Executive Compensation in Family Firms: Fat Cats or Benefactors

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Abstract

This paper examines the relation between founding family ownership and compensation practices. Concentrated ownership is widely spread across Europe and can have an influence on compensation. I propose that there is a different focus on the various elements of executive pay in companies in which a large shareholder is present, particularly in those which are family-owned. Equity-based compensation is less needed in CEO pay as interest alignment will be enhanced and monitored by the large shareholder himself. Results using fixed effect panel data regressions show that founding family firms use cash- compensation as a substitute for equity-based pay in most cases. In those companies in which a founding-family member is actively involved as CEO, cash pay is of even increased importance, especially in firms using a dual share structure; this fact may indicate expropriation problems. Finally total compensation is, however, similar across all company types which hints at a market for CEO.

JEL Classification: G32, G34 **Keywords:** founding family firms, executive compensation, multiple shareholders

1. Introduction

Finding instruments that mitigate agency conflicts between managers and shareholders in companies is an issue that has been widely addressed in the finance literature for a considerable period of time. The underlying hypothesis is based in the assumption that share ownership is widely dispersed among investors and that consequently due to a free rider problem none has an incentive to monitor managers properly. Specific compensation practices, and here especially equity-based pay, has emerged as a promising venue to overcome this problem and to align interests between managers who de facto control the firm and shareholders who own the company.

However, recent evidence suggests that companies with a dispersed (mostly anonymous) ownership do by far not represent as big a share as previously assumed. In fact, the predominant ownership structure in the vast majority of markets around the globe consists of family controlled companies. La Porta et al. (1999) in an international study find that 30% of firms are family-controlled while 36% are widely-held. Faccio and Lang (2002) show that family firms are the predominant ownership structure in Western Europe except for the UK and Ireland. Claessens et al. (2000) observe that in Asian countries approximately 2/3 of firms are owned by families or individuals. Even in the United States where it is widely accepted that companies have a dispersed ownership Anderson and Reeb (2003) establish that around 35% of companies in the S&P 500 are family controlled. This result has extensive repercussions on agency conflicts between owners and managers.

Both family control and compensation practices help alleviate agency problems between shareholders and managers (agency costs I). Compensation should be directed towards aligning the interests of managers and shareholders while a large family shareholder has a clear incentive to control management and to make it perform in the best interest of shareholders. In the latter case, however, the diminution in agency problems between shareholders and managers may create an adverse effect. As Schulze et al. (2003) point out large shareholders can use their power (in terms of votes and insider knowledge) to extract private benefits from the company which they may use for personal or family purposes. This will result in agency cost shifting from those between managers and owners to one between large shareholder and minority shareholders (agency costs II) which might be even more detrimental to small shareholders. This conclusion suggests that agency problems between large and minority shareholders are a relevant issue. Problems are aggravated by the fact that many classic corporate governance mechanisms such as takeover threats or monitoring from institutional investors may become partly or completely ineffective especially if the controlling shareholder exercises a management position in the company or holds a majority stake. Controlling family shareholders tend to get much closer involved in their company's operational and strategic activities than institutional owners who themselves must account for their acts to their own shareholders. This position of knowledge and, therefore power will also translate itself into the possibility to extract private benefits which may lead to different compensation practices.

Stewardship theory takes an opposing stance with regard to human behaviour. While agency theory implicitly assumes that individuals that are in power will exploit it to enrich themselves or to dominate others, stewardship theory rather looks at the altruistic side of people. Davis et al. (1997) propose that individuals do not always entirely behave in their own self-interest but can also be motivated by altruism, generosity or loyalty. As Arregle et al. (2007) suggest families do care about their companies as they constitute the majority of their wealth and are part of their identity and patrimony. This and the fact that the reputation, professionalism and perception of the family within its social environment are directly linked to the company works as a strong incentive to follow a long term strategy and behave in a way that is not purely self-centred (Ward (2004) and Miller and Le Breton-Miller (2005)). This might lead to family members paying themselves lower compensation as their main interest is not primarily pecuniary but more nonfinancial (Corbetta and Salvato (2004)). If the stewardship principle is followed by the family there is furthermore the side-effect of transforming employees into stewards themselves which leads to more loyalty and solidarity among the workforce. Allouche and Amann (1997) find that family firms pay better, have more long-term remuneration and less complicated compensation structures which leads to higher employee satisfaction.

Chrisman et al. (2007) suggest an interesting venue for research in investigating whether family shareholders treat family- and outside managers in different ways. Problems in the case of outside managers might come from asymmetric information and thus classic agency theory while for family managers they might emanate from asymmetry of altruism between family members. Lubatkin et al. (2007) further show that different forms of altruism might indeed lead to tensions between family owners and managers.

These various aspects that are different to circumstances in widely held corporations should be reflected in CEO compensation packages. Despite its obvious relevance and the considerable research conducted in both the compensation and family business field, this subject has not attracted much attention yet.

In this paper I try to fill this gap by using panel data over the period 2007-2009 for a sample of companies listed on the Swiss exchange. The Swiss market offers a rich diversity of listed

companies with interesting features for studying how founding family ownership influences compensation practices. Sample firms cover multiple industries, they range from a rather small and local market focus to large and multinational activities and from young and growing to old and mature which is representative of a typical economy. The Swiss market is known for its high ownership concentration with owners ranging from founding families or private investors to the State as well as other financial or industrial corporations. As La Porta et al. (1998) point out German-civil-law countries are only average in investor protection but are very good in enforcing existing laws. A priori it is therefore not clear if expropriation of minority owners may be an issue or not. Bebchuk et al. (1999) suggest that the separation of ownership and control in companies creates additional agency costs. A controlling shareholder may however extract private benefits more easily and may have an incentive to maximise his own compensation as he bears less the consequence than minority shareholders. Nenova (2003) shows, that Swiss companies, and especially family-controlled ones, widely use dual-class shares as a means to separate ownership from control. Expropriation may therefore be considered a problem on the Swiss market in this context.

In view of the above, I examine how founding family owners affect the CEO compensation policies of their firms. In my research I consider different compensation components such as salary, cash compensation, equity compensation and total compensation. Employing a fixed effect model I analyse the amount companies pay their CEO whereas a fixed effect tobit model is used to study the part of total compensation that emanates from either cash or equity compensation. Diverging characteristics of family firms are also taken into account. First, a special emphasis is put on active management and generational issues of family members. The employment of family members as CEO or as Chairman should have an influence on compensation practices and -levels. Generational issues might equally impact pay practices as descendants probably view compensation differently from founders. Furthermore, a closer look is being taken at relative importance and the identity of second blockholders in family firms. The presence of a second blockholder inside a company may considerably influence and subsequently alter the behaviour of the controlling shareholder. It can reduce agency costs by having the second blockholder closely monitor the controlling shareholder.¹ Finally, I examine the impact

¹ Literature on multiple blockholders in general is vast and mostly discusses whether the presence of more than one large shareholder is positive or negative. Bloch and Hege (2001) develop a model where blockholders' competition for control is detrimental and value destructing while Bennedsen and Wolfenzon (2000) and Zwiebel (1995) show that blockholders through the formation of coalitions inside a company extract benefits. On the other side, Bolton and Von Thadden (1998), Winton (1993) or Lehmann and Weigand (2000) show the positive effects of multiple blockholders. Finally, Maury and Pajuste (2005) find that the presence of two families in a company is very

large shareholders other than founding families might have on CEO pay. They might satisfactorily control the CEO and be beneficial for investors. On the other side, such investors (frequently the state or other companies) are themselves only represented by employees who therefore do not have such a strong incentive to monitor management as it is not their own money that is at stake.

Main results show that a well-developed market for CEO seems to exist in Switzerland. Total compensation is not significantly different but fairly comparable across companies. However, firm characteristics have a significant impact on pay structures. Founding family firms show a lower propensity to use equity-based compensation than widely held companies and as a result substitute this lower level of equity-based pay by higher levels of cash-based compensation. Second, family firms employing an active executive family member show a clear preference for cash-pay which indicates a possible expropriation problem. This finding is even more visible in companies having a dual class structure. However, family firms with outside CEO or without a second blockholder follow exactly the substitution of equity for cash pay.

This study represents a enhancements and new aspects to existing literature in four important ways. First, it expands knowledge in the fast rising field of family firms. This field has gained impetus since the publication of the article by Anderson and Reeb (2003) but has so far mainly focused on the market- and accounting performance of such firms. Other financial topics linked to family firms have hardly received academic attention so far. The research of compensation policies in family firms is however important as it helps to draw inferences about agency costs between controlling and minority shareholders and deals with an important issue that is directly related to CEO motivation and consequently firm performance. Moreover, it sheds light onto the current debate on compensation policies and -regulation by the general public and regulators in many countries. The presence of a family shareholder might help regulators in defining meaningful and already tested compensation policies. Moreover, it is closely linked with different internal and external governance mechanisms which vary depending on ownership structure.

Secondly, it adds to the vast body of literature on CEO compensation. Many papers have tried to find a link between pay and performance (Jensen and Murphy (1990)) or to explain compensation package characteristics and their link to corporate governance (e.g. Core et al. (1999)). The relation between ownership and pay has received some attention (e.g. Mehran (1995)) but has not been researched as widely. Articles in this field mostly concentrate on the role

detrimental in terms of firm value while the presence of a second non-family blockholder minimises the possibility of private benefit extraction.

of institutional investors (e.g. Hartzell and Starks (2003)) as control mechanism but not on other ownership types (Gomez-Mejia et al. (2003) and Carrasco-Hernandez and Sánchez-Marín (2007) being two notable exceptions). According to Combs et al. (2010) research on the relation between family ownership and compensation is only in its infancy and is an interesting area to pursue.

Thirdly, the paper adds new evidence to the literature on multiple blockholders and its impact on companies. Literature in this field mostly examines the question if the presence of multiple blockholders mitigates agency conflicts between controlling and minority shareholders or if it even worsens the situation for investors through the possible establishment of coalitions. The relation between such an ownership structure in family firms and compensation has not been researched yet. It is, however, an interesting matter as the second blockholder does not have any incentive to coalesce but only to control since CEO compensation will not be available to him and might prevent the extraction of private benefits.

Fourth, the article provides characteristics and scope of compensation policies in Switzerland. So far evidence on compensation practices in this market is non-existent to the best of my knowledge. Data on compensation in European countries is also not widely researched but rather focuses on the British market. It is an interesting market to study especially for comparisons with the US market which in many aspects is quite similar. It is, however, not truly representative of Europe as a whole since many British companies are widely held and thus not at all comparable to the ownership structure in Continental Europe. The Swiss market, on the other hand, has the advantage of being very diverse in terms of company characteristics and ownership structure and represents much better the European reality. Additionally, regions of Switzerland, i.e. the French and Italian speaking part, though following German-civil-law might still differ in the perception and enforcement of the law due to cultural differences that follow French-civil-law traits. This makes Switzerland the perfect country to study as it assembles features that are present on most Continental European markets.

The remainder of the paper is structured as follows: Section 2 reviews the relevant literature. In section 3 data and variables are presented and defined. Section 4 shows the main results while further robustness tests and specifications are analysed in section 5. Section 6 summarises and concludes.

