CEO and Chairperson Compensation: 
The Impact of the Financial Crisis

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St. Gallen, October 26, 2010

The President:

Prof. Ernst Mohr, PhD
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Kilchberg, Switzerland, November, 2010

Marika Staljon Bührer
Abstract

This study presents a timely research into the compensation of CEOs and chairpersons and the lessons that could be learned from the financial crisis. The determinants of CEO and chairperson compensation in two large, publicly-listed banks in Switzerland – Credit Suisse and UBS - are studied over the period from 2002-2009. The dissertation investigates whether the level and mix of compensation granted and the changes to these factors were linked to performance, and whether the level of compensation has been fair or has rather been based on individual greed. Despite numerous research articles investigating CEO and board compensation, there is a lack of broad conceptualization that considers both the CEO and the chairperson in order to provide an integrated overview. This dissertation attempts to close this gap. Little has been studied on the financial crisis in Switzerland up to now. Given the recent actions undertaken in the market, however, there can be no doubt that such a study is essential.

The initial framework is based on a literature review and Martin Hilb’s New Corporate Governance framework (2006), taking agency and stakeholder theory into account. In this behaviour-driven concept, the focus is on the reward value created for shareholders, employees, customers and the public, taking the factors of internal, external and corporate equity into account. The empirical study of CEO and chairperson compensation was conducted as case study research in Switzerland with the data being collected from the financial statements of the banks studied and the stock market during 2002-2009, complemented with semi-structured interviews and makes use of OLS regression analysis.

The difference in pay between CEOs, chairpersons and average employees increased dramatically during the last decade, and based on previous research, was due to equity compensation. The role of annual bonuses has also been significant in the banking industry. There is robust evidence that the ratios for both CEO and chairperson pay increased substantially at the start of 2000, but decreased during the financial crisis, only to recover again during 2009. Before the crisis in 2006, the ratios in Credit Suisse were 266 for the CEO and 255 for the chairperson. The respective ratios in UBS were 267 for CEO and 353. Compensation ratios decreased significantly in UBS in 2007, and, in the year 2008 reached 25 and 33 in the UBS, and 40 and 28 in Credit Suisse. The crisis was caused by the collapse of the subprime market, and was blamed on the stimulation based on compensation paid out with little clarity on how to compensate the new, unregulated activities in the banking sector. The findings suggest that compensation practices were based on historical, lagging performance instead of current or long term performance and did not have a holistic view of the benefits to the different stakeholders. The study suggests a holistic view on compensation, rather than restricting compensation levels and fine-tuning existing methods, which may not be a sustainable solution and may create issues in the future.
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AoA</td>
<td>Articles of Association</td>
</tr>
<tr>
<td>APP</td>
<td>Adjustable Performance Plan</td>
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<tr>
<td>Bn</td>
<td>Billion</td>
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<tr>
<td>BoD</td>
<td>Board of Directors</td>
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<tr>
<td>CC</td>
<td>Compensation Committee</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CG</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>CGC</td>
<td>The Chairman’s and Governance Committee</td>
</tr>
<tr>
<td>CH</td>
<td>Switzerland</td>
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<tr>
<td>CHF</td>
<td>Swiss Franc</td>
</tr>
<tr>
<td>CS</td>
<td>Credit Suisse</td>
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<tr>
<td>EBIT</td>
<td>Earnings before interests, taxes and extraordinary items</td>
</tr>
<tr>
<td>E. g.</td>
<td>For example</td>
</tr>
<tr>
<td>EPS</td>
<td>Earnings per share</td>
</tr>
<tr>
<td>F. ex.</td>
<td>For example</td>
</tr>
<tr>
<td>FINMA</td>
<td>Swiss Financial market Supervisory Authority</td>
</tr>
<tr>
<td>FASB</td>
<td>Financial Accounting Standards Board</td>
</tr>
<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
</tr>
<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
</tr>
<tr>
<td>GAAP</td>
<td>Generally Accepted Accounting Principles</td>
</tr>
<tr>
<td>G20</td>
<td>The group of twenty finance ministers and central bank governors</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>HRCC</td>
<td>Human Resources and Compensation Committee</td>
</tr>
<tr>
<td>HRM</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>Ie.</td>
<td>Id est (that is)</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
</tr>
<tr>
<td>Ln</td>
<td>Natural logarithm</td>
</tr>
<tr>
<td>LTIP</td>
<td>Long-term incentive plan</td>
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M  million
NIAS  Net income attributable to shareholders
NYSE  New York Stock Exchange
OLS  Ordinary least squares
OGR  Organizational Guidelines and Regulations
PIP  Performance Incentive Plan
R&D  Research & Development
ROA  Return on Assets
ROE  Return on Equity
RSU  Restricted Share Unit
SAR  Share Appreciation Right
S&P 500  Standard & Poor’s 500
SISU  Scaled Incentive Share Unit
SIX  Swiss Stock Exchange
STIP  Short-Term Incentive Plan
TARP  Troubled Asset Relief Program
TMT  Top Management Team
US  United States
USD  US Dollar
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1. Introduction

1.1 Background and problem analysis

How much should companies pay to senior executives to attract, motivate and retain them? And how much should companies pay to the chairperson, especially when CEO duality is prohibited? The increasing transparency of compensation, the importance of compensation supporting the strategy, and the CEO as the main strategic decision-maker create a platform for discussion on executive and director compensation. Although executive compensation in publicly-listed companies is highly regulated, it often is a topic in the media and in board meetings, and seems to fail to solve the agency problem. During the financial crisis, attention from both the media and the public was focussed on executive and director compensation levels, whether they are paid too much, or even whether they should pay part of it back. It does not seem to matter how they are compensated, but how much they are paid in a certain year, which shows that the question of executive compensation has not yet been solved. The instrument or tool used in a pay mix can be questioned if it enables high compensation levels in a short-term at the expense of long-term performance. That has created emotions, and even anger over the CEO pay, and claims that the recent pay levels have encouraged greedy CEOs to take excessive risks, thereby contributing to the financial crisis. At the beginning of 2000, pay was accused of contributing to the accounting scandals by greedy CEOs and the collapse of share prices. Together with the disclosure requirements, these recent activities and emotions have created an environment of continuous debate on compensation and continuous research by academics.

Being closely linked to executive pay, non-executive “director pay has only recently received more attention by academics” (Hengartner, 2006: 6). Since 2002, CEO duality, i.e. the control of both the board and the executive committee by the same person, has been prohibited in Swiss financial institutions. A separate role for the chairperson became significant, as companies with wholly non-executive boards do not allow the CEO to be a member of the board, but permit attendance of board meetings on request. Typically, the board, under the leadership of a chairperson, determines the strategy and direction of the firm, leaving the CEO and the executive committee with the responsibility for managing the operational implementation. A full-time chairperson has even occasionally been provided with benefits and a compensation structure similar to those of the CEO. Compensation practices cascade down the company, affecting compensation levels and composition throughout the
organization (Gomez-Mejia, 1994); an understanding of the top level structure and the pay-setting process is therefore important.

The linkage between pay and company performance is a crucial element in CEO compensation (e.g. Jensen and Murphy, 1990; Murphy, 1999; Eisenhardt, 1989), but seems to be not that important when discussion turns to a chairperson (Yermack, 2004). The disparity arises from Agency Theory, which considers the CEO to be an agent of the shareholders, and the chairperson to be a representative of the shareholders. As a result, CEO compensation is studied far more widely than chairperson compensation, and has lead to different results and suggestions based on the time of the research and country in which it was carried out. Some scholars suggest that CEO compensation is based on an optimal contracting approach (Jensen and Murphy, 1990a), whereas others believe in the managerial power approach (Bebchuk and Fried, 2003).

The recent financial crisis, which started in the US as early as 2007, and hit European banks heaviest in 2008, created the biggest regulatory overhaul since the 1930s largely related to executive compensation and corporate governance. The current debate concerns the influence of the CEO and the chairperson on short-term company performance at the expense of a long-term performance. Politicians claim that this is due to the pay standards being tied to short-term profits. It is argued that a well designed compensation plan can reward executives and stakeholders, whereas a poorly designed plan can waste corporate resources without motivating the executive. At the extreme, it can cause the executive to take short-term actions that reduce shareholder value in the long-term. These include actions such as cutting back on long-term investments in order to increase current compensation. Part of the problem is that executives have negotiated contracts that do not necessarily take account of pay over the long term. As a consequence of the crisis, the financial services industry is reviewing its compensation practices. Companies provide shareholders with a say on pay, which is a typical reaction when the firms are performing poorly (Thomas and Martin, 1999). However, some scholars indicate that not only pay, but also short-term focus of the international investors encourages managers to focus on short-term or even quartile results (Bushee, 1998).

The instrument or tool in a pay mix is only questionable if it has enabled significant pay levels just before a company’s failure. The focus from the public has been totally oriented towards the level of compensation. Agency Theory suggests the use of equity compensation schemes to align the interest of managers to those of the owners (Blasi et al., 2003). However, recent years have shown that options tempt executives to manipulate the books in order to obtain

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1 As outlined by Obama
2 F.ex. Obama, Timothy Geithner
3 F.ex. FINMA is setting minimum standards for remuneration systems in financial institutions in Switzerland
4 Anderson, Banker and Ravindran (2000) Jones, Kalmi and Mäkinen (2006) found that there is a relationship between a firm’s performance and equity compensation, and, moreover, that company performance influences the adaptation of equity compensation.
better earnings (Hall and Murphy, 2003; Bebchuk et al., 2001; Bolten et al., 2002; Felton, 2004), reprising them (Daily et al. 2002), backdating them (Collins et al. 2009) and cashing them out before information on company failure is published. Researchers therefore often suggest certain tools they consider to be superior to others; in case of options, for example, they suggest restricted stock (Hall and Knox, 2003). Today, the focus is on bonuses, which the public argues have been too high. Regulators are demanding deferrals for multiple years to solve the problem. Long-term deferrals, such as for five years, may, however, link the payment to the person’s previous role and lead to the compensation levels being no lower than for the non-deferral model. This happened in Credit Suisse. The CEO received CS deferred PIP grants in his Investment Bank role in 2004 and 2005. The awards vesting in 2010 resulted in significant pay levels, as CS has outperformed compared to peer companies, and this is one of the performance measures for the awards. The same thing took place with Grübel, who joined UBS after his retirement from CS. UBS compensated the forfeiture of his awards in the CS PIP plan. The public may easily mistakenly add these figures to current CEO compensation, although they were actually granted in previous roles.

