneration Committees serves to reduce excessive remuneration for directors and whether or not this relationship is conditioned by the level of ownership concentration. Given that excessive remuneration is an imprecise concept that is difficult to measure, it is useful to have a benchmark with which to compare. The benchmark can be external and horizontal, relying extensively on comparisons with peer groups from comparable firms, or internal and vertical, taking into account the remuneration of the rest of the company's employees (Magnan and Martin, 2019). Recently, internal benchmarking has been forced upon the boards through the enactment of laws [2] that mandate the calculation and disclosure of the quotient between the directors' remuneration and the average remuneration of the rest of the company's employees. This pay ratio is a measure of the vertical pay inequality within the firm (Shin *et al.*, 2015) stemming from notions of fairness and inter-class pay equity (Faleye *et al.*, 2013) and relates to ethical and moral considerations for defining remuneration within a company (Magnan and Martin, 2019). Moreover, the value of the ratio impacts worker motivation and, therefore, business performance (Bao *et al.*, 2020) and has important effects on the image and prestige of the company. Therefore, in line with the argument that to assess whether the remuneration of directors is more or less excessive, it is appropriate to use relative measures rather than absolute figures. Given the growing importance attributed to internal benchmarking, in this study we use the pay ratio, or quotient between the remuneration received by the directors and the average remuneration of all the company's employees, as a proxy for restraint on compensation.

By estimating panel data regressions controlling for endogeneity concerns, we find that a greater presence of proprietary directors on the Remuneration Committee leads to a lower vertical pay gap, i.e. to more responsible and ethical behavior by companies in this area. In addition, the negative relationship between the proportion of proprietary directors on the Remuneration Committee and the vertical pay gap is enhanced by the presence of a controlling shareholder. These results, therefore, support the monitoring hypothesis over the private benefits hypothesis with

respect to ownership concentration and are more consistent with the socioemotional wealth theory, which emphasizes that the owner's emotional ties to the firm leads to decision-making aimed at ensuring the long-term survival of the firm and upholding its reputation.

This paper makes several contributions to the literature. From a theoretical perspective, we use agency theory and socioemotional wealth theory to justify our hypotheses. In this sense, we follow the recommendations of authors such as [Heracleous and Lan \(2022\)](#) and [Brigham and Payne \(2019\)](#) who suggest that socioemotional wealth theory has the potential to influence research outside of the realm of family businesses. Our paper also complements recent evidence on the contribution of active shareholders to controlling management remuneration ([Agrawal and Nasser, 2019](#); [Nguyen et al., 2022](#)), even in contexts of high ownership concentration such as Spain. In this study, we also use the pay ratio as an indicator of wage moderation, for which there is currently little evidence ([Rouen, 2020](#)).

2. Conceptual framework and hypotheses

2.1 The remuneration committee and the role of proprietary directors

Remuneration constitutes a mechanism that provides discipline and incentives to directors ([Jensen and Meckling, 1976](#); [Jensen and Murphy, 1990](#); or [Murphy, 1999](#)). An important control function decision of the board is the determination of the compensation policies for managers and directors. However, the determination of this policy is often delegated to a subgroup of the board, the Remuneration or Compensation Committee ([Conyon and Peck, 1998](#)). In this sense, most corporate good governance codes propose setting up a nomination and remuneration committee that independently defines and evaluates the remuneration policy for managers and directors of a company based on the principles of moderation and transparency.

Remuneration Committee independence has been seen as synonymous with disciplinary capacity and several studies have ~~analysed~~ analyzed the relationship between Remuneration Committee independence and top management pay. However, in most cases it has not been possible to establish that greater independence of the Remuneration Committee implies lower levels of remuneration ([Cybinski and Windsor, 2013](#); [Gregory-Smith, 2012](#); or [Vafeas, 2003](#), among others). This has been also the case in the studies carried out in Spain (see, for example [Fernández et al., 2011](#)).

Contrary to the case of independent directors, the literature and codes of good governance have traditionally shown much less interest in the role that proprietary directors can play in setting executive and director compensation. Recently, however, some articles have focused specifically on providing evidence of the influence of proprietary directors on CEO pay. For example, [Agrawal and Nasser \(2019\)](#) find that the presence of proprietary directors on the board leads to an average reduction in the CEO's remuneration of between 9.6% and 25.1% in US companies. They also point out that the influence of proprietary directors is greater when they sit on the Remuneration Committee. Along the same lines, in a very recent study analyzing CEO compensation packages of US public companies (2006–2017), [Nguyen et al. \(2022\)](#) observe that the impact of blockholders on restructuring executive compensation is greater when they can appoint directors into the Remuneration Committee.