2. Literature

An optimal compensation mix geared to long term incentives and based on shares and stockoptions should enable companies to align the interests of managers with those of shareholders. Many academics have tried to model compensation to achieve an optimal alignment and to provide compensation contracts that successfully work in practice. This implies that a principalagent problem to be solved exists in the first place. Principals and agents must pursue goals that are different enough for needing a mechanism, in this case compensation, to re-align their interests. In companies with a large shareholder this is not necessarily the case.

The potential benefits associated with the presence of a majority shareholder are not new. Berle and Means (1932) already researched this possibility. A majority shareholder clearly has a substantial incentive to control management since a large part of his wealth is invested in the company. As a result, every shareholder may benefit from this situation. Although this seems to be a convincing argument, authors such as Demsetz (1983) claim that ownership concentration does not have an influence on firm value and that companies chose the form of ownership that minimises agency costs. This view is shared by Himmelberg et al. (1999) or Demsetz and Villalonga (2001).

It is widely accepted that the presence of a large shareholder can diminish or at least does not aggravate the classic conflict between firm owners and managers and thus reduces agency costs (Agency Costs I). However, the potential benefits of having a large shareholder in a company can be limited by the appearance of another type of agency problem (Agency Costs II). Large shareholders may influence decisions that foster their personal profit or utility but neglect or even harm minority shareholders. The extraction of private benefits is in the centre of this problem. Since its modelisation by Grossman and Hart (1980) authors have tried to quantify the magnitude of private benefits. Based on a sample of 39 markets throughout the world Dyck and Zingales (2004) observe that private benefits of control on average amount to 14% of equity value.

Although from a theoretical point of view it is not clear which of the two effects prevails both can have a serious impact on the level of executive compensation and its composition. Close monitoring of management will result in a better alignment of interests between owner and managers and may lead to lower executive remuneration or to a limited use of incentive-based components such as shares or stock-options. The extraction of private benefits or entrenchment of a large shareholder, who is actively involved in the firm, on the other hand can lead to higher compensation especially in form of fix pay and thus be harmful to minority shareholder. Additionally, it can be argued that from a stewardship theory point of view (Donaldson and Davis (1991) and Davis et al. (1997)) family members do not necessarily have a big incentive to expropriate as they might gain satisfaction from many non-pecuniary situations.

2.1 Ownership structure and CEO compensation

First studies on remuneration looked at the influence a large outside shareholder may have on the compensation level and mix in US publicly listed companies. Gomez-Mejia et al. (1987) observe that ownership structure has an impact on CEO compensation. Although the compensation mix is not different in firms with a blockholder, CEO pay is more closely linked to firm performance. Large shareholders want to maximise their investments in the company and therefore strongly align their interests with those of management. A study by Hambrick and Finkelstein (1995) follows a similar path and shows interesting implications for family firms. They suggest that firms with a large outside shareholder fix CEO compensation independently and at such a competitive level to retain his services. In widely held companies CEOs are in a stronger position to influence their own pay and consequently go to the maximum legitimate level. Family firms can fall in both categories. If a family member is CEO and large shareholder at the same time he may influence his own pay and extract private benefits at the detriment of minority shareholders. However, if he is only a passive blockholder he will try to align interests with management and at the same time minimise management pay. Mehran (1995) finds evidence that compensation mix is more important for motivating executives than compensation levels. He further states that outside blockholders substitute equity-based pay by increased monitoring. Hartzell and Starks (2003) follow this line and show that institutional ownership concentration is positively related to pay-performance and has a negative relation to total compensation. Similarly to Mehran they conclude that the blockholder mitigates agency conflicts without having to resort to outsized compensation packages. This negative relation between ownership concentration and compensation is found by other researchers on different markets (e.g. Core et al. (1999), Cyert et al. (2002), Goldberg and Idson (1995) or Haid and Yurtoglu (2006)). However, evidence is not that clear cut as may seem. Holderness and Sheehan (1988) or Cheung et al. (2005) find that on the contrary the presence of a blockholder increases salaries and bonus payments.

2.2 Family control and CEO compensation

Existing literature on compensation and ownership, however, does not identify the identity of the blockholder. Do all large owners exercise the same influence on CEO pay or are there notable differences between for example family owner and institutional owners? Jensen and Murphy (1990) suggest that CEO should not to be paid like bureaucrats but rather like entrepreneurs, which already hints at a difference in pay level or structure. Previous research on

compensation differences in the presence of an outside blockholder has consequently been complemented by studies on remuneration in founder- or family controlled companies. In one of the first studies McConaughy (2000) analyses compensation in founding-family controlled firms with family member CEO compared to outside CEO. He finds evidence that family member CEO receive lower total pay and less incentive-based remuneration. He concludes that family firms have to pay more to attract good outside managers and that family member CEO do not try to extract money from the firm in form of excessive compensation. Gomez-Mejia et al. (2003) confirm the view that family member CEO receive less total compensation than outside CEO in family firms. The difference in the relation further grows with an increase in the family share ownership. An interesting finding shows that a compensation premium is at work that insulates active family members from systematic risk. It seems that the protection against business risk is of greater importance to family CEO than a high pay level. This negative relation is confirmed by Cavalluzzo and Sankaraguruswamy (2000) for SME in the United States. However, other studies by Haid and Yurtoglu (2006) in Germany or Cohen and Lauterbach (2008) on the Israeli market observe a positive relation between family ownership and CEO pay. Combs et al. (2010) dig deeper into the familyness of family companies and find that CEO compensation and here especially of family CEO heavily depend on the family and the number of family members active in the company. Their research establishes that compensation for family firms with one active family member increases by 56% in relation to other companies. However, if multiple family members are active compensation decreases by 13%. This indicates that family members control and monitor their executive pay. Croci et al. (2010) analyse whether institutional shareholdings might influence pay in European family firms. They find that family control lowers CEO pay, especially if the CEO is a family member which confirms that family CEO do not try to expropriate others through excessive pay. Institutional owners, however, do not uphold this negative relation. In such firms CEO pay, especially of professional, outside CEO increases. Block (2008) uses a Bayesian approach to analyse the compensation structure in family firms and non-family firms. In accordance with previous research he finds that family CEO receive a higher part in base salary but a lower part in stock-options than outside CEO. He suggests that the payperformance relation is weaker in family-managed companies but still at a high level. Carrasco-Hernandez and Sánchez-Marín (2007) go further and look at employee compensation in family firms with family and outside CEO and non-family firms. They conclude that family firms with family CEO pay their employees less and rather target their incentives towards achieving short term goals. With regard to pay mix their findings show that family firms with outside CEOs have

a higher variable compensation part. Family firms with family CEOs and non-family firms rather resort to more substantial fix remuneration.

On the whole literature on family ownership and compensation seems limited and results are inconclusive, especially in continental Europe, where the majority of companies are family-run. Family ownership tends to have a negative relation with CEO compensation which favours the notion that pay is less important as the family mitigates agency costs and monitors the CEO. It also provides evidence that family CEO do not seem to expropriate minority shareholders, at least as far as payment packages are concerned. However, some studies counterbalance these findings by establishing a positive relation between pay and family ownership. The explanation might be once again found in private benefit extraction. Either, a family member is CEO and extracts private benefits in form of higher pay or outside CEO are dominated by family members and let them expropriate minority shareholders.

2.3 Dual-class shares and CEO compensation

Recent articles have started to look not only at the link between ownership structure / family firms and compensation but also at the influence of control-enhancing mechanisms on pay. One of these mechanisms consists of dual-class shares; it is frequently used among family companies to allow the family to finance itself on the markets while keeping control of their company.

Masulis et al. (2009) analyse the impact of dual-class shares on agency problems. Their results show a positive relation between the wedge between control and ownership rights and compensation. This relation is accentuated in companies in which the CEO is a blockholder. Tinaikar (2009) affirms this fact and finds a positive relation between the existence of dual-class shares and total compensation. Amoako-Adu et al. (2011) examine more specifically the link between dual class structures and family companies on the Canadian market. Their findings suggest that active family members get higher compensation (in particular bonuses and stock options) in companies with dual class structures as compared to firms with a single share class.

3. Data and methodology

3.1 Sample

The analysis covers companies listed on the Swiss Exchange between 2007 and 2009. I start by using the broadest stock index in Switzerland, the Swiss Performance Index. Companies must have been part of this index for at least one year to be included in the sample. This limitation immediately eliminates companies with a very low free float that can be related to funds or only have a secondary listing on the Swiss Exchange. The sample period starts in 2007 as the publication of data on executive compensation for Swiss companies was not mandatory before. The period ends 2009 being the most recent fiscal year for which a vast majority of companies have reported their financial results. The final sample includes 226 companies (640 firm year observations)².

As the research is focused on founding family firms it is most important to have reliable information on the ownership structure of Swiss companies. This is mostly achieved through hand-collecting information from different sources. Firstly, the data is collected from companies' annual reports and classified by shareholder type such as widely held firms, companies with an individual shareholder, state owned firms, companies with widely held industrial or financial corporations as an ultimate blockholder and miscellaneous. In a second step, firms which report one or more individuals as blockholders are divided into founding family firms and firms with a private investor³. If no clear evidence about the ultimate blockholder was obtained from annual reports, additional information was taken from Swiss stock guides, newspaper articles, corporate homepages or the commercial register. Data on active management or board positions by family members and 2nd blockholders was retrieved by applying an equivalent procedure.

In concluding the process, all data related to corporate governance and ownership was finally merged with accounting and financial data from Thomson Financials Worldscope and Datastream. This allows for reliable data and information on a vast array of companies from different industries, of different sizes and age, ownership structures etc.

3.2 Ownership variables

Following extant literature on family firms and blockholders a company is defined as being widely held if no shareholder holds more than 20% of ultimate voting rights (see among others Villalonga and Amit (2006), Sraer and Thesmar (2007), Favero et al. (2006)). Although a threshold of 20% may seem low there exists a widely accepted view that due to generally low AGM attendance and active representation of blockholders either on the board or in management in a majority of the companies it is sufficient for having an influence on company policies such as payout decisions.

A blockholder may have various identities. In the case of Swiss state ownership it may not only refer to the Swiss Federal Government but also regional (cantonal) and municipal government entities. Widely held industrial and financial corporations in this context are

² Due to missing data it is possible that not all 640 observations may be used in all regressions.

³ A private investor must not necessarily be a corporate raider or short term investor. In fact, most private investors in Swiss companies though not having founded the company have been invested and sometimes even actively managing it for several years.

companies that themselves do not have a dominant shareholder. Miscellaneous covers blockholders that could not be classified into any other category. It is mostly composed of foundations, cooperatives or private pension funds. Contrary to these rather straightforward classifications, firms with founding families and private investors as large shareholders need more scrutiny. A private investor is defined as one or more individuals that are not the founders of the company. In case there is more than one private individual it must clearly be stated that such investors have an agreement to vote together. The term founding family is used for one or more individuals or families that founded a company. Similar to private investors founding family firms may have been founded by more than one individual or family (for example families Hoffmann and Oeri for Roche or the Rhys brothers and Beda Diethelm for Sonova). Corresponding with these definitions and summarised in table 1 I have created different dummy variables that take the value one if a company falls in a specific category and zero otherwise. Overall, the sample consists of 226 companies and 640 firm year observations that are made up by 204 founding family firm years and 436 non-founding family firm years.