In spite of the IT-bubble crash or the financial crisis, income for top management level remains at a significant level. It can be hard to justify certain compensation levels as fair in a period of sinking share prices, corporate layoffs and government bailouts. The question of “how should the remuneration of executives, chairpersons and members of boards and committees be managed in order to be fair from the points of view of the individuals remunerated, the shareholders, the employees, the clients and the public?” (Hilb, 2006: 240) is increasingly important, and the financial crisis could probably provide some lessons.

1.2 Gaps in existing literature

The number of studies has soared since the transparency of executive compensation has increased, giving easier access to the data. The most well-known studies arise from the separation of ownership and control (Smith A., 1776; Fama and Jensen, 1983) and from agency theory (Jensen and Meckling 1976; Eisendhardt 1989). A significant number of articles have been written about the pay–for-performance relationship, but with different results due to different samples and time periods or performance indicators (e.g. Hall and Liebman, 1998; Murphy, 1999; Mäkinen, 2007; Lambert and Lackert; 1987). The studies include the relationship between compensation and future firm performance (Sanders, 2001; Hanlon et al., 2003), alignment of CEO compensation with company goals (Ikäheimmo. et al., 2007) and shareholder wealth maximization (Core et al. 2003). The research field of economics and finance makes use of stock market-based measures, whereas, in contrast, studies in the accounting literature typically use either accounting-based measures or both measures together (Joskow and Rose, 1994). Pay-for-performance studies on non-executive
directors have only recently raised the interest of scholars, however (Schmid 1997; Yermack 2004).

At the beginning of 2000, economists and scholars based their studies on stock options plans, which had become a typical tool for CEO compensation in high-tech companies (Mäkinen, 2007; Hall and Murphy, 2000; Bettis et al., 2005). There were plenty of studies into the valuation of options (e.g. Carpenter, 1998; Hall and Murphy, 2002) and their reprising (Chen, 2004; Carter and Lynch, 2001; Chance et al., 2000). The popularity of options has been explained by accounting standards, which required firms to include as an expense item most forms of pay, such as salaries, cash bonuses, and the value of shares, but allowed firms to choose whether to include the value of options (Guay et al. 2003). The popularity has also been explained by taxation benefits, which allowed performance-related pay in excess of USD 1 million to be tax deductible to the corporation.

The implication of compensation policies for managerial decision-making has been studied by focussing on investment and debt policy (Coles et al., 2002), risk-taking (Carpenter, 2000) and corporate acquisition decisions (Datta et al., 2001). A number of studies have recently responded to the debate of credit crisis, but have only focused on CEO compensation (Westman 2009, Fahlenbach and Stulz, 2009), corporate governance (Beltratti and Stulz, 2009) and the US market area (Leval and Eeckaut, 2009; Naryaman, Brem, 2009).

There is very little academic literature that addresses the compensation of both the CEO and the chairperson, or that has studied the situation in Europe over the period from the recession caused by the burst of IT bubble up to the financial crisis. In addition, most of the studies focus on agency theory, and a conceptual view of agency theory including behavioural concepts is therefore required. An earlier study by Coombs and Gilley (2005) investigated the relationship between stakeholder management and executive pay, but only measured non-financial variables, such as community, diversity, employee and environment performance, as predictors of CEO compensation. This dissertation moves beyond the basic agency-theory hypothesis of only linking pay to shareholder performance or of linking pay to non-financial measures only. It extends the existing literature by investigating the concepts of CEO and chairperson compensation with regard to benefits created for the key stakeholders, which, besides shareholders, also includes clients, employees and the public. The relation between CEO and chairperson pay and performance for key stakeholders and the impact of financial crisis are studied.

1.3 Goal and research questions

The focus of this study is on remuneration at the top level, because similar issues pertain to employees who are not at the top of the corporate hierarchy. In order to achieve a well-
designed pay system, it is important to understand the major forces influencing the pay, such as corporate governance systems, external benchmarks, financial markets, the managerial labour market, and the government. Corporate governance in particular plays a significant role in the thesis. After the corporate scandals in 2002, Taylor (2003) suggested four reasons for crisis in corporate governance: the burst of the dot.com bubble, the stock market crash, high-risk strategies and insider greed, which all impacted public trust. At least two of these have been repeated in the recent financial crisis: greed and high-risk strategies. Management and board supported high risk strategies, and were compensated based on short-term results at the expense of long-term performance. That is in line with Gladwin et al. (1995), who argue that there has been increased separation of the economy and society, and increasingly orientation on short-term financial performance. In the IT–bubble, the equity was overvalued partly due to the market mistake of creating agency costs through damaging managerial and organisational incentives (Jensen, 2002). In the credit crisis, the risks that banks took on were incorrectly valued. Undervalued equity can be easily solved by hostile takeovers or leveraged or management buyouts, but overvalued equity can normally only be solved through corporate governance (Jensen et al., 2004).

This research explores the compensation of the CEO and the chairperson, the top positions in the banks, within Switzerland with regard to recent changes in the regulatory environment in the two case companies: Credit Suisse and UBS. The focus of the study is on the pay mix and level of both roles, and the impact of the financial crisis on them. The aim is not to create a perfect compensation policy, but to draw up recommendations for the remuneration practice of Compensation Committees in order to ensure fairness from the points of view of the individuals remunerated, the shareholders, the employees, the clients and the public (Hilb 2006), and to find out which lessons can be learned from the financial crisis.

Hilb (2006) defines three dimensions of fairness in compensation, as follows:

- Internal fairness based on competence and conformance to requirements
- External fairness determined through relevant market comparisons
- Performance-related fairness of the variable portion of pay linked to firm performance

Using the behaviour-driven concept together with agency theory, any contribution towards the creation and increase of value for shareholders, employees, customers and the public should be rewarded and encouraged. Social norms and fairness of pay have been subject to on-going public debate during the financial crisis, and are thought to have impacted strongly on executive pay (Krugman, 2005). The existing knowledge on the topic is consolidated as well as investigated empirically through a case study. The results of the research include the factors that are crucial to successful compensation and a thorough understanding of them.

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5 Equity is overvalued when a firm’s stock price is higher than its underlying value.
6 The terms “financial crisis” and “credit crisis” are used interchangeably for the same topic.
The research objective of this dissertation is:

To contribute to the understanding of academics and practitioners with regard to CEO and chairperson compensation, and to indicate the lessons that could be learned from the financial crisis.

This dissertation moves beyond the basic agency-theory hypothesis of only linking executive pay to firm performance, and extends the existing literature by investigating both CEO and chairperson compensation. Given the recent financial crisis, the study only concentrates on one industry and two companies with similar level of complexity, internationalization, turnover and number of employees (Sanders and Carpenter, 1998): Credit Suisse and UBS. Not only the stability of Swiss franc, but also the size of the assets in Swiss banks supported the decision to choose Switzerland for the study. An estimated one-third of all funds held outside the country of origin are kept in Switzerland, which amounted to 6.7 trillion Swiss francs by 2007.

The objective of this study is to answer to the main question by addressing the following sub-questions:

1. How are the CEO and chairperson rewarded in Credit Suisse and the UBS?
2. How does public pressure affect CEO and chairperson pay in Credit Suisse and the UBS?
3. What could we learn from the financial crisis regarding CEO and chairperson compensation?
4. What are the similarities between the compensation success factors?
5. How can practitioners make successful compensation possible?

The substance of each research question is described in more detail as follows.

1. How are the CEO and chairperson rewarded in Credit Suisse and the UBS?

The aim is to gain an in-depth understanding of CEO and chairperson pay in Credit Suisse and the UBS, and into the reasons behind the pay practice, taking into account factors such as the external market and pay-setting processes. One important part of this research question is whether the CEO and chairperson are overpaid, i.e. not paid for performance. In addition to shareholder performance, the performance includes also benefits to other stakeholders, such as customers, employees and the public. The internal and external fairness are also studied, while fairness is considered together with the relevant pay theories. Prior studies investigated the dynamic response of executive pay to changes in firm size (Bebchuk and Grinstein, 2005). The firm-size effect with a reduction of size during the crisis is studied in relation to pay.

2. How does public pressure affect CEO and chairperson pay in Credit Suisse and the UBS?
The evolution of the compensation is studied over the time period from 2002 to 2009, capturing both the end of the IT boom and the financial crisis. Together with increasing disclosure requirements, many studies have been conducted on the compensation paid during this time, and it has received increasing attention in the media. The public debate and government interventions give the impression that the boards of directors have made a bad job of defining the compensation levels and the mix, and this question therefore aims to find out whether this is the case in Credit Suisse and the UBS, and how public pressure is impacting pay.

3. What could we learn from the financial crisis regarding CEO and chairperson compensation?

The main focus of this question is to understand the effect that the credit crisis and the downturn have had on pay, and what has been wrong with pay. Part of the answer is to find the changes that have occurred in the UBS and Credit Suisse in order to reward strategies, and the communication that has taken place due to the financial crisis. The primary goal is to find the lessons that could be learned from the financial crisis. The special market characteristics of the banking industry are derived, and CEO and chairperson compensation characteristics set the context for the case study analysis, while the response of pay policies and practices to the increased regulations is studied.

4. What are the similarities between the compensation success factors?

The aim is to define which factors make CEO and chairperson compensation successful and fair, and to identify the challenges in successful compensation. The agency theory with support of stakeholder theory and other pay related theories, together with previous pay studies, are used to build up a conceptual framework. The model is developed based on the literature review.

5. How can practitioners make successful compensation possible?

The aim here is to contribute to pay theories by building up suggestions as to how practitioners can create successful compensation for the CEO and chairperson.