These recent papers suggest that shareholders who sit on the Remuneration Committee (proprietary directors) are better able to protect the interests of their companies, avoiding excessive CEO compensation. They argue that this is because proprietary directors on the Remuneration Committee have both the incentive (holding a significant equity stake) and the means (greater access to information through their board seat) to achieve it. Therefore, a proprietary director can play a more powerful governance role than a blockholder without a board seat or an independent director who, by definition, is not a shareholder ([Agrawal and Nasser, 2019](#)).

Proprietary directors are very important in Spain, currently making up approximately one-third of the board members of Spanish listed companies ([CNMV, 2021](#)). Although, as stated by national organizations such as [IC-A \(2019\)](#), proprietary directors add value to good governance and management both through their position and their personal and professional capabilities, the role of these directors has also been scarcely analyzed in Spain.

Recent evidence commented above refers to the role of proprietary directors in curbing CEO compensation (in absolute terms). Nevertheless, in line with authors such as [Faleye et al. \(2013\)](#) or [Rouen \(2020\)](#), we believe that to evaluate moderation in director remuneration it is more appropriate to use a relative measure such as the quotient between the director's remuneration and the average remuneration of the rest of the employees. Therefore, building on the

arguments used in previous literature concerning the vertical pay gap, we expect that due to the greater identification of proprietary directors with the company, and taking into account the significant public attention that the vertical pay gap is receiving, proprietary directors on the Remuneration Committee will take particular care to safeguard the good image and reputation of the firm, and contribute to reducing the vertical pay gap in Spanish firms.

H1. The greater the presence of proprietary directors on the Remuneration Committee, the smaller the vertical pay gap.

2.2 The effect of ownership concentration

Ownership structure, and specifically the degree of ownership concentration, may influence the relationship defined above in Hypothesis 1. In this section, using arguments from two different theories (Agency Theory and Socioemotional Wealth Theory), we formulate two competing hypotheses on the moderating effect of ownership concentration.

Agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983) agrees that ownership concentration acts as a corporate governance mechanism that reduces the conflicts of interests between shareholders and managers. Nevertheless, when ownership concentration reaches a certain level, large shareholders can use their position to obtain private benefits at the expense of minority shareholders (Shleifer and Vishny, 1997; La Porta *et al.*, 2000; Villalonga and Amit, 2006; Aluchna and Kaminski, 2017), giving rise to the expropriation effect.

The amount of private benefits that a large shareholder can extract is higher in countries with less effective accounting disclosure rules, weaker laws protecting minority shareholders and a lower quality of law enforcement (Dyck and Zingales, 2004; Nenova, 2003). Since these are characteristics of most Continental European countries (La Porta *et al.*, 1998; Martynova and Renneboog, 2011), listed firms in these countries tend to be closely held, with one shareholder (or group) often controlling the majority of the voting rights (De La Cruz *et al.*, 2019). This is also the case of Spain, where in 2020 either a natural or a legal person owned a majority of the voting rights in approximately 30% of all listed companies (CNMV, 2021). In these contexts, resolving conflicts of interest between majority and minority shareholders is the major problem of corporate governance.

The diversion of corporate resources from the corporation (or its minority shareholders) to the controlling shareholder can take a variety of forms, including transfer pricing favoring the controlling shareholder, the transfer of assets from a firm to its controlling shareholder at non-market prices, loan guarantees using the firm's assets as collateral, and so on (Johnson *et al.*, 2000). To obtain the support of the board for the appropriation of private benefits, the controlling shareholder can garner favor with the directors by setting higher remuneration for them. In exchange for excessive compensation, directors may be laxer in fulfilling their monitoring and oversight duties, thus facilitating expropriation activities (López-Iturriaga *et al.*, 2015).

Therefore, according to arguments grounded in agency theory, it would be expected that the influence of proprietary directors on reducing the pay gap (H1) would be diluted in firms with a powerful largest shareholder.

H2a. The negative relationship between the proportion of proprietary directors on the Remuneration Committee and the vertical pay gap is diluted in the presence of a controlling shareholder.

Nevertheless, different theoretical perspectives based, fundamentally, on behavioral agency theory and organization theory, support the positive effects of the existence of a controlling shareholder on the company and all its stakeholders. Therefore, it is necessary to take into account that the private benefits obtained by the controlling shareholder are not only pecuniary, but also non-pecuniary. Non-pecuniary benefits, such as prestige, social status and the ability of the controlling shareholder to run the company in line with their values and ideas, etc., have a psychological undercurrent and have no transferable value (Demsetz and Lehn, 1985). The desire to conserve the non-pecuniary benefits of control enjoyed by controlling shareholders discourages them from an excessive appropriation of resources (pecuniary benefits) that would harm minority shareholders and the company as a whole (Heracleous and Lan, 2022). It has been suggested that the non-pecuniary benefits and the emotional bond of the controlling-shareholder with the company are greater in the case of family businesses (Gómez Mejía *et al.*, 2007). These authors conceptualize socioemotional wealth as “the group of non-financial aspects of the company that satisfy affective needs of the family, such as identity, the capacity to exert family influence and the perpetuation of the family dynasty”, and explain that the preservation of these benefits motivates, to a large extent, decision-making in family businesses.

