

Pay for power?
Explaining CEO compensation as a function of CEO power
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Key words: Executive compensation, pay, remuneration, compensation committee, CEO duality, director independence, CEO celebrity, corporate governance, CEO power

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Dieser Artikel untersucht die Rolle der Macht als eine Erklärung für die Vergütung des Top Managements. Unsere Hypothese ist, dass die Machtverteilung zwischen CEO, Verwaltungsrat und Aktionären eine wichtige Rolle spielt in der Vergütung des CEOs. Wir untersuchen verschiedene Faktoren, welche die Machtverteilung beschreiben und testen unsere Hypothese an einer Stichprobe Schweizer Firmen. Unsere Resultate unterstützen die These, dass Macht ein wichtiger Faktor in der Vergütung des Top Managements in der Schweiz spielt. CEO Faktoren wie der Status als Star CEO oder die Verschmelzung mit dem VR-Präsidium, Verwaltungsratsfaktoren wie Unabhängigkeit oder Präsenz eines Entschädigungsausschusses sowie die Aktionärsstruktur spielen alle eine Rolle in der Entschädigung des CEOs.

Summary

This article investigates the role of power as an explanation for the compensation of top managers. We hypothesize that the distribution of power among the CEO, the board of directors and shareholders affects the compensation of the CEO. We investigate various factors that describe the distribution of power and test our hypothesis on a sample of Swiss firms. Our results support the notion that power plays an important factor in the compensation of top management in Switzerland. CEO factors such as the status as a star CEO or the combination with the Board Chairman position, board factors such as independence or presence of a compensation committee and shareholder structure all are associated with the level of CEO compensation.

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1 Introduction

Despite the adoption of numerous corporate governance codes and laws over the past fifteen years, and despite calls to strengthen the role of boards of directors *vis-à-vis* top executives, research has documented that CEOs have succeeded in capturing an increasing share of corporate profits (e.g. *Bebchuk/Grinstein* 2005; *Rost/Osterloh* 2008). The financial economics literature has typically examined compensation decisions from the perspective of a board of directors that attempts to establish an optimal contract in order to mitigate agency conflicts. An increasing body of work, however, suggests that the process of determining compensation is better described as a bargaining process between the board and the CEO (*Hermalin/Weisbach* 1998) and that the power of CEOs to influence boards provides an explanation for the significant deviations from the optimal contract (*Bebchuk/Fried/Walker* 2001).

The power view of executive pay is reflected in the widespread popular belief that CEOs are overpaid (e.g. *Schöchli* 2010). In support of this view, academics such as *Gomez-Mejia/Wiseman* (1997) argued that many CEOs would be willing to accept a much lower compensation than they actually received if they had to, without quitting the job. This suggests that CEOs are able to extract additional pay on top of their reservation wage. However, other scholars have defended current corporate governance arrangements and have argued “that the critics are wrong” (*Kaplan* 2008).

The discussion on CEO pay raises two important questions. First, what corporate governance related factors determine the outcome of CEO-board negotiations on CEO pay? Put differently, what are key determinants of CEO power *vis-à-vis* the board, and to what extent do these determinants account for CEO pay? Second, do these determinants also hold in the Swiss corporate governance context characterized e.g. by a different understanding of the role of the CEO, much lower levels of duality than in the United States, lower levels of transparency, and more concentrated ownership patterns?

The current study will address these questions and investigate how CEO power relative to the board and the company’s shareholders affects the level of CEO pay in Switzerland. Building on the corporate governance and executive compensation literature, we discern a number of determinants that are likely to influence the distribution of power between the CEO, the board and a company’s shareholders, and test the executive pay effects. We use a sample of 199 firms listed at the Swiss stock exchange over two years. Our findings lend support to the premise that CEO pay is influenced by the relative power of the incumbent versus the board and the company’s shareholders.

The structure of this paper is as follows. The theoretical section identifies possible sources of CEO power and derives the hypotheses. The methods section explains our sample, introduces our variables and specifies our model. The results section presents our results which are discussed in the subsequent section. We finish the paper with the limitations, implications for future research, and our conclusions.