The research strategy in this study is a case study with a post research design with descriptive characteristics, but is complemented with quantitative methods for developing existing theories and models. It is thereby a combination of qualitative and quantitative analysis. In the conceptual framework, agency theory is supplemented with stakeholder theory, which not only takes shareholders into account, as suggested by the agency theory, but also employees, clients and the public. The goals of the case study are to test the conceptual framework, conduct an in-depth research on CEO and chairperson compensation and define and test the different factors that affect successful compensation in the context of the Swiss banking industry and the financial crisis, with OLS regression. Public information on UBS and Credit
Suisse is studied, and is supplemented by semi-structured interviews, as archival data cannot adequately capture the nuances underlying the compensation decisions (Gomez-Mejia, 1994). The public documents include corporate governance reports, annual reports, companies’ internet pages and the stock market.

This work aims at providing a detailed and comprehensive overview of CEO and chairperson pay in Switzerland, and especially in the Credit Suisse and the UBS. Furthermore, it aims to bring insight into the topical phenomenon of compensation in the financial crisis. By presenting an extensive and updated review of the literature and detailed statistical data, it is intended to provide a valuable input to compensation committees, consultants, managers, HR and regulators on this contentious issue. The findings aim to contribute to the bodies of corporate governance and compensation research, such as the small but increasing amount of literature on media and public opinion regarding corporate decisions (e.g., Dyck and Zingales, 2002; Core et al. 2008), since the understanding of the performance for stakeholders can be crucial for reputational reasons, and also to the large amount of literature on compensation and corporate governance (e.g. Murphy, 1999; Core et al. 1999; Holmström and Kaplan, 2002; Bebchuk and Fried, 2004).

### 1.4 Key definitions

The definitions of the key concepts of this study are presented in this chapter. Some of these concepts are based on previous literature. Other relevant concepts are defined within the text.

**Cash compensation**: The combination of fixed basic pay or annual salary and cash incentives, which is typically performance-based for executives. Cash compensation levels are usually aligned with market levels.

**Total direct compensation**: In addition to cash compensation, total direct compensation includes the opportunity to acquire company equity, such as shares and options. “Base salary is often less than half of the direct compensation for executives” (Risher, 2009: 9). Employees receive direct compensation in return for the services they provide to the organization. They are given at a regular interval at a definite time.

**Indirect compensation**: Everything from the legally required public protection programs, such as social security to health insurance, employment security, retirement programs, and allowances such as a company car or housing.

**Total compensation**: In addition to direct compensation, this includes indirect compensation with benefits and the value of the prerequisites of higher-level executives.
Pay mix: The combination of fixed and variable compensation, including short and long term compensation. Compensation philosophy is a key element in determining the mix.

Executive: The executive is a senior manager in a corporation. The highest-level executive position in the company is chief executive officer (CEO). A non-executive director is an outside director who performs at the board level without an employment contract with the company.

CEO duality: The CEO and Chairman of the Board roles are assumed by the same person.

Corporate governance: In the purpose of this thesis, following definition from the various different definitions is used: Corporate Governance is the process and structure used to direct and control the business and affairs of the corporation with the objective of maximizing stakeholder value, which includes ensuring the financial viability of the business. “The process and structure define the division of power and establish mechanisms for achieving accountability among shareholders, the board of directors and management. The direction and control of the business should take into account the impact on other stakeholders, such as employees, customers, suppliers and communities”. (Dey Report, 2.1)

Financial crisis: is a reduction in the general availability of loans or credit or a sudden tightening of the conditions required to obtain a loan from the banks. It is also known as the credit crisis. The 2007-2010 crisis was triggered by a liquidity shortfall in the United States banking system caused by the overvaluation of assets. It resulted in the collapse of large financial institutions, the bailout of banks by national governments and downturns in stock markets around the world.

Government: The organization or agency through which a political unit exercises its authority, controls and administers public policy and directs and controls the actions of its members or subjects.

Pay-for-performance: A system that links compensation to measures of work quality and/or goals. For the CEO, there is a requirement to tie compensation to company performance compared with competitors.

Principal-agent problem: arises under a condition of incomplete and asymmetric information when a principal hires an agent. The two may not have the same interests. The principal–agent problem is found in most employer/employee relationships, for example, when shareholders hire top executives of corporations.
1.5 Structure of the dissertation

The structure of the dissertation is related to the research process. The structure of the thesis is visualized in Figure 1. The second part of the dissertation provides an in-depth literature review of both executive and director compensation from key determinants to pay-setting processes, which are remarkably similar. The major streams of compensation literature are reviewed, and the concept of the agency theory and performance based compensation to mitigate agency problem is introduced. Other concepts, such as stakeholder theory, are studied to complement this. Since corporate governance has a significant role in executive compensation and because directors participate in the internal governance, both corporate governance and the new regulations due to the financial crisis are reviewed. The conceptual framework captures the aspects from the theories, the pay determinants from the literature and the notion of pay fairness towards stakeholders. Based on this, the hypotheses are formulated at the end of the section.

Figure 1. Structure of the dissertation.

The third part presents the empirical objectives with the research methodologies selected, explains the limits of the empirical part and continues by testing the hypotheses. The case study design is described first, including a description of the research problem. Secondly, the case selection is described together with the research strategy, design and process, data collection and data analysis. As the third part, the validity and reliability of the study is analysed. Finally, the in-depth case study findings are presented with a qualitative review of both case companies and a quantitative analysis across both case companies. A summary of findings and a discussion is presented in the same section.

The final part of the thesis presents the summary and the key findings of the study, with its implications for theory and practice. It ends with the limitations and the directions for further research.
2. Theoretical framework

The purpose of this chapter is to review the existing literature regarding compensation and corporate governance. Corporate bodies use remuneration to attract, retain, and motivate employees. The components of pay mix and determinants that impact on the pay level are discussed, together with the pay-setting processes, which include corporate governance and the recent changes to it. In addition to this, the results from previous studies on the relationship between pay and performance are summarized. Furthermore, the purpose of this chapter is the exploration of the conceptual and theoretical approaches relevant to the addressed gap in research. Conceptual theories that help to focus on the research from a certain angle are related to behavioural and economic theories of pay in this study, although with a specific focus on agency theory, the relation between pay and performance and the mitigation of the owner-manager conflict. This framework, built from interrelated concepts, may not necessarily be well worked-out as a theory, but it guides this research by determining what is measured, and what statistical relationships are looked for. At the end of the chapter, the hypotheses are built based on the framework and the literature.

2.1 Studies on executive pay

There have been many studies in the field of executive compensation with the majority of them focussing on the US market, which is the “undisputed trendsetter in executive remuneration practices” (Jensen et al, 2004: 2). Over time, researchers have become increasingly interested in the consequences of compensation. Several researchers argue that different compensation methods have an impact on company decision-making. The amount of company equity that top management holds has a significant impact on corporate strategic decisions (Datta et al., 2001; Bliss and Rosen, 2001), such as investment and debt policy.

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7See the survey article by Murphy, 1999, "Executive Compensation", in ed. Ashenfelter and Card, Handbook of Labor Economics, 3, North Holland for an overview of the academic literature, including citations to nearly 200 academic articles relating to executive incentives, remuneration, and turnover. Reprints of 45 of the most influential academic articles on executive pay are available in Hallock and Murphy, 1999, The Economics of Executive Compensation V. I & II, Elgar Reference Collection, International Library of Critical Writings in Economics, Cheltenham, UK: Edward Elgar Publishing.
(Coles et al., 2002), risk-taking (Carpenter, 2000), corporate acquisition decisions (Datta et al., 2001), the value development of the firm (Morck et al., 1988; McConnell and Servaes, 1990) or the compensation policies for managers and other employees of the company (Gomez-Mejia, 1994) and the relation to future firm performance (Sanders, 2001). At the level of pay, it is often argued that top executives are overpaid (Gomez-Mejia, 1994). Probably no other single variable had received as much empirical attention across different business fields and social sciences related to them as executive compensation (Gomez-Mejia, 1994). Some of the recent studies from social sciences investigate relationship between stakeholder management8 and executive pay (Coombs and Gilley, 2005) with the findings of negative influence of non financial stakeholder measures on CEO salaries. However, in spite of many decades’ research efforts, there still is much to be learned regarding CEO compensation (Gomez-Mejia and Wiseman, 1997).

Although a majority of the previous empirical CEO compensation studies have been conducted either in the U.S. or in the U.K., mainly due to the better availability of data, other countries have recently increased the transparency of CEO compensation and have shown great interest in the research. According to the previous studies, US CEOs are paid more than their international counterparts, and receive a larger portion of their total pay in the form of stock options, and a lower fraction in the form of salaries than any of their global counterparts (Murphy, 1999). The pay levels of US CEOs exceeds pay in other countries, even after adjusting for tax rates, purchasing power, and public benefits (Abowd and Bognanno, 1995). More specifically, Conyon and Murphy (2000) report that CEOs in the US earn 45% higher cash compensation and 190% higher total compensation, together with a significantly higher ownership of their firms, than CEOs in the UK. An extensive research conducted by Fernandes et al. (2009) examined the level and structure of compensation for CEOs in 27 countries in 2006. The findings show that the U.S. CEOs earn much more than any of their foreign counterparts. Table 1 shows the findings of the US compared to European countries such as the UK and Germany. Total average compensation in the US was USD 5.5 million compared to USD 3.3 million in the UK and USD 1.7 million in Germany. These differences can be explained by the higher portion of equity compensation granted to the US CEOs, since fixed pay and bonuses of US CEOs are lower than their German colleagues’.

8 Stakeholder management deals with “the degree to which organizations move beyond their own needs and legal requirements to satisfy the needs of their various non-shareholding stakeholders such as employees, suppliers, customers, and individuals in the community, whose primary benefit derived from the company is not from its shareholder returns” (Coombs and Gilley, 2005: 827).
### Table 1. The level and structure of compensation in the US, UK and Germany in 2006.
Fernandes et al. (2009).