[Insert Table 1 here]

In a further step the dummy for founding family firms is divided into several sub-groups. Firstly, a distinction is made between founding families owning the majority of voting rights (i.e. more than 50% of votes) or only a controlling stake between 20 and 50%. Several studies have shown that family firm characteristics and here especially the active involvement of a family member or generational issues may have an important impact on firm performance and policy (e.g. Pérez-González (2006), Villalonga and Amit (2006) or Bennedsen et al. (2007)). By taking these findings into consideration, founding family firms have further been categorised into groups depending on the active position and generation of a family member. I create dummies relating to the fact that the CEO or Chairman of the Board is a family member or an outsider and in case it is a family member if it is the founder himself or a descendant. Finally, the founding family dummy has been substituted by three categories depending on second blockholder in ultimate voting rights held by the second blockholder, (ii) the difference in ultimate voting rights between the founding family and the second blockholder and (iii) the identity of the second blockholder. This allows me to examine to what extent the presence of a second blockholder has a positive or negative influence on corporate policies.

3.3 Compensation variables

Data on compensation has been hand-collected from the respective firms' annual reports. As described above compensation typically includes various components. The empirical study of CEO compensation includes three different components; these are salaries, cash- and equity-based compensation. Salary is equivalent to fix remuneration. Cash-based compensation is the total amount of salary and bonus paid out in cash and thus comprises a mixture of both fix and variable compensation. It also includes other kinds of compensation that are of a fix nature as for example pension benefits or other perks such as the use of a company car. Equity-based compensation represents the amount paid out or granted in shares and options and entirely of a variable nature. Finally, the sum of all components has been calculated and labelled total compensation. For the following analysis all these compensation components are calculated for each company's CEO. For situations in which the CEO is also a member of the board the compensation due to this position has been deducted to obtain a pay figure that is purely attributable to the function of CEO.

3.4 Control variables

In the empirical part a set of control variables is used. These can be divided in variables that are related to the financial and economic facets of the company and those that describe the governance and personal aspects of companies and CEOs. The natural logarithm of total assets constitutes the parameter for firm size. Rosen (1982) shows that size is an important motivator of CEO pay and should be positively related. Large companies usually demand more talented and therefore more costly managers for running their businesses. Baker et al. (1988) and Murphy (1999) also establish a significant positive relation between firm size and compensation. Tosi et al. (2000) conduct a meta-analysis on pay and accumulate evidence that firm size accounts for 40% of variations in pay. Gabaix and Landier (2008) build a model on CEO pay and observe that firm size is the most important factor explaining CEO pay. The increase in firm size in recent years explains the increase in CEO compensation across firms, years and countries.

The Market-to-Book ratio is used as a proxy for growth and investment opportunities. It is calculated as market value of equity divided by book value of equity. Following studies by Smith and Watts (1992) companies possessing larger opportunities for future growth better compensate their managers. This may be seen as award for to the complexity of continually finding and managing growth areas within a company. Smaller or younger companies that are in an early stage of their development typically have only achieved recent but high growth; a diverging compensation mix is a possible scenario for them. This kind of companies often experiences

difficulties accessing capital markets and heavily relies on earnings to fund growth. It is to be expected that in such instances cash compensation will be low to keep cash in the company. On the other hand, these companies carry more risk than large and seasoned companies which requires paying a risk premium to management for taking up a job that bears a high risk of continuity. A higher proportion of cash compensation would mitigate this risk factor for managers. Equity compensation will be higher as it lowers current pay levels while having the beneficial effect of boosting managerial talent and with it growth. The annual growth rate in sales over the preceding 5 years is also used as proxy for investment opportunities.

Leverage might play an important role in determining a company's compensation mix and -levels. A high leverage ratio augments the probability that a company falls into financial distress. As Madura et al. (1996) point out a higher probability of distress is linked to higher company risk which in turn leads to an increase in management pay to compensate such additional risk. Von Eije and Megginson (2008) argue that a high leverage could be a proxy for old, large and stable companies. This leads back to the firm size argument since these companies are in need of proven managers which are rare and expensive. On the other side, Begley and Feltham (1999) find a negative relation between debt covenants and CEO cash compensation while John and John (1993) observe that equity-based pay has an inverse relation to leverage in order to moderate agency costs of debt. Leverage is calculated with total debt as numerator and total capital as denominator.

Following prior literature two measures of firm performance are used. Return on assets (ROA) as an indicator of accounting performance and the stock return as market-based performance measure. Kaplan (1994) and Murphy (1985) suggest that a close link between performance and compensation should exist. This direct relation ensures that managers have monetary incentives to work in the interest of shareholders as an increase in shareholder value will augment their own pay and measurably awards them for their achievements.

It is not a priori clear if risk is positively or negatively related to compensation. From a theoretical point of view Banker and Datar (1989) argue that risk can have both effects. Empirically, Core et al. (1999) finds a negative relation while Cyert et al. (1997) finds that consistent with agency theory risk has a positive relation to pay. Linck et al. (2009) are of the opinion that riskier firms are paying out more equity-based compensation to managers due to the fact that it enhances information asymmetry between corporate insiders and shareholders which must be counterbalanced by an increased alignment of interests. Following Core, I therefore use the standard deviation of the ROA and stock returns to account for the riskiness of a company.

Furthermore, I also take governance characteristics that might affect compensation into account. CEO tenure is the number of years the CEO has held his position in the company. A longer tenure can lead to either a positive or negative effect. For one it accounts for the experience of the CEO which should increase his value to the company over time. The more experience and the power he gets inside the company the more he normally will get paid (e.g. McConaughy (2000)). On the other hand, a long tenure may be associated with managerial entrenchment. The longer a CEO has been on the job the better he knows how to extract private benefits; he can influence the board more easily and he will work less in the interest of shareholders (Hill and Phan (1991)). The power in this case shifts from the board and shareholders to the CEO or management team. This might especially be important inside family firms in which a family member will be more reluctant to leave his job to an outsider even though it might be in the best interest of shareholders. CEO age might equally play a role in compensation mix. Lippert and Moore (1994) for example take the position that labour market pressure is less effective for older CEOs. It is, therefore, even more important to award such CEO through equity compensation. Gray and Cannella (1997), however, establish that older CEO have a lower part of their pay that is at risk. They come to the conclusion that this is linked to a lower propensity to take risk and on to the delay of investment decisions by CEO nearing retirement. They mitigate this explanation somewhat stating that older CEO might also use their power to decide on compensation packages that best suit their preferences. Board size encompasses the total number of board members. The board is responsible for a variety of corporate decisions which includes fixing the compensation of top managers. Board size will play an important role in as far as boards that are smaller may be more efficient in taking decisions and in deciding better CEO compensation packages (Yermack (1996)). Core et al. (1999) find a positive link between board size and compensation which also hints that larger boards might be sub-optimal in setting pay.

I further construct a dual-class dummy to control for differences in investors' ownership and voting rights. The dummy takes the value one if a company has more than one share class. The most widespread form of distortion of the one share-one vote principle in Swiss companies is achieved by issuing more than one share class. This can be considered a sign of weak governance and may influence the compensation of both CEO and management. The impact should generally be negative. Chourou (2010) finds that companies in which multiple share classes exist have higher cash compensation for owner CEOs. However, this effect is only true for companies with a weak governance which indicates that owner CEOs will use their power to extract private benefits if it's easily possible. Masulis et al. (2009) similarly find that managers with excess control

rights benefit from higher compensation. This effect is further accentuated if the manager is himself or is linked to a controlling shareholder. These findings clearly indicate that managers will extract higher compensation through direct shareholder links and even more so if he is in a situation in which he can decide himself on his own compensation in his role as controlling shareholder.

Finally I use industry dummies based on the ICB classification to control for industry effects and year dummies to control for effects that may be related to a specific year of the sample.

3.5 Descriptive statistics

On the basis of above definitions founding family firms account for 32% in the sample period 2007 to 2009 while 12% of companies have a private investor as large shareholder. 34% are widely held companies, while 2% are owned by other widely held industrial and 6% by financial companies; 10% are state owned and 4% are categorised as miscellaneous.⁴ These shares remain very stable over the period examined with only a few companies changing categories.

Table 2 shows summary statistics for different variables. Cash compensation totals 1.4 million CHF on average of which approximately 50% comes in form of salary and 50% in form of cash bonus, perks and other pecuniary advantages. Equity compensation at an average of 800'000 CHF demands a lower share of total remuneration which is in the region of 2.2 million CHF for the CEO of a Swiss company. Firms in the sample have an average size (total assets) of 26 billion Swiss francs, 5-year sales growth of 44.25% (p.a.) and a leverage of 12%. Average Marketto-Book-value is 2.80, while average ROA is 4.86% and average stock return is 2.38%. Stock volatility amounts to 4.90% while stock return volatility is 32.45%. 18% of firms are characterised by a capital structure composed of more than one share-class that can either be listed or unlisted. The average board size is 7.05 which is in line with previous studies while CEO tenure averages 6.7 years and CEO age 52 years. 38% of these family firms have a CEO from within the family, while 54% have a family Chairman. Nearly one in two founding family firms has a smaller second blockholder holding at least 5% of ultimate voting rights. Most of these second blockholders hold between 5-10% of voting rights and a difference of 40-60% in voting rights compared to the family firm owner. A majority of these second blockholders is either an individual that is not part of the family or a financial institution.

⁴ The proportion of family firms is quite comparable to findings in a study by Faccio and Lang (2002) who determine a share of 56% being held by family firms while widely-held companies only account for 26% in their study. Explanations may be found in the distinction between founding and non-founding family firms, a more rigorous definition of family firms and the different period examined.

[Insert Table 2 about here]

Table 3 shows results of the univariate analysis of the sample by testing difference of means and between non-family and family firms.

[Insert Table 3 about here]

CEOs of founding family firms earn a significantly higher salary and cash compensation, equity compensation, however, is twice as much in non-family firms as compared to family firms. Board size is smaller in family firms which may be explained by the average difference in size between family and non-family firms and their tendency to concentrate company control. CEOs in family firms also seem to stay longer at the helm of their company while the average CEO age at 52 years is exactly the same for the two types of companies. Multiple share classes, which typically serve as control enhancing means for large shareholders, are used in 38% of founding family firms but only 9% of non-family firms. It is a clear proof of family firms' intent to preserve and exercise control in their companies. Kunz (2002) outlines that the number of companies with dual-class shares has dramatically decreased in Switzerland over the last 20 years. This shows that company owners and boards are now more frequently being forced and therefore inclined to follow the one share one vote principle. However, pressure from shareholders to change the voting structure has been less successful in companies in which a family is present. Research establishes that companies are different in size amounting to 36 billion CHF in assets for non-family firms and only 4 million for founding family firms. Furthermore, I observe that family firms have significantly less leverage which supports the notion of family firms to rely on their own financial strength by building up equity rather than resorting to financial institutions or debtholders who may want to have a say in company decisions. Although family firms do not perform better in terms of ROA and sales growth, they have a higher Marketto-Book but a significantly lower stock return over the sample period. Volatility in ROA and stock returns do not differ significantly between the two firm types.

4. Empirical results

A fixed effect panel data model is used to assess the relation between a corporation's compensation policy on the one side and founding family control on the other side. The data for this study is structured as an unbalanced panel of 226 companies for the period 2007-2009. I use

different specifications for every sub-section. In the first sub-section I analyse the propensity of Swiss companies to use equity-based pay by using a fixed effect logit regression with the dependent variable a dummy taking the value one if the company uses equity based pay and zero otherwise.