2 Theoretical background

From a financial economics perspective, managers’ pay arrangements are a (partial) solution to the agency problem. The optimal contracting approach assumes that compensation schemes determined by the board or its compensation committee provide managers with efficient incentives to maximize shareholder value. Major conclusions of this approach are that compensation schemes need to be sufficiently high-powered (*Jensen/Murphy* 1990) and that divergence from optimal contracting can never be an equilibrium situation. However, some scholars have argued that executive pay can be viewed not only as a potential instrument for addressing the agency problem but also as part of the agency problem itself (*Bebchuk/Fried* 2003). Under this managerial power approach, some features of

pay arrangements reflect managerial rent-seeking rather than the provision of efficient incentives. Support for a power explanation of executive pay is given by the fact that researchers report large (unexplained) variance in the compensation of executives for firms of similar size, in the same industry, and performance at similar levels.

Overpaying the CEO simply because the CEO can wield his/her power has typically been viewed as non-acceptable from a socioeconomic perspective of fairness within a society (*Walsh* 2008). The public's willingness to comprehend high levels of CEO compensation that are not well explained by economic factors such as firm performance is very limited (*Möckli* 2010). On top of that, overpaying the CEO can actually be costly to the firm, as overpayment will often cascade down to lower organizational levels (*Wade/O'Reilly/Pollock* 2006). This cumulative additional remuneration can be viewed as a distribution of funds from shareholders to the company's employees.

In management, the understanding of the notion of power is greatly influenced by political science. *Pfeffer* (1981: 32) refers to power as the "capability of one social actor to overcome resistance in achieving a desired objective or result". For the case of top management teams, *Finkelstein* (1992: 506) defined power as "the capacity of individual actors to exert their will". We follow these definitions of power in the context of our study. Organizational outcomes then are shaped by a struggle for dominance among coalitions with possibly opposing goals (*Mintzberg* 1983). Managers, owners and the board of directors represent major coalitions at the apex of a firm with opposing preferences as regards compensation policy, and the level of compensation is likely to reflect the preferences of the group that gains the preponderance of power. For the CEO, the assumed preferred result is higher pay. Beyond pure economic utility of money a higher level of pay is associated with a symbolic value as a scorecard of managerial status and success (*Ungson/Steers* 1984). A more powerful manager will be better able to influence or exert his/her will on the remuneration decisions made by the board or its compensation committee. Conversely, the board, as the representative of the company's shareholders will seek to pay their CEO as little as necessary to attract and retain the desired talent. Consistent with the view that more powerful executives earn higher pay, several scholars (e.g. *Finkelstein* 1992; *Daily/Johnson* 1997) have argued that compensation level is itself an important indicator of formal power.

Power has received prior attention from executive compensation researchers (e.g. *Lambert/Larcker/Weigelt* 1993). Agency theory implicitly acknowledges the existence of power in the relationship between executives and shareholders (*Gomez* 2004), as the separation of ownership from control has created a situation where the checks which formerly operated to limit the use of power have disappeared. Faced with a separation of ownership and control, the principal (i.e. stockholders represented by the board of directors) needs to design an optimal contract for the compensation of the agent (i.e. CEO) that maximizes the principal's return accounting for optimal risk sharing between the principal and the agent (*Grossmann/Hart* 1983). However, if the agent gains increasing influence over the body responsible for setting his compensation, the design of the compensation contract may reflect executives' preferences, that is, a higher level of total compensation above the level stipulated by optimal contracting (*Zajac/Westphal* 1996).

Although power has been implied as a determinant of executive pay, it has seldom been carefully operationalized or tested in empirical research for its effects on the level of executive pay. As *Grabke-Rundell/Gomez-Mejia* (2002: 13) stated, "the negligence by agency theorists to explicitly consider power as a predictor of executive compensation levels may explain why strong empirical support for agency theory formulations is lacking". One reason for the scarcity of studies on the power-pay relationship may be that CEO power is hard to "prove". Although CEOs can acquire power from a variety of sources, prior research has typically assumed that most sources of power increase with CEO tenure (*Hill/Phan* 1991) or CEO stock ownership (*Allen* 1981a) thereby neglecting the nuances provided by other sources of power relevant for the current context (e.g. *Pettigrew/McNulty* 1998).

Studies applying a more sophisticated measure of power for CEOs and other top executives include *Combs/Skill* (2003) who used founder status and CEO board tenure to develop a single measure of executive power, and *Grinstein/Hribar* (2004) who used three dichotomous variables (CEO duality,

CEO on nominating committee and large boards) to develop a managerial power construct. *Lambert et al.* (1993) conceptualized power as equity ownership and the selection of board members. *Boyd* (1994) examined five measures that sorted into two factors with CEO duality, ratio of insiders and the level of director pay sorting into a structural power category, and board stock and institutional ownerships sorting into an ownership power category. *Barkema/Pennings* (1998) argued that CEO compensation reflects the effect of various sources of CEO power such as shareholdings, tenure or founder status. *Bebchuk/Fried* (2003, 2004) argued that the board itself is weak because outside directors tend to be loyal to or dominated by the CEO due to process infirmities like large boards, CEO duality, interlocks and financial dependence. Further, most firms lack a large outside shareholder, the financial interest of whom would influence bargaining over pay.

In sum, the managerial power hypothesis posits that CEOs have substantial influence over their pay. As a result, at least some CEOs are overpaid compared to the level that would be optimal for shareholders. We now build upon this tenet to develop five hypotheses on the relationship between the distribution of power among the CEO, the board of directors and a company's shareholders on the one hand, and CEO compensation on the other hand.

Shareholder concentration and CEO pay

An important source of the relative power of the CEO is the concentration of outside equity ownership. The agency problem associated with the separation of ownership and control can at least partly be overcome by effective monitoring by large shareholders (*Promse* 1992). Large shareholders have the power to exert control over management through their voting power or representation on the board. They should also have the incentives to do so, as selling stock when dissatisfied with management may be a very expensive option. Thus firms characterized by higher shareholder concentration should on average be associated with more moderate pay levels.

Previous empirical studies have used a 5% threshold in operationalizing ownership concentration when investigating the actions and compensation of agents (e.g. *O'Reilly et al.* 1988; *Tosi/Gomez-Mejia* 1989; *Fong/Misangyi/Tosi* 2010). This standard operationalization of ownership structure gives rise to two types of firms: owner-controlled and management-controlled firms. Owner-controlled firms are defined as those that have at least one shareholder, other than a manager of the firm, who owns 5% or more of the company's stock. In management-controlled firms, there are no such major shareholders. In general, CEOs in management-controlled firms get higher total compensation (*Core/Holthausen/Larcker* 1999) and have higher pay raises (*Hambrick/Finkelstein* 1995) than CEOs of owner-controlled firms. This broad distinction between management-controlled and owner-controlled firms assumes that the relative size of the ownership package of a large shareholder matters little once the 5% threshold is overcome. However, the larger the ownership stake of a shareholder, the larger the incentives to oppose higher than competitive pay levels. International comparisons suggest that large shareholders are especially prevalent in Switzerland as opposed to the US (*La Porta/Lopez-de-Silanes/Shleifer* 1999).

Some authors have therefore employed a more refined account of ownership structure. Using a Herfindahl-Index, *Schmid* (1997) documented a negative relation between total compensation and ownership concentration in Germany. *Khan/Dharwadkar/Brandes* (2005) found that large institutional investors are associated with lower total CEO compensation. *David et al.* (1998) found that both large non-institutional shareholders and pressure-resistant institutional shareholders reduce the level of CEO compensation. We therefore state:

Hypothesis 1: The percentage of large outside shareholders is negatively related to the level of CEO pay.

CEO duality and CEO pay

CEO duality is an important structural measure of relative power of the CEO over the board of directors (*Finkelstein/D'Aveni* 1994). If the CEO is also the chairman of the board of directors, the ability of the board to exert control over the compensation setting process may be compromised, increasing the potential for agency conflicts. The CEO may exert influence by setting the agenda,

controlling information flows to and creating dependence for non-executive directors. Formally, the CEO bargains with his subordinates for his compensation.

Several studies in the United States have found that CEO duality is a significant predictor of executive compensation levels (e.g. *Core et al.* 1999; *Fulmer* 2009). This can be viewed as a reward for the extra workload or responsibility involved. It does not, however, rule out the possibility that CEOs in such dominant positions are able to garner more generous pay packages than what the two positions would pay individually, which remains a question of proportion. While a modest pay premium may suggest a reward for the extra workload, more pronounced differentials may point at self-serving behavior. This leads to the following hypothesis:

Hypothesis 2: CEO duality is positively related to the level of CEO pay.

Compensation committees and CEO pay

Traditionally, management researchers have argued that the establishment of an independent compensation committee enhances the board's power position (e.g. *Pearce/Zabara* 1991; *Hambrick/Fukutomi* 1991). In this view, the presence of a compensation committee institutionalizes the board's monitoring task. Detailed work is undertaken in such committees and suggestions are prepared and presented to the full board. The compensation committee is responsible for setting executive pay and therefore seen as the powerful mechanism for setting optimal compensation packages by aligning management and shareholder interests (*Daily/Johnson/Ellstrand/Dalton* 1998).. In the absence of a compensation committee, there would be an opportunity for CEOs to award themselves 'excessive' pay packages. Furthermore, with the existence of a compensation committee, responsibility lies with a smaller group of people. As high compensation packages are likely to draw attention to a firm (*Pollock/Fischer/Wade* 2002), directors may be reluctant to provide generous pay packages, as the media may pinpoint such "bad behavior" and a director's reputation and further presence as a director may be at stake. This line of thinking is reflected in the recommendation of the *Swiss Code of Best Practice in Corporate Governance* (2007) to set up a compensation committee.

Despite the theoretical arguments in favor of establishing a compensation committee, some researchers have been more critical of these committees. *Bebchuck/Fried* (2004) suggested that compensation committees are restrained only by an "outrage" constraint exerted by outside commentators. *Conyon/Peck* (1998) documented that compensation committees are often poorly informed and ill-equipped to design adequate compensation schemes. A case in point, *Conyon/Peck/Sadler* (2009) established how compensation consultants have effectively contributed to rising executive pay levels. Ultimately the only sanction that investors have in pursuing their rights is in not re-electing board and/or compensation committee members, an option which is rarely enforced (*Dillon* 2010). *Rost/Osterloh* (2009) therefore concluded that compensation committees have been guided by "wrong applications of principal-agent-theory".

Indeed, the empirical evidence on the effects of compensation committees has shown sobering results (*Hengartner*, 2006). Given that literally all stock-listed companies in the US have been required to have a committee for a long time, no empirical US research exists to test this relationship. In the UK, almost all stock-listed companies had adopted compensation committees by the mid-1990s. Studies based on earlier data sets found a positive association between the presence of a compensation committee and cash pay levels (*Main/Johnston*, 1993; *Conyon/Peck*, 1998). Compared to the UK, compensation committees have been a more recent phenomenon in Switzerland. Based on more recent insights into the limitations of principal agent theory and the dynamics of compensation committees, and based on the limited available evidence, we posit the following hypothesis:

Hypothesis 3: The presence of a compensation committee is positively related to the level of CEO pay.

Independent directors and CEO pay

Past economic research has investigated board structure as indicative of the relative power of the CEO over the board or to what extent boards use their monitoring role (e.g. *Boeker* 1992). This stream of research mainly follows the typology of the proactive board (*Pearce/Zabara* 1991). For proactive

boards to exist they must usually be composed primarily of independent outside (non-executive) directors. Non-executive and especially independent directors are viewed as better monitors of a CEO's performance. The higher the number of independent outside directors on the board, the higher the overall power of non-executives as opposed to executive directors. Fulfilling their duty as shareholders' representatives, boards with a high proportion of independent outside directors will restrict pay excesses to a minimum. This line of argument forms the basis for the listing requirement at the New York Stock Exchange (*Bebchuk/Fried*, 2004: 202) and the recommendations of the *Swiss Code of Best Practice* (2007) that the board be composed of a majority of independent directors with no material relationships with the company.

A vast body of literature has tested the effect of non-executive directors on executive pay, but little supporting evidence could be found. Contrary to the theoretical arguments researchers found non-executive directors to be positively associated with executive compensation (e.g. *David/Kochbar/Levitas*, 1998). *Conyon/Peck* (1998) reported no significant effects of non-executive directors on cash compensation. At best, there is mixed evidence on whether more power in the hands of non-executives as opposed to executives in terms of board structure leads to pay practices consistent with shareholder preferences. This mixed empirical evidence between board structure and executive pay may be a lack of proper illustration of CEO power by using the non-executive director variable. Rather, what matters is that outside directors are also independent from executive management. The mixed empirical evidence may then be a lack of proper illustration of CEO power when using the non-executive director variable. Instead, it looks more appropriate to examine the effect of independent directors. The following hypothesis is proposed:

Hypothesis 4: The proportion of independent directors on the board of directors is negatively related to the level of CEO pay.

CEO celebrity status and CEO pay

Star or celebrity status is another source of CEO power that may influence compensation (*Elson* 2003), as a firm's legitimacy depends in part on the prestige of its managers. Serving as a figurehead, the CEO constitutes the liaison between the firm and its environment (*Mintzberg* 1973). As the symbolic head of the company to the outside world, the CEO is responsible for defining and conveying organizational meaning, which may occasionally create a celebrity or star status. In a broader context, top managers often act as boundary-spanners to owners, government, employee groups and the general public. As the company and its CEO are intertwined in public opinion, the departure of a CEO of high personal standing would result in a significant negative share price reaction. CEOs aware of their power arising from being the face of a company may be able to use this power to increase their compensation. *Schildknecht* (2004) suggested that CEOs – through public relations consultants – try to create a successful image. Non-executive directors charged with negotiating the CEO's pay package and suffering from information asymmetry with respect to the CEO's performance will be influenced by this image of a successful leader.

The proposition that CEO celebrity status may influence CEO compensation practices has only been looked at in one recent study in the US. Using data from the early 1990s, *Wade/Porac/Pollock/Graffin* (2006) found that CEOs who received a medal in the CEO of the Year Competition were associated with higher total compensation. Further, two related studies suggest a relation between celebrity status and compensation. Using survey data, *Tosi/Gomez-Mejia* (1989) suggested that executives can take advantage of the board, particularly when ownership is highly dispersed, by using personal charisma to extract higher pay without performance contingencies. *Tosi/Misangyi/Fanelli/Waldmann/Yammarino* (2004) found a positive association between charisma and total compensation. This suggests the following hypothesis:

Hypothesis 5: CEOs with a celebrity status receive a higher level of CEO pay.

3 Methods

Data and Sample

We used data from 199 companies listed at the Swiss stock exchange SWX in 2002 and 2003, representing 398 firm-year observations. The sample has a few note-worthy characteristics. First, Swiss stock-listed companies are characterized by large variations in terms of compensation structure, degree of managerial power or degree of complexity. In the year 2002, the SWX launched its *Directive on Information Relating to Corporate Governance* (SWX Directive) with mandatory regulations for companies listed at the SWX. These guidelines are similar to, though less far-reaching than, codes in e.g. the UK or the US. One of the novelties is that Swiss listed companies were advised to establish board committees. Thus we selected a period with observable differences which help to make statistical tests more powerful. Second, prior research has focused on very large companies. This study comprises both larger and smaller firms providing a more balanced picture of the executive pay landscape. It further provides a rather complete picture of executive pay in Switzerland by potentially including all stock-listed companies. Third, we study companies from a wide variety of industries, which will enhance the external validity of the study's results. Prior studies have usually either excluded banks or other financial services companies from their sample, or focused exclusively on banks. Fourth, using data for the years prior to the most recent corporate excesses and financial crisis arguably lends a clearer picture to the study of CEO power and pay arrangements. We obtained our data from companies' annual reports, the *Share Guide* published by *Finanz und Wirtschaft*, and from *Top – Die grössten Unternehmen der Schweiz* published by *Handelszeitung*.

Model specification

The model regresses the natural logarithms of total compensation on managerial power measures. The total compensation model looks as follows:

$$Y_{it} = a_0 + a_1X1_{it} + a_2X2_{it} + e_{1it}$$

In this regression, Y_{it} is the dependent variable of interest (the log of CEO total compensation) for firm i in year t and X_{it} are explanatory and control variables. $X1$ is a vector containing the power variables, and $X2$ a vector representing other determinants of executive pay that were commonly reported to have a significant influence on executive pay. All variables are expressed in natural logs with the exception of dummy variables and proportions to mitigate the effects of skewed distributions that is typical of executive pay data.

Listed companies at the Swiss stock exchange are required to disclose the compensation of the highest paid member of the board of directors, but they do not need to disclose the name of this individual. In many cases, companies explicitly disclosed CEO compensation. The general rule was to keep the highest paid director variable in the regression of CEO compensation if total compensation for this executive was higher than the average total compensation for top all management team members. If this value was smaller, we retained the average total top management team compensation. This rule may include a few executive board chairmen in regressions of CEO compensation. To the extent that this is the case, results may not fully represent and perhaps slightly underestimate the true effects on CEO pay. To mitigate this limitation, we controlled for the inclusion of average top management team values with a CEO dummy variable in all regressions.

Dependent variable

Total CEO compensation is the sum of all cash (salary plus bonus), shares and options awards made during the year. Shares were valued by multiplying the number of shares awarded by the share price on the date of the grant. If the grant date was not disclosed, the share price at the end of the fiscal year was applied. If shares were not awarded free of charge, but granted at a discount, the difference between the prevalent share price and the purchase price was multiplied by the number of shares awarded to indicate the monetary benefit arising from the award. The value of stock option grants was

calculated using the *Black/Scholes* (1973) option valuation model adjusted for continuous dividends (*Merton* 1973). Following other researchers (e.g. *Yermack* 1995), we assumed that options were granted at the money, if not otherwise indicated.

Independent variables

Largest shareholder measures the percentage of equity owned by the largest outside shareholder. As we are interested in measuring the power of the largest shareholder, we used the voting percentage rather than the ownership percentage in cases where the “one share – one vote” rule was violated. *CEO duality* is a categorical variable coded 1, if the CEO also was the chairman of the Board of Directors, and 0 otherwise. We coded companies that had a *compensation committee* as 1, and companies without such a committee with 0. If a company just had one board committee and if this one committee also determined the compensation of the CEO and other executives, the variable was coded as 1.

We measured the proportion of *independent directors* out of total directors on a firm’s board. Independence was defined following the definition used in the *Swiss Code of Best Practice* (2007). These directors are non-executive, have not been a member of the executive management for at least three years and have no or comparatively minor business relations with the company. Not all companies explicitly disclosed whether their directors were independent or not based on the definition of the Swiss Code of Best Practice. In these cases, we studied the curriculum vitae and other pieces of information disclosed in the annual report, such as compensation paid by the company to services firms such as law firms, at which non-executive board members were employed, to determine a board member’s independence.

We measured the effect of *CEO celebrity status* with a categorical variable of 1, if the particular CEO appeared in the top ten ranking of the best entrepreneur of the Swiss weekly business publication *Handelszeitung* and 0 otherwise. This ranking is determined by the members of the Club of Zurich Business journalists and should therefore provide a good proxy of how the media portray a particular CEO. Hypothesizing that certification as a top ten ranking in this survey affects CEO pay, we lagged this variable by one year.

Control variables

We controlled for the organizational characteristics shown by previous research to be either theoretically or empirically relevant to the study of executive pay levels. *Firm size* was measured as the logarithm of sales revenues. Sales revenues for financial firms were defined as gross income (banks) and gross premium income (insurance companies). Firm size has been empirically established as the major determinant of CEO pay accounting for more than 40% of the variance in total CEO pay (*Tosi/Werner/Katz/Gomez-Mejia* 2000) in line with pay consultants’ practice of benchmarking compensation of similar firms (*Conyon et al.* 2009). *Firm performance* was measured as total shareholder return, that is, the percentage increase in the share price plus the dividend yield. Firm financial performance has been the variable that agency theorists have mostly been interested in (e.g. *Jensen/Murphy* 1990), even though performance empirically has shown little relationship with the level of annual CEO compensation grants. Finally, we controlled for *industry effects* creating categorical variables for the industry sectors consumer cyclical, consumer non-cyclical, financial services, healthcare, industrial, technology and utilities, as compensation practices vary substantially across industries (*Faulkender/Yang* 2010).

4 Results

Table 1 reports descriptive statistics. Compensation data are presented in Swiss Francs for interpretability in Table 1, but are logged for purposes of regression analysis. Mean and median CEO compensation in our sample were 1.531 MCHF and 0.584 MCHF respectively with a substantial range

between the highest compensation and the lowest compensation. Table 2 reports the results of the hypothesis testing. Model 1 regresses CEO compensation on the control variables. Model 2 reports the full model including the power variables.

Large outside shareholders are associated with significantly lower total CEO compensation thus supporting hypothesis 1. This is consistent with prior empirical evidence from the US (e.g. *Core et al.* 1999; *Ryan/Wiggins* 2001) and supports the managerial power hypothesis that CEOs have relatively more influence on the compensation setting process in firms with more dispersed ownership structures.

When CEOs also hold the position of the Board chairman, CEO compensation is higher by 24% ($e^{0.213}-1$) consistent with hypothesis 2. This premium is larger than the one found in other studies. *Core et al.* (1999) reported a 16% pay premium and *Sridharan* (1996) an 18% premium for cash compensation. This large difference lends support to the idea that incumbents of the dual role exercise strong power to tweak their compensation package in their favor.

The existence of a compensation committee is positively associated with CEO compensation, supporting hypothesis 3. The corresponding regression coefficient suggests that boards with a compensation committee grant their CEOs about 29% higher compensation than boards without such a committee. This result challenges the view of *Pearce and Zahra* (1991) that powerful boards split their tasks among board committees, but it supports the alternative view that CEOs were able to capture this new corporate governance in their favor.

Consistent with hypothesis 4, the proportion of independent directors is negatively associated with CEO compensation levels. It suggests that independent directors constitute a powerful counterweight to the CEO. Celebrity status also influences compensation. Successful CEOs, who manage to build a celebrity or star status around their person, get substantially higher pay. The coefficient suggests that, all other things equal, CEOs of a particularly high status earn more than 50% ($e^{0.413}-1$) higher pay than other CEOs, supporting hypothesis 5.

We conducted several additional analyses to test for the robustness of our results. To test whether the positive relationship between the presence of a compensation committee and CEO compensation is driven by the composition of the committee, we conducted an additional analysis on the sub-sample of companies that have such a committee. We found no evidence that CEOs sitting on the compensation committee lead to pay arrangements that disproportionately benefit executives consistent with a study of US entrepreneurial firms (*Conyon/He* 2004). This suggests that CEOs are able to influence their own compensation irrespective of whether they sit on the compensation committee or not. Some CEOs, although they do not formally serve on the compensation committee, actually attend their meetings. As an alternative measure of CEO duality, we measured whether the CEO also sits on the board of directors. In roughly half of the sample firms, the CEO is a member of the board. CEO board member was measured as a dummy variable 1, if the CEO sits on the board of directors and 0 otherwise. Results are essentially unchanged to the ones reported. We also ran additional regressions including CEO tenure, a measure used by previous research as a proxy for CEO power. This variable was not significant and it did not alter our results.

5 Discussion

The findings of the current study suggest that the distribution of power between the CEO, the board of directors and the company's shareholders exerts an important influence on CEO pay. This has important implications for future research, standard setters and policy makers alike.

The *Swiss Code of Best Practice in Corporate Governance* (2007) promulgates director independence as a central notion for board committee membership. The results of our study show that this quest for director independence has the effect of lower CEO pay. To the extent that part of the total CEO pay represents successful rent-seeking at the expense of shareholders, independent directors are better at limiting CEO pay to the efficiently lower levels thereby returning excess cash to shareholders. Board independence appears to also affect other organizational outcomes. *Ruigrok/Canepa* (2005) found that Swiss companies that had established an audit committee over the period 2002-2004 with a high ratio of independent directors tended in the subsequent year to be more likely to obtain a clean audit opinion, and less likely to be subject to an official procedure initiated by the SWX Swiss Exchange. Likewise, *Marciukaity/Szenwzyk/Varma* (2009) found that independence of both the board and its audit committee affects the probability of voluntary as opposed to forced earnings restatements. Put together, these findings support calls for more board independence in order to strengthen effective corporate governance. The preference and recommendations of the Swiss Code to fill the board with independent directors should help combat self-serving managerial behavior.

Our study found that firms with large outside shareholders are associated with lower CEO pay levels. From a power perspective, this suggests that CEOs are relatively less powerful in firms that have at least one large shareholder that functions as a counterforce to the CEO. Pay levels in these firms, then, are lower, as they do not include a premium that is due to CEO power. Conversely, CEOs are relatively more powerful in firms that have dispersed stock ownership without any significant shareholder that could function as a counterforce, and the compensation at these firms is more likely to reflect CEO preferences, that is, higher total compensation on top of the compensation otherwise justified by common characteristics such as firm size, performance or industry pay. We have also shown that this relationship is stronger, the higher the ownership stake of the largest shareholder suggesting that the balance of power shifts continuously as the ownership stake rises.

The combination of the CEO and board chairman positions has been met with criticism by corporate governance activists for a long time. The results of this study suggest that CEOs who also occupy the position of the chairman of the board earn a pay premium of about 24%. At least two reasons provide legitimate reason for a positive association between CEO duality and pay levels. First, CEOs who also occupy the position as a chairman of the Board of Directors should be rewarded with higher pay for their dual responsibility. These CEOs are filling two jobs, for which otherwise two people would have been remunerated. Second, it has been argued that the duality structure may be advantageous in situations requiring strong leadership (*Finkelstein/D'Aveni* 1994). This is the case, for instance, in a turnaround situation. Hence, the association between CEO duality and higher compensation may be due to special circumstances leading to higher pay. Nevertheless, this large premium suggests that there is at least some managerial self-serving in place.

The strong positive association between the presence of a compensation committee and total CEO pay is in line with prior studies on cash compensation in the UK (*Main/Johnston* 1993; *Conyon/Peck* 1998). Our study has shown that not only cash compensation, but also total compensation including stock and option grants are higher in firms that have a compensation committee.

The results raise questions about the theoretical prediction that specialized committees are a characteristic of powerful boards (*Pearce/Zabha* 1991). CEOs of firms with a compensation committee earn about 29% higher total compensation. Codes of Best Practice in Corporate Governance have taken up the idea that the professionalization of boards requires specialized committees. Implicit in this assumption is the idea that effective governance through a specialized compensation committee

will lead to more optimal compensation levels. However, the presence of a compensation committee in fact increases rather than decreases compensation levels. This result is clearly inconsistent with the idea that a compensation committee decreases the relative power of CEOs over their board.

The result is consistent with a “bidding-up” hypothesis first evoked by *Ezzamel/Watson* (1998). The authors argued that boards respond to deviations from the going market rate with subsequent pay adjustment and that this adjustment is especially observable for executives that are paid below market. Such a bidding-up of CEO compensation may have been helped by the establishment of compensation committees, which started hiring compensation consultants that present the boards detailed compensation data of comparable firms (e.g. *Conyon et al.* 2009).

A final explanation for the positive relationship between the presence of a compensation committee and CEO compensation may be labour-market related. It is conceivable that board members concerned with retaining their CEOs may resume to granting a better pay packages to avoid their top executives searching for outside opportunities (*Fulmer* 2009).

However, the case of the compensation committee has shown that standard setters need to exercise care in designing corporate governance mechanisms, if the intended effects are to materialize.

6 Conclusion

The notion that power relationships between the CEO, the board of directors and a company’s shareholders play an important role in determining the level of executive pay has received increasing attention from researchers interested in understanding CEO compensation. In this paper we developed and tested five hypotheses with respect to the influence of the relative power of the CEO versus the board and shareholders on his or her compensation. CEO compensation levels are lower the higher the ownership share of the largest outside stockholder and the larger the proportion of independent directors on the board. CEO and compensation levels are substantially higher when the CEO also occupies the position of the chairman of the board, when the CEO has a particularly high status, and when the board has a compensation committee. The case of the compensation committee has shown that standard setters need to exercise care in designing corporate governance mechanisms, if the intended effects are to materialize.

This paper has several limitations. First, while in our theoretical argument we posit causal relationships, in this paper we do not have a longitudinal dataset that allows us to test actual causes and effects. Second, we have had to rely on executive pay data published on the basis of the 2002 SWX requirements which were less far-reaching than disclosure requirements e.g. in the U.S. or the UK. This means that we did not have access to data on each individual executives’ total pay, and that we could not conduct more fine-grained analyses of executives’ individual pay components (i.e. salary, cash bonus, shares and options).

Future research may therefore consider longitudinal designs in order to better understand the dynamic interaction between corporate governance related variables such as analyzed in this paper on the one hand, and executive pay characteristics on the other hand. Future researchers in Switzerland should be able to benefit from (slightly) more generous disclosure requirements stipulated by the revised *Directive on Information Relating to Corporate Governance* that has been in place since January 2007. Finally, there is ample scope for case studies or survey-based designs that examine how CEOs, other executives and board members, particularly compensation committee members, think and act when discussing and designing executive compensation.

7 References

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Table 1: Summary statistics of CEO compensation and power variables

	Mean	Median	Standard Deviation	Minimum	Maximum
CEO compensation	1 530 634	583 717	3 292 540	111 548	31 525 189
Largest shareholder %	32.4	23.3	26.3	2.8	94.0
CEO duality	0.20	0	0.40	0	1
Compensation committee existence	0.61	1	0.49	0	1
% independent directors	0.76	0.80	0.21	0	1
CEO celebrity status	0.03	0	0.18	0	1

Table 2: Linear regression analysis predicting compensation

Variable	Model 1		Model 2	
CEO duality			0.213**	(0.0756)
% independent directors			-0.479**	(0.1482)
Largest shareholders			-0.005**	(0.0011)
Compensation committee existence			0.251**	(0.0609)
CEO celebrity status			0.413*	(0.1638)
Dummy consumer cyclical	0.0706	(0.1242)	0.0650	(0.1159)
Dummy consumer non-cyclical	0.1281	(0.1393)	0.1624	(0.1317)
Dummy financial	0.4860**	(0.1203)	0.548**	(0.1139)
Dummy healthcare	1.0532**	(0.1494)	0.945**	(0.1420)
Dummy industrial	-0.0403	(0.1147)	-0.020	(0.1069)
Dummy technology	0.6132**	(0.1494)	0.384**	(0.1430)
Dummy utilities	-0.4352*	(0.1729)	-0.220	(0.1647)
Total shareholder return	0.0006	(0.005)	0.001	(0.0005)
Ln revenues	0.3519**	(0.0176)	0.349**	(0.0176)
CEO dummy	0.4205**	(0.0633)	0.421**	(0.0633)
Constant	11.1409**	(0.1789)	11.14**	(0.1789)
Observations	398		398	
Adjusted R ²	0.66		0.71	

*p < 0.05; **p < 0.01. Robust standard errors in parentheses.