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK</th>
<th>DE</th>
</tr>
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<tbody>
<tr>
<td><strong># of firms</strong></td>
<td>1'285</td>
<td>1'077</td>
<td>103</td>
</tr>
<tr>
<td><strong>Fixed pay, USD</strong></td>
<td>1'091'204</td>
<td>607'872</td>
<td>1'230'746</td>
</tr>
<tr>
<td><strong>Non-equity, USD</strong></td>
<td>1'295'487</td>
<td>333'811</td>
<td>2'039'772</td>
</tr>
<tr>
<td><strong>Equity, USD</strong></td>
<td>3'110'066</td>
<td>754'316</td>
<td>776'630</td>
</tr>
<tr>
<td><strong>Total Compensation, USD</strong></td>
<td>5'496'757</td>
<td>1'695'999</td>
<td>3'270'518</td>
</tr>
</tbody>
</table>

Compensation levels and pay mixes have not been stable throughout the years, however, Frydman and Saks (2007) analyse average cash and total remuneration of on the three highest-paid executives in the largest 50 US firms in 1940, 1960, and 1990 and show a significant increase in the compensation from the late 1990’s until early 2000 due to the increasing number of options granted. Figure 2 shows a sharp peak in the compensation level in 2000, which then decreases instantaneously after that. The figure also shows that pay was actually quite stable until 1980’s. From 1970 to 1975, total compensation equalled cash compensation, and there were no significant increases in the total pay. The additional components of pay that were introduced during the end of 1970s, mainly equity-related, increased total pay to more than the cash compensation. That was the beginning of increasing pay levels.
It has been argued that the peak in the compensation level that started in 1995 was caused by the Clinton Tax Act\(^9\), which defined non-performance-related compensation in excess of USD1 million as unreasonable, and therefore not deductible as an ordinary business expense for corporate income tax purposes (Jensen et al., 2004). The companies found out that option grants satisfied the new IRS regulations and allowed pay that was significantly in excess of USD 1 million to be tax-deductible for the corporation. This created an escalation in option grants and a contradictory outcome of the Act was the significant increase in executive compensation as shown in Figure 2. Even before Clinton’s Act, during the 1992 presidential election in the US, new legislation\(^10\) was introduced to limit CEO pay levels from exceeding 25 times that of the lowest-paid worker. Companies were required to include non-binding shareholder resolutions\(^11\) about CEO pay in their company proxy statements and to disclosure top executive compensation in the annual proxy statement. However, these activities did not limit the level of compensation as intended, in fact vice versa. These examples therefore show that when compensation has become a political topic, with political intervention, there has been a massive growth in the CEO compensation.

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\(^9\) The Omnibus Budget Reconciliation Act of 1993
\(^10\) The House of Representatives disallowed deductions for compensation exceeding 25 times the lowest paid worker
\(^11\) The Securities and Exchange Commission (SEC) pre-empted the pending Senate bill in February 1992
2.1.1 Predictors on executive pay

The traditional theory of a firm states that top managers operate to maximize the firm’s value or profits. Starting from this neo-classical approach, the behavioural studies of Cyert and March (1963) argue that different individuals and groups within the firm have their own aspirations and conflicting interests, and that firm behaviour is the weighted outcome of these conflicts. The structure of the manager’s compensation contract results from the competition in the managerial labour market and links the compensation closely to the company’s profitability while uniting the manager’s interests with shareholder interests (Fama, 1980). Consequently, managers act to maximize profits and shareholder wealth. Many studies focus on the relationship between CEO compensation and firm performance (e. g. Baker et al. 1988; Jensen and Murphy, 1990a; Murphy, 1985; Finkelstein and Hambrick, 1989; Barkema and Gomez-Mejia, 1998) with mixed results (Jensen and Murphy, 1990a), on different firm sizes (Schmidt and Fowler, 1990; Ciscel and Carroll, 1980; Gomez-Mejia et al., 1987; O’Reilly et al., 1988) and in the diversification of the companies (Rose and Shepard, 1997; Berg, 1969; Finkelstein and Hambrick, 1989). Compensation is often tied to measures that are positively correlated with managerial effort, such as accounting income, share price or market share (Balsam, 2007). However, other variables such as diversification and internationalization are established as predictors of executive and CEO total compensation levels and of the percentage of equity compensation in CEO pay mix (Sanders and Carpenter, 1998; David et al., 1998). Furthermore, Cyert et al. (2002) find a positive relationship between CEO equity ownership and total compensation; although other researchers do not find any evidence on the existence of this relationship (e. g. Carpenter et al., 2002). The only variable by far that has been found to have a consistently positive relationship with CEO compensation is firm size. Rose and Shepard (1997) report that the CEO of a firm with two lines of business averages 14% more total compensation than the CEO of a similarly-sized but undiversified firm, ceteris paribus.\(^\text{12}\)

Since financial measures are used to link pay to performance, companies that reward on growth may create a strong incentive for managers to make acquisitions in order to obtain an increase in net pay, even if the mergers cause the acquiring firm’s stock price or subsequent operating performance to decline, which is typical after a merger announcement (Bliss and Rosen, 2001). To support the argument, Bebchuk and Grinstein (2005) report that company expansions are generally associated with increases in CEO compensation. Based on Swiss market data, the firm size, the level of internationalisation and the political environment are all related to executive pay, while diversification and market uncertainty show no significant association with it (Hengartner, 2006).\(^\text{13}\)

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\(^{12}\) Ceteris paribus = all other things being equal

\(^{13}\) Hengartner 2006 has listed a comprehensive overview on CEO pay and power and complexity studies in his doctoral thesis.
CEO tenure has mixed results depending on the time period of the research. According to Finkelstein and Hambrick (1989), the seniority level of an executive or rather the CEO’s general management experience is related to his bonus, but not to total cash compensation or salaries. It had significant positive associations to CEO cash pay during the 70’s and early 80’s in the US, while extremely long CEO tenure had a negative effect on compensation (Finkelstein and Hambrick 1989), and later had no impact (Coombs and Gilley, 2005) or a negative impact on CEO total pay in the US (Henderson and Frederickson, 1996; Cyert et al., 2002), and a negative impact on CEO cash pay in Denmark between 1992-1995 (Eriksson, 2000). Despite inconsistent empirical evidence, CEO tenure continues to be used as a single control variable for CEO power in the recent pay studies (e.g. Sanders, 2001). Researchers have also studied how CEO tenure impacts on pay mix, showing that the link between CEO tenure and equity is either negative (Bushman et al., 2004) or non-existent (Ryan and Wiggings, 2001).

The prevalent theory in research of CEO compensation is agency theory and optimal contracting. It is also suggested to consider other theories and alternative mechanisms for the setting of CEO pay besides of that (Daily et al., 1998; Barkema and Gomez-Mejia, 1998). Executive pay could be considered to be “an outcome of socially constructed corporate governance arrangements” (Otten, 2007: 2). Mallette et al. (1995) extend the field, and argue that executive pay is determined by a complex set of social, economic and political explanations. Belliveau et al. (1996) studied compensation not linked to financial performance by investigating the effects of various organisational and CEO characteristics on CEO pay. The findings show that social capital, institutional ties and the resources available from social networks have a significant impact on CEO compensation. Zajac and Westphal (1995) examine the consequences of symbolic action in corporate governance and explain “why alternative explanations rooted in agency and human resource logics may be used to reduce ambiguity surrounding the adoption of new incentive plans for CEOs”. Other factors, outside of agency theory, identified as predicting CEO pay included human capital with skills (e.g. Finkelstein and Hambrick, 1989; Carpenter et al., 2001; Mayers and Smith, 1992), social similarity (Belliveau et al., 1996), CEO reputation (Milbourn, 2003) and stakeholder management (Coombs and Gilley, 2005).

Human capital theory (Becker, 1975) identifies several personal attributes of employees that are associated with lifetime income, such as on-the-job-training, age, experience, education (Finkelstein and Hambrick, 1989) and level in the management hierarchy (Rajagopalan and Prescott, 1990). The results are mixed when explaining compensation variation, however, and human capital variables are often the explanation for little or no variation in executive pay. Finkelstein and Hambrick (1989) argue that a CEO’s general management experience is related to his bonus, but not to total cash pay or basic salary. Carpenter et al. (2001) complete the finding with the suggestion that the CEO’s international experience is positively related to

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14 Social explanation includes social comparison and isomorphism
total pay levels. However, there seems to be no link between CEO age and compensation (Mayers and Smith, 1992). Executive compensation may also be influenced by the degree to which the CEO, under specific performance conditions, successfully manages the expectations and reactions of investors, directors and other important stakeholders. They can be managed through self-handicapping\(^{15}\) in case of failure (Siegel and Brockner, 2005). With regard to future human capital and its compensation implications, Moisio et al. (2006) suggest in their field study conducted in Finland that the aging population, new technical innovations and globalization may have an impact on, and provide challenges to compensation.

Core et al. (1999) argue that there is an association between the quality of the firms’ corporate governance and the level of CEO compensation. Both board characteristics and ownership structure have a substantive cross-sectional association with the level of compensation (Core et al., 1999). Jensen (1993) proposes that boards of directors become less capable of holding frank discussions, and therefore less effective in monitoring the top management, as they become larger. Jensen et al. (2004) suggest that elements of conflict, negotiation, and gaming can enter the discussion over the pay-performance relation for the executive and, if not managed properly, they can lead to value destruction and inefficient remuneration packages. Bebchuk and Fried (2003, 2004) argue that managerial power over the board of directors is the reason for the amount of “extraction of rent” in recent years and decades. Studies have recently been carried out based on CEO stock ownership, but have little consistency in results, (Allen, 1981; Geletkanycz et al., 2001). The relationship between board size and CEO total compensation was positive in 1980 (Core et al. 1999). Mäkinen (2007) finds that the board size is positively related with cash pay and that the share of foreign ownership is positively related to CEO total compensation level, which supports the inefficiency and free-rider issues with a large board. There is also a positive association between board size and the cash compensation of the highest-paid director in the UK (Main, 1991; Conyon and Peck, 1998) and the total CEO compensation (Core et al., 1999; Gosh and Sirmans, 2005).

The existence of non non-executive directors impacts positively on the level of equity compensation in the CEO compensation mix (David et al., 1998; Mehran, 1995). Yermack (1996) reports that smaller boards are more likely to dismiss the CEO in cases of weak performance than larger boards. The board member outsider ratio had a positive impact in the US on both CEO cash and total pay in 1980 (Boyd, 1994; Core et al., 1999), but negative impact during 1989 - 1991 (Sridharna, 1996). According to Bebchuk and Fried (2003), the monitoring issues lead to use of equity plans under dispersed ownership. A large shareholder would resort to alternative methods of monitoring managers, and the likelihood for equity plans would thereby decrease (Ittner et al., 2003). Non-executive and especially independent directors are viewed as better monitors of a CEO’s performance. The Swiss Code of Best Practice for corporate governance (2008) recommends that the board be composed of a

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\(^{15}\) It is an activity with the aim of “receiving less unfavourable evaluations in the case of negative performance information and more favourable evaluations in the case of positive performance information” (Siegel and Brockner, 2005: 2).
majority of non-executive, directors with no material relationships with the company and it suggests that the roles of CEO and chairperson should be separated. Previous research shows that CEO duality\textsuperscript{16} impacts strongly on the pay level of a CEO (e.g. Boyd, 1994; Core et al., 1999), which is an irrelevant variable for the purposes of this study, since CEO duality is not allowed in Swiss banks.