Equity comp. dummy=
$$\beta_0 + \beta_1$$
(family variables)+ β_2 (control variables)+
 β_3 (year dummies)+ β_4 (industry dummies)+ ϵ

I then run a fixed effect model on the natural logarithm of salary, cash compensation and total compensation and a fixed effect tobit regressions on the natural logarithm of equity compensation.

Ln(compensation variable)=
$$\beta_0 + \beta_1$$
(family variables)+ β_2 (control variables)- β_3 (year dummies)+ β_4 (industry dummies)+ ϵ

4.1 Propensity of family firms using equity-based compensation

There are a number of arguments supporting the notion that family firms use a different compensation mix, and especially with regard to equity based pay. It does not come as a surprise that every company has a cash compensation part in its pay package. All pay a fixed salary and a vast majority, albeit not all, pay a bonus to management that is either linked to short term performance or other criteria. Concerning equity-based pay, the picture changes somewhat. Only about one half of Swiss companies use shares or options to compensate their managers. Research results as reflected in table 4 clearly establish that especially founding family firms and companies with a miscellaneous shareholder have a lower propensity to use equity-based pay. Miscellaneous blockholders such as foundations or co-operative associations often follow different activities that are not purely profit related and therefore do not want to compensate managers for performance only. In the case of founding families the alignment of interest between managers and shareholders is taken over by the blockholder; a fact which works as a substitute to equity compensation. Not only does the blockholder type play an important role in the management, he also holds a stake in the company. If the stake held by the family is substantial (i.e. it is a majority shareholder with a stake of more than 50%) equity compensation can be expected to be even far less important. This is in fact what I find in table 4. The explanation is twofold. For one, the necessity for monitoring managers increases with the amount of money that is at stake for the shareholder. On the other side, it is not really of interest to an active family member to receive additional shares as compensation as he already is heavily invested in the company. For corporations in which the active shareholder does not control the majority of shares the situation and motivation is a bit different. Although the monitoring of managers may be accomplished the lack of majority vote does not allow to fully control important decisions. Consequently, the monitoring is enforced by an alignment of interests through equity pay. If the CEO is a family member equity pay may also be of interest to him for increasing his own personal stake vis-à-vis other family members over the tenure of his stewardship.

[Insert Table 4 about here]

The generational stage of the company-owners also plays an important role. Corporations at the founder stage will use equity pay more frequently than those at the more mature descendant stage. At the founder stage companies will have more pressure from banks, private equity companies and other stakeholders to use equity compensation as a means to control and motivate the CEO for ensuring survival and continuity of the company. This is achieved most easily by using stock options. Furthermore, in such start-up companies the stake by the founder might still be small and the use of equity compensation allows him to increase the stake. At the descendant stage power struggles might exist among family shareholders. If several family members hold the company's shares they may not want an outsider or family member CEO to gain too much power through increased shareholding. Consequently, the use of equity pay will be limited to a minimum.

4.2 Ownership structure and compensation decisions

Table 5 provides a first insight into the compensation policy of corporations in which either an individual or a founding family is present as large shareholder. Firms in which an individual is a blockholder seem to pay less equity-based compensation, which is offset by a higher proportion in salary and cash compensation. By and large, total compensation is higher than for corporations with a dispersed ownership. Founding family firms however show quite similar results. Equity based compensation is lower than in widely held corporations while cash compensation is higher. However, salary and total compensation are not significantly different.

[Insert Table 5 about here]

Explanations may be found along two axes. In cases in which the CEO is an outsider, equity based compensation does not as much constitute a function of alignment as the blockholder himself has a big incentive to control the CEO and management in general. As far as cash and total compensation are concerned it can be argued that if the right and most suitable CEO is wanted by the blockholder his demands have to be met. For cases, in which the individual is himself the CEO higher cash and total compensation can be explained by the extraction of private benefits. It is plausible that being both an owner and executive he yields enough power and to choose the compensation mix that maximises his utility. It does not come as a surprise that equity is of less importance as the blockholder already is heavily invested in the company and does not need to further increase equity holdings and therefore his financial dependency on the company's share price. Once again cash will be the preferred compensation to allow him to diversify his investments. In the case of founding family firms the insignificant result for salary and especially total compensation hints at a market for CEO. It seems as if the market for CEO is rather competitive; compensation therefore has to be in line with other companies otherwise CEO would either quit or the best may not be attracted in the first place. The only difference is the pay mix, which (as explained above), leads to a different type of behaviour as agency problems are reduced.

The previous analyses suggest that founding family firms have higher cash compensation but lower equity compensation than widely-held companies. This observation supports the agency model in which compensation packages and large shareholders are used to align interests between managers and shareholders. It remains, however, to be seen where differences between corporations with an individual shareholder and family firms derive from. In a more detailed study I break down the data of non-family firms into different categories of ownership: widelyheld, owned by a governmental entity, another corporation or miscellaneous. For family firms and any other blockholder, a threshold of 20% is used. In a second step, I also analyse any given differences within founding family firms. It may be expected that a family will behave differently depending on the ownership stake it holds. In the following I therefore distinguish between founding family firms in which the family is a large shareholder (owning 20-50% of voting rights) and firms in which the family is a majority shareholder (more than 50% of voting rights) and consequently controls decisions.

[Insert Table 6 about here]

Results in table 6 suggest that the identity of the blockholder has a non-negligible impact on compensation policies. This is also true for founding family firms. Compensation in companies with a founding family and individuals as shareholders differ in instances when private investors are present. Family members apparently only change the compensation mix but do not try to exaggerate total pay. Private investors on the other side, clearly seem to demand much higher pay than others. Their level of equity based compensation is comparable to dispersed firms but they remunerate better in terms of salary, cash and consequently in total. As already stated before this can be due to a massive extraction of company funds in cases the private investor is himself CEO or probably an accrued interest to find the best managers obtainable for maximising company results directed to maybe sell the company at a premium in the future. Corporations which have another company as blockholder behave very similar to those with private investors. The same reasons as those stated above are valid. Unsurprisingly, state controlled companies pay much less both in terms of cash and total compensation. This confirms the popular wisdom that working for the government or governmental entities is not very profitable. Miscellaneous blockholders, such as foundations, cooperations etc. pay less in equity but still arrive at similar levels in total compensation. An explanation can be found in the nature of these shareholders who frequently target other goals than wealth maximisation and therefore want to pay their managers market compensation but not necessarily tie it to performance achievements.

Results for different size of ownership stakes of the founding family are mostly in line with expectations. Family firms with a 20-50% ownership compensate their CEO in the same way as widely held companies but use less equity based pay to do so. For companies with a majority family shareholder cash compensation is higher and equity compensation much lower while total compensation is similar to corporations with a dispersed ownership. In both cases it seems that once again alignment of interests is achieved through monitoring and not through compensation. In the case of majority shareholders the extremely negative coefficient for equity compensation can result from the fact that the family already controls a comfortable majority of shares and therefore does not need or want supplementary shares. Cash is preferred to equity as it permits to diversify investments or focus on consumption.

4.3 The effect of active management and generational issues

Earlier studies on family firms show that further differentiation is needed to arrive to correct conclusions. Evidence was found that a variety of other characteristics and here especially on the involvement of family members in the company and generational issues can further influence results (see Villalonga and Amit (2006)). Table 7 shows results for founding family firms which

are either at a founder or descendant stage or in which a family member takes an active management position in the company as CEO and/or Chairman or in which only a passive approach as an investor is being used.

[Insert Table 7 about here]

Table 7 shows evidence, that mostly family firms at the descendant stage or with an outside CEO use different pay packages than widely held companies. This can probably be explained by the fact that at the founder stage the owner will probably be alone and thus be able to choose himself the compensation package that suits him best. This seems to be confirmed by the fact that a founder CEO pays himself a higher salary. This enables him to better diversify his wealth outside of his company and to provide some financial security should his endeavour fail. The probability of the company to be owned by more than one family member increases at the descendant stage. This may lead to different scenarios. The negative relation with regard to equity based compensation can be explained by potential power struggles. Although, the whole family might have a considerable stake in the company each member probably does not individually yield that much power. In this case, passive family members would not want another family member or an outsider to gain too much power by granting them stock options or shares. This is particularly the case for a family CEO. At the founder and descendant stage the above argument on equity compensation equally seems interesting for outsider CEO however, unlike in a case of descendant CEO the outsider seems to get higher cash compensation but not a significantly higher salary. This suggests that family owners monitor external CEO and consequently do not need to pay him that much in equity. There still remains however some incentive by granting a more substantial bonus part of cash compensation. In total, however, compensation is equal to companies with a widely dispersed ownership which once again hints at the presence of existing market pressure that pushes pay to a certain level that is uniform across company types and CEO. The only flexibility for a company seems to be on the way it decides to structure compensation for its employees and not on how much it pays them.

Table 8 further reports more detailed results on active management inside family firms by not only looking at the above-shown generational distinction but also on the distinction between CEO and Chairman on effective compensation. Evidence suggests that the decisions on CEO compensation are not entirely independent of the CEO himself. The most flagrant case consists of family firms in which a family member is CEO and Chairman of the board. In this case he gets paid a substantial amount in salary and in cash compensation and only insignificantly less in terms of equity compensation.⁵ This clearly indicates that the CEO has some influence on his own pay or at least that he can persuade the compensation committee to allow him to extract some private benefits in form of superior pay. In the case in which a family member is CEO but an outsider is Chairman the problem does not seem to exist. Compensation is in line with widely held companies but includes a much lower proportion of equity based pay. Here minority shareholders seem to be better protected, at least in terms of compensation, as the outside Chairman exercises control over the family CEO's decision making. Now looking at outside CEO in family firms it can be observed that while total compensation is still in line with common market practise compensation mix changes once again. It does not seem to make a difference whether the Chairman is a family member or not; cash compensation is higher and equity compensation lower. The case with a family Chairman can be explained by the power struggle argument in which family members do not want to give too much power (i.e. shares) to the CEO and rather monitor him personally. In order to still attract outsiders the company has to offer a higher bonus and cash compensation to offset the missing equity part. In cases where CEO and Chairman are outsiders an explanation is more difficult to arrive at. One could argue that even though the family is a passive investor it still carries considerable weight with the board of directors and can therefore influence its decisions. However, it is very difficult to judge and measure the real independence of board members towards management and shareholders. Furthermore it is understood that the Chairman of the board has an important controlling function in the company and his incentive should therefore not be focused on profit maximisation

[Insert Table 8 about here]

In summary, compensation does seem to differ depending on the activities and roles family members exercise in their company. Firms at the founder stage have less problems and disputes between family members, which may become a big issue from 2nd generation onwards. Moreover, internal organisation is important for compensation purposes. The way companies organise their structure and communication channels between managers and the board has a big influence on how CEO behave and on their executive privileges.

⁵ Compensation is only for his function as CEO. Pay for the function of Chairman of the board has to be added.

4.4 Compensation in the presence of multiple blockholders

As has been described in the previous section CEO might influence or even dominate the board and thus profit in one way or another. Other than for compensation the point of who is controlling the majority shareholder and thus effectively protects minority shareholders is not unimportant. Several possibilities exist. The easiest is to find independent board members with no link whatsoever to the large shareholder and who submit to the preferences and benefits of all shareholders. Another possibility is having a second blockholder who himself is so heavily invested in the company that he will monitor the largest shareholder and not allow him to take decisions detrimental to the company. In the following section I further review this idea. What happens to compensation in family firms in which a second blockholder is present? Two scenarios seem appropriate to be investigated. The first is to look at the relative power between the largest and second largest blockholder. Obviously, a second blockholder that has a similar stake as the largest shareholder will have more power and incentives to monitor. On the other side, companies with no second blockholder or a second blockholder, which is relatively small, will not be able to do much. Second, the identity of the second blockholder might play an important role. Same as in the case of the largest shareholder only individuals that have their personal money invested will have a maximal incentive to exercise control over others as it is their personal wealth and utility that is at stake. A blockholder who is representing the state or another corporation will have a much lower incentive to control as he is not personally affected by poor results.

As described in table 9 family firms without a second blockholder seem prone to private benefit expropriation. Not only is equity compensation low which makes the CEO immune against poor management and results of the companies they manage but cash compensation is substantial which also results in higher total compensation. This clearly indicates that without a second blockholder exercising control CEO are allowed to run the company and extract benefits at their discretion. In firms in which a second blockholder is present and has a similar stake than the largest shareholder results are mixed. Total compensation and cash compensation is in line with widely held companies. It therefore seems that expropriation is contained. Equity compensation is lower which can be explained by a dual monitoring of the management team by both the largest and second largest shareholder. This double monitoring effect also seems to be the case for companies with second blockholders that are relatively small. This indicates that the mere presence of two blockholders has an influence and that the size of the stake is not that important.⁶

[Insert Table 9 about here]

Turning to the identity of the second blockholder the idea that a blockholder that is directly affected by poor management will monitor in a stricter way has to be nuanced. As has been described above, CEO, in companies without a second blockholder, tend to benefit as much as possible from their power. Companies in which an individual is second blockholder are dealing with CEO pay in a more responsible way. Compensation level and mix are exactly in line with widely held companies. Coefficients for all pay forms are negative but none is significantly so. The second blockholder, therefore, stops any extraction possibilities that might arise but does not diminish compensation for the CEO.

4.5 Compensation and dual class structures

The presence of more than one share class in a company may have an important influence on compensation levels and structures through different channels. In a first step I look at family companies with and without dual class structures. Those with more than one share class pay out higher salaries and cash compensation than those with only one share class. This might signal that control by the family is obtained and exercised more easily and therefore private benefit extraction becomes easier. On the other hand equity-based pay shows a negative relation with the use of dual class shares although it is more negative with the absence of such structures. This indicates that family shareholders of companies without such a share structure are cautious with equity-pay as it diminishes their voting power and potentially creates either a disequilibrium inside the family or gives outside CEO too much power. As for total compensation there is no significant difference which reinforces the notion that a market for CEO exists and therefore family companies must align their compensation in order to obtain or retain the best candidates.

[Insert Table 10 about here]

In a second step, I analyse the influence of dual class shares inside family companies by also looking at the identity of their CEO. Results may vary depending on an outsider or family

 $^{^{6}}$ As a robustness test I reconstructed second blockholder dummies as follows: no second blockholder, relative difference of 0-40% and relative difference >40%. Results are very similar to the ones reported in table 7.

member at the helm of the company. By and large results are not much different. Total compensation does not change independent of dual class structures or active management by a family member. For companies with a family member CEO and dual class shares salary is significantly higher than for other types of companies. This indicates a form of expropriation by the blockholder as he holds sufficient voting rights to take decisions that benefit him and is proportionally less affected by expropriation than other shareholders. On the other side, the family CEO also gets a lower amount in equity-based compensation. As he controls already a large part of voting rights he may be relatively less interested in further augmenting this stake and being even more dependent on company performance and rather aim at a diversification of his investments. For companies with a family member CEO but without a dual class structure compensation levels are not significantly different from widely held companies. Increased equity compensation relative to the case with dual class shares allows the family member to increase his controlling stake in his own company as he cannot do it via diverging voting and cash-flow rights. Considering outsider CEO the difference for dual class companies or not is minimal. In both cases equity-based pay is substituted for cash compensation. This once again suggests that families as blockholders will monitor outside CEO and therefore are less reliant on equity-based pay to mitigate possible agency conflicts. However, they need to compensate outsiders at market rate to retain the best person which explains total compensation being in line with other companies.

5. Robustness tests

This section looks at different specifications that might create a bias in the main results. First I re-estimate main results by using different econometric techniques. Some studies generally use either fixed effects or Tobit fixed effects regressions for every compensation form. I, therefore, run both these regression techniques on the different variables, which qualitatively yields similar results. In a further step, I also estimate pooled average regressions, random effect OLS regressions (with GLS and ML estimators) and in between regressions; all tests result in similar findings than for the initial case.

A second bias concerns the misspecification of variables. I test the robustness of pay variables by using the proportion of cash pay over total compensation and equity pay over total compensation instead of the absolute numbers as in the initial case but results remain similar. I also use 1 year sales growth in lieu of 5 year sales growth, debt/equity instead of debt/capital as leverage, the natural logarithm of sales instead of the total assets as size proxy. More importantly I use a wedge for firms with multiple share classes instead of the dummy between ownership and voting rights. The main results are stable when using these alternative control and compensation variables. In addition, I re-estimate my models with winsorised control variables (leverage, market-to-book, sales growth, ROA, stock returns, volatility of ROA and stock returns) at a 2.5% and 97.5% and 1% and 99% level. Results also remain qualitatively similar.

I further explore the sensitivity of results to the use of utilities and financials. For this I exclude utilities and financials as these companies may be considered regulated and not be entirely free in setting their company policies. Discarding these companies from the sample does however not alter main results.

Finally, the challenge may be raised that the use of an unbalanced sample might distort results. Companies that fall out of the sample during the period, either due to bankruptcies or takeovers, might have different compensation levels or structures just before their disappearance. Similarly, companies that appear on the market during the examined period might not be able to pay their CEO in an entirely independent manner and might bias results. I, therefore, run panel data regressions for a balanced panel of firms that comprises 600 firm-year observations for 200 companies. Results indicate that firms dropping out or appearing in the sample do not affect findings.

6. Summary and conclusions

During the last decade and especially the financial crisis, medial, political and academic attention on executive compensation has increased tremendously. Questions about right and adequate compensation levels and mix have been widely discussed and many different views expressed. The present financial crisis has even made executive compensation the centre-piece of serious doubts about the validity of our value system and the chance of survival for the capitalistic system as a whole. Discussions have not only focused on total executive compensation and its size and growth over years but on its variable components such as share and option grants which many believe are at the roots of short-term profit maximisation at the cost of healthy long-term development. Although this phenomenon has primarily been observed in the Anglo-Saxon world it has spread to most other countries and economies as the financial crisis reached a global scale and has impacted real economies. In this challenging environment it is interesting to examine if we can observe significant differences in executive compensation between widely held firms and firms which are owned by a large shareholder.

This paper examines remuneration packages of CEO in firms with a large shareholder and more precisely founding family firms. Companies with this type of ownership structure are prevalent outside Anglo-Saxon countries and represent interesting characteristics that might have a significant effect on their compensation practices.

I may conclude my study in pointing out that, apart from state-controlled and private investor firms, ownership structure has no relation and impact to the level of total CEO compensation. However, the distribution, size and emphasis that are directed to the different components making up total compensation differ significantly for founding family firms. The level of cashbased remuneration in the way of salaries and bonuses is higher, while the use of shares and options is lower than for other companies. These observations are valid for founding family firms irrespective of active family involvement. High salary and cash-compensation is even more visible in companies in which the family CEO also acts as Chairman of the Board and therefore influences his own compensation. The use of dual-class shares does not significantly alter results. Higher cash-based compensation is offset by an even higher decline in equity-based pay.

The interpretations and practical implications of these findings can be manifold. From a practical point of view it shows that compensation is not uniform across companies. It would therefore be wrong and misleading to try issuing a unique regulative framework on compensation or to compare different companies, even within a given market, without differentiating. Moreover, the results suggest that the use of incentive-based compensation to align the interests of managers and shareholders has its shortfalls. What started as a good concept has gradually turned into a way for managers to benefit from the system. Backdating of stock-options or accounting manipulations to inflate performance measures are only two examples. Especially the exorbitant amount paid out as stock-options have been regarded as problematic in the media. Family firms use less equity-based pay and perform better than widely-held companies in many markets (see Maury (2006) for 13 Western European markets or Isakov and Weisskopf (2008) for Switzerland). Lessons from compensation practices and non-monetary incentive-based compensation and more intrinsic motivation or identification with a company can be more effective than oversized compensation packages.

As far as I know this paper is the first study to look at compensation components of family firms in Switzerland which constitutes an ideal setting for research on both family companies and remuneration. It is meant to contribute to academic research by expanding the discussion on both executive compensation and family business research.

This paper provides some more aspects to agency theory and especially to the methods of aligning the interests of managers and shareholders. It shows that blockholders as such do not necessarily monitor managers more closely. If the blockholder is himself a widely-held company then monitoring is probably limited and the alignment of interests is achieved via executive compensation contracts similar to firms with dispersed ownership. In family firms incentivebased compensation for management is of less importance which can be explained by an increased monitoring activity by the company owners. Families have an increased incentive to control management. Their personal stake in the firm in terms of capital investment and family reputation will not tolerate management failure over the long-term.

The results of this paper also add evidence to the argument that families might use their controlling stake to extract private benefits. Contrary to other studies on the US market (Gomez-Mejia et al. (2003) or McConaughy (2000)) I find that base salary and cash-compensation is higher in firms with family CEO and increases even more for companies in which a family member is both CEO and Chairman of the board. This gives the family full control over major decisions in the company. The controlling family may decide on strategy and executive compensation on board level and implement the decisions in the management team. However, founding families substantially lower equity-based pay in both cases which leads to total compensation that is not significantly different from widely-held companies. This shows that the characteristics of a founding family firm have an important influence on remuneration but only on pay structure and not on total amounts.

This paper also provides evidence that the use of control-enhancing mechanisms such as dualclass shares may not be detrimental to minority shareholders. It seems that dual-class shares have an influence on pay structure but are not used as a mean to expropriate minority shareholders by means of higher compensation. Family members only structure their compensation packages to suit their needs but not to extract benefits from their position.

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Table 1 Sample composition

The table shows the number of companies for each ownership category and year. Widely held firms do not have an ultimate owner holding more than 20% voting rights. Companies with a large shareholder owning more than 20% voting rights are divided into founding family members, private investors, the state, a widely held industrial or financial corporation or categorised as miscellaneous.

Year Widely held	Widely held	Blockholder	Founding	Private	State	WH	WH	Miscellaneous	Total
	Dioemioidei	Family	Investor	State	industrial	financial	wiiseenaneous	Fotai	
2007	72	144	69	25	21	6	14	9	216
2008	73	142	69	26	21	5	12	9	215
2009	71	138	66	24	22	4	13	9	209
Total	216	424	204	75	64	15	39	27	640

Table 2Descriptive Statistics

The compensation variables for the analysed sample of 226 firms and 640 firm-year observations include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Ownership variables show the identity of a blockholder holding more than 20% while companies without a blockholder with more than 20% ultimate voting rights are labelled widely held. CEO and Chairman positions in founding family firms can either be held by the family or an outsider. Second blockholder variables include two specifications and are represented by dummies. Firstly, the difference in voting rights between the first and second blockholder and secondly the identity of the second blockholder. Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size (total assets in CHF 000), 5-year sales growth (in CAGR form), leverage (long term debt/total assets), Market-to-Book (market value of shareholder's equity/book value of shareholder's equity), ROA (EBIT/total assets), stock return (annual stock return), stdev ROA and stdev stock return (annual standard deviation of the ROA and monthly stock return respectively over the past 5 years).

· · · · ·	Mean	Median	Standard Deviation
Compensation variables			
Salary	672'638	500'000	600'546
Cash compensation	1'381'665	879'000	1'556'479
Equity compensation	786'804	34'505	2'882'978
Total compensation	2'173'37 0	1'003'234	3'740'339
Ownership variables			
Family owning 20-50%	0.12	0.00	0.32
Family owning >50%	0.20	0.00	0.40
Widely-held	0.34	0.00	0.47
Founding family firm	0.32	0.00	0.47
Family firm - founder stage	0.15	0.00	0.36
Family firm - descendant stage	0.17	0.00	0.37
Private investor	0.12	0.00	0.32
State	0.10	0.00	0.30
Corporation	0.08	0.00	0.28
Miscellaneous	0.04	0.00	0.20
Other blockholder	0.34	0.00	0.48
Active management			
Family Chairman	0.16	0.00	0.37
Outsider Chairman	0.15	0.00	0.36
Family CEO	0.12	0.00	0.33
Outsider CEO	0.20	0.00	0.40
2nd blockholder			
No 2nd blockholder	0.14	0.00	0.35
2nd blockholder individual	0.07	0.00	0.25
2nd blockholder other	0.11	0.00	0.31
Blockholder diff = 0	0.14	0.00	0.35
Blockholder diff 0-20%	0.04	0.00	0.20
Blockholder diff $\geq 20\%$	0.14	0.00	0.34

	Descriptive Sta	tistics	
	Mean	Median	Standard Deviation
Governance variables			
Board size	7.05	7.00	2.73
CEO tenure	6.70	5.00	5.41
CEO age	51.91	52.00	7.00
Dual-class shares	0.18	0.00	0.39
Control variables			
Firm size (in '000 CHF)	26'117'795	760'160	178'000'000
Sales growth (in %)	44.25	6.61	227.49
Leverage (in %)	12.41	8.03	13.83
Market-to-Book	2.80	1.76	6.32
Return on assets (in %)	4.86	6.67	23.41
Stock return (in %)	2.38	0.09	52.16
Stdev ROA (in %)	4.90	2.20	9.78
Stdev stock return (in %)	32.45	27.03	26.54

Table 2 cont'd

Table 3 Univariate tests

This table reports the mean and median values of several variables as well as results of a test of means. The variables for the analysed sample of 226 firms and 640 firm-year observations include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size (total assets in CHF 000), 5-year sales growth (in CAGR form), leverage (long term debt/total assets), Market-to-Book (market value of shareholder's equity/book value of shareholder's equity), ROA (EBIT/total assets), stock return (annual stock return), stdev ROA and stdev stock return (annual standard deviation of the ROA and monthly stock return respectively over the past 5 years).

***, **, * shows significance at the 1%, 5%, 10% level respectively.

T	All firms		Family	firms	Non-Fam	Non-Family firms		
	Mean	Median	Mean	Median	Mean	Median		
Compensation variables								
Salary	672'638	500'000	747'287	515'400	639'642	482'923	-2.0245**	
Cash compensation	1'381'665	879'000	1'611'953	916'000	1'277'715	864'114	-2.4995**	
Equity compensation	786'804	34'505	485'335	0	922'500	74'750	1.7568*	
Total compensation	2' 173'370	1'003'234	2'094'569	949'000	2'2 08'957	1'036'320	0.3551	
Governanœ variables								
Board size	7.05	7.00	6.60	6.00	7.26	7.00	2.8373***	
CEO Tenure	6.70	5.00	8.04	6.00	6.09	5.00	-4.252***	
CEO age	51.91	52.00	51.81	52.00	51.96	52.00	0.2546	
Dual-dass shares	0.18	0.00	0.38	0.00	0.09	0.00	-9.6562***	
Control variables								
Firm size	26'117'795	760'160	4'009'785	568'639	36'400'000	1'103'627	2.1529**	
5-year sales growth (in %)	44.25	6.61	49.37	8.93	41.86	5.56	-0.3891	
Leverage (in %)	12.41	8.03	9.18	4.99	13.93	10.47	4.0951***	
Market-to-Book	2.80	1.76	3.48	1.99	2.47	1.61	-1.8863*	
Return on assets (in %)	4.86	6.67	6.89	8.38	3.90	5.54	-1.5081	
Stock return (in %)	2.38	0.09	-2.99	-1.01	4.90	0.21	1.786*	
Stdev ROA (in %)	4.90	2.20	5.25	2.48	4.74	2.03	-0.6046	
Stdev stock return (in %)	32.45	27.03	30.22	26.87	33.51	27.05	1.4602	

Table 4Propensity to use equity compensation

This table reports the propensity of family firms to use equity compensation. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, 5-year sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return.

***, **, * shows significance at the 1%, 5%, 10% level respectively.

		Equ	ity compensa	ation	
	(1)	(2)	(3)	(4)	(5)
Founding family		-1.3479***	-1.4193***		
		(-3.248)	(-3.330)		
Private Investor			-0.6773		
			(-1.390)		
State			-0.6487		
			(-1.116)		
WH corporation			0.1805		
			(0.317)		
Miscellaneous			-1.5553***		
			(-3.024)		
Family with 20-50%				-0.8338*	
,				(-1.787)	
Family with >50%				-1.8875***	
,				(-3.213)	
Founder stage				()	-0.6776
					(-1.269)
Descendant stage					-2.0881***
2 cocontraint orage					(-4 300)
Other bh	-0.0251	-0 5515		-0 5979	-0 5804
o ther bh	(-0.079)	(-1.490)		(-1.617)	(-1.552)
Board size	-0.1507**	-0.1337**	-0 1569**	-0.1292*	-0.1266*
Dourd Size	(2268)	(2014)	(2.291)	(1.048)	(1.810)
CEO tenure	0.0193	(-2.014)	(-2.2)1)	0.0304	0.0349
CEO tenute	(0.678)	(1.026)	(1 159)	(1.053)	(1, 250)
CEO ago	(0.078)	0.0104	(1.137)	0.0068	0.0031
CEO age	(0.702)	(0.442)	(0.612)	0.0008	(0.122)
Dual alass shares	(0.792)	(0.442)	(0.012)	(0.280)	0.1004
Dual-class shales	-0.4478	-0.3130	-0.3223	-0.0021	-0.1094
Sizo	(-1.142)	(-0.793)	(-0.009)	(-0.004)	(-0.274)
5126	(5.701)	(5 (02))	(5.720)	(5 599)	(5.667)
Salaa amarrith	(3.701)	(3.092)	(3.730)	(3.366)	(3.007)
Sales growin	(0.250)	(0.152)	0.0001	0.0001	-0.0001
Lawanaaa	(0.259)	(0.155)	(0.141)	(0.126)	(-0.189)
Leverage	-0.0139	-0.0170	-0.0198**	-0.0105	-0.0177
M - 1+ /D1-	(-1.1/1)	(-1.300)	(-1.062)	(-1.302)	(-1.002)
Market/ DOOK	(1,422)	(1.467)	(1.275)	0.1408	(1.204)
DOA	(1.455)	(1.407)	(1.575)	(1.299)	(1.294)
KUA	-0.0014	-0.0021	-0.0055	-0.0009	-0.0055
Ctorella Distances	(-0.110)	(-0.155)	(-0.255)	(-0.062)	(-0.221)
Stock Return	0.0030	0.0028	0.0027	0.0025	0.0033
	(1.016)	(0.905)	(0.873)	(0.831)	(1.025)
Volatility (ROA)	-0.0339	-0.0369	-0.0421	-0.0406	-0.0408*
T 7 1 .414. / · ·	(-1.408)	(-1.495)	(-1.610)	(-1.617)	(-1./12)
volatility (return)	0.0041	0.0024	0.0018	0.0022	0.0006
2	(0.626)	(0.366)	(0.292)	(0.348)	(0.106)
Constant	-9.9450***	-9.6834***	-10.3159***	-9.2004***	-9.6091***
	(-4.253)	(-4.110)	(-4.257)	(-3.886)	(-4.229)
Observations	608	608	608	608	608

Table 5 Family ownership and compensation

This table reports the level and mix of compensation in family firms. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, 5-year sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return. ***, **, * shows significance at the 1%, 5%, 10% level respectively.

	Sal	Salary Cash comp.		Equity	comp.	Total comp.		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Individual sh.	0.1542**		0.2207***		-3.7880***		0.1755*	
	(2.098)		(2.827)		(-2.941)		(1.784)	
Founding family		0.0891		0.1933**		-5.0171***		0.0489
		(1.014)		(2.224)		(-3.307)		(0.470)
Other bh	0.0380	0.0650	0.0448	0.1144	0.2703	-1.5608	0.0225	0.0315
	(0.412)	(0.607)	(0.446)	(0.967)	(0.202)	(-1.070)	(0.196)	(0.241)
Board size	-0.0063	-0.0110	0.0118	0.0069	-0.6783**	-0.6104**	0.0032	-0.0012
	(-0.329)	(-0.554)	(0.656)	(0.386)	(-2.420)	(-2.211)	(0.140)	(-0.055)
CEO tenure	0.0067	0.0067	0.0097	0.0089	0.0448	0.0788	0.0069	0.0074
	(0.996)	(0.982)	(1.498)	(1.319)	(0.407)	(0.721)	(0.898)	(0.923)
CEO age	0.0107**	0.0107**	0.0076	0.0083	0.1038	0.0800	0.0097*	0.0094
-	(2.069)	(2.088)	(1.465)	(1.601)	(1.103)	(0.872)	(1.661)	(1.597)
Dual-class shares	0.1195	0.1507	0.0889	0.1061	-1.6923	-1.2458	0.0570	0.1123
	(1.270)	(1.557)	(0.921)	(1.090)	(-0.979)	(-0.722)	(0.479)	(0.980)
Size	0.2749***	0.2730***	0.3310***	0.3290***	2.9907***	2.9583***	0.4240***	0.4198***
	(13.614)	(13.324)	(14.571)	(14.385)	(7.685)	(7.556)	(14.768)	(14.143)
Sales growth	-0.0001	-0.0001	-0.0001	-0.0001	0.0018	0.0016	0.0000	0.0000
0	(-0.491)	(-0.548)	(-0.767)	(-0.779)	(1.401)	(1.316)	(0.293)	(0.263)
Leverage	-0.0039	-0.0037	-0.0050	-0.0046	-0.0509	-0.0610	-0.0060	-0.0060
0	(-0.903)	(-0.874)	(-1.137)	(-1.057)	(-1.101)	(-1.364)	(-1.236)	(-1.231)
Market/Book	0.0277**	0.0270**	0.0434***	0.0432***	0.4469**	0.4573**	0.0222***	0.0226***
	(2.363)	(2.293)	(3.949)	(4.018)	(2.041)	(2.081)	(3.415)	(3.608)
ROA	-0.0012	-0.0012	0.0027*	0.0027**	0.0171	0.0153	0.0043**	0.0044**
	(-0.647)	(-0.641)	(1.885)	(2.000)	(0.440)	(0.395)	(2.388)	(2.503)
Stock Return	-0.0007*	-0.0008*	-0.0001	-0.0001	0.0125*	0.0117	0.0011**	0.0010*
	(-1.831)	(-1.927)	(-0.282)	(-0.325)	(1.681)	(1.596)	(2.098)	(1.880)
Volatility (ROA)	0.0003	0.0005	0.0081**	0.0085**	-0.0956	-0.1041	0.0138***	0.0140***
• • •	(0.062)	(0.088)	(2.216)	(2.340)	(-1.050)	(-1.150)	(3.105)	(3.295)
Volatility (return)	0.0028*	0.0028	0.0031**	0.0032**	0.0191	0.0145	0.0050***	0.0049***
	(1.696)	(1.644)	(2.146)	(2.136)	(1.268)	(0.930)	(3.211)	(3.099)
Constant	8.5320***	8.6025***	8.6110***	8.6358***	-39.6482***	-37.9528***	7.3949***	7.5274***
	(20.669)	(20.551)	(19.499)	(19.368)	(-4.950)	(-4.780)	(14.121)	(13.984)
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	583	583	613	613	611	611	614	614
R -squared	0.56	0.55	0.62	0.61			0.65	0.65

Table 6 Ownership structure and compensation policies

This table reports the level and mix of compensation in family firms. The variables for the analysed sample include the log of salary, cash compensation, equity compensation and total compensation that encompass the whole compensation. Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, 5-year sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return.

	Sal	ary	Cash comp.		Equity	comp.	Total comp.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Founding family	0.1021		0.2146**		-5.2247***		0.0782	
	(1.178)		(2.518)		(-3.439)		(0.777)	
Private Investor	0.2522*		0.2971*		-2.3668		0.3049*	
	(1.949)		(1.929)		(-1.129)		(1.713)	
State	-0.2293		-0.2936**		-1.6212		-0.4907***	
	(-1.625)		(-2.039)		(-0.698)		(-2.969)	
WH corporation	0.1566		0.3130**		1.7054		0.2610*	
•	(1.320)		(2.576)		(0.791)		(1.804)	
Miscellaneous	0.0098		0.0937		-5.7571**		-0.0767	
	(0.075)		(0.429)		(-2.527)		(-0.276)	
Family with 20-50%	~ /	0.1479		0.1572	()	-2.7684*	()	0.0426
5		(1.437)		(1.466)		(-1.769)		(0.351)
Family with >50%		0.0249		0.2291**		-7.7019***		0.0552
		(0.224)		(2.238)		(-3.502)		(0.438)
		()				()		()
Other BH		0.0562		0.1196		-1.8720		0.0324
		(0.519)		(1.002)		(-1.290)		(0.246)
Board size	0.0013	-0.0104	0.0184	0.0067	-0.7127**	-0.5890**	0.0127	-0.0013
	(0.070)	(-0.529)	(1.007)	(0.372)	(-2.576)	(-2.155)	(0.544)	(-0.057)
CEO tenure	0.0074	0.0070	0.0084	0.0089	0.0930	0.0914	0.0071	0.0074
	(1.095)	(1.034)	(1.238)	(1.304)	(0.838)	(0.823)	(0.923)	(0.922)
CEO age	0.0104**	0.0102**	0.0084	0.0086*	0.0980	0.0595	0.0095*	0.0095
ollo uge	(2.056)	(2.044)	(1.639)	(1.652)	(1.070)	(0.641)	(1.668)	(1.615)
Dual-class shares	0.1342	0.1852*	0.0910	0.0856	-1 1170	0 1848	0.0905	0.1087
D'un chubs shures	(1.450)	(1.878)	(0.990)	(0.910)	(-0.664)	(0.098)	(0.848)	(0.920)
Size	0 2754***	0 2708***	0 3355***	0 3302***	3.0575***	2 8810***	0.4301***	0.4200***
oize	(13 719)	(13 411)	(14 739)	(14 224)	(7 844)	(7.386)	(15 141)	(14.058)
Sales growth	0.0001	0.0001	0.0001	0.0001	0.0017	0.0019	0.0000	0.0000
Sales growth	(0.626)	(0.540)	(0.892)	(0.840)	(1 293)	(1.459)	(0.233)	(0.254)
Lavarage	0.0043	0.0037	0.0051	0.0046	0.0680	0.0611	0.0067	0.0060
Levelage	-0.0043	(0.873)	-0.0031	-0.0040	-0.0080	-0.0011	-0.0007	-0.0000
Marlet / Boole	(-1.024)	(-0.875)	0.0201***	(-1.001)	(-1.401)	(-1.401)	0.0214***	0.0226***
Market/ Dook	(2.045)	(2.146)	(3.810)	(4 1 4 2)	(1.050)	(1.014)	(2.744)	(2 501)
POA	(2.043)	(2.140)	(3.819)	0.0028**	0.0117	(1.914)	0.0020**	0.0044**
NOA	-0.0014	-0.0012	(1.994)	(2.010)	(0.205)	(0.450)	(2.365)	(2.505)
Stools Dotum	(-0.730)	(-0.070)	(1.004)	(2.019)	0.0114	(0.439)	(2.303)	(2.303)
Stock Return	-0.00074	(1.072)	-0.0000	-0.0001	(1.557)	(1.503)	(2.107)	(1.886)
Valatility (DOA)	(-1.//9)	(-1.972)	(-0.089)	(-0.299)	(1.557)	(1.505)	(2.107)	(1.000)
volatility (KOA)	-0.0004	(0.012)	(2,100)	(2.206)	-0.1161	-0.11/2	(2 1 95)	(2 208)
\mathbf{V}_{-1}	(-0.073)	(0.012)	(2.199)	(2.396)	(-1.255)	(-1.230)	(3.165)	(3.308)
volatility (return)	0.0024	0.0028	0.0028**	0.0032**	0.0132	0.0142	(2.924)	(2,009)
C	(1.5/2)	(1.639)	(2.108)	(2.139)	(0.853)	(0.969)	(2.834)	(3.098)
Constant	8.4945***	8.66 / /***	8.4481***	8.6024***	-39.32/6***	-35.5461***	/.2664***	/.5212***
	(21.453)	(21.338)	(20.078)	(19.077)	(-5.000)	(-4.451)	(14.822)	(13.985)
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2 01111100	100	100	100	100	100	100	100	1.00
Observations	583	583	613	613	611	611	614	614
R-squared	0.57	0.55	0.63	0.61			0.68	0.65

***, **, * shows significance at the 1%, 5%, 10% level respectively.

The effect of active management and generational issues on compensation This table reports the level and mix of compensation in family firms. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return. ***, **, * shows significance at the 1%, 5%, 10% level respectively.

, ,	Salary	Cash comp.	Equity comp.	Total comp.
Fam. CEO - Founder	0.2977***	0.1310	-1.1460	0.0236
	(2.709)	(1.188)	(-0.653)	(0.202)
Fam. CEO - Descendant	0.0374	0.0934	-8.0791***	-0.0914
	(0.330)	(0.827)	(-3.620)	(-0.696)
Outs. CEO - Founder	0.0096	0.2030**	-3.3412**	0.1568
	(0.099)	(2.085)	(-2.005)	(1.413)
Outs. CEO - Descendant	0.0346	0.2407***	-8.2014***	0.0077
	(0.557)	(3.474)	(-5.674)	(0.098)
Other BH	0.0719	0.1074	-1.5696	0.0234
	(1.047)	(1.430)	(-1.549)	(0.285)
Board size	-0.0118	0.0053	-0.5311***	-0.0004
	(-0.988)	(0.420)	(-2.639)	(-0.031)
CEO tenure	0.0044	0.0107**	0.0825	0.0096
	(0.877)	(2.008)	(0.967)	(1.589)
CEO age	0.0119***	0.0072*	0.0655	0.0076*
	(3.139)	(1.878)	(0.976)	(1.753)
Dual-class shares	0.1784***	0.1058	-0.3092	0.1286*
	(2.818)	(1.595)	(-0.270)	(1.693)
Size	0.2780***	0.3285***	3.0005***	0.4189***
	(20.385)	(19.730)	(10.701)	(21.054)
Sales growth	-0.0001	-0.0000	0.0011	0.0000
	(-0.827)	(-0.671)	(0.692)	(0.346)
Leverage	-0.0034	-0.0045*	-0.0584*	-0.0061**
	(-1.307)	(-1.662)	(-1.816)	(-2.012)
Market/Book	0.0257***	0.0434***	0.4180**	0.0229***
	(2.789)	(4.847)	(2.242)	(3.844)
ROA	-0.0015	0.0028**	0.0100	0.0044***
	(-0.873)	(2.473)	(0.268)	(3.046)
Stock Return	-0.0007*	-0.0002	0.0125*	0.0010*
	(-1.651)	(-0.332)	(1.728)	(1.687)
Volatility (ROA)	-0.0009	0.0087 * * *	-0.1289	0.0137***
	(-0.165)	(2.822)	(-1.615)	(3.692)
Volatility (return)	0.0027*	0.0032**	0.0107	0.0047***
	(1.717)	(2.299)	(0.894)	(3.382)
Constant	8.4697***	8.7251***	-38.0903***	7.6510***
	(27.950)	(26.039)	(-4.782)	(18.884)
Industry Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Observations	583	613	611	614
R-squared	0.56	0.61		0.65

The effect of active management on compensation

This table reports the level and mix of compensation in family firms. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return. ***, **, * shows significance at the 1%, 5%, 10% level respectively.

, , shows significance at	Salary	Cash comp.	Equity comp.	Total comp.
Fam. CEO - Fam. CoB	0.4369**	0.3393**	-1.2078	0.1977
	(2.440)	(2.288)	(-0.452)	(1.179)
Fam CEO - Outs COB	-0.0514	-0.1099	-5 8939*	-0 2222
	(-0.379)	(-0.722)	(-1.756)	(-1.170)
Outs, CEO - Fam, COB	-0.0461	0.2906**	-4 8291**	0 1293
	(-0.435)	(2 157)	(-2.142)	(0.880)
Outs, CEO - Outs, COB	0.1431	0.1980**	-6.1431***	0.0567
	(1.283)	(2.042)	(-3.648)	(0.457)
Other BU	0.0000	0 1172	1 2276	0.0251
Other BH	(0.831)	(0.075)	(0.905)	(0.265)
Boord size	(0.031)	(0.973)	(-0.903)	0.0056
Doard Size	(0.827)	(0.126)	(2165)	(0.252)
CEO tenure	0.0006	0.0074	(-2.103)	(-0.252)
CEO tenure	(0.077)	(0.982)	(0.135)	(0.661)
CEO age	0.0134***	0.0075	0.1007	0.0088
CLO age	(2.625)	(1.409)	(1.059)	(1.463)
Dual-class shares	0.1363	0.0869	-1 4339	0.0937
	(1 510)	(0.915)	(-0.838)	(0.821)
Size	0.2783***	0 3310***	2 9998***	0 4215***
CIEC	(14.782)	(14,343)	(7.547)	(14.011)
Sales growth	-0.0001	0.0000	0.0016	0.0001
Series Brown	(-0.603)	(0.037)	(1.289)	(0.682)
Leverage	-0.0040	-0.0050	-0.0642	-0.0064
	(-0.953)	(-1.146)	(-1.441)	(-1.312)
Market/Book	0.0253**	0.0421***	0.4255**	0.0213***
	(2.419)	(4.516)	(2.058)	(3.415)
ROA	-0.0008	0.0031**	0.0149	0.0048***
	(-0.449)	(2.368)	(0.395)	(2.934)
Stock Return	-0.0006	-0.0001	0.0132*	0.0011**
	(-1.385)	(-0.140)	(1.818)	(2.047)
Volatility (ROA)	0.0013	0.0098***	-0.1029	0.0152***
	(0.256)	(2.683)	(-1.156)	(3.786)
Volatility (return)	0.0028*	0.0031**	0.0147	0.0048***
• • •	(1.699)	(2.125)	(0.911)	(3.109)
Constant	8.3949***	8.7121***	-39.6867***	7.5933***
	(20.980)	(19.005)	(-4.848)	(13.753)
Industry Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Observations	583	613	611	614
R-squared	0.57	0.62		0.65

Compensation in the presence of multiple blockholders

This table reports the level and mix of compensation in family firms. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company, CEO age the age in years of the CEO and dual-class shares a dummy that takes the value 1 if the company has more than one share class. Control variables consist of firm size, 5-year sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return. ***, **, * shows significance at the 1%, 5%, 10% level respectively.

	Sal	Salary Cash comp.		comp.	Equity	comp.	Total comp.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
No 2nd bh	0.1415*		0.4042***		-6.3709***		0.2556***	
	(1.899)		(5.756)		(-4.370)		(3.038)	
2nd bh 0-20%	0.0467		0.0854		-5.0441**		-0.0957	
	(0.679)		(0.872)		(-2.442)		(-0.910)	
2nd bh >20%	0.0602		0.0384		-3.6952***		-0.0958	
	(0.758)		(0.489)		(-2.743)		(-1.085)	
2nd bh individual	()	-0.0474		-0.0469	()	-1.9391	()	-0.1747
		(-0.303)		(-0.328)		(-0.989)		(-1.031)
2nd bh other		0.1240		0.1106		-5.5716***		-0.0454
		(1.223)		(1.016)		(-2.876)		(-0.404)
		()		()		()		(
Other BH	0.0666	0.0716	0.1170	0.1230	-1.5266	-1.6558	0.0367	0.0399
	(0.963)	(0.668)	(1.563)	(1.043)	(-1.507)	(-1.140)	(0.446)	(0.304)
Board size	-0.0112	-0.0134	0.0056	0.0043	-0.5768***	-0.5496**	-0.0020	-0.0034
	(-0.856)	(-0.693)	(0.453)	(0.247)	(-2.910)	(-1.986)	(-0.147)	(-0.153)
CEO tenure	0.0064	0.0055	0.0090*	0.0079	0.0763	0.1034	0.0073	0.0066
	(1.296)	(0.795)	(1.866)	(1.189)	(0.910)	(0.942)	(1.299)	(0.828)
CEO age	0.0108***	0.0116**	0.0080**	0.0088*	0.0813	0.0634	0.0093**	0.0099*
	(2.949)	(2.329)	(2.218)	(1.717)	(1.224)	(0.695)	(2.246)	(1.674)
Dual-class shares	0.1446**	0.1444	0.0726	0.0700	-1.1091	-1.0986	0.0806	0.0788
	(2.291)	(1.490)	(1.165)	(0.763)	(-0.961)	(-0.636)	(1.117)	(0.710)
Size	0.2732***	0.2740***	0.3295***	0.3301***	2.9447***	2.9449***	0.4202***	0.4207***
	(18.763)	(13.351)	(20.491)	(14.489)	(10.530)	(7.478)	(21.429)	(14.138)
Sales growth	-0.0001	-0.0001	-0.0000	-0.0000	0.0014	0.0017	0.0001	0.0001
cureo growin	(-0.546)	(-0.541)	(-0.258)	(-0.463)	(0.905)	(1.304)	(0.636)	(0.500)
Leverage	-0.0038	-0.0038	-0.0051**	-0.0051	-0.0581*	-0.0580	-0.0065**	-0.0065
Levenage	(-1.501)	(-0.897)	(-1.978)	(-1.185)	(-1 814)	(-1 324)	(-2.187)	(-1 333)
Market/Book	0.0271***	0.0285**	0.0428***	0.0444***	0.4730**	0.4317*	0.0234***	0.0240***
Market/ Dook	(3.062)	(2505)	(5 235)	(4 760)	(2 557)	(1.871)	(3.987)	(3.870)
ROA	-0.0012	-0.0011	0.0029***	0.0029**	0.0155	0.0170	0.0046***	0.0046***
non	(-0.697)	(-0.614)	(2.627)	$(2\ 212)$	(0.431)	(0.417)	(3.182)	(2,707)
Stock Return	-0.0008*	-0.0008*	-0.0001	-0.0001	0.0115	0.0114	0.0010*	0.0010**
	(-1.790)	(-1.904)	(-0.254)	(-0.277)	(1.592)	(1,553)	(1.750)	(1 974)
Volatility (ROA)	0.0006	0.0006	0.0090***	0.0090**	-0 1049	-0.1089	0.0145***	0.0145***
(iton)	(0.122)	(0.111)	(2.936)	(2, 492)	(-1 324)	(-1 177)	(3.864)	(3 477)
Volatility (return)	0.0028*	0.0027	0.0032**	0.0031**	0.0146	0.0165	0.0048***	0.0048***
(oracinity (retain)	(1.739)	(1.616)	(2,354)	(2.119)	(1 257)	(1.087)	(3 487)	(3.065)
Constant	8 5978***	8 5566***	8 6671***	8 6187***	-38 1793***	-37 3621***	7 5372***	7 5066***
Constant	(28 181)	(20.667)	(27, 284)	(19.433)	-30.1775)	(-4 767)	(19.036)	(13.867)
	(20.101)	(20.007)	(27.207)	(17.755)	((1.00)	(17.050)	(13.007)
Industry Dummies	Ves	Ves	Ves	Ves	Ves	Ves	Ves	Ves
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	100	100	100	100	100	100	100	100
Observations	583	583	613	613	611	611	614	614
R-squared	0.55	0.55	0.62	0.62			0.65	0.65
i oquarea	0.55	0.55	0.04	0.04			0.05	0.05

Compensation in the presence of dual class structures

This table reports the level and mix of compensation in family firms with and without dual class structures. The variables for the analysed sample include the salary (in CHF), the cash compensation (salary, bonus, company cars and other perks in CHF), equity compensation (shares and stock-options in CHF) and total compensation that encompass the whole compensation (in CHF). Board size represents the number of members on the board, CEO tenure the number of years the CEO has been managing the company and, CEO age the age in years of the CEO. Control variables consist of firm size, 5-year sales growth, leverage, Market-to-Book, ROA, stock return, stdev ROA and stdev stock return. ***, **, * shows significance at the 1%, 5%, 10% level respectively.

	Salary		Cash	Cash comp.		Equity comp.		Total comp.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Family Firm with DCS	0.2332*		0.2963**		-8.0520***		0.0899		
	(1.897)		(2.202)		(-4.162)		(0.655)		
Family Firm w/out DCS	0.0890		0.1918**		-3.9671**		0.0891		
	(0.970)		(2.137)		(-2.543)		(0.841)		
Family CEO with DCS		0.3981**		0.2585		-7.4385**		0.0709	
-		(2.020)		(1.420)		(-2.300)		(0.355)	
Family CEO w/out DCS		0.1779		0.0772		-1.8077		-0.0165	
-		(1.187)		(0.543)		(-0.725)		(-0.097)	
Outsider CEO with DCS		0.1669		0.3069*		-8.2508***		0.0921	
		(1.277)		(1.958)		(-3.771)		(0.614)	
Outsider CEO w/out DCS		0.0558		0.2444***		-4.9327***		0.1410	
		(0.549)		(2.630)		(-2.962)		(1.173)	
		,							
Other BH	0.0854	0.0958	0.1285	0.1204	-1.8256	-1.6751	0.0418	0.0347	
	(0.769)	(0.855)	(1.075)	(0.993)	(-1.270)	(-1.153)	(0.315)	(0.259)	
Board size	-0.0120	-0.0123	0.0061	0.0043	-0.5522**	-0.5181*	-0.0006	-0.0024	
	(-0.611)	(-0.684)	(0.338)	(0.241)	(-2.006)	(-1.899)	(-0.028)	(-0.105)	
CEO tenure	0.0076	0.0043	0.0096	0.0115	0.0875	0.0565	0.0090	0.0105	
	(1.134)	(0.610)	(1.470)	(1.542)	(0.790)	(0.500)	(1.133)	(1.196)	
CEO age	0.0114**	0.0133**	0.0087	0.0073	0.0649	0.0903	0.0093	0.0081	
8	(2.168)	(2.534)	(1.639)	(1.317)	(0.705)	(0.973)	(1.550)	(1.295)	
Size	0.2737***	0.2762***	0.3295***	0.3284***	2.9517***	2.9798***	0.4208***	0.4199***	
	(13.286)	(14.115)	(14.409)	(14.064)	(7.528)	(7.559)	(14.015)	(13.789)	
Sales growth	-0.0001	-0.0001	-0.0001	-0.0000	0.0017	0.0015	0.0000	0.0000	
8	(-0.587)	(-0.714)	(-0.829)	(-0.533)	(1.332)	(1.116)	(0.210)	(0.359)	
Leverage	-0.0038	-0.0039	-0.0047	-0.0047	-0.0569	-0.0544	-0.0060	-0.0060	
0	(-0.891)	(-0.910)	(-1.071)	(-1.081)	(-1.265)	(-1.205)	(-1.218)	(-1.235)	
Market/Book	0.0282**	0.0277**	0.0438***	0.0445***	0.4281**	0.4021*	0.0225***	0.0232***	
	(2.419)	(2.378)	(4.073)	(4.234)	(1.981)	(1.865)	(3.563)	(3.644)	
ROA	-0.0014	-0.0015	0.0026*	0.0027**	0.0163	0.0185	0.0042**	0.0043**	
	(-0.736)	(-0.792)	(1.930)	(2.020)	(0.416)	(0.458)	(2.385)	(2.488)	
Stock Return	-0.0008*	-0.0008*	-0.0001	-0.0002	0.0120*	0.0127*	0.0010*	0.0010*	
	(-1.955)	(-1.887)	(-0.337)	(-0.429)	(1.649)	(1.763)	(1.917)	(1.867)	
Volatility (ROA)	0.0008	0.0004	0.0087**	0.0092**	-0.1077	-0.1149	0.0139***	0.0144***	
	(0.139)	(0.068)	(2.403)	(2.576)	(-1.204)	(-1.297)	(3.226)	(3.472)	
Volatility (return)	0.0028	0.0028*	0.0032**	0.0032**	0.0142	0.0146	0.0048***	0.0048***	
	(1.636)	(1.671)	(2.128)	(2.104)	(0.920)	(0.964)	(3.054)	(3.051)	
Constant	8.5614***	8.4110***	8.6111***	8.7272***	-37.4377***	-39.7575***	7.5113***	7.6171***	
	(20.051)	(19.875)	(18.942)	(18.279)	(-4.743)	(-4.947)	(13.721)	(13.465)	
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Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	583	583	613	613	611	611	614	614	
R-squared	0.55	0.55	0.61	0.61			0.64	0.64	