However, [Brigham and Payne \(2019\)](#) states that socioemotional wealth theory can, and will, be applied to organizations beyond the family and family-controlled business. They suggest that socioemotional wealth is not specific to family firms and the concept can be broadened to embrace a wider spectrum of controlling shareholders. Furthermore, [Heracleous and Lan \(2022\)](#) identify different configurations of socioemotional wealth depending on the type of controlling-shareholder and indicate that ownership concentration is not detrimental to minority shareholders. The non-pecuniary benefits of control, such as socioemotional wealth, motivate those who enjoy them to prioritize long-term survival and a broader societal purpose for the corporation, which goes beyond shareholder enrichment.

Based on this perspective derived from organizational theory, and more specifically from a broad interpretation of socioemotional wealth theory, it is expected that the existence of a large controlling shareholder would favor a greater commitment of the company to its stakeholders, and reinforces the influence of proprietary directors on restraining board member compensation, therefore reducing the vertical pay gap:

H2b. The negative relationship between the proportion of proprietary directors on the Remuneration Committee and the vertical pay gap is enhanced by the presence of a controlling shareholder.

3. Sample and methodology

3.1 Sample

Our sample contains information on the individual compensation of 1048 directors of 57 Spanish listed firms for the years 2013–2018 making up an unbalanced panel with 3565 observations for the period. This information was collected from Annual Reports on the Remuneration of Directors for each company. Company-level economic and financial data were obtained from the System of Analysis of Iberian Balance Sheets (SABI) database, while Annual Corporate Governance Reports were used to extract data relating to the board of directors, the remuneration committee, and the ownership structure of the company.

3.2 Variables

[Comment: We propose some changes about the section of variables.

See attach file in Q7.]In addition to the variables of interest related to the composition of the Remuneration Committee and ownership structure, other variables related to the profile of the directors and the characteristics of the company and the board of directors have been used as explanatory variables since they are commonly used in the literature ([Arrondo et al., 2008](#) or [Sánchez-Marín et al., 2022](#), among others).

3.2.1 Dependent variable

Vertical_Pay_Gap: the quotient between the individual annual cash compensation of each director and the average remuneration of the employees of the same company. This variable has been entered in the models in logarithmic form following authors such as [Faleye et al. \(2013\)](#), [Mueller et al. \(2017\)](#) or [Beck et al. \(2020\)](#).

3.2.2 Main explanatory variable

RC ~~Proprietary~~ *Proprietary*: The proportion of proprietary directors on the Remuneration Committee.

3.2.3. Control Variables: We use variables related to characteristics of the firms and the boards of directors, as well as characteristics of each director.

27 3.2.3 Firm and board variables

FirmSize: The logarithm of total assets.

ROA: Earnings before taxes divided by total assets.

Ownership Concentration: Two measures have been used to control the effect of ownership structure on the models. *MainBlock*: This continuous variable represents ownership of the main shareholder of the company (as a proportion). In other model, we use the dummy variable *ControlShareholder* that takes on the value of 1 if the stake of the main shareholder is equal or greater than 50%, and 0 otherwise.

Typology of the main shareholder: We use the following five dummy variables to identify the typology of the main shareholder: *Bank*, *Company*, *Family*, *Government*, and *Institutional Investor*. The dummy variable for institutional investor ownership is excluded from the models to avoid perfect multicollinearity.

RC_Size: The number of members on the Remuneration Committee (in logarithm).

B_Size: The number of members on the board (in logarithm).

FemaleBoard: The proportion of female directors on the Board of Directors.

BoardLeadership: A dummy variable that takes the value of 1 if the roles of Chairperson and CEO are unified, and 0 otherwise.

BoardOwnership: This variable represents ownership in the hands of members of the Board of Directors of the company (in proportion).

3.2.4 Individual directors' variables

Foreign: A dummy variable that takes on the value of 1 if the director is a foreigner and 0 otherwise.

Education: A dummy variable that takes on the value of 1 if the director holds a Master's degree, MBA, PhD, or has had an international education, and 0 otherwise.

Tenure: The length of time the director has been on the board (in years).

Type of director: We use four dummy variables to control for the type of director: *Executive*, *Proprietary*, *Independent*, and *Other External Directors*. The dummy variable for other external directors is excluded from the models to avoid perfect multicollinearity.

Explanatory variables related to the board of directors and firms' characteristics have been lagged by one period to reduce econometric problems of endogeneity. The models also include year effects.

3.3 Methodology

In order to test the research hypotheses, three models were estimated:

Model 1 focuses on ~~analysing~~ analyzing the effect of the proportion of proprietary directors on the Remuneration Committee on the vertical pay gap:

$$\text{Vertical_Pay_Gap}_{it} = \alpha + \beta_0 \text{RC_Proprietary}_{it} + \sum \gamma \text{controls}_{it} + \eta_i + \lambda_t + v_{it}$$

where η_i is the unobserved individual heterogeneity, λ_t represents time fixed effects and v_{it} is the idiosyncratic error term.

According to Hypothesis 1, we would expect β to be negative and statistically significant, indicating that the higher the proportion of proprietary directors on the Remuneration Committee, the lower the vertical pay gap.

Model 2 tries to ~~analyse~~ analyze whether the effect of the presence of proprietary directors on the Remuneration Committee on the vertical pay gap is influenced by ownership structure:

$$\text{Vertical_Pay_Gap}_{it} = \alpha + \beta_0 \text{RC_Proprietary}_{it} + \beta_1 (\text{RC_Proprietary}_{it} * \text{MainBlock}_{it}) + \sum \gamma \text{controls}_{it} + \eta_i + \lambda_t + v_{it}$$

In this way, if β_1 is statistically significant, the effect of the presence of proprietary directors on the Remuneration Committee on vertical pay gap changes depending on the value of the ownership of the main shareholder.

To delve deeper into this relationship and test the second hypotheses of the study (H2a and H2b), Model 3 was estimated, where the effect of the proportion of proprietary directors on the Remuneration Committee on the vertical

pay gap was ~~analysed~~ analyzed depending on the existence of a controlling shareholder on the firm.

$$\text{Vertical_Pay_Gap}_{it} = \alpha + \beta_0 \text{RC_Proprietary}_{it} + \beta_1 (\text{RC_Proprietary}_{it} * \text{ControlShareholder}_{it}) + \sum \gamma \text{controls}_{it} + \eta_i + \lambda_t +$$

For this Model 3 (and assuming that β_0 is negative), if β_1 is positive (negative) and statistically significant, it indicates that the effect of the proportion of proprietary directors on the Remuneration Committee on lowering the vertical pay gap is diluted (enhanced) in the presence of a controlling shareholder, thus confirming hypothesis H2a (H2b).

These equations are estimated using a panel data methodology, applying the System *Generalized Method of Moments* (GMM) technique (Arellano and Bover, 1995; Blundell and Bond, 1998). The *Generalized Method of Moments* (GMM) provides a framework for estimating equations with endogenous variables, which is a common problem in research on corporate governance (Wintoki *et al.*, 2012). Endogeneity arises when some correlation exists between the regressors and the model error, making the estimators of coefficients that ignore the problem biased and inconsistent. In our case, for example, an important source of endogeneity is simultaneity (or reverse causality) between the vertical pay gap and the proportion of proprietary directors on the Remuneration Committee. This means that because of the vertical pay gap, blockholders are likely to strive to have representatives in the remuneration committee, so both variables are codetermined simultaneously. The generic solution for any endogeneity problem, whether it is produced by measurement errors, omitted variables, or simultaneity, is the use of valid instrumental variables. Instrumental variables that are related to the explanatory variable, but not the error, can be used to isolate the variation that is not correlated with the error. Such instruments are easy to obtain in short panels (N is much larger than T) because lagged values (beyond $t-1$) of original regressors can be used. The System GMM estimator solves the endogeneity problem through the estimation of a system of two simultaneous equations, one equation in levels (with lagged first differences instruments) and the other in first differences (with lagged level instruments). By estimating the two equations as a system, system GMM improves the efficiency of estimates. The two-step version of the estimator, which provides estimators that are robust to autocorrelation and heteroscedasticity, is applied here together with Windmeijer (2005) corrected standard errors. In addition, the Hansen test complements our GMM analyses, helping us to verify the absence of over-identifying restrictions of the models.

4. Results

4.1 Descriptive statistics

Figure 1 shows the evolution of the average value of the pay gap throughout the period studied, differentiating also by category of director. As for the total sample, the value of the pay gap falls between a minimum of 6.3 (in 2013) and a maximum of 8.5 (in 2015), which indicates that, on average, a director's remuneration is between 6.3 and 8.5 times greater than the average compensation of the company's workers. Nevertheless, when the directors are differentiated by category, important differences are found.


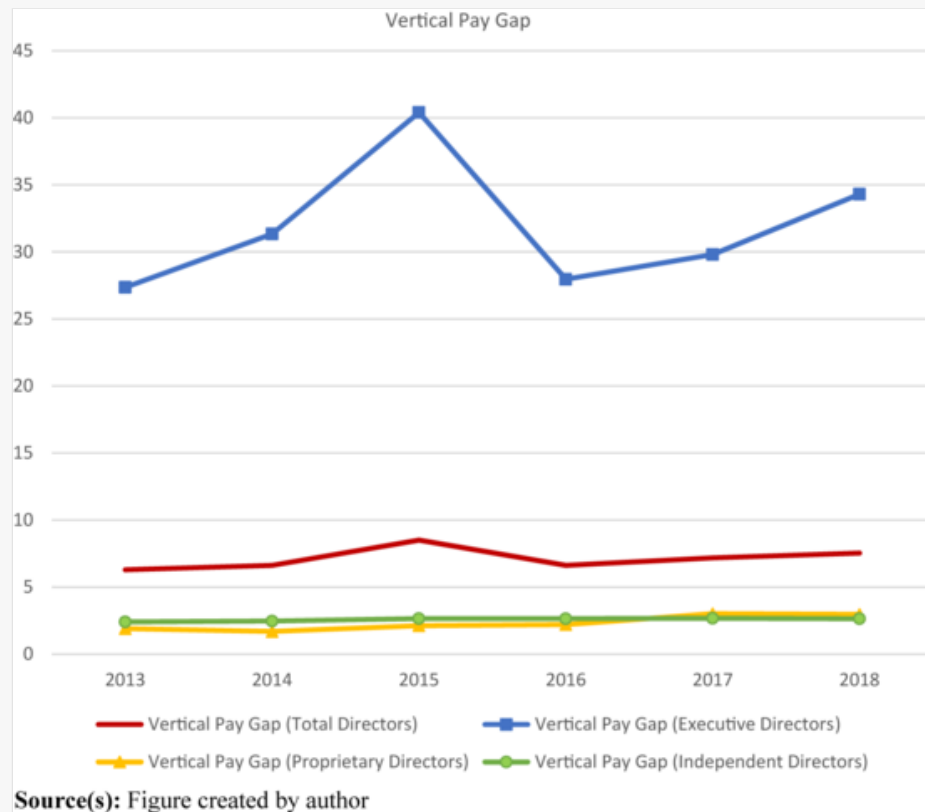
 Images are optimised for fast web viewing. Click on the image to view the original version.

Figure 1



Evolution of vertical pay gap by type of director

With regard to the category of executive directors, it can be seen that, on average, executive directors' remuneration is over 27 times the average salary of the employees of the company; in some cases, it reaches almost 40 times the average salary of the workers. If attention is paid to the group of external directors, differentiating between proprietary and independent directors (the results for other external directors are not shown since they are a minority group within the boards), it can be seen in the case of proprietary directors that the vertical pay gap is between 1.5 and 3, with an increasing trend in recent years. With regards to the category of independent directors, the values of the vertical pay gap are around 2.5, and remain fairly stable throughout the period of study.

Regarding the Remuneration Committee, Figure 2 shows both the average size of the committee and the percentage of each of the categories of directors on the committee during the period analysed. In relation to the size of the Remuneration Committee, it can be seen that the average size of this committee has remained stable over the period analysed, averaging around four members. With respect to the composition of this committee, a change is observed after 2015 due to new legal provisions that came into effect that year. In this regard, it can be seen that, since 2015, the percentage of executive directors on this committee is zero.


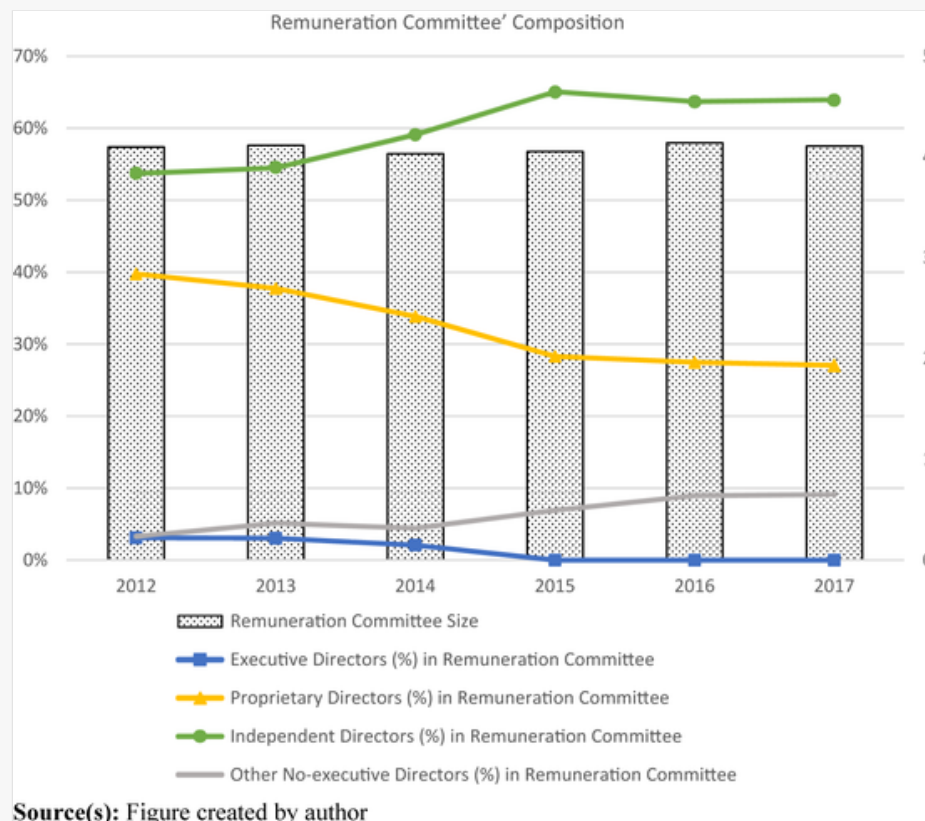
 Images are optimised for fast web viewing. Click on the image to view the original version.

Figure 2



Evolution of Remuneration Committee' Composition

As for the rest of the variables included in the models, Table 1 shows that on average, the main shareholder represents almost 30% of ownership (29.1%) and that in 21% of the companies in the sample, the main shareholder holds 50% or more of the capital. As far as the characteristics of the boards are concerned, on average, almost 16% are women (15.8%), the positions of Chairperson and CEO are unified in just over 40% of cases (42.3%) and directors represent almost 20% of firm ownership (19.7%). As far as the characteristics of the individuals in the sample are concerned, almost 17% are foreigners, and 65% of the directors hold a Master's degree, MBA, a PhD or have an international education; the average length of time the directors have been on the board is 8 years. With regard type of director, approximately 16% are executive directors, 36% are proprietary directors, 41% are independent directors and 6% are other external directors.

Table 1

i The table layout displayed in this section is not how it will appear in the final version. The representation below is solely purposed for providing corrections to the table. To preview the actual presentation of the table, please view the Proof.

Descriptive statistics

Variable	Mean	Standard dDeviation	Minimum	Maximum
VERTICAL_PAY_GAP	7.110	24.076	0	578.845
RC_PROPRIETARY	0.325	0.237	0	1
FIRMSIZE	15.001	1.810	10.355	18.522
ROA	0.026	0.103	-0.757	0.850
MAINBLOCK	0.291	0.201	0.000	0.921
CONTROLSHAREHOLDER	0.210	0.408	0	1
BANK	0.092	0.290	0	1
COMPANY	0.262	0.440	0	1

FAMILY	0.385	0.487	0	1
GOVERNMENT	0.045	0.206	0	1
INSTITUTIONAL INVESTOR	0.216	0.412	0	1
RC_SIZE (number of directors)	4.091	1.220	1	10
B_SIZE (number of directors)	11.777	3.014	5	20
FEMALEBOARD	0.158	0.107	0	0.571
BOARDLEADERSHIP	0.423	0.494	0	1
BOARDOWNERSHIP	0.197	0.236	0	0.89
FOREIGN	0.168	0.374	0	1
EDUCATION	0.653	0.476	0	1
TENURE	8.006	8.031	0.025	72.893
EXECUTIVE	0.157	0.364	0	1
PROPRIETARY	0.363	0.481	0	1
INDEPENDENT	0.414	0.493	0	1
OTHEREXTERNAL	0.066	0.249	0	1

Table Footnotes


Source(s): Table created by author

The correlations matrix (not included in the text for reasons of space) shows that correlations are below the 0.7 threshold that is commonly set as the limit for multicollinearity.


















4.2 Multivariate analysis

Table 2 lists the results of the estimates for each one of the models described in section 3.3.

Table 2

 The table layout displayed in this section is not how it will appear in the final version. The representation below is solely purposed for providing corrections to the table. To preview the actual presentation of the table, please view the Proof.

GMM regressions on vertical pay gap

Variable	Model 1	Model 2	Model 3
RC_PROPRIETARY	 -0.703***	 -0.398*	 -0.709***
RC_PROPRIETARY*MAINBLOCK		 -0.015*	
RC_PROPRIETARY*CONTROLSHAREHOLDER			 -0.559**
FIRMSIZE	0.177**	0.190***	0.249***
ROA	0.706	0.611	0.729
BANK	 -1.364***	 -1.289***	 -1.417***
COMPANY	0.007	0.252	0.148
FAMILY	 -0.568**	 -0.403*	 -0.445**
GOVERNMENT	 -0.433	 -0.588	 -0.709
RC_SIZE	 -0.247	 -0.255	 -0.073















B_SIZE	 -0.018	 -0.031	 -0.195
FEMALEBOARD	0.501	0.627*	0.412
BOARDLEADERSHIP	 -0.278*	 -0.383**	 -0.304**
BOARDOWNERSHIP	 -0.004	 -0.003	 -0.002
FOREIGN	 -1.489*	 -0.646**	 -1.417*
EDUCATION	0.720	0.979	0.820
TENURE	0.005	0.011	0.014*
EXECUTIVE	2.025***	2.420***	2.075***
PROPRIETARY	 -0.012	0.367	 -0.007
INDEPENDENT	 -0.037	0.249	0.068
INTERCEPT	 -1.226*	 -2.138**	 -2.373**
YEAR DUMMIES	Yes	Yes	Yes
OBSERVATIONS	3565	3565	3565
<i>Tests</i>			
AR (1) ( p-value)	 -5.38*** (0.000)	 -5.22*** (0.000)	 -5.71*** (0.000)
AR (2) ( p-value)	 -0.34 (0.730)	 -0.70 (0.486)	 -0.56 (0.572)
Hansen test ( p-value)	37.13 (0.116)	36.50 (0.130)	33.81 (0.207)

Table Footnotes

Note(s): 1. Asterisks represent the significance levels of the coefficients: *** for 1%, ** for 5% and * for 10%

2. The results of the GMM model correspond to the two-stage and robust estimation, providing estimators that are robust to autocorrelation and heteroscedasticity

3. AR (1) and AR (2) are the tests used to check for the existence of first- and second-order serial correlation. The null hypothesis indicates the absence of serial correlation. First-order correlation must exist, but not second-order correlation

4. The Hansen test checks whether over-identification restrictions of the model are correct or not. In this sense, a *p*-value greater than 0.10 indicates that the over-identification restrictions are correct (instruments are valid)

Source(s): Table created by author

Table 2 shows the effect of the proportion of proprietary directors on the Remuneration Committee (RC_Proprietary in Model 1) on the vertical pay gap is negative and significant, corroborating H1 of the study. Therefore, proprietary directors act as a control mechanism in the matter of board member remuneration, since a greater presence of proprietary directors on the Remuneration Committee results in a smaller vertical pay gap. The greater identification of proprietary directors with the company can lead them to be careful with decisions that affect the good image and reputation of the firm. Since high pay ratios have a negative impact on the company's image (Mitchell *et al.*, 2018), a greater presence of proprietary directors on the Remuneration Committee contributes to reduce vertical pay gap in Spanish firms. This evidence is consistent with that obtained in some recent papers for US firms (Agrawal and Nasser, 2019; Nguyen *et al.*, 2022).

To analyze the combined effect of the presence of proprietary directors on the remuneration committee and the equity in the hands of the main shareholder, Model 2 was estimated. It shows that the coefficient of the interactive term RC_Proprietary*MainBlock is negative and significant, confirming that the effect of the proportion of proprietary directors in Remuneration Committee on the vertical pay gap changes depending on the value of the ownership of the main shareholder. To delve deeper into this relationship and test the second hypothesis of the study, Model 3 was estimated, where the effect of the presence of proprietary directors on the Remuneration Committee was analysed depending on the existence of a controlling shareholder (a shareholder who owns a stake that is equal or more than 50%). As shown in Table 2 (Model 3), the coefficient of the multiplicative variable RC_Proprietary*ControlShareholder is negative and significant, which implies that a greater presence of proprietary

directors on the Remuneration Committee translates into lower pay gap in companies with a controlling shareholder, which would lead us to reject [H2a](#) in the study, and therefore, accept hypothesis [H2b](#).

Therefore, our evidence is consistent with the idea that the presence of a large shareholder may improve monitoring, vigilance, and corporate governance ([Hambrick and Finkelstein, 1995](#)). Our results, then, go against the agency theory, which emphasizes the dangers derived from a high concentration of ownership (hypothesis [H2a](#)), but would be in line with the socioemotional wealth approach and hypothesis [H2b](#) of the present study. A controlling shareholder enriches the role of proprietary directors on the Remuneration Committee and contributes to a further reduction of the vertical pay gap, and prioritizes a broader societal purpose of the corporation.

With regard to the firm variables, it should be noted that company size has a positive and significant influence on all models, as found in [Mueller et al. \(2017\)](#) or [Faleye et al. \(2013\)](#), among others. We also observe that the typology of the main shareholder influences the vertical pay gap. Likewise we find that, controlling for the rest of variables, the vertical pay gap is lower for family firms (which provides additional support for the postulates of the SEW theory) and when the main shareholder is a bank.

Concerning the variables that represent characteristics of the board, the coefficient of the variable BoardLeadership is negative and significant in the three models estimated. Therefore, we observe that when the same person holds the positions of Chairperson and CEO, the vertical pay gap is smaller. This result is contrary to the findings of [Faleye et al. \(2013\)](#) for US companies. Nevertheless, the effectiveness of corporate governance practices depends strongly on their fit with the broader institutional context, so the same practice could achieve different results depending on the institutional context ([Filatotchev et al., 2013](#); [Aguilera et al., 2018](#)).

On the other hand, and concerning the variables that represent directors' characteristics, the variable that includes the category of executives (EXECUTIVE) generates a positive and significant effect, which indicates that the vertical pay gap is greater for executive directors, as is shown in both the descriptive statistics and in [Figure 1](#). Finally, and similarly to [Acero and Alcalde \(2020\)](#) who find that foreign directors receive lower compensations in Spain, we also find that the vertical pay gap is significantly lower for these directors.

5. Conclusions and implications

The unequal distribution of income and wealth within countries and on a global scale has become an important issue on the social and political agenda of the ~~21st~~ twenty-first century ([Piketty, 2014](#)). In this scenario, excessive compensation for board members in listed firms draws public and media attention and sparks anger in society.

This paper analyzes, for a sample of listed Spanish companies, whether the presence of proprietary directors on the Remuneration Committees leads to greater restraint in remunerating directors and whether or not this relationship is conditioned by the concentration of ownership. For that, this study has taken the quotient between the remuneration received by the directors and the average remuneration of all the company's employees as a measure of the level of restraint on the remuneration of directors. Moreover, this quotient reflects the pay inequality within the firm, which is tied to ethical and moral considerations.

Proprietary directors have the incentives (holding a large equity stake) and the ability (through their position on the board) to be effective monitors ([Agrawal and Nasser, 2019](#)). In addition, the need to adapt the study of corporate governance mechanisms to the institutional environment ([Filatotchev et al., 2013](#)) makes researching the role of proprietary directors especially relevant to Spain, where, unlike other countries, this type of director has been the predominant group within the boards of directors of listed companies for many years. This is due to the high concentration of ownership in Spanish companies and the importance of family ownership in this country. According to the data from European Family Businesses, Spain is the European country with the largest presence of family businesses.

Our results indicate that proprietary directors act as a control mechanism in the matter of board member remuneration, since a greater presence of proprietary directors on the Remuneration Committee results in a smaller vertical pay gap, which we can interpret as more socially responsible behavior by the firm. Moreover, the presence of a controlling shareholder reinforces this effect. Therefore, these results corroborate the postulates of the Socioemotional Wealth

Theory, which stresses that the affective bonds that the owners have with the company lead to decision-making aimed at guaranteeing the long-term survival of the company and safeguarding its reputation.

Finance and economic literature mainly focus on the dangers derived from a high concentration of ownership, especially in countries with weak legal protection for investors and minority shareholders in which the extraction of private benefits by large shareholders is more likely (Nenova, 2003; Dyck and Zingales, 2004). Nevertheless, we find that in Spain, which has a French-civil-law origin legal system that offers less protection to minority shareholders in comparison to common law countries (La Porta *et al.*, 1998), ownership concentration enhances the role of proprietary directors in controlling director remuneration.

As for implications for policy-makers, the results of this paper suggest that it may be necessary to implement a change of approach in corporate governance codes and regulations, giving greater value to the figure of proprietary directors, at least in contexts such as the Spanish one, ~~characterised~~ **characterized** by a high degree of ownership concentration. Moreover, since we find that the effect of proprietary directors on the control of directors' remuneration is even greater when ownership is highly concentrated, our results are consistent with the idea already put forward by Holderness (2003) that small shareholders and regulators have little reason to fear large shareholders in general, especially, when a large shareholder is active in the firm management.

As for the implications for managers, our paper reasserts the importance of the firm's decisions in the context of one of contemporary society's central issues: inequality. The board of directors' remuneration is not evaluated only by taking into account the amount in absolute terms, but also in relation to the participation of other stakeholders in the income generated by the company. Management must be aware that investors and society in general, no longer value the company based exclusively on its economic results, but also taking into consideration the social and ethical commitment reflected in its decisions.

Like all research, the study is not exempt of limitations. This evidence refers only to Spain. Therefore it would be enriching to replicate these analyses in other contexts, in addition to including more variables in the models.

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Footnotes

Text Footnotes

- ¹. In Spain, there are three categories of non-executive or external directors: independent directors (renowned professionals that are not affiliated with the management team or with significant

shareholders), proprietary directors (significant shareholders or their representatives) and other external directors (directors who do not fit in either of the other categories).

2. Since 2018, publicly traded companies in the USA have to report the “pay ratio” between the firms's CEO and its average employee. Pay ratio regulations also apply to UK listed companies with over 250 employees since the beginning of 2020. In Spain, Law 5/2021 establishes that companies must explain how the remuneration and employment conditions of the company's workers have been taken into account when setting the remuneration policy of the board. Listed companies must relate the remuneration of the directors to the average remuneration of the company's employees and include this information in the Annual Report on the Remuneration of Directors.

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Q1

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Q7

Query: Please check the hierarchy of the section headings.

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Q8

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