Several researchers have studied internal corporate governance through the compensation committees. The composition of the compensation committee seems to have no effect on CEO compensation, even if the composition varies between affiliated directors, interdependent directors and outside CEOs (Daily et al., 1998). Similarly, having an insider in the committee does not increase CEO compensation compared to committees without insiders (Newman and Mozes, 1999). However, based on social comparison theory, strong associations were found between CEO compensation and the compensation level of outside members of the board of directors, especially those who serve on the compensation committee (O’Reilly et al., 1988). The highest level of corporate governance is that of the shareholders in the AGM. There have been many initiatives in the US\textsuperscript{17} and Europe aimed at increasing shareholders’ say on pay in the AGM. Cai and Walkling (2008) examined the interpretation of the market on shareholders’ say on the executive pay bill. The stocks of firms with positive abnormal CEO compensation and low CEO pay-for-performance react to the bill in a significant and positive manner. The reaction is stronger among firms with weaker governance, and has the greatest impact among the subset of firms most likely to benefit and implement changes.

Switzerland is a small country, but the major factor is that the talent pool for top positions is limited, even internationally or globally. It can be assumed that top executives and board members form an elite group, who know each other through shared board memberships (Keller, 2003), “exclusive network groups, events such as the World Economic Forum, or alumni clubs” (Hengartner, 2006: 92) and provide valuable contacts with other organizations (Belliveau et al., 1996; Fama and Jensen, 1983; Finkelstein, 1992). Interlocking relationships may therefore easily exist, although they are not tolerated by the press (Wittwer, 2005: 27), but lead CEOs earn substantially more cash compensation than CEOs who are not interlocked (Hallock, 1997, 1999). However, given the limited talent pool, the fierce fight for talent seems to be more of a threat than interlocking relationships. Fee and Hadlock (2003) observe a positive relationship between firm performance and the likelihood that a manager will move to a better position at another firm. Furthermore, Brickley et al. (1999) report that CEOs in the companies that perform well hold more-post retirement directorships than CEOs from poorly performing companies.

\textsuperscript{16} For example, Boyd 1994, Core et al. 1999 find significant positive relationship between CEO compensation level and CEO duality in the US.

\textsuperscript{17} Say-on-Pay Bill (H.R. 1257) which passed the House of Representatives on April 20, 2007 by a 2 to 1 margin. This bill does not limit CEO pay–out, but requires an advisory shareholder vote on the executive compensation packages.
Of the recent studies investigating the influence of political pressure on executive pay, Tosi et al. (2004) found weak evidence of a positive association between the political uncertainty perceived by top managers and CEO cash pay. Joskow et al. (1996) argue that political pressures constrain CEO pay levels in the electrical utility industry. With an example from General Dynamics, Dial and Murphy (1995) describe how political pressures can induce companies to change their compensation practices. In the case of General Dynamics, the company replaced a controversial bonus plan with conventional stock options. As a figurehead, the CEO constitutes the liaison between the firm and its environment (Mintzberg, 1973), in which the media may lead public opinion, and proxy analysts the opinion of the shareholders. Bolliger and Kast (2004) find that CEO compensation components strongly influence the propensity of managers to engage in expectation management strategies, since most of the performance-related components in a pay mix, ranging from equity to bonuses, are associated with analyst guidance. Jensen et al (2004) argue that traditional plans encourage managers to ignore the cost of capital, to manage earnings in ways that destroy value, and to take actions to deceive investors and capital markets, and in the worst case at the expense of investors.

The studies relating to pay and risk (e.g. Berger et al., 1997; Barron and Waddell, 2003; Core and Guay, 2001) include findings that leverage increases after managers receive large incentive compensation awards (Berger et al., 1997). Leverage measures company risk and influences the return on existing equity capital (John and John, 1993) and the voting power of managers’ equity stakes. Managers may therefore “increase the debt-assets ratio in response to equity compensation” (Hengartner, 2006: 38). The studies related to cash compensation and risk show that business risk is negatively related to the use of bonuses in cash compensation, but if the manager accepts the greater business risk, the basic pay level is higher than with less risk (Bloom and Milkovich, 1998). Jin (2002) also finds that firm-risk, but not market risk, is the driving force of the negative relation between risk and incentives. Most of the studies in the early 2000’s showing a relationship between the pay and risk were conducted based on option compensation, however (e.g. Oyer and Schaefer, 2005; Raigopal and Shevlin, 2002; Barron and Waddell, 2003). Therefore, the findings of a relationship between firm risk and pay-for-performance sensitivity vary depending on the time period of the study.

When compared to blue-collar workers, the pay levels of CEOs and chairpersons are, of course, significantly higher. The magnitude of the ratios between the lowest paid employees and the top management can be in the hundreds, with the ratio between the CEO and the average blue-collar worker in the US being: 476:1 in the year 2000 (Castronovo et al., 2000). However, compared to corporate profits, dividends or increases in shareholder wealth, the numbers don’t seem to be too excessive. For instance, CEO average (median) compensation in the US in 2005 was 0.77 (0.55) % of the profits (Balsam, 2007: 372). As a percentage the dividends, the compensation was 7.57 (2.52) and, as a percentage of the increase in shareholder wealth calculated as price appreciation plus dividends paid, was 0.55 (0.27) in the largest companies in 2005 (Balsam, 2007: 372). CEO average percentage salary increase in
the US was 5.13%, in 2005, which is in excess of inflation (Balsam, 2007:106). The other components of the pay also increased substantially, with the exception of options, which no longer had the same taxation and accounting benefits as in the early 2000s. CEOs bonuses increased by 11.07%, long term incentives by 20.37%, options by 0.43% and stock grants by 27.72%. CEOs receiving stock grants increased from 29.98 to 45.21 between 2002 and 2005, whereas the use of option declined from 76.11 to 68.66 (Balsam, 2007). Consistently with tournament theory, American CEOs made twice as much money compared to next highest-paid executive in 2005, and more than three times the fifth-highest paid executive (Rosen, 1986). According to Hengartner (2006), a CEO in the Swiss market received significantly lower compensation. Total average compensation was CHF 2.5 million in 2004, although figures were extremely skewed and the difference between the lowest and the highest pay was huge.

The largest award paid as a bonus in 2003 was granted to Sanford Weill, the Chairman of Citigroup, and totalled USD 29 million. He was also granted stock options based on the Black-Scholes model to a value of USD 36 million at the grant date, and, in 1998, to a value of USD 137 m in the combined role of chairman and co-CEO. Joe Roby, President & COO of Credit Suisse First Boston USA, was granted long term incentives to a value of USD 24 million in 1996, and Merrill Lynch Chairman & CEO E. O’Neal received a stock grant of USD 31.3 million in 2004, based on the stock price at the grant date (Balsam, 2007). The pay of US CEOs has exceeded pay in other countries, even after adjustment for tax rates, purchasing power, and public benefits (Abowd and Bognanno, 1995). Krugman (2007) argues that the reason for the lower level of pay of European CEOs compared to their US peers is due to social shame. In 1960s and 70s, huge pay awards for CEOs would have affected the company’s team spirit and could have led to employment problems. The average CEO owned 3.1 (median 0.29) percent of shares in the firm in 1997 (Conyon and Murphy, 2000).

During the financial crisis, there has been increasing media attention on compensation, with criticism of the payment of large bonuses to top executives. If the companies have solid financial results, the public does not show too much interest in executive compensation. When a crisis occurs, however, compensation is once again a subject for debate. This can be seen as a “market for corporate control” (Jensen and Ruback, 1983). According to Jensen et al, (2004), the agency costs of overvalued equity were the source of corporate failures in early 2000. As there is no automatic mechanism to correct this, Jensen et al. (2004) suggest that it must be resolved by corporate governance systems. The excessive risks taken by companies in 2000, with mistakes in the valuation of the risk, can be compared to overvalued equity. “The creation of a new regime in compensation practice will entail considerable thought. It is a time in which proper investments in the integrity of the organization and its systems will generate considerable benefits in both the short and long run” (Jensen et al, 2004: 98). This is still a valid statement during the financial crisis.
2.1.2 Pay-for-performance

The objective of the firm is to maximize long-term total firm value. If the financial markets fulfil strong-form efficient market assumption\(^\text{18}\), maximizing long-term shareholder value equals maximizing short-term share prices, since all the information applicable to share prices is publicly available, and is therefore reflected in them. In reality, the top executives routinely and inevitably possess information that is not available to investors.

Pay-for-performance is the basic agency assumption, and is probably one of the most-studied relationships in executive compensation. The evolution of the public firm is based on a separation between ownership and control. It has created diversified corporate ownership with opportunities for CEOs to maximize their personal wealth at the expense of shareholders (Berle and Means, 1932; Jensen and Meckling, 1976). Incentive compensation, such as equity, which makes managers into owners of the company, is supposed to mitigate the problem. The level of compensation traditionally plays a minor role, since agency theorists argue that it is not the level of payment that matters, but the method of payment (Jensen and Murphy, 1990b). However, based on optimal contracting, the compensation and managerial ownership levels are set, on average, at the value-maximizing level (Himmelberg et al., 1999; Core et al., 2003). Empirically, tests of the relationship between pay and performance focus almost exclusively on the magnitude of the interest alignment between CEOs and shareholders in terms of pay-performance sensitivity. Significant and high pay-performance sensitivity indicates that the agency problems have been effectively mitigated. Agency theory is introduced in more detail later in this chapter.

Several researchers have found a positive relationship between pay and performance in the empirical studies among publicly-held companies (e.g. Jensen and Murphy, 1990a; Murphy, 1985; Barro and Barro, 1990; Joskow et al. 1993; Houston and James, 1992). Tosi et al. (2000) argue that firm performance explains less than 5% of the variation in CEO pay, however. The studies carried out before the equity boom (Murphy, 1985), document that changes in executive cash compensation are positively related to stock price changes in the current year. Hall and Liebman (1998)\(^\text{19}\) find a strong link between the compensation of CEOs and the assets of the companies they manage. Boschen and Smith (1995) and Hayes and Schaefer (2000) report that CEO compensation responds to the lagged performance, and that current compensation is therefore correlated by future performance. Boschen and Smith (1995) show that CEO compensation responds to changes in firm performance over the next 4 to 5 years, with the cumulative response of pay to performance being roughly 10 times that of the contemporaneous response. Surprisingly, Murphy (1986) suggests that the pay-performance sensitivity is negatively influenced by CEO experience. The results could be

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\(^{18}\) Strong-form efficiency means that share prices reflect all information and no one can earn excess returns

\(^{19}\) Hall and Liebman, 1998 study 478 US large companies between 1980 and 1994
explained by high, fixed basic salaries and guaranteed payments such as pension and allowances that do not have a link to performance.

The researchers have not been able to entirely solve the causal direction of the equity incentives and the performance relationship between equity and performance. The issue remains, even with accounting-based measures of return. Rather than higher equity incentives producing better firm performance in the future, the fact may be that firms expecting better future performance grant more equity (Yermack, 1997). In addition to equity, the input of managerial discretion to performance has also been studied. Managerial discretion refers to the potential impact of managers on organisational outcomes (Hambrick and Finkelstein, 1987). Finkelstein and Boyd (1998: 179 define it as the “latitude of action in making strategic choices”. Balkin and Gomez-Mejia (1987) found that the association between performance and compensation is higher in high-technology firms, which tend to have higher levels of discretion (Hambrick and Abrahamson, 1995).

Although most of the studies are from the US market, Randøy and Nielsen (2002) examine the relationship between firm performance, corporate governance and CEO compensation in Sweden and Norway in 1998, with a sample of 120 Norwegian and 104 Swedish publicly-listed firms. The researchers did not find evidence that CEO compensation is statistically related to firm performance. On the contrary, the evidence indicates a statistically significant and positive relationship between the size of the board, foreign board membership, market capitalisation and CEO compensation. Kato and Kubo (2006) examine the link between CEO compensation and firm performance in Japan by using panel data from 1986 to 1995. They find evidence that CEO cash compensation is sensitive to accounting-based measures of firm performance, but that stock market-based measures of firm performance seem to be a less important factor in CEO compensation20. Pay-for-performance sensitivities have not been widely studied for outside board members, since they are expected to be aligned with shareholders interests without any additional incentives. However, Yermack (2004) studies the relationship of outside board members pay and performance, and finds it lower than that of CEOs (Yermack 2004). Between With regard to different industries, Houston and James (1992) find no evidence of greater performance sensitivity in banks than in non-banks. However, firms with higher risk tend to have lower pay-performance sensitivities in various occupations (Prendergast, 2002). After the deregulation of the banking industry in the US, the CEO’s input became more important to a firm’s success or managerial discretion increased, which increased the pay-performance sensitivity (Crawford et al. 1995).

Based on the “line-of-sight” argument, the motivation from performance-based rewards arises from the influence of employees on the measures on which the performance pay is based (Vroom, 1995). This can be misused in the case of the top management. Jensen and Murphy (2004) argue that managers may shift future earnings to the present and current expenses to

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20 One reason may be the fact that executives’ stock options were banned in Japan until 1997, except at small venture-capital companies.
the future through aggressive accounting and operating decisions, in order to be able to report better accounting-based earnings. None of these actions are taken to create real value. Dechow and Loan (1991) show evidence that CEOs in their final years of office tend to manage investments to improve short-term earnings performance by spending less on R&D during their final years in office.

Changes in \textit{shareholder wealth} are measured with the pay-performance sensitivity defined as the dollar change in the CEO’s pay or wealth associated with a dollar change in the wealth of shareholders such as total shareholder return. From a shareholder perspective, the level of compensation is of secondary importance to the appropriate mix of compensation (Jensen and Murphy, 1990b). In a seminal article, Jensen and Murphy (1990a) find significant positive relationship between shareholder wealth and pay. The researchers provide estimates for the total wealth and performance sensitivity for a large sample of 310 US companies between 1974 and 1986. Both cash compensation and total compensation, including stock option grants and gains from exercising stock options, are positively related to firm performance. However, the authors argue that the economic significance of these compensation and wealth changes is low. The CEO receives an additional 1.35 cents of cash and 3.3 cents of total compensation, respectively, for each USD 1,000 increase in shareholder wealth. The estimates of the total CEO pay-performance relation, including pay, options, stockholdings and dismissal, indicate that CEO wealth changes by 3.25 USD for every 1,000 USD change in shareholder wealth. The levels are low, which show that CEOs bear less than 5% of the cost of their actions, and receive less than 5% benefits. However, share prices are influenced by factors outside of CEO control, and it could therefore be argued that shareholder wealth is not a reasonable measure for determining the compensation of CEOs. As the ownership percentage increases, the executive becomes less likely to take costly actions that will reduce shareholder value by bearing the greater percentage of the cost. Some researchers claim that CEO ownership accounts for the bulk of the sensitivity of CEO wealth to firm performance (Jensen and Murphy, 1990a; Hall and Liebman, 1998, Murphy, 1998) Very few studies on the pay-performance relationship exist outside of the US and the UK. One of the few studies outside these countries is a cash pay-performance relationship conducted in Germany by Conyon and Schwalbach (2000) \footnote{Conyon and Schwalbach (2000) studied 68 companies in Germany between 1968 and 1994 based on the pay measure of the per-capita income of the top management team} where scholars report elasticity of 0.071.

The relationship between equity ownership and performance is typically measured as Tobin’s Q \footnote{Tobin’s Q is the ratio of the market value of equity plus the book value of debt to the book value of the total assets}. CEO equity ownership and firm performance should exhibit a positive association because higher ownership CEOs are closer to optimal incentive levels. There is empirical evidence of a positive relationship between increases in ownership and firm performance as long as managerial ownership is less than 50 percent, (McConnell and Servaes 1990), while Gerhardt and Milkovich (1990) report positive relationship between the use of equity
compensation and ROA%. The relationship is non-linear between shares held by the board of directors and Tobin’s Q, but less significant when the performance was measured by the accounting rate of return (Morck et al. 1988).

Schmid and Zimmermann (2007) study the relationship between managerial share ownership and corporate governance mechanisms in 145 Swiss firms, excluding financial services companies. There is a positive relationship between equity-based compensation and the value of managerial shareholding. The results suggest that Swiss managers hold their equity when they are convinced that the firm will perform. At a later date, several shareholding requirements were put in place to prevent top management selling all their equity, and to share the pain with shareholders when share prices are declining. Beiner et al. (2006) find a positive, robust effect of managerial shareholding on firm value with inclusion of the firm-specific corporate governance index. However, there is presently no theoretical or empirical consensus on how stock options and managerial equity ownership affect firm performance (Core et al., 2003), for example, Himmelberg et al. (1999) find no relation between firm value and managerial stockholdings. In contrast to this economic perspective, scholars and practitioners take the view that contracting arrangements are largely inefficient or do not minimize agency costs (e.g. Morck et al., 1988).

A limitation of the usual pay-performance research is that it does not take into account the agency theoretic suggestion that CEOs are compensated based on firm-specific returns, filtering out observable aggregate shocks over which the CEO has no control (Holmström, 1982). Relative performance compared to peers could solve this issue, as it would only provide executives with high pay when their firms outperform peer firms in the market. Based on this, executive pay should be positively related to firm performance, but negatively to industry or market returns (Gibbons and Murphy, 1990)23.

Another limitation is that most of pay-for-performance studies are carried out based on financial performance. A recent study from McGuire et al. (2003) suggests that paying CEOs with stock and options reduces their performance with regard to stakeholders other than shareholders, which means that CEO incentive compensation is associated with lower corporate social performance. If the boards of directors reward CEOs for maximizing value for shareholders, the exclusive focus on financial performance may underestimate the true pay-performance relationship (Gomez-Mejia and Wiseman, 1997). Coombs and Gilley (2005) argue that stakeholder management exerts a negative influence on CEO salaries. McGuire et al. (2003) find that CEO incentive compensation is associated with lower corporate social performance. This suggests that paying CEOs with shares and options reduces their performance with regard to stakeholders other than shareholders.

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23 Gibbons and Murphy (1990) studied a sample of more than 1,000 firms over a 13-year period, and found evidence that both industry and market performance are negatively related to changes in CEO compensation.
2.1.3 The financial crisis and compensation

As a new phenomenon linked to compensation, the financial crisis has attracted researchers, although many of the studies are not yet available. Studies related to these are based on excessive risk-taking and the lack of understanding of the risk exposure by the board of directors. They blame the fact that the management was not alerted, and were compensated for further risk-taking. Today, extremely high company leverage ratios linked to 100% mortgages at a time of falling house prices seem to be an obvious combination for future failure (Sahlman, 2009). Sahlman (2009) suggests plenty of questions that management should consider when reviewing the systems and improving them. He is one of the rare researchers who points out the importance of talent management within the same context, and suggests that consideration should be paid as to whether the right people are being attracted and retained in the firm. The same applies to customer groups, as not all customers are good ones. Furthermore, Sahlman (2009) argues that the macroeconomic problems were caused by the micro-economic decisions with which executives put their stakeholders at risk. Due to compensation plans leading to excessive risk-taking, Lanskroner and Raviv (2009) propose adding a new component to executive pay, which will be deferred until the value of the firm reaches a predetermined range. Because of the convex relationship between asset risk and compensation value, this solution could reduce excessive risk-taking. It could mitigate the issue of executives not giving enough weight to the downside of risky strategies, as they do not bear the risk of potential losses, but do share any possible gains with the shareholders. Not only are short-term bonuses criticized, however, but equity awards related to the bank’s capital structure are also blamed, as being equivalent to “a leveraged bet on the value of the bank’s assets” (Bebchuk and Spamann, 2010: 275). Bebchuk and Spamann (2010) further argue that corporate governance reforms, aimed at aligning the executive pay with shareholders interests cannot eliminate the identified problem. The interest of “shareholders could be served by more risk-taking than is socially desirable” (Bebchuk and Spamann, 2010: 274).

Surprisingly, an initial study by Fahlenbrach and Stulz (2009) found that banks whose executives held more bank stock did worse in the crisis than banks whose executives held less. It suggests that, for pecuniary reasons, executives were not choosing to ignore excessive risks of which they were aware. If they had been aware of such risks, they would have sold their stock. Fahlenbrach and Stulz (2009) examine the possibility that bank CEOs cashed in their equity positions in advance of the recent financial crisis, but find no evidence that CEOs attempted to liquidate their equity positions, but actually lost an average of USD 30 million in stock, while the median CEO lost over USD 5 million. In addition to that, the performance of banks with higher stock option compensation and cash bonuses was no worse than the others. But a more recent study (Cheng and Hong, 2009) has cast doubts on Fahlenbrach and Stulz’s findings. Cheng and Hong stress that, in light of the non-correlation between shareholder rights and both risk-taking and price performance, further research should explore investor preferences as an alternative hypothesis for the failure of governance. It seems that investors
care about short-term gains in stock prices a lot more than the long-term viability of the company.

Some of the companies required government support in order to survive. For the first time in US history, the federal government was therefore directly responsible for setting CEO pay levels at companies that received exceptional assistance from the Troubled Asset Relief Program (TARP) in 2009. Most of the compensation was needed to take in shares, and the American Recovery and Reinvestment Act of 2009 prohibited cash bonuses, retention awards and incentive compensation, and limited restricted stock grants to one-third of total compensation in bailout institutions. It also prohibited stock option compensation and “golden parachute” payments to bailout recipient executives; although one may argue that, with a share price close to zero, the restricted shares are almost same as a stock option, with only upside earning potential or zero earning.

Erkens et al. (2009) argue that, together with their shareholders, boards who replaced poorly-performing CEOs during the crisis seem to have encouraged investments in sub-prime mortgage-related assets\(^{24}\), which could indicate that the boards did not understand the risk related to these investments, and compensated such investments with large bonuses. The researchers argue that another other paradox was created during the crisis, the so-called “golden parachutes” to compensate poor performance when fired. These include severance pay, cash bonuses, stock options or other benefits, and can be substantial. During the financial crisis, executives received millions of dollars in exit packages. The CEO of AIG, Robert Willumstadt, was offered a package of million 22 m, but declined it, whereas Charles Prince took USD 100 million with him from Citigroup\(^{25}\). It therefore seems as though executives were rewarded for poor performance.

As a result of the financial crisis, financial institutions have been facing increasing pressure from governance, politicians, shareholders and the public to change their compensation practices and to remove incentives for short-term excessive risk-taking. Academics have provided their recommendations for the practice (e.g. Landskroner and Raviv, 2009) and new papers for discussion are published frequently. The typical argument to explain failure is the use of the wrong incentive method together with government issues (Sahlman, 2009). However, the studies lack compensation research on director’s pay, and focus mainly on short-term bonuses and the analysis of sub-prime mortgages.

\(^{24}\) The role of corporate governance was studied using a dataset of 296 financial firms from 30 countries. Erken et al. found evidence that shareholders encouraged larger risk-taking and that directors with reputational concerns contributed to the losses

\(^{25}\) Figures based on: http://www.mint.com/blog/finance-core/golden-parachutes-how-the-bankers-went-down/24/02/2009
2.1.4 Greed

During the crisis, it was often claimed that corporate governance failed because it could not prevent the crisis. There were two crises in the 2000s: the first at the beginning of 2000, when the IT bubble burst, and the second one in 2007. It is argued that lack of regulation and the greed of executives, together with boards of directors engaging in risky behaviour, may have caused the latter crisis, which ended up destroying shareholder value. Greed is defined as excessive desire to acquire or possess, especially wishing to possess more than one needs or deserves. However, “neither the managers nor the boards of directors foresaw or prevented the massive value destruction that took place at companies such as AIG … nor did external private monitors such as the media, securities analysts … rating agencies … raise sufficient warnings about increasing danger” (Sahlman, 2009: 1). Misunderstanding of the risks taken combined with greed or short-term focus on profits is not a good combination. As long as incentives have an element of variable pay tied to financial performance, there is an element that encourages risk-taking, since the management does not bear the fully cost of the possible loss, although incentives such as equity compensation are supposed to mitigate agency problems and align the interests of owners and management. Before the financial crisis, there was no clarity on the measurement of the risk involved in sub-prime mortgages. Management incentives were based on accounting figures, which means they were paid out based on historical results, which did not contain current information. It is claimed that greed can possibly lead to executives ignoring the risk of reputational damage when the only aim is the financial performance.

At the same time, the sub-prime mortgage business in the US increased from USD 180 million to USD 600 million with a control system that was becoming increasingly weaker (Tilson and Tongue, 2009). Management were still enjoying massive bonuses in 2006, while the investment banking and wealth management units in UBS, for example, reported a loss of USD 18.7 billion related to subprime mortgages in 2007, followed by a first-quarter loss of USD 19 billion (Sahlman, 2009). Securitized loans separated the borrower from the lender, and lead to issues in which the risk was passed forward. This was combined with compensation systems based on short-term profits and the use of other people's money without carrying the downside risk. In addition, the possible incompetence of the people in key decision-making positions increased the risk of failure. This underlines the importance of reviewing HRM processes holistically, from recruitment, selection and talent management up to compensation. Even the correct compensation structure cannot solve the issue if the incumbents of the top roles are incompetent, or the board of directors does not spend enough time within the company. In addition to this, the board of directors may separate tasks by assigning them to different committees with different directors, ruining the holistic picture. If the compensation committee decides on incentives without participating in the discussions of the risk committee or the audit committee, they may not understand how they are driving the accounting choices or risk (Sahlman, 2009). Risk and reward measurements come under review when regulators propose changes in compensation governance structures.
2.1.5 Short-term pressure and compensation

Earlier research findings indicate that the frequent trading and short-term focus of individual investors may encourage managers to sacrifice long-term investments in order to meet current earning targets (Bushee 1998, Liljeblom and Vaihekoski (2007). It suggests that shareholders aim at short-term results. The studies in the US and Sweden (Clay 2000) have shown that short-sighted investment behaviours can even weaken the governance mechanisms of a firm, and thereby lead to higher levels of managerial compensation, as was seen during the financial crisis.

Liljeblom and Vaihekoski (2007) argue that listed firms are subject to short-term pressure due to high ownership and increased transparency. The researchers classify short-term investors as mutual funds and other institutional investors, such as foreign investors. Not only increased transparency, but the short interval of financial reporting, such as quarterly reporting, may be the reason for short-term pressure; firms have been forced to improve their financial performance from quarter to quarter. According to the study, firms in general react to moderate short-term pressure, even if it means that they have to compromise the firm’s long-term future. A significant positive coefficient suggests that firms experiencing pressure are more prone to take concrete actions. Short-term pressure most strongly affects decisions concerning the required rate of return or the payback period for the investments. Liljeblom and Vaihekoski (2007) divide the companies into those with a short-term and those with a long-term focus, whereby firms with a long-term focus are typically government-owned, and found that management compensation plans in longer-horizon companies tend to focus more on long-term profitability and growth than on current valuation or operational cash flow. This can be linked to the financial crisis, which converted short-term focussed companies into government-owned companies with long-term focus. Not only the companies that were bailed out, but others as well may be forced to move towards long-term incentives, however.

2.2 Studies on director pay

Although closely linked to executive pay, academics have long shown relatively little interest in understanding how non-executive boards are paid, and the effects that their compensation has on company profits. The topic has only recently received more attention from researchers. One reason for the lack of interest may be the implicit assumption of agency and optimal contracting theory that the board of directors act in the interests of the shareholders. Optimal contracting theory assumes that there is no principal-agent relationship between the shareholders and the board of directors, which can argued to be an unsatisfactory simplification. Consequently, there are no agency costs between shareholders and board members, and incentive compensation is irrelevant. The responsibility of directors includes
providing strategic direction for the company, monitoring the CEO and supervising business on behalf of the shareholders and they are charged to do this. Directors are responsible for hiring, firing, evaluating, and monitoring the top management team. It can therefore be argued that directors are the shareholders’ agents, and that their conflicting preferences may give rise to agency costs. Spatt (2006) suggests that incentive compensation could motivate the board towards greater involvement in the firm and their roles within it. The existence of major shareholders can mitigate this problem, however, as, instead of providing compensation to the board members, they would use financial resources to monitor the management.

Today, more details than ever are required in the reporting of director compensation, with disclosure guidelines almost identical to those for the firm’s senior officers. Since the members of the board are charged with selecting CEO and setting executive pay, the pay mix and level that the board award themselves may provide valuable information for the understanding of executive compensation and other firm issues (Yermack, 2004). Understanding director compensation becomes even more important when CEO duality is not allowed. Moreover, the empirical results show that the determinants of executive and director pay are remarkably similar (Yermack, 2004).

As stated earlier, a potential for misaligned interests between directors and shareholders does exist, requiring incentive arrangements that are compatible and individually rational for both board members and executives. The limited evidence available suggests that outside board members are increasingly being paid in a manner intended to mitigate such agency problems. For instance, remuneration for outside directors has increased by 70% over the past five years, largely due to the growth of equity-based compensation (Oppermann, 1997; Perry, 1999). Hambrick and Jackson (2000) suggest that outside directors of highly performing firms hold 1.3% of stock in their company, compared to only 0.1% for poorly-performing firms in the same industry. Becher et al. (2005) document similar results, indicating that director equity-based compensation induces higher corporate performance. For the majority of directors, compensation is not tied to the success of the firm or to their individual performance in the boardroom. This is consistent with the traditional agency theory view of judging the role of director incentive pay as negligible. Nevertheless, an increasing number of companies have paid annual retainers at least partly in equity since the late 1980s. And while the values of the equity awards granted still exhibit little variation, their subsequent fluctuation has had the effect of tying directors’ rewards more closely to firm performance than before (Hengartner 2006).

Yermack (2004) documents that the pay performance sensitivity of outside board members is several orders of magnitude lower than that of CEOs. Consistent with executive pay results, most of this sensitivity stems from changes in the value of shares and option holdings if the retainer on director compensation paid in equity, since the incentives of each director will

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26 Such as shares and options
27 The researchers studied 40 high performing firms in 1987
generally increase over the tenure due to an accumulation of equity-based retainer awards. The pay-for-performance sensitivity arising from annual changes in cash pay and equity-awards is extremely small. Beiner et al. (2005) measured the compensation for the whole top management team and the members of the board of director over a sample of 156 Swiss firms in 2002, and found a significant positive relationship between the ratio of outside directors and the proportion of equity-based compensation.

The impact of directors’ ownership on executive compensation has been studied by several researchers. According to Schmid (1997), outside directors without share ownership would not represent shareholders and their interests. In situations of higher director equity pay or other incentives (Hermalin and Weisbach 1998), the monitoring-substitution perspective proposes a reduced need for executive incentive compensation (Yermack 2004). Finkelstein and Hambrick (1989) and Lambert et al. (1993) document no significant relationship between outside directors’ holdings and executive compensation, however. On average, the ownership by directors is a relatively small proportion of corporation stock, with a mean (median) value of 0.136 (0.005) percent (Core et al. 1999). However, CEOs with large shareholdings also have an incentive to reduce their own cash pay. This will reduce pay levels for their subordinates, and thereby increase shareholder wealth. Basically, no other incentives are needed with high ownership.

Compared to accounting-based performance, researchers find a weak significant relationship between the use of equity-based compensation and related subsequent accounting performance. Brick et al. (2002) further argue that director pay is positively related to CEO overcompensation, and that stock volatility and ROA% predict director compensation levels. Based on this, future ROA% is negatively related to excess CEO compensation. After control characteristics, CEO characteristics and other governance factors, director and CEO compensation are positively related. In case of the CEO having high stock ownership, directors pay was lower. Evidence from Germany in 1991 (Schmid 1997) shows that the compensation of the board and the top management team are both related to firm size, performance and shareholder concentration. Main (1991) finds that the size of the board has an impact on directors’ cash compensation,28 which is consistent with executive compensation studies. Results similar to those of Schmid and Main are confirmed later on in the US by Brick et al. (2002). Ryan and Wiggings (2004) show that CEO duality has a negative impact on total director compensation. When the CEO is not a chairperson, the compensation levels of the board are higher than with CEO duality.

The next sub-chapters review the compensation components for both executives and directors, and the pay-setting process.

28 Director cash compensation is typically defined as: Cash compensation = Annual cash retainer + (number of board meetings × fee per meeting) The number of board meetings are reported in the company’s proxy statements.
2.3 Compensation

The purpose of compensation is to attract, retain, and motivate employees. It can be defined as wages and other financial and non-financial rewards earned by work. This study focuses on the financial compensation of a CEO and a chairperson. Compensation is reviewed in this study with following critical dimensions: total level of compensation components, the composition of the compensation package, and the relation between pay and performance. The following sub-chapter explains the components of compensation, the compensation decisions and the pay structure that need to be understood, before building the framework of the study.

2.3.1 Compensation components

The executive compensation package often contains many components. A well constructed package maximizes the benefit for the firm and minimizes the costs related to executives, hence minimizing costs and risk for the shareholders. The most common components are: basic salary, variable cash bonus, stock options, stock grants, pensions, benefits, perquisites and severance benefits (Murphy, 1999). Each component has a different cost for the company and a different effect on employee motivation and risk. In addition to this, the components have different relationships with performance. For instance, equity compensation is partially driven by market forces, which are not under the control of a manager, whereas a bonus plan based on accounting numbers may be controlled by a manager due to the possibility to carrying out cosmetic changes to the books, which may lead to higher reported accounting earnings, but not necessarily to higher shareholder value. According to agency theory, variable compensation components based on performance are included in the compensation mix in order to align the interests of the management and the shareholders, whereas fixed compensation components, such as basic salary and pension, are included to reduce the risk to the incumbent and to guarantee a certain standard of living. Severance payments may still be included in CEO contracts as fixed payments, although it is not recommended to award compensation if a manager is terminated for incompetence or just cause (Jensen et al. 2004).

There are plenty of descriptions of compensation. For example, Hulkko et al. (2002: 54) describe compensation, with its goals and as an individual subjective experience as follows:

- It is two-way process belonging to the organisation and its members, which is beneficial for both parties
- It is a tool to help the management support the company’s strategy and goals
- It delivers a message to the organisation top management and supports behaviour
The manner in which the compensation message is received has an impact on the organisation, but perceptions of the compensation levels are individual (Hulkko et al. 2002). An efficient compensation strategy supports the completion of the business strategy and vision (Rantamäki et al. 2006). It needs to fit together with the organization in an integrated way and to develop together with it (Lahti et al. 2004). Ikäheimo et al. (2003) divide compensation methods in two types. The first type of compensation is related to the company’s cash payments, and includes time-related fixed pay, pension and performance-based pay. The other type is related to equity-based pay, and includes options and share-based compensation, which may have different forms and may include performance conditions for vesting. Figure 3 shows the types of compensation. Although equity-based pay is typically long-term compensation, the annual bonuses may be deferred for the future, or can be combined with equity payments and be partially paid in shares.

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Figure 3. Senior management compensation system (Adapted from Ikäheimo et al. 2003: 20).

Executive remuneration packages throughout the 1970s consisted almost entirely of basic salaries and bonuses tied to annual performance measures. Executive share options were popular in the 1960s, but fell out of favour in the 1970s (Jensen et al. 2004), to become fashionable again in the 1990’s.

Annual base salary, the basic and the oldest component of the compensation package, is usually determined before the start of the employment contract, and is reviewed each year based on the performance of the executive and the market data, although corporate board members may be reluctant to reduce the executive’s salary when the performance is poor (Hall and Liebman, 1998). Jensen et al. (2004) argue that CEOs recruited from outside more
easily receive pay that is higher than CEOs from within the company, which sometimes can be even considered to be “too much”. This is due to the fact that, in the typical case, pay negotiations only start after the professional head-hunter companies that boards often use have identified the ideal candidate, and have communicated to the candidate that he will become the new CEO. This increases the bargaining power of the candidate. Base salary levels are often supported by an analysis of compensation in external peer companies. This analysis is typically provided by independent compensation consultants, and is based on the previous year’s salary data, with estimates regarding the future direction. In addition, board members may use their CEO positions outside the company as social reference points. Along this line, Krugman (2007) suggests that social norms and political power are drivers in an executive compensation level, rather than CEO skills, which makes the compensation strongly subjective. Simultaneously, an increasing transparency provides senior managers with an opportunity to compare their earnings. This has lead to a situation in which compensation levels in general have been increasing (Keltanen 2009).

A bonus is a cash-based payment that can be awarded to compensate good performance, and is often tied to the individual and accounting-based performance of the company. Most of the for-profit companies offered an annual bonus plan covering its top executives based on a single-year’s performance (Jensen et al. 2004), and some companies have offered a similar variable pay plan to directors in key functions. It is therefore typically determined based on the previous fiscal year’s performance, and may take both qualitative and quantitative performance metrics into account, but is finally determined by the company’s compensation committee (Hayes and Schaefer 2000). Along with basic annual salary review, Hall and Liebman (1998) indicate that corporate board members often do not penalize CEOs by reducing their annual bonus, even in years of poor performance. Since specific objectives can be used as performance goals and measures in the bonus plans, they may also provide guidance on value creation. This is missing in the equity-based plans. If there is no clarity on performance metrics or, for instance, regarding the valuation of the risk involved, however, the goals can lead to the destruction of value, rather than value creation. The qualitative evaluations can also be subjective. The criticism is made here that annual cash payment frequency and the single-year performance period may represent a strong incentive for short-term results at the expense of long-term performance.

Additional fixed benefits and allowances add a significant value to the total compensation package. These may include a range of allowances from housing to schooling, the use of company airplanes and apartments, special dining facilities, country club memberships, life and disability insurances or special guaranteed retirement arrangements. In addition, companies may offer their senior management low or no-interest bank loans (Ikäheimo, 2003) or the ability to defer compensation at above-market interest rates, which should not be ignored as a factor in their total pay packages. The issue with benefits and allowances is that they are never linked to company’s or the executive’s performance, as they are contractually agreed. Bebchuk and Fried (2004) refer to pensions as stealth compensation, which means that these elements of pay are not directly observable. Other stealth compensation could be
the life-long use of a company apartment, office or secretary services, or the promise of post-retirement compensation, which provides the employee with a payment or series of payments after retirement. These elements of pay are becoming more and more popular (Bebchuk and Fried, 2004), but are difficult to evaluate in the compensation analyses, although they do need to be disclosed in the proxy statements in the US.

*Severance payments* arise when an executive is fired without cause, or leaves the company under pressure. They are sometimes defined in the contract in order to protect the executive and to induce him to take risks (Almazan and Suarez, 2003). A typical contract would include the explicit compensation paid to be paid by the company upon signing a separation agreement and the vesting of pre-existing compensation. One reason for companies to negotiate these payments, which shift the risk from the executive to the company and seem to compensate for poor performance, could be to attract external talent. The evolution of the “Golden Parachute” took place in 1980’s 29 “to award payments to incumbents who lose their jobs in connection with a change in control” (Jensen et al 2004: 28). These payments are standard clauses in executive contracts in the US intended to protect an executive if the company is acquired by another company, and to prevent executives opposing the merger.

*Deferred compensation* can either be paid in cash or as equity, and it is defined as a payment that takes place later than it is earned. The employee receives payment in a period subsequent to that in which the service was performed. The most common form is pension; either defined benefits or defined contributions. The first type provides the employee with guaranteed payments based upon predetermined benefits formulas, while the second type defines the employer’s contribution, to which the employee may add and direct towards employer-provided investment vehicles (Balsam, 2007). In addition to these plans, executives may be provided with supplemental executive retirement plans (SERPs). Unfunded deferred compensation may decrease the executives’ willingness to take risks by making the executive a debt-holder of the company (Sundaram and Yermack, 2007). However, if the payout is linked to shares, it may mitigate the horