

Relationship between employee representation on firms' compensation committee and director compensation, and salary gap between CEO and other employees in firms

Mối quan hệ giữa sự hiện diện của đại diện người lao động trong ủy ban lương thưởng với thù lao của thành viên hội đồng quản trị và khoảng cách tiền lương của tổng giám đốc điều hành và các nhân viên khác trong công ty

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Abstract

In this paper, we examine the relation between employee representation on firms' compensation committees and compensation of directors; and the gap between CEO's total salary and average salaries and benefits in these firms. Using an international sample of 3.274 listed firms across 29 countries over period 2012-2017 with simultaneous-quantile regressions, we find that across most quantile of compensation dependent variables, the presence of employee directors on compensation committees significantly mitigates the level of average board members' compensation and the salary gap between CEO and other employees in the firm as well. Employee representation on compensation committees appear to significantly limit the upper tail of the compensation distribution much more than the lower tail. In addition, this mitigation effect is stronger in firms with a unitary board structure.

Keywords: employee representatives; compensation committee; director compensation; salary gap between CEO and other employees.

Tóm tắt

Bài viết nghiên cứu mối quan hệ giữa sự hiện diện của đại diện người lao động trong ủy ban lương thưởng và mức thù lao của thành viên hội đồng quản trị và khoảng cách lương thưởng của tổng giám đốc điều hành và các nhân viên khác trong công ty. Sử dụng mẫu nghiên cứu ngẫu nhiên gồm 3.274 công ty niêm yết trên 29 quốc gia trong thời gian từ năm 2012 đến năm 2017, với phương pháp hồi quy phân vị, kết quả nghiên cứu cho thấy các công ty có sự hiện diện của đại diện người lao động trong ủy ban lương thưởng thì mức thù lao bình quân của các thành viên hội đồng quản trị sẽ thấp hơn so với các công ty không có sự hiện diện của đại diện người lao động trong ủy ban lương thưởng, đồng thời khoảng cách lương thưởng giữa CEO và các nhân sự còn lại trong công ty cũng thấp hơn. Mức độ ảnh hưởng của đại diện người lao động trong ủy ban lương thưởng sẽ càng tăng khi các mức thù lao cho các nhà điều hành và khoảng cách tiền lương ở các phân vị càng lớn. Bên cạnh đó, tác động tích cực của đại diện người lao động đối với việc bảo đảm các chính sách lương thưởng phù hợp được thể hiện rõ ràng hơn trong các công ty có cấu trúc quản trị công ty theo mô hình đơn cấp.

Từ khóa: đại diện người lao động; ủy ban lương thưởng; thù lao thành viên hội đồng quản trị; khoảng cách tiền lương của tổng giám đốc điều hành và các nhân viên khác.

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1. Introduction

A primary monitoring mechanism in a corporation is board of directors. Recently, boards of directors have increasingly been called to account for accountability for the “executive pay fiasco” that has resulted in excessive CEO compensation packages [1] since responsibility for assessing senior executives' performance and determining appropriate compensation packages is one of the central monitoring functions of directors [2] to align management and shareholder interests [3, 4, 5]. That is consistent with agency theory [3, 6]. Although the dominant theory in governance research is agency theory, other theoretical frameworks have been suggested as well such as social comparison theory [7], institutional theory [8], and stewardship theory [9].

Extant research examining the relation between a firm's board and CEO compensation has focused primarily on the composition of the board-at-large. However, it may be the nature of the compensation committee, not the board as a whole, that is at issue. Several researchers have noted the need for research focusing on board committees [10, 11, 12]. A focus on compensation committees may be especially important because these committees are responsible for ensuring that compensation systems function effectively and equitably from the viewpoint of shareholders [13].

Although some research has examined the relation between the composition of compensation committees and elements of executive-level compensation [14, 15], we are unaware of any research that empirically examines the effect of employee representation on compensation committees (ERC) on multiple pay practices including director compensation and salary gap in a firm. In their seminal paper on CEO compensation, Jensen and Murphy (1990) posit that political and regulatory

constraints truncate the upper tail of executive remuneration, resulting in lower overall levels of CEO pay and pay-performance sensitivities [16]. They identify government legislation and the presence of unions as two obvious examples of such institutional constraints. Several empirical studies have confirmed Jensen and Murphy (1990) 's predictions for firms operating in regulated industries, where government oversight and disclosure rules ensure that executive pay remains a highly visible and contentious subject. However, similar research on the possible constraining effects of unions as well as ERC is scarce.

In many firms, trade unions act as the go-betweens and spokespersons, and this mechanism often works quite well. The route of ERC goes one step further, though, by choosing for participation rather than just negotiation. Employee directors take part in the discussions and votes, get access to otherwise nonpublic information, bring often vital information from the floor to the boardroom, and convince workers that the proposed solutions make sense. ERC is based on a quid pro quo attitude: if the firm takes care of the employees' interests, employees become more cooperative and motivated in return, which boosts productivity. The focus of the paper is not on whether ERC achieves its main objectives regarding social relations and economic efficiency, though, but on how the presence of employee directors on compensation committees affects their firms' remuneration pay policies, considering average compensation of board members and salary gap between CEO's total salary and average salaries and benefits in the firms.

To the best of our knowledge, there are only two studies that have estimated the effect of employee representation on the level of CEO compensation but they focused on employee presence at the board level at large rather than at

compensation committee level [17, 18]. Vitols (2010) examine the impact of board-level employee representation on the structure and level of management remuneration in the 600 largest listed European companies and find that board-level employee representation is associated with less frequent use of stock options and lower total CEO remuneration [17]. Using a comprehensive dataset of French listed companies over the period of 2003–2013, Dardour, Husser, & Hollandts (2015) investigate the relation between board diversity and CEO compensation [18]. They find a negative relation between total board-level employee representation and CEO compensation. Regarding research on the impact of compensation committee composition on CEO compensation, in the context of the U.S listed firms, these studies focus on compensation directors' affiliation, independence, share stakes, their own remuneration, and CEO presence [15, 19, 20] and current interlocking employee directorate [21]. They do not include employee representation as an attribute of compensation committee composition.

This paper fills this gap in the literature by using a unique panel of 3,274 listed firms across 29 countries over period 2012-2017 with simultaneous-quantile regressions. We examine the effect of employee representation on compensation committees on multiple remuneration practices including director compensation salary gap in a firm. Including this range of compensation variables enables a broad assessment of the extent to which employee directors can voice their concerns to prevent managerial rent extraction and ensure equality for the workers. Our results suggest that employee presence on compensation committees is indeed significantly associated with remuneration pay practices. Specifically, we find that ERC firms display lower levels of total director compensation and lower level of

salary gap as compared to non-ERC firms. The constraining effect of ERC on these remuneration practices is found to be stronger the higher-up in the distribution ladder one moves. That is, the upper tail of these compensation proxies is significantly reduced within ERC firms, just as Jensen and Murphy (1990) predicted. Last but not least, we find that the mitigation effect of ERC is more pronounced in firms with a unitary board structure where employee directors have more room to voice their concerns and contribute to the board's monitoring effectiveness.

The rest of the paper is organized as follows: Section 2 develops our tested hypothesis. Section 3 describes how the dataset was constructed, and provides an overview of the data and model specification. Section 4 presents the empirical results and section 5 discusses and concludes the paper.

2. Hypothesis development

Working in a compensation committee with a responsibility for designing, overseeing, and optimizing executive compensation packages in a firm, as employee representatives, employee directors pay particular attention to social and human policies. Jensen and Meckling (1979) posit that workers prefer to lobby a company's board in order to grant workers higher pay and other remunerations [3]. From this perspective, employee directors are less likely to support corporate decisions that lead to higher CEO compensation and other directors' remuneration. In fact, being part of the workforce and human capital, employee directors often orient management away from share price and towards "real" performance indicators, trying to avoid situations where management benefits when workers get hurt and keeping the gap between top management and worker pay from getting too large [17]. Moreover, Jensen and Murphy (1990) posit that workers perceive high

executive pay as a signal for the firm's financial health and employ it as a justification for increased wage demands [16]. In case of employee representatives sitting on compensation committees, this would naturally make senior executives and boards more cautious when determining pay packages. Since workers can use their representation on compensation committees as a means of influencing remuneration pay through the voicing of fairness concerns in compensation board rooms and actualizing worker preferences for a more compressed compensation structure within the firm, the following hypothesis can be derived:

Hypothesis 1: There is a negative relation between employee representation on compensation committees and director compensation as well as salary gap between CEO compensation and average salaries and benefits in a firm.

The second hypothesis are derived from the widespread belief that two tier systems are better at monitoring management than one tier systems, since two tier systems are in principle more independent of top management than one board systems (where the main board is often chaired by the CEO). We expect that the less effectiveness of one tier systems may be offset and enhanced by the presence of employee representatives on compensation committees, thus in such unitary board systems management will be less able to extract rents (i.e. higher pay

then justified by performance). Therefore, we derive the second hypothesis as follows:

Hypothesis 2: The mitigation effect of employee representation on compensation committees on director compensation and salary gap is more pronounced in firms with a unitary board structure.

3. Data and research design

3.1. Sample and data

To investigate whether ERC is associated with remuneration practices, we use an international sample of all countries for which director-level board characteristics data are available in Institutional Shareholder Services (ISS), and financial data are available in Thomson Reuters Eikon. Our primary sources for the regulation of board-level employee representation on country level are reports from European Trade Union Institute (ETUI), the Organization for Economic Cooperation and Development (OECD), and prior studies. We verify the information obtained in these reports using various using alternative sources, for example the websites of the countries' primary regulators. Data is gathered from 2012 to 2017. Observations were deleted if governance or financial information was missing. We further exclude financial firms (SIC40), given their idiosyncratic operations. The resulting sample consists of 11.854 firm-years from 29 countries for 3.274 firms. Table 1 shows the country breakdown of the sample.

Table 1. Country breakdown of the sample

| Country | Nobs | Frequency |
|-----------|------|-----------|
| Australia | 711 | 5.93 |
| Austria | 32 | 0.27 |
| Belgium | 28 | 0.23 |
| Canada | 879 | 7.33 |
| China | 71 | 0.59 |
| Denmark | 80 | 0.67 |
| Finland | 141 | 1.18 |

| Country | Nobs | Frequency |
|----------------|---------------|------------|
| France | 390 | 3.25 |
| Germany | 80 | 0.67 |
| Hong Kong | 966 | 8.06 |
| India | 330 | 2.75 |
| Indonesia | 50 | 0.42 |
| Italy | 89 | 0.74 |
| Japan | 33 | 0.28 |
| Malaysia | 131 | 1.09 |
| Netherlands | 141 | 1.18 |
| New Zealand | 63 | 0.53 |
| Norway | 60 | 0.5 |
| Philippines | 20 | 0.17 |
| Poland | 13 | 0.11 |
| Singapore | 65 | 0.54 |
| South Africa | 343 | 2.86 |
| South Korea | 5 | 0.04 |
| Spain | 110 | 0.92 |
| Sweden | 233 | 1.94 |
| Switzerland | 242 | 2.02 |
| Thailand | 71 | 0.59 |
| USA | 5,245 | 43.76 |
| United Kingdom | 1,365 | 11.39 |
| Total | 11,987 | 100 |

3.2 Research design

3.2.1. Variable measurement

Director compensation (DR_COMP) is measured by taking natural logarithm of 1 plus the ratio of total compensation of board members in US dollars divided by board size.

Salary gap (SALARY_GAP) is measured by taking natural logarithm of 1 plus the ratio of CEO's total salary (or the highest salary) divided by average salaries and benefits.

Employee representation on compensation committees: The dummy (ED_CC) indicates whether or not, at the end of fiscal year t , company i has at least one employee representative on the board's compensation committee (i.e. an employee director who represents the company's employees and is not part of management).

Control variables: In line with prior compensation research, we control for firm characteristics and board characteristics. Specifically, we include the firm's number of employees as the size proxy, (EMPLOYEES); firm age (FIRM_AGE), leverage (LEVERAGE); lagged Altman's Z-score (LAG_ZSCORE); market to book ratio (MTB); returns on assets (ROA); and sales growth (SALES_GR);

Regarding board characteristics, we use the percentages of independent board members (PCT_INDEPEND) and of financial experts (PCT_FINEXPERT); the natural logarithm of mean director tenure (LN_TENURE); the natural logarithm of the mean value of company stock held by directors in the board (LN_SHAREVALUE); the percentage of directors holding multiple board memberships

(PCT_BUSY); the percentage of directors at least 65 of age (PCT_BUSY); the percentage women directors (PCT_GENDER); the natural log of board size (BOARD_SIZE); and the CEO duality indicator (CEO_DUAL).

We present more detailed definitions of the above variables used in our tests and regressions in Table 2. To mitigate the influence of outliers, all continuous variables are winsorized at the top and bottom one percent of the distribution.

Table 2. Variables definition, measures and data sources

| Variable name | Definition | Source |
|---------------|---|--------|
| DR_COMP | Natural logarithm of 1 plus the ratio of total compensation of board members in US dollars divided by board size. | Eikon |
| SALARY_GAP | Natural logarithm of 1 plus the ratio of CEO's total salary (or the highest salary) divided by average salaries and benefits. | Eikon |
| ED_CC | A dummy variable equals to 1 if at the end of the fiscal year, a firm had at least one director as an employee representative on the compensation committee (i.e., employee-director is a non-management employee of the company, representing the rest of the company's employees), and 0 otherwise. | ISS |
| BOARD_TYPE | A nominal variable takes a value of 1 if board structure is unitary, a value of 2 if board structure is mixed, and a value of 3 if board structure is two-tier. | Eikon |
| PCT_INDEPEND | Percentage of independent directors on the board (Company classification) | ISS |
| PCT_FINEXPERT | Percentage of board members who qualify as a financial expert according to SOX. | ISS |
| LN_TENURE | Natural logarithm of mean director tenure on the board. | ISS |
| LN_SHAREVALUE | Natural logarithm of 1 plus the mean dollar value of company stocks owned by board members. | ISS |
| PCT_BUSY | Percentage of directors on the board having at least three appointments. | ISS |
| PCT_RETIRE | Percentage of directors on the board who are at least 65 years old. | ISS |
| PCT_GENDER | Percentage of female directors on the board. | ISS |
| BOARD_SIZE | Natural logarithm of board size. | ISS |
| CEO_DUAL | Dummy variable that equals 1 when the CEO serves as chair of the board, and 0 otherwise. | ISS |
| EMPLOYEES | Natural logarithm of number of employees. | Eikon |
| FIRM_AGE | Natural logarithm of number of years since incorporation. | Eikon |
| LEVERAGE | Total debt divided by total assets. | Eikon |
| LAG_ZSCORE | Altman Z-score in prior year, indicating financial stability. | Eikon |
| MTB | Market value of equity divided by book value of equity. | Eikon |
| ROA | (Earnings before interest and tax) divided by total assets. | Eikon |
| SALES_GR | (sales in current year-sales in previous year)/sales in previous year. | Eikon |

3.2.2. Descriptive statistics:

In Table 3, we present summary statistics of all variables included in the regression analysis. The directors in an average firm in our dataset has a total compensation of 235.143 U.S. dollars,

and the average gap between a CEO's total salary and average salaries and benefits within that firm is 559 U.S. dollars. On the whole, a compensation committee has employee representatives during 1.11 percent of firm-years (133 out of 11.854 firm-years).

Table 3. Descriptive statistics

| Variable | N | mean | median | sd | Q1 | Q3 |
|---------------|--------|---------|---------|--------|---------|---------|
| DR_COMP | 11.987 | 11,5793 | 11,7966 | 1,0163 | 10,1996 | 12,5889 |
| SALARY_GAP | 6.029 | 3,9777 | 3,8321 | 1,4606 | 2,2895 | 5,7502 |
| ED_CC | 11.987 | 0,0111 | 0,0000 | 0,1048 | 0,0000 | 0,0000 |
| BOARD_TYPE | 11.987 | 1,1656 | 1,0000 | 0,5130 | 1,0000 | 2,0000 |
| PCT_INDEPEND | 11.987 | 0,6889 | 0,7273 | 0,1949 | 0,3846 | 0,9000 |
| PCT_FINEXPERT | 11.987 | 0,1491 | 0,1250 | 0,1399 | 0,0000 | 0,3636 |
| LN_TENURE | 11.987 | 1,7886 | 1,7918 | 0,5777 | 1,0986 | 2,4849 |
| LN_SHAREVALUE | 11.987 | 14,5825 | 15,1050 | 3,6649 | 10,9623 | 18,3382 |
| PCT_BUSY | 11.987 | 0,2557 | 0,2500 | 0,1786 | 0,0000 | 0,5000 |
| PCT_RETIRE | 11.987 | 0,3010 | 0,2857 | 0,2035 | 0,0000 | 0,5833 |
| PCT_GENDER | 11.987 | 0,1676 | 0,1538 | 0,1207 | 0,0000 | 0,3333 |
| BOARD_SIZE | 11.987 | 2,2141 | 2,1972 | 0,2729 | 1,9459 | 2,5649 |
| CEO_DUAL | 11.987 | 0,3236 | 0,0000 | 0,4679 | 0,0000 | 1,0000 |
| EMPLOYEES | 11.987 | 8,7877 | 8,9134 | 1,7989 | 6,4329 | 11,0021 |
| FIRM_AGE | 11.987 | 3,1904 | 3,1781 | 0,8533 | 2,0794 | 4,4067 |
| LEVERAGE | 11.987 | 0,2469 | 0,2420 | 0,1677 | 0,0041 | 0,4711 |
| LAG_ZSCORE | 11.987 | 4,0002 | 2,8236 | 4,5817 | 0,9505 | 7,7399 |
| MTB | 11.987 | 3,7161 | 2,4146 | 4,3191 | 0,8405 | 7,6481 |
| ROA | 11.987 | 0,0778 | 0,0750 | 0,0943 | 0,0043 | 0,1753 |
| SALES_GR | 11.987 | 0,0706 | 0,0387 | 0,2991 | -0,1528 | 0,2816 |

For a first look at how ERC firms differ from non-ERC ones, we present univariate comparisons. In Table 4, tests are reported for equality of the means (Student-t test) and of the

medians (Wilcoxon test). The results show that ERC firms show lower level of director compensation and salary gap than non-ERC firms.

Table 4. Univariate analysis – ED firms vs. non-ED firms

| | Non-ED firms | | | ED firms | | | Wilcoxon test | |
|------------|--------------|---------|---------|----------|---------|---------|---------------|-----------------|
| | N | mean | median | N | mean | median | t-test p | Wilcoxon test p |
| DR_COMP | 11.854 | 11,5857 | 11,8053 | 133 | 11,0053 | 11,0546 | 0,0000 | 0,0000 |
| SALARY GAP | 5.916 | 3,9880 | 3,8424 | 113 | 3,4376 | 3,4717 | 0,0001 | 0,0000 |

To economize on space, we do not tabulate correlations between variables. With the exception of a 0.44 correlation between

PCT_RETIRE and LN_TENURE, all correlations among the explanatory variables in the regression are low.

3.2.3. Model specifications

To test our hypotheses, we modeled director compensation and salary gap as a function of

$$Compensation_{i,t} = \beta_0 + \beta_1 ED_CC_{i,t} + \beta_2 BOARD_TYPE_{i,t} + \beta_3 (ED_CC_{i,t} * BOARD_TYPE_{i,t}) + Control\ variables + Country, Industry, Year\ Fixed\ effects$$

In this paper, we employ simultaneous quantile regressions to investigate the relation between ERC and director compensation and salary gap shown on the above equation. In contrast to typical OLS linear regression in which the dependent variable is the mean, our quantile regression uses a quantile (e.g., 10th, 25th, 50th, 75th, and 90th) as the dependent variable. Quantile regression is based on minimizing asymmetrically weighted absolute residuals, and estimates models for the full range of conditional quantile functions. By using this approach one can detect any heterogeneity in the employee representation effect over director compensation and salary gap since regression parameters are allowed to vary across different points in the conditional distribution. This method can be useful to explore whether the effect of employee representation on director compensation and salary gap varies depending on the quantile chosen. As Koenker and Xiao (2002: p. 1583) suggest “by supplementing least squares estimation of conditional mean functions with techniques for estimating a full family of conditional quantile functions, quantile regression is capable of providing a much more complete statistical analysis of the stochastic relationships among random variables” [22].

ERC, board type, an interaction between ERC and board type, and control variables. We also control fixed effects of industry, country, and year. The full model is the following:

4. Empirical results

Panel A of Table 5 presents the results of quantile regressions. We find strong evidence that ERC is significantly associated with the two compensation (dependent) variables, especially ERC has a greater effect on the upper tail of the compensation and salary gap distribution. Specifically, the coefficients of ED_CC in Model 1 (director compensation) are negative and statistically significant in most of quantiles except the quantile 25th, and the magnitude of these coefficients increases across the quantiles 50th, 75th and 90th. We observe the same patterns for Model 2 (salary gap) but they are only statistically significant for the last three quantiles. These results suggest that allowing employees to voice their opinions in compensation committees limits excessive director compensation and salary gap between CEO’s total salary (or the highest salary) and other employees, in line with predictions in Hypothesis 1. Moreover, the results are fairly clear that the negative association between ERC and director compensation and salary gap is much stronger as we move up the compensation ladder. That is, ERC appears to significantly limit the upper tail of the pay distribution much more than the lower tail, as Jensen and Murphy (1990) predict.

Table 5. Dual-IMR Heckman estimates of the relation between ERB and earnings opacity

| | | Model 1 (DR_COMP) | | Model 2 (SALARY_GAP) | | |
|-------------------------------------|-----|----------------------|-----------|-------------------------|---------|---------|
| | | se | b | se | se | |
| Panel A: Quantile regression | q10 | ED_CC | -0.433* | (0.247) | -1.192 | (0.737) |
| | q25 | ED_CC | -0.332 | (0.224) | -0.373 | (0.255) |
| | q50 | ED_CC | -0.401*** | (0.105) | -0.421* | (0.223) |

| | | | | | |
|--------------------------------|---------------------------------|-----------------------|---------|-----------------------|---------|
| q75 | ED_CC | -0.410 ^{***} | (0.121) | -0.498 ^{**} | (0.235) |
| q90 | ED_CC | -0.702 ^{***} | (0.234) | -0.837 ^{***} | (0.275) |
| Interaction | | | | | |
| q10 | BOARD_TYPE | -0.045 | (0.038) | -0.148 [*] | (0.077) |
| | ED_CC*BOARD_TYPE | 0.207 [*] | (0.122) | 0.503 ^{**} | (0.252) |
| q25 | BOARD_TYPE | -0.058 ^{***} | (0.015) | -0.141 ^{***} | (0.036) |
| | ED_CC*BOARD_TYPE | 0.203 [*] | (0.112) | 0.079 | (0.111) |
| q50 | BOARD_TYPE | -0.047 ^{***} | (0.014) | -0.109 ^{***} | (0.039) |
| | ED_CC*BOARD_TYPE | 0.224 ^{***} | (0.047) | 0.149 | (0.105) |
| q75 | BOARD_TYPE | -0.032 | (0.021) | -0.061 | (0.049) |
| | ED_CC*BOARD_TYPE | 0.173 ^{**} | (0.069) | 0.110 | (0.100) |
| q90 | BOARD_TYPE | -0.056 | (0.041) | -0.045 | (0.066) |
| | ED_CC*BOARD_TYPE | 0.206 ^{**} | (0.102) | 0.170 | (0.132) |
| q50 | Control variables | | | | |
| | PCT_INDEPEND | 0.882 ^{***} | (0.047) | 0.169 [*] | (0.093) |
| | PCT_FINEXPERT | 0.148 ^{***} | (0.038) | 0.218 [*] | (0.129) |
| | LN_TENURE | -0.038 ^{***} | (0.009) | 0.064 [*] | (0.033) |
| | LN_SHAREVALUE | 0.021 ^{***} | (0.002) | 0.050 ^{***} | (0.006) |
| | PCT_BUSY | 0.328 ^{***} | (0.027) | 0.102 | (0.072) |
| | PCT_RETIRE | 0.102 ^{***} | (0.025) | 0.155 [*] | (0.094) |
| | PCT_GENDER | 0.163 ^{***} | (0.057) | -0.256 | (0.158) |
| | BOARD_SIZE | 0.198 ^{***} | (0.028) | 0.119 ^{**} | (0.056) |
| | CEO_DUAL | -0.061 ^{***} | (0.010) | -0.055 | (0.040) |
| | EMPLOYEES | 0.092 ^{***} | (0.005) | 0.344 ^{***} | (0.012) |
| | FIRM_AGE | 0.002 | (0.005) | 0.006 | (0.019) |
| | LEVERAGE | 0.088 ^{***} | (0.033) | 0.180 | (0.144) |
| | LAG_ZSCORE | 0.006 ^{***} | (0.001) | 0.009 ^{**} | (0.005) |
| | MTB | 0.003 ^{***} | (0.001) | 0.014 ^{**} | (0.006) |
| | ROA | -0.261 ^{***} | (0.062) | 0.294 [*] | (0.165) |
| | SALES_GR | 0.062 ^{***} | (0.014) | 0.052 | (0.050) |
| | _cons | 9.709 ^{***} | (0.073) | -0.918 ^{***} | (0.164) |
| | <i>Fixed effects</i> | C, I, Y | | C, I, Y | |
| | <i>N</i> | 11.987 | | 6.093 | |
| | Pseudo. <i>R</i> ² | | | | |
| | q10 | 0.5354 | | 0.3093 | |
| | q25 | 0.5123 | | 0.3071 | |
| | q50 | 0.4477 | | 0.2954 | |
| | q75 | 0.3182 | | 0.3023 | |
| | q90 | 0.1921 | | 0.3389 | |
| Panel B: OLS regression | | | | | |
| | ED_CC | -0.483 ^{***} | (0.167) | -0.488 | (0.307) |
| | BOARD_TYPE | -0.077 ^{***} | (0.019) | -0.083 ^{**} | (0.039) |
| | ED_CC*BOARD_TYPE | 0.215 ^{***} | (0.074) | 0.148 | (0.137) |
| | Adjusted. <i>R</i> ² | 0.5844 | | 0.4562 | |

Notes: For the definitions of the variables, see Table 2. ED_CC refers to employee representation on the compensation committee. Bootstrapped standard errors are shown in parentheses next to regression coefficients. Significance indications *, **, and *** correspond to $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, all two-tailed. C, I, Y refer to country, industry, and year fixed effects. For brevity, the results of control variables are shown only for the 50th quantile regression.

Regarding the moderating effect of board structure, the coefficients on the interaction (ED_CC*BOARD_TYPE) are significantly positive in all quantiles for Model 1 and in only quantile 10th for Model 2, providing evidence that the relation between ERC and director compensation and salary gap is moderated by board type. When BOARD_TYPE receives a value of 1 (i.e., unitary board), the total mitigation effect of ED_CC is always stronger than it is as compared to the other values of BOARD_TYPE (i.e., mixed board and two-tier board). The results support Hypothesis 2, implying that the mitigation effect of ERC on director remuneration and salary gap is more pronounced in firms with a unitary board structure.

A quick look at the Panel B of Table 5, the results of OLS regression do not provide a comprehensive picture, especially for the salary gap model, the coefficient of ED_CC is not statistically significant. This suggests that using quantile regressions is important for this study.

In terms of governance control variables, board characteristics seem to matter but their relation with different measures of compensation is not clear and quite puzzling. Firms with more independent, financial expert, longer-tenured, or more female directors, larger size, more shares held by directors, and more multiple directorship have higher level of director compensation and salary gap.

Related to the firm control variables, the results show that larger firms with higher leverage ratio, higher sale growth, higher market value, and higher financial distress have higher level of director compensation and salary gap. For each of the rest of firm-characteristic control variables, its effect is quite mixed across models.

5. Discussion and conclusion

In this paper we find evidence that ERC is associated with lower levels of director compensation and the gap between CEO's total salary (or the highest salary) and average salaries and benefits. The mitigation effect of ERC is also found to be stronger the higher-up in the CEO compensation distribution ladder one moves. Additionally, this effect is more pronounced in firms with a unitary board structure. These findings provide empirical support for Jensen and Murphy (1990) 's prediction that "truncating the upper tail of the payoff distribution requires that the lower tail of the distribution also be truncated in order to maintain levels of compensation consistent with equilibrium in the managerial labor market" [16]. Moreover, these results not only reveal a new attribute of compensation committee in listed firms but also confirm what employee representatives can do when they have a seat on compensation board rooms. As institutional channels of employee voice, employee representatives appear to impose constraints on other directors' as well as CEO's compensation, especially at the upper end of the compensation structure. It implies that ERC may indeed operate as a "fairness factor and/or implicit regulator", translating workers' desire for reduced intra-firm wage dispersion into reality. The presence of employee representatives on compensation committees could therefore be one important factor to consider in corporate governance to ensure a more compressed distribution of income inside the firms.

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