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Board Compensation and Firm Performance: The Role of "Independent" Board Members

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european corporate governance institute

ECGI Working Paper Series in Finance

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Working Paper N°. 104/2005

October 2005

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Abstract

This paper examines the link between firm performance, board structure and top executive pay. We use a panel of firms from the Portuguese Stock Market, where the institutional context differs markedly from the U.K. and U.S., but is very similar to most other European countries. The standard organizational structure is a single-tier board, which includes the CEO as well as executive and non-executive members. The results confirm a large effect of firm size on top executive compensation. However there is no relationship between the board remuneration and company performance. We examine whether the governance structure of companies is relevant in influencing top executive pay. Specifically, we consider the role of non-executive board members as mediators of the management and shareholders relationship. Our results suggest that firms with more non-executive board members pay higher wages to their executives. Furthermore, we find that firms with zero non-executive board members actually have less agency problems, and have a better alignment of shareholders' and managers' interests. These results cast some doubts on the effectiveness of independent board members incentive systems, and on their stated monitoring role.

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1. Introduction

The growth in executive pay over the past decade has increased the attention given to the subject of executive compensation. Around the world, there is now a debate about the levels and quality of publicly traded companies' compensation arrangements (e.g., Bebchuk and Fried (2003), Hall and Liebman (1998), Conyon and Murphy (2000)). This topic became even more salient after the recent corporate scandals, and the important role that top executives played in them.

This paper contributes to the assessment of the executive pay landscape by examining the determinants of executive pay in a typical Continental European setting. In particular, we look at top executive compensation of companies listed in the Euronext Lisbon (Portuguese Stock Exchange), where companies' boards are commonly organized in a single-tier structure. We investigate the determinants of managerial compensation, with a special emphasis on the relation between compensation and firm performance. Portuguese listed firms have a wide variety of board structures and compositions. We investigate their implications, particularly the role of non-executive board members.

Several studies have examined the relationships between measures of firm performance and top manager pay in the U.S.. Murphy (1999) provides a thorough review of the executive compensation literature, with an emphasis on U.S. data. Outside the U.S., there is limited evidence on the determinants of managerial pay. Kaplan (1994) compares Japanese and U.S. incentives, and finds that incentives are broadly similar. Conyon and Murphy (2000) compare executive pay in the U.S. and U.K., and find that the determinants are similar, although the institutional environment fosters very different magnitudes in the pay levels and relationships with size and performance.

Looking outside the U.S. may provide out of sample evidence of the results found there. In addition, it is interesting to check whether the main results are robust in a different setting, with very different institutional environment and firm governance structure. The corporate

board structure in Portugal is very different from the U.S., but very similar to most European countries. There is a single-tier system, without a separate supervising board. The single board comprises the CEO, other executive managers as well as non-executive directors. In this single-tier system, non-executive board members' prescribed role is to protect shareholders interests in key decisions of the company. They have the duty to fill the gap between uninformed shareholders and informed executive managers.

We find that the size of the company is the main determinant of executive compensation. Indeed our results suggest very large elasticities of pay relative to size (much larger than previous research has found in the U.K. or U.S.). However, performance is not associated with pay levels. For the empirical analysis we consider both aggregate management compensation, as well as its components: fixed and variable compensation. Not even when we look at the variable component of pay is executive compensation related to shareholders' wealth or accounting measures of performance. Our results are robust to a "changes" specification that addresses inference problems associated with a "levels" specification because of omitted variables. We use several control variables, most of which have the expected results. Importantly, we find that company risk is not a significant determinant of compensation. Together with the fact that compensation is not associated with performance, this suggests an important disconnect between managers' and investors' interests, which can pose serious problems for the future health of these companies.

We find an important role of non-executive board members in influencing pay levels. Contrary to expectations, top-executive remuneration is higher when companies have more non-executive board members. Also, we find that non-executive board members are not very successful in aligning shareholders and managers interests. Surprisingly, we find that firms with zero non-executive board members actually have a stronger relationship between executive remuneration and firm performance. These results suggest that to foster the board of directors' effective monitoring role, special attention needs to be paid to the role, quality and integrity of their non-executive directors. In particular, their real independence should be guaranteed.

Finally, our results cast some doubts on the effectiveness of some commonly used governance ratings. In theory, most companies in our sample have a good governance system, with a significant number of non-executive directors, and a substantial share of executive compensation in variable terms. In practice, neither variable compensation reflects firm performance nor non-executive directors help to align management and shareholders' interests.

The rest of the paper is organized as follows. Section 2 describes the data and institutional background to top management pay systems in Portugal. The results are discussed in Section 3. Section 4 concludes the paper and discusses the implications of our study for the governance of publicly trade companies.

2. Board Composition and Compensation Data

Besides the U.S., not many countries in the world require companies to disclose top management pay. In Portugal, the stock market regulator (CMVM) has introduced in 2001 several corporate governance recommendations. One of these is that listed companies must disclose in their Annual Governance Reports (part of their Annual Reports), the payments to the top executives. Each company reports the following data: total board pay, executive board members pay, and non-executive board members pay. In addition, the compensation is broken down into fixed and variable components for each type of board member.

Our sample consists of all firms listed in Euronext Lisbon. For each firm, we hand-collect data on compensation from the companies' Annual Reports and Annual Governance Reports. Our final sample consists of 58 companies that are (were) listed in Euronext Lisbon from 2002-2004. Table 1 reports the distribution of firm/year observations across industries and size categories.

Following Conyon and Murphy (2000) we categorize firms into four broad industry groups: manufacturers, utilities, financial services and others. Manufacturing is the largest group, with

40% of the observations. Finance sector comprises 15% of the sample, but they account for 30% of the total market capitalization.

We categorize companies into three size groups (large, medium, small) based on their market capitalization. "Large" firms are the top 20%, "Small" firms the bottom 20%. Between percentiles 20 and 80 of market capitalization, we classify the firms as "Medium". The cuts are made based on each company median market capitalization in the sample period.

A number of control variables are part of our empirical design. Accounting performance, firm size and book-to-market equity ratio are from Worldscope. Stock price and dividend payment information are from Datastream. We also obtain historical information on index constituents from Euronext Lisbon. The main Portuguese index contains 20 companies. Together, these firms (also known as PSI 20 constituents) constitute more than 80% of the total market capitalization of the Portuguese market.

Management structure in Portuguese listed companies is similar to many other European countries. There is a single-tier structure. The corporate board of the company includes the CEO and a varying number of other board members that can be either executive or non-executive. Each executive board member oversees different functional areas of the company (finance, marketing, human resources, strategy, etc.). Non-executive board members have an assigned role of monitoring management of the company, filling the gap between uninformed shareholders and fully informed executive managers.

Table 2 reports summary statistics of the number of board members companies have, including their composition (executives / non-executives). A typical board has approximately 8 members (5 executive and 3 non-executive). Board size varies widely across companies. Large companies have significantly larger boards, both in terms of executives and non-executive board members. Companies that belong to the main index have on average 11 board members, whereas smaller firms, that do not belong to the PSI20 have 6. The composition of boards also varies. On average, boards include 33% non-executive board members, but within our sample, almost one-third of the companies have no non-executive director. The maximum percentage

of non-executive board members is 80%. Though board size clearly increases with company size, the trend is even more clear for non-executive board members. Indeed, small companies have on average less than 2 non-executive board members, whereas large companies have almost 8.

We define the executives' total compensation in a given year as the sum of the executives' salary (fixed part) and bonuses (variable component). Stock options granted to the executives are not included into the variable component, because firms are not required to disclose an euro value for these plans. Thus, like much of the literature, the annual compensation figures we use do not include a source of additional compensation for many executives. However, the omission of these less visible forms of compensation may not pose as serious a problem as in the case of the U.S.. Over the time period under consideration, these forms of compensation are not as wide-spread in Portugal as in the U.S. Anyway, the omission of these forms of compensation would not be a problem insofar as movements in these forms of compensation and cash compensation are correlated (Kaplan (1994)).

Table 3 reports summary statistics of the compensation variables for the different company sizes. Panel A focuses on Total Board Compensation. On average the board of a company is paid 2.400.000 euros a year. Total pay clearly increases with firm size. In 2004, the mean pay for large companies is 7.400.000 euros, far larger than the 430.000 mean pay for small companies. Panel B reports the Average Compensation per Board Member. Although large companies have much larger management boards, the per-capita results still confirm the well-documented pay/size relation. On average a board member of a large company earns 650.000 Euros, whereas in small companies their total salary is around 70.000 Euros. Among PSI 20 firms (the main index of Euronext Lisbon Stock Exchange), total board compensation is on average 4.8 million Euros, and average per capita compensation is 480.000 Euros. For firms that do not belong to the index, these values are on average 4 times lower.

The numbers on total compensation above include fixed and variable components. In Panel C we report the share of Fixed-Based Compensation as a percentage of Total Compensation.

Interestingly, smaller companies rely much more on fixed compensation. For small companies 97% of the compensation is from the fixed salary component. For medium and large companies the share of the fixed component is lower, 82% and 57% respectively.

Table 3 reports total board compensation, which aggregates executive and non-executive board members. In Tables 4 and 5 we present the descriptive statistics for components of compensation, separately for executive and non-executive board members.

As expected, executive board members have much larger wages, both fixed and variable. Executive members receive in this sample period an average of 385.000 per year (Table 4, Panel B), and a significant part of it comes from the variable component - 23% (Table 4, panel C). The overall level of pay of executive members is in line with pay levels in the U.S. or U.K.. For example, Conyon and Murphy (2000) report an average pay of GBP 291,000 in the U.K. and 317,000 in the U.S.. Large companies pay executive board members around 1 Million euros a year, whereas small companies pay 10 times less (around 100.000). The structure of pay also differs significantly across sizes. Board members of large companies receive almost 50% variable compensation, whereas in small companies, most of the compensation if fixed.

Table 5 reports average pay levels and structure of non-executive board members. From Panel A we see that on average companies spend around 200.000 Euros a year with their non-executive board members wages (530.000 in large companies, and 35.000 in smaller ones). In Panel B we see that the average pay to each of these board members is 55.000, most of which is fixed. Across all sizes, less than 10% of non-executive board members' wages comes from the variable component (Panel C). There are some trends however. Over the time period, companies have more non-executive board members, and they pay them more as well. On average, in 2002 a company had 2 non-executive board members, which rose to 5 in 2004. The size effect of managerial pay is also very pronounced. Non-executive board members of large companies receive on average 57.000, and in small companies the average pay to a non-executive director is 17.000. Looking at index membership provides even sharper contrasts.

6

Companies that belong to the main index pay on average 92.000 to each non-executive board member, whereas companies that do not belong to the index pay four times less.

3. What Determines Executive Compensation

In this section we study the determinants of managerial compensation in this single-tier environment. We analyze the roles of company size and performance in influencing managerial compensation. In addition, we study other determinants of compensation, such as industry, risk and growth of a company. Given the data on board structure, we investigate the potentially disciplinary role that non-executive board members have in influencing compensation and incentive schemes.

3.1. Pay - Size Relation

One of the most consistent findings in the executive compensation literature is the relation between pay and company size. The summary statistics of Table 3 to 5 show similar results: main index constituents and large firms pay much larger sums to their managers. Underlying this size effect is the notion that bigger companies require better managers. The costs in shareholder wealth of incorrect decision-making are directly related to the size of a company. Also, larger firms have more complex operations that make monitoring more difficult (Demsetz and Lehn (1985)) and increase the potential for moral hazard. The additional complexity of larger firms requires more able managers who have higher equilibrium wages (Baker and Hall (2004)).

Following the literature (e.g., Core, Holthausen and Larcker (1999)), we use sales to control for size[1]. In order to understand how executive pay varies across different sized companies, we estimate the following regression equation:

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[1]All the results of this paper hold when assets are used as an alternative measure of size.

$$\log(PAY_{i,t}) = \alpha + \beta \log(SIZE_{i,t}) \tag{1}$$

Where *PAY* is the total board pay, *SIZE* is total company's sales within the year. The coefficient β represents the elasticity of board compensation to company size.

Table 6 presents the results of estimations across different samples. Across all firms (Row 1), the elasticity pay-size is 0.51 when total compensation is considered, and 0.39 when analyzing only the fixed component of management compensation. These estimates indicate that doubling firm size, increases total board pay by approximately 50%. Though company size is an important determinant of pay around the world, these results suggest that the rewards for scale are more pronounced in Portugal than in the U.S. or even the U.K.. Conyon and Murphy (2000) estimate an elasticity of total pay for the U.S. of 0.30, while for the U.K. is around 0.20.

Rows 2 to 5 report the estimated elasticities by industry group, and suggest a wide range in the size premium across different sectors. The estimated pay-size elasticities are all positive and statistically significant. Estimates of elasticity of total compensation range from 0.34 (Others) to about 0.75 in the financial sector.

We separately estimate (1) for different compensation variables, and the different board members. We present the pay-size elasticities of these different estimations in Table 7. Columns (1)-(3) use as dependent variable total compensation of all board members, whereas columns (4)-(6) use per-capita compensation. Regarding executive members of the board, we can see that their total pay has an elasticity of 50% to firm size. However, the separate components of compensation react differently to changes in size. The elasticity of the variable compensation is much larger than the fixed one (64% vs. 36%), suggesting that a significant portion of the pay differential of large vs. small firms comes from the variable compensation part. The third row reports results of a regression of compensation of non-executive board members on firm size. Interestingly, non-executives' wage is also very sensitive to company size (more

8

than 0.60 elasticity). This is consistent with the statistics of Table 5, which show that large companies, and companies that belong to the main index pay non-executive directors four times more than smaller companies. Columns (4)-(6) look at per-capita compensation. The basic results are unchanged, though the magnitude of the coefficients is smaller. The elasticity of non-executive compensation to company size is larger than the one of executives, and the variable component of pay is significantly more influenced by company size than the fixed part. This is consistent with the evidence from Tables (3) and (4), where it is shown that larger companies rely much more on variable compensation than smaller ones.

3.2. Pay - Performance Relation

One of the main goals of effective corporate governance is to solve the agency problem suggested by Jensen and Meckling (1976). Firm managers often have goals that conflict with the interests of shareholders. Agency theory suggests that it is good for shareholders to align incentives of managers with their own. The typical principal-agent model suggests that shareholders should contract with managers' compensation that is related to the actions they take. Since actions are not directly observable, a contract that aims to maximize shareholders objectives must be devised. One way to do this (align the interests) is to make managers' compensation a function of firm performance (Murphy (1985), Kaplan (1994)).

The executive compensation literature (see review by Murphy (1999)) suggests that compensation should be related to measures of stock-based performance, not only because this is the desired by shareholders, but also because high stock returns should signal positive information on the actions taken by managers.

We begin by exploring the relationship between levels of salary and bonus and firm performance. We estimate the following regression equation:

$$\log(PAY_{i,t}) = \alpha + \beta \log(RET_{i,t}) \tag{2}$$

where $PAY_{i,t}$ is the annual pay to executives of Firm i in Year t, and $RET_{i,t}$ is the annual stock return of their firm.

Panel A of Table 8 reports the results of pooled time-series cross-sectional regressions of the level of compensation on stock market performance. The first column presents the results of a regression where the dependent variable is the annual total board compensation. The elasticity of salary and bonus with respect to changes in firm value is about 0.06, and insignificantly different from 0. The second column reports results for a regression of fixed salary of all board members, and the third column examines their variable component of compensation. Column (4) reports the results when the dependent variable is the per-capita average compensation of board members. The coefficients on performance are always insignificant. Whether we look at total, fixed or variable compensation, the results suggest that board compensation is not significantly related to firm performance.

The analysis is repeated in Columns (5) to (8), using the compensation of executive members of the board as dependent variable. Looking only at executive members of the board does not change the basic results: compensation does not seem to reflect changes in shareholder wealth. The pay-performance sensitivities range from -0.16 to 0.19 depending on the compensation indicator used, but are never significant.

The results above are based on a "levels" specification, which could be affected by omitted variables and other biases. Thus, to further test pay-performance sensitivities we examine changes in management compensation. Our procedure is similar to Jensen and Murphy (1990) and we consider a "changes" version of specification (2) wherein we relate changes in compensation to firm performance:

$$\Delta \log(PAY_{i,t}) = \alpha + \beta \log(RET_{i,t}) \tag{3}$$

where $\Delta \log(PAY_{i,t})$ is the annual rate of growth of Pay of Firm i in Year t, and $RET_{i,t}$ is the annual stock return. In short, Equation (3) simply states that growth in management

10

pay depends on their firm's performance. Panel B of Table 8 presents the results of this specification.

The results of the changes regressions are very similar to the results of Panel A (levels). In particular, the conclusions for the performance are unaffected. Whether looking at the total board, or only at executive board members, the results of Table 8 suggest that changes in compensation are not associated with changes in shareholder wealth.

The previous results are obtained in a univariate regression. We now control for other factors known to affect compensation. First, we control for firm size. The most consistent result from different studies of managerial pay is that firm size is positively and significantly associated with compensation levels. Given the evidence of the previous section, we also expect size to be a major determinant of the board compensation. Second, we control for a firm's level of risk. Aggarwal and Samwick (1999) find that the return variance is an important determinant of the level of remuneration and this was robust across other measures of firm risk. This fits with principal agent theory since risk averse executives demand higher salaries and less comprised as performance-based when risk is high in order to bare less of the risk. We introduce the volatility of share price returns as a proxy for risk as an additional control variable.

Third, we control for the effect of investment opportunities, as firms that grow more presumably need better managers and are ready to pay them more. We use the Book-to-Market ratio as an inverse of a proxy for growth opportunities.

In addition to the above control variables, we investigate the role of board composition in influencing managerial compensation. The board structure variables may play some role in shaping the structure of the total board pay. A higher proportion of non-executive board members may imply greater monitoring so that executives' pay is set at a lower rate. Alternatively if there are few executive board members they may have more roles and responsibility and actually require higher remuneration. We introduce as additional regressors the total size of the board, as well as the proportion of non-executive board members.

11

We use industry dummy variables (IND) to capture unexplained variations across industries. The industries are industrial and manufacturing, financial, public utility, and other sectors. We also control for index membership, by introducing a dummy that equals one if a certain company belongs to the main index in a certain year.

To study determinants of executive compensation, and the role of performance in a multivariate setting, we estimate the following equation:

$$\log(PAY_{i,t}) = \alpha + \delta_1 \cdot \log(RET_{i,t}) + \delta_2 \cdot SIZE_{i,t} + \delta_3 \cdot RISK_{i,t} + \delta_4 \cdot BTM_{i,t} \tag{4}$$
$$+ \delta_5 \cdot INDEPENDENT_{i,t} + \delta_6 \cdot N_{i,t}^{total} + \delta_7 \cdot D_{i,t}^{PSI20} + \theta \cdot INDUSTRY_{i,t}$$

where $PAY_{i,t}$ is the annual pay to executives of Firm i in Year t, and $RET_{i,t}$ is the annual stock return. $SIZE$ is the log of total sales, $RISK$ is the standard deviation of monthly stock returns within the year, BTM is the Book-to-Market ratio (inverse proxy for growth opportunities), N^{total} is the total number of board members and $INDEPENDENT$ is the fraction of non-executive members in the company board. D^{PSI20} is a dummy for index membership. θ are the coefficients on the industry dummies[2].

Table 9 reports estimates of Equation (4) using these additional controls. Companies do not pay more to their managers when the company performed well. The basic results from the univariate analysis remain. Board compensation is not significantly related to shareholders performance (columns (1) to (4)). In columns (5) to (8) the dependent variable is executive board members compensation, in its' separate components: Total, Total per-capita, Fixed per-capita and Variable per-capita. The main result remains. Even when we look only at the variable component of management pay (column (8)), the results indicate that changes in shareholders' wealth are not a significant determinant of compensation of executive board members.

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[2]The dummy coefficients are normalized so that they can be interpreted as deviations from the overall sample average (Suits (1984)).

The proxies for size and growth are always significant and enter the different compensation regressions with the predicted signs. Companies with lower book-to-market ratios (growth-firms), pay their managers relatively more, though the coefficients are not always significant. Firm size has positive coefficients and large t-statistics. These results confirm the results of previous studies in the executive compensation literature (e.g. Murphy (1985), Core, Holthausen, and Larcker (1999), Himmelberg, Hubbard, and Palia (1999)).

The coefficient on risk is not significant, suggesting that it is not a significant determinant of board compensation. The results are similar for the executive board members[3]. Overall, the results suggest that managers are not compensated for managing riskier companies.

The coefficients on the *INDEPENDENT* variable merit some attention. When looking at the total board (columns 1 to 4) the results suggest that total board pay slightly decreases when it includes more non-executive board members. This is natural, since in section 2 we reported much lower pay levels for non-executive board members, and mostly fixed. Interestingly, non-executive board members seem to have an impact on the pay level of executive managers. When we look at per-capita compensation of executives (Table 9 - Columns (6) to (8)), the results suggest the the individual pay of each executive director is higher when there is a large fraction of non-executive members in the board. Total pay to executive board members, and particularly the fixed component of salary increases significantly when boards include more non-executive board members (Column (7)). These findings contradict prior expectations from agency theory. If the number of non-executive board members is used as a proxy for the level of monitoring then the expectation is that the pay of the executive board members is negatively related to it. Nevertheless, these results are consistent with previous findings for the U.S. and U.K.. Core, Holthausen, and Larcker (1999) and Cosh and Hughes (1997) have explored the issue of executive compensation and the structure of the board though both in the context of an individual director's pay rather then the whole board. Their results suggest that larger boards pay their CEO more. They also found that in firms with a higher proportion of non-executives

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[3]Unreported results using idiosyncratic risk of each company as an alternative proxy for risk provide similar results. Stocks with high idiosyncratic risk actually pay less to their managers, controlling for the other factors.

the CEO was paid more. Cosh (1997) using a set of U.K. firms also found that firms with a higher proportion of non-executives paid their CEO more.

The financial firms coefficients are always positive and significant. Controlling for other factors that affect compensation (size, risk, etc.), the estimated coefficients indicate significant premiums for executives in the finance sector. The results are similar when one looks only at executive board members. Controlling for all the other factors, executives in the financial sector are paid 50% more relative to their peers. Looking at the individual components of pay, we find that most of the premium enjoyed by finance executives is in their variable salary. The fixed salary is not significantly higher than in other sectors, but the variable component is much larger (70%).

In addition to the above mentioned size effect, we find that index membership significantly influences managerial wages. Indeed, the coefficients on the index membership dummy (*PSI*20) suggest that, controlling for all the other company characteristics (including size) and industry groups, wages of board members of PSI20 companies are paid 30-40% more than other managers. This index membership effect suggests a very different labor market for executives of top companies. Given the probable additional regulatory oversight, visibility of the company and investor relations of index members, they reward their managers with much higher wages.

One alternative explanation for the lack of pay-performance relationship is the possibility that companies do not use financial markets as their main financing source, and thus stock prices are not deemed appropriate measures of firm performance. We test this hypothesis by considering accounting measures of performance, namely Return on Equity (ROE) and Return on Assets (ROA). Table 10 reports the pay-performance coefficients of this multivariate analysis using ROE as the performance metric. The main results are unchanged. Table 11 reports the results of the multivariate estimation using ROA as independent variable. The conclusion remains[4]. There is no significant relationship between compensation and accounting

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[4]The results are similar using lagged ROE and ROA.

performance. Higher (lower) ROE and ROA are not translated into significantly higher (lower) wages for managers of the company. Furthermore, as in the case of market-based performance measures (Table 9), not even the variable component of management pay is significantly associated with accounting profitability.

3.3. The Role of Non-Executive Board Members

There is a clear trend during the sample period for higher numbers of non-executive members in companies boards. On average, in 2002 a company had 2 non-executive board members, which rose to 5 in 2004. During this period the average pay of these non-executive board members doubled. The evidence from Table 5 suggests a very strong size effect in non-executive pay levels. Indeed, companies that belong to the main index pay on average 92.000 to each non-executive board members, whereas companies that do not belong to the index pay four times less. Together with the fact that index membership significantly increases the number of non-executive board members, this suggests a very particular labor market for non-executives members. As companies reach a certain size threshold, they actively seek (and reward) a higher number of non-executive board members (perhaps to comply with regulators' recommendations and additional visibility of main index companies).

To further examine the monitoring role of non-executive board members, we conduct two sets of estimations. We estimate the multivariate equation (4) separately for firms with and without non-executive board members. Table 12 reports the results of these estimations. Columns (1) and (2) use as dependent variable total board pay. We can see that for the subset of firms with zero non-executive board members, pay levels are actually related to returns. On the other hand, for companies with one or more non-executive board members, the pay-performance relationship vanishes. In columns (3) and (4) we look at the individual pay level of each executive director for these two subsets of firms. The results suggest that executive board members' pay is only related to shareholders performance for those firms with zero non-executive board members. Together with the results from Tables 9-11, these results cast

15

some doubts on the monitoring role of these non-executive board members. Though main index companies rely more and more on non-executive board members (their number doubled in the last 3 years), they do not seem very effective in aligning managers and shareholders interests[5].

Although monitoring is their main prescribed duty, in practice the results question whether they are really able to carry out this "watchdog role" effectively. One possibility that might explain these findings is the lack of a market for reputation. Indeed, if the labor market for non-executive board members is very ineffective (or inexistent), then reputation as effective defenders of shareholders interests is not a serious concern for them. A related problem is their lack of incentives to challenge managers. Given the high wages paid (and relatively low effort required), these non-executive board directorships can be highly attractive positions. Non-executive directors are expected to supervise and be independent from the management team. However, high compensation, together with a lack of labor market suggests that there are few incentives for non-executive directors to really act as guardians of shareholders interests. In practice, they have little to gain from their prescribed role, but a lot to loose.

4. Conclusion

This paper contributes to the executive pay literature by examining the determinants of top executive compensation of companies listed in the Euronext Lisbon (Portuguese Stock Exchange). We investigate the determinants of managerial compensation, with a special emphasis on the relation between compensation and firm performance. Though there is a wide variation the board structure and composition, Portuguese boards have distinct features, that are common across Continental Europe. Our dataset allows us to investigate the role of non-executive board members in mediating shareholders' and managers' relations and interests.

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[5]Regressing compensation on all variables used in Table 12, plus an interaction of *Return* and *Independent* provides exactly the same results. As the fraction of non-executive members increases, the pay-performance relation disappears.

Broadly, our evidence is consistent with a strong size factor in executive compensation, as well as a significant premium for executives in the finance sector. However, our results suggest that company performance is not significantly related to executive compensation. We also find that the risk of a company, measured by the standard deviation of stock returns is not a significant determinant of pay. This is consistent with the non-existent pay-performance relation. Neither is pay related to shareholders' wealth, nor is managerial pay related to the risk of the equity holders. Managers are not compensated for managing riskier companies, which is natural, since they are not compensated (penalized) by good (bad) returns to shareholders equity. Interestingly, not even variable compensation is related to performance, either market-based, or accounting based. Based on the raw data, variable compensation represents a substantial share of total compensation. In practice, our results suggest that variable compensation is very rigid, and indeed not very variable.

Looking at board composition, we find that non-executive board members do not have a strong monitoring role. Wages are higher when companies have more non-executive board members. Furthermore, our estimations suggest that companies with zero non-executive board members actually have a stronger alignment between managers and shareholders interests.

Given our results, the main goal of corporate executives is to enlarge their companies. Indeed, the size premium found is much larger than other studies have documented for the U.S. and U.K.. Also, there is a very significant premium for executives of companies that enter the main stock market index, both for executives, and non-executive board members.

Overall, the results suggest an important disconnect between investors and managers rewards. Compensation is not related to shareholders wealth, nor do shareholders have any mechanism to influence it. Though companies begin to have more non-executive board members, they have a very minor monitoring job. The results actually suggest that very few companies have what is really considered an independent director, that looks after shareholders interests.

These results also raise some doubts on corporate governance ratings/rankings that simply check for the existence of certain features in Annual Reports or organizational structures. In this sample, governance is apparently good, with a large fraction of variable compensation, and a significant number of non-executive directors. However, digging further the real data suggests that what seems variable is not really variable, and that non-executive directors are not really performing their prescribed role.

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Table 1
Description of Sample Firms

This table presents the distribution of firm/year observations across industries and size categories. Columns (1) and (2) report the percentage of observations and market capitalization from that category. Column (3) presents the median market capitalization of firms in each category.

Panel A: Distribution of Firms by Industry

	% Observations	% Market Cap	Median Market Capitalization
Manufacturing	39,44%	20,32%	126.681
Finance	15,49%	28,29%	259.105
Utilities	11,97%	40,94%	1.572.107
Other	33,10%	10,45%	67.196
Total	100,00%	100,00%	128.207

Panel B: Distribution of Firms by Size

	% Observations	% Market Cap	Median Market Capitalization
Large	21,83%	86,14%	2.963.225
Medium	59,15%	13,65%	122.992
Small	19,01%	0,21%	8.670
Total	100,00%	100,00%	128.207

Table 2
Descriptive Statistics for Board Composition

This table presents summary statistics of the number of board members companies have (Panel A), as well as their composition (executives / non-executives). In Panel B we report the mean number of board members of each size category.

Panel A: Descriptive Statistics of Board Composition

	Total	Executive	Non-Executive
Mean	8,2	5,0	3,2
Median	7	5	2
Min	3	1	0
Max	31	13	18
Number of Obs.	142	142	142

Panel B: Average Number of Board Members by Company Size

	Total	Executive	Non-Executive
Large	14,1	6,5	7,6
Medium	7,0	4,9	2,1
Small	5,3	3,4	1,9
Total	8,2	5,0	3,2

Table 3
Descriptive Statistics for Total Board Compensation

This table reports summary statistics of the compensation variables across different company sizes. Panel A focuses on Total Board Compensation. Panel B reports the Average Compensation per Board Member, and Panel C presents the share of Fixed-Based Compensation as a percentage of Total Compensation.

Panel A: Total Board Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	2.279.556	5.014.644	779.669	7.139.259	1.010.909	359.230
2003	2.207.209	4.258.611	839.607	6.658.959	1.359.345	395.440
2004	2.762.412	5.121.513	1.129.188	7.424.178	1.596.011	436.004
Total	2.403.699	4.774.698	904.791	7.076.233	1.326.236	391.043

Panel B: Per Capita Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	251.580	499.715	115.507	681.835	144.564	67.245
2003	251.672	443.600	123.720	613.773	195.845	69.671
2004	302.930	498.610	167.458	650.313	226.256	81.766
Total	267.524	478.948	133.865	649.711	189.499	71.460

Panel C: Fixed-Based Compensation as a % of Total Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	83%	70%	90%	57%	88%	100%
2003	79%	67%	87%	57%	81%	95%
2004	75%	61%	85%	56%	77%	98%
Total	79%	66%	88%	57%	82%	97%

Table 4

Compensation of Executive Board Members

This table reports summary statistics of the compensation variables across different company sizes for Executive Board Members. Panel A focuses on Total Compensation to Executive Board Members. Panel B reports the Average Compensation per Executive Board Member, and Panel C presents the share of Fixed-Based Compensation as a percentage of Total Compensation.

Panel A: Total Executive Board Members Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	2.178.848	4.776.284	754.448	6.874.739	948.912	334.197
2003	2.011.399	3.819.240	806.171	6.026.670	1.256.684	350.855
2004	2.494.154	4.548.993	1.071.573	6.710.350	1.436.930	400.870
Total	2.217.588	4.353.882	867.057	6.548.139	1.217.840	355.800

Panel B: Per Capita Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	357.564	690.557	174.955	939.635	217.631	95.105
2003	358.690	610.432	190.862	854.199	284.774	103.097
2004	447.674	739.284	245.790	975.840	333.265	101.306
Total	385.882	677.368	201.609	923.754	279.356	99.739

Panel C: Fixed-Based Compensation as a % of Total Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	82%	68%	90%	55%	87%	100%
2003	78%	65%	87%	54%	80%	95%
2004	73%	58%	84%	53%	75%	98%
Total	78%	63%	87%	54%	81%	97%

Table 5
Compensation of Non-Executive Board Members

This table reports summary statistics of the compensation variables across different company sizes for Non-Executive Board Members. Panel A focuses on Total Compensation to Non-Executive Board Members. Panel B reports the Average Compensation per Non-Executive Board Member, and Panel C presents the share of Fixed-Based Compensation as a percentage of Total Compensation.

Panel A: Total Non-Executive Board Members Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	100.708	238.360	25.221	264.520	61.997	25.033
2003	195.810	439.371	33.436	632.289	102.661	44.585
2004	268.258	572.520	57.615	713.829	159.080	35.134
Total	186.111	420.816	37.735	528.094	108.397	35.243

Panel B: Per Capita Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	38.618	70.392	18.551	35.987	51.258	14.918
2003	52.328	95.108	16.303	63.007	62.759	16.877
2004	77.905	106.410	45.328	71.289	89.867	25.983
Total	55.894	92.477	24.939	56.521	68.825	17.633

Panel C: Fixed-Based Compensation as a % of Total Compensation

	TOTAL	PSI 20	No PSI 20	Large	Medium	Small
2002	90%	93%	88%	93%	85%	100%
2003	93%	94%	91%	94%	92%	93%
2004	91%	91%	91%	93%	95%	67%
Total	91%	93%	90%	93%	91%	90%

Table 6
Elasticity of Total Board Compensation to Company Size

This table presents the results of univariate estimations of Log Compensation on Log Size. The first four columns present the estimation results for Total Board Compensation, while columns (5)-(8) use only the Fixed Compensation of Board Members. * means significant at 5% and ** significant at 1%.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
	Total Pay				**Fixed Wage**			
	Elasticity	**t-stat**	**Obs.**	**R2**	**Elasticity**	**t-stat**	**Obs.**	**R2**
All companies	0.5126**	14,41	139	0,6025	0.3939**	13,5	139	0,5709
Manufacturing	0.4860**	7,51	54	0,5205	0.4290**	7,25	54	0,5025
Financial Services	0.7319**	8,99	22	0,8016	0.4504**	10,43	22	0,8446
Utilities	0.5459**	7,17	17	0,7742	0.4801**	8,57	17	0,8304
Others	0.3472**	6,72	46	0,5064	0.2549**	5,34	46	0,3934

Table 7

Elasticity of Compensation to Company Size, for Different Board Members and Type of Compensation

This table presents the results of univariate estimations of Log Compensation on Log Size for different components of compensation. The results are presented separately for the whole board, for Executive Board Members and for Non-Executive Board Members. The first three columns present the elasticity estimates for Total Compensation, while columns (4)-(6) use the Per-Capita Compensation. * means significant at 5% and ** significant at 1%.

		(1)	(2)	(3)	(4)	(5)	(6)
		Total Compensation			Per Capita Compensation		
		Total	Fixed	Variable	Total	Fixed	Variable
Total Board	**All**	0.5126**	0.3939**	0.7141**	0.3511**	0.2324**	0.5077**
	t-stat	14,41	13,5	7,75	10,45	8,88	5,36
Executives	**All**	0.4983**	0.3683**	0.6442**	0.3747**	0.2447**	0.5252**
	t-stat	13,8	12,54	6,78	11,04	8,84	5,58
Non-Executives	**All**	0.6646**	0.6369**	0.6147*	0.4442**	0.4143**	0.2067
	t-stat	9,48	9,35	2,63	5,79	5,49	0,94

Table 8: Board Compensation and Performance Univariate Analysis

This table presents the results of univariate regressions of Compensation on Firm Performance. Panel A presents the results for a levels specification, while Panel B uses wage changes as dependent variable. Columns (1)-(4) use different components of Total Board Compensation, while columns (5)-(8) examine only Executive Board Members. Total PC means total compensation (fixed + variable) per-capita. * means significant at 5% and ** significant at 1%.

Panel A: Levels of Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total	Board			Execu	tives	
	Total Pay	Fixed	Variable	Total PC	Total Pay	Fixed	Variable	Total PC
Return	**0,0613**	**0,042**	**-0,6707**	**0,1407**	**0,0684**	**0,0431**	**-0,1682**	**0,1994**
	0,25	0,22	1,32	0,72	0,28	0,23	0,33	0,98
Constant	13.8827**	13.5919**	13.2318**	11.9002**	13.8034**	13.4888**	13.1791**	12.3140**
	133,81	166,04	70,72	144	134,46	170,52	74,35	144,01
Observations	141	141	87	141	141	141	86	141

Panel B: Changes in Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total	Board			Execu	tives	
	Total Pay	Fixed	Variable	Total PC	Total Pay	Fixed	Variable	Total PC
return	**0,1699**	**0,1758**	**-0,1762**	**0,2243**	**0,1662**	**0,1709**	**-0,1822**	**0,1795**
	1,38	1,52	0,63	1,87	1,39	1,54	0,64	1,39
Constant	0.1390**	0.1064*	0.2214*	0.1112*	0.1230*	0,0828	0.2227*	0.1434**
	2,75	2,23	2,1	2,25	2,51	1,82	2,06	2,69
Observations	90	90	51	90	90	90	51	90

28

Table 9: Board Compensation and Shareholders' Wealth

This table presents the results of multivariate regressions of Compensation on Firm Performance. Columns (1)-(4) use Total Board Compensation, while columns (5)-(8) examine only Executive Board Members. Total Pay is the cumulative pay of all board members (or only the executives), Fixed PC is fixed compensation per-capita, Variable PC is variable compensation per-capita, and Total PC means total compensation (fixed + variable) per-capita. Return is the annual performance of the stock, $SIZE$ is the log of total sales, $RISK$ is the standard deviation of monthly stock returns within the year, BTM is the Book-to-Market ratio, N^{total} is the total number of board members and $INDEPENDENT$ is the fraction of non-executive members in the company board. $PSI20$ is a dummy for index membership. The equation is estimated with industry dummies for Manufacturing, Finance, Utilities and Others. Absolute values of T-statistics are presented below the estimated coefficients. * means significant at 5% and ** significant at 1%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total Board				Executives		
	Total Pay	Total PC	Fixed PC	Variable PC	Total Pay	Total PC	Fixed PC	Variable PC
Return	0.1868	0.2106	0.1831	0.5808	0.1994	0.1965	0.1668	0.7592
	1.28	1.52	1.58	1.47	1.35	1.39	1.42	1.6
Size	0.3660**	0.3210**	0.2270**	0.5654**	0.3590**	0.3116**	0.2147**	0.5289**
	8.44	7.78	6.6	5.32	8.19	7.4	6.15	4.95
Risk	0.5291	0.3301	0.2762	-0.7727	0.5251	0.2974	0.2617	-1.0218
	1.09	0.71	0.71	0.28	1.07	0.63	0.67	0.37
BTM	-0.1551	-0.1366	-0.085	-0.5279**	-0.1707	-0.1281	-0.0758	-0.4819*
	1.75	1.62	1.21	2.86	1.91	1.49	1.06	2.6
Independent	-0.4251	-0.4717	-0.4274*	-0.9458	-0.6207*	1.0227**	1.0098**	0.6963
	1.67	1.95	2.12	1.54	2.41	4.14	4.93	1.14
N^{total}	0.0337*	-0.0480**	-0.0291*	-0.0887**	0.0332*	-0.0453**	-0.0267*	-0.0843**
	2.17	3.25	2.36	3.01	2.12	3	2.14	2.88
Manufacturing	-0.1433	-0.1614	-0.0337	-0.2654	-0.1492	-0.2074*	-0.0718	-0.3014
	1.42	1.68	0.42	1.33	1.46	2.12	0.88	1.52
Finance	0.4432**	0.4800**	0.1728	0.7070**	0.4303**	0.4662**	0.1257	0.7379**
	3.37	3.84	1.66	2.91	3.24	3.65	1.19	3.06
Utilities	-0.0367	-0.0619	0.0062	-0.057	-0.0239	-0.0035	0.0819	-0.0628
	0.26	0.46	0.05	0.22	0.17	0.03	0.71	0.25
Other	-0.2631*	-0.2567*	-0.1454	-0.3845	-0.2572*	-0.2553*	-0.1358	-0.3736
	2.43	2.5	1.69	1.59	2.35	2.43	1.56	1.56
PSI20	0.3764*	0.4181**	0.2422	0.5981*	0.3332*	0.3326*	0.1243	0.5654
	2.38	2.78	1.93	1.99	2.09	2.17	0.98	1.9
Constant	8.9749**	8.2607**	9.0194**	4.0644**	9.0664**	8.3379**	9.1394**	4.4748**
	17.15	16.6	21.72	2.93	17.15	16.42	21.7	3.21
Observations	134	134	134	85	134	134	134	84

Table 10: Board Compensation and Accounting Performance: Return on Equity

This table presents the results of multivariate regressions of Compensation on Firms Accounting Performance. Columns (1)-(4) use Total Board Compensation, while columns (5)-(8) examine only Executive Board Members. Total Pay is the cumulative pay of all board members (or only the executives), Fixed PC is fixed compensation per-capita, Variable PC is variable compensation per-capita, and Total PC means total compensation (fixed + variable) per-capita. *ROE* is the return on equity, *SIZE* is the log of total sales, *RISK* is the standard deviation of monthly stock returns within the year, *BTM* is the Book-to-Market ratio, N^{total} is the total number of board members and *INDEPENDENT* is the fraction of non-executive members in the company board. *PSI20* is a dummy for index membership. The equation is estimated with industry dummies for Manufacturing, Finance, Utilities and Others. Absolute values of T-statistics are presented below the estimated coefficients. * means significant at 5% and ** means significant at 1%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total Board				Executives			
	Total Pay	Total PC	Fixed PC	Variable PC	Total Pay	Total PC	Fixed PC	Variable PC
ROE	0.0015	0.0017	0.0013	0.0029	0.0012	0.0014	0.0007	0.0033
	1.08	1.38	1.26	1.13	0.86	1.08	0.68	0.96
Size	0.3537**	0.3057**	0.2168**	0.4620**	0.3492**	0.2994**	0.2101**	0.4113**
	7.84	7.17	6.16	4.09	7.65	6.84	5.82	3.53
Risk	0.4308	0.2251	0.1899	0.3145	0.4132	0.1948	0.1767	0.2394
	0.91	0.5	0.51	0.11	0.86	0.42	0.47	0.08
BTM	-0.1554	-0.1315	-0.0739	-0.4807**	-0.1671	-0.1226	-0.0609	-0.4268*
	1.74	1.56	1.06	2.66	1.84	1.41	0.85	2.32
Independent	-0.3688	-0.4118	-0.3764	-0.7915	-0.5620*	1.0787**	1.0554**	0.8806
	1.47	1.73	1.92	1.31	2.21	4.42	5.25	1.45
N^{total}	0.0325*	-0.0486**	-0.0295*	-0.0820**	0.0317*	-0.0461**	-0.0275*	-0.0768*
	2.1	3.32	2.44	2.7	2.02	3.07	2.22	2.53
Manufacturing	-0.1556	-0.1725	-0.0399	-0.3275	-0.1643	-0.2192*	-0.0789	-0.3833
	1.58	1.85	0.52	1.66	1.64	2.29	1	1.95
Finance	0.4360**	0.4710**	0.1704	0.6294*	0.4281**	0.4608**	0.1309	0.6450*
	3.29	3.75	1.65	2.52	3.19	3.58	1.23	2.59
Utilities	-0.0055	-0.0277	0.0325	-0.0438	0.0048	0.0263	0.1003	-0.0413
	0.04	0.2	0.29	0.17	0.03	0.19	0.88	0.16
Other	-0.2749*	-0.2708**	-0.1629	-0.2582	-0.2686*	-0.2679*	-0.1523	-0.2204
	2.54	2.65	1.93	1.05	2.45	2.55	1.76	0.9
PSI20	0.4169**	0.4722**	0.2938*	0.6990*	0.3723*	0.3793*	0.1667	0.6858*
	2.67	3.19	2.41	2.34	2.35	2.5	1.33	2.29
Constant	9.1318**	8.4457**	9.1374**	5.3182**	9.1996**	8.4908**	9.1963**	5.9104**
	16.94	16.57	21.72	3.76	16.85	16.23	21.32	4.04
Observations	132	132	132	85	132	132	132	84

Table 11: Board Compensation and Accounting Performance: Return on Assets

This table presents the results of multivariate regressions of Compensation on Firms Accounting Performance. Columns (1)-(4) use Total Board Compensation, while columns (5)-(8) examine only Executive Board Members. Total Pay is the cumulative pay of all board members (or only the executives), Fixed PC is fixed compensation per-capita, Variable PC is variable compensation per-capita, and Total PC means total compensation (fixed + variable) per-capita. ROA is the return on assets, $SIZE$ is the log of total sales, $RISK$ is the standard deviation of monthly stock returns within the year, BTM is the Book-to-Market ratio, N^{total} is the total number of board members and $INDEPENDENT$ is the fraction of non-executive members in the company board. $PSI20$ is a dummy for index membership. The equation is estimated with industry dummies for Manufacturing, Finance, Utilities and Others. Absolute values of T-statistics are presented below the estimated coefficients. * means significant at 5% and ** significant at 1%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total Board				Executives			
	Total Pay	Total PC	Fixed PC	Variable PC	Total Pay	Total PC	Fixed PC	Variable PC
ROA	0.0024	0.0046	0.0057	0.0163	0.0017	0.003	0.0033	0.0158
	0.42	0.86	1.29	1.15	0.29	0.55	0.73	0.81
Size	0.3608**	0.3151**	0.2216**	0.4732**	0.3547**	0.3075**	0.2123**	0.4314**
	8.03	7.4	6.36	4.22	7.8	7.04	5.94	3.72
Risk	0.4253	0.2614	0.2492	2.3018	0.4034	0.2112	0.2063	2.0089
	0.88	0.57	0.66	0.62	0.82	0.45	0.53	0.54
BTM	-0.129	-0.11	-0.0587	-0.5021**	-0.1458	-0.1028	-0.0469	-0.4464*
	1.42	1.27	0.83	2.68	1.58	1.16	0.65	2.33
Independent	-0.3597	-0.3862	-0.3312	-0.8539	-0.5607*	1.0945**	1.0968**	0.8156
	1.39	1.58	1.65	1.36	2.14	4.35	5.34	1.28
N^{total}	0.0374*	-0.0475**	-0.0294*	-0.0827*	0.0364*	-0.0444**	-0.0266	-0.0779*
	2.19	2.94	2.22	2.43	2.1	2.68	1.96	2.28
Manufacturing	-0.1618	-0.1843	-0.056	-0.3156	-0.1678	-0.2273*	-0.0918	-0.3711
	1.61	1.93	0.72	1.56	1.65	2.32	1.15	1.83
Finance	0.4807**	0.5128**	0.2111	0.6153*	0.4623**	0.4964**	0.1691	0.6387*
	3.45	3.89	1.96	2.35	3.28	3.67	1.53	2.44
Utilities	-0.0413	-0.0443	0.0252	-0.017	-0.0255	0.0068	0.0854	-0.0159
	0.27	0.31	0.22	0.06	0.17	0.05	0.71	0.06
Other	-0.2776*	-0.2841**	-0.1804*	-0.2827	-0.2690*	-0.2759*	-0.1627	-0.2517
	2.51	2.71	2.11	1.14	2.41	2.57	1.85	1.02
PSI20	0.4247**	0.4747**	0.3022*	0.6215*	0.3778*	0.3820*	0.1803	0.606
	2.65	3.13	2.43	2.02	2.33	2.45	1.41	1.96
Constant	9.0056**	8.3127**	9.0592**	5.0508**	9.0986**	8.3747**	9.1475**	5.5487**
	16.9	16.46	21.93	3.68	16.88	16.17	21.59	3.91
Observations	129	129	129	82	129	129	129	81

Table 12: The Role of Non-Executive Board Members

This table presents the results of multivariate regressions of Compensation on Firm Performance. Columns (1)-(2) present the results for Total Board Compensation, separately estimated for firms with and without non-executive board members. Columns (3)-(4) examine Per-Capita compensation of Executives. Return is the annual performance of the firm's stock, $SIZE$ is the log of total sales, $RISK$ is the standard deviation of monthly stock returns within the year, BTM is the Book-to-Market ratio, N^{total} is the total number of board members and $INDEPENDENT$ is the fraction of non-executive members in the company board. $PSI20$ is a dummy for index membership. Absolute values of T-statistics are presented below the estimated coefficients. * means significant at 5% and ** significant at 1%.

	Total Board Pay		Individual Executive Pay	
	(1)	(2)	(3)	(4)
	Independent = 0	Independent > 0	Independent = 0	Independent > 0
Return	0.5981*	0.07	0.5654*	0.1402
	2.18	0.4	2.07	0.82
Size	0.4643**	0.3741**	0.4451**	0.2901**
	5.66	7.64	5.45	6.01
Risk	0.6918	0.5891	0.5906	0.048
	1.03	0.66	0.89	0.05
BTM	-0.2725	-0.1439	-0.2746	-0.1792*
	1.45	1.59	1.47	2
Independent	-	-1.0236*	-	0.7134
		2.29		1.62
N_{total}	0.1326*	0.0632**	-0.008	-0.0092
	2.3	4.18	0.14	0.62
Constant	7.1288**	9.0081**	6.4837**	8.4781**
	6.89	13.99	6.29	13.35
Observations	45	89	45	89
R-squared	0.6711	0.7293	0.5638	0.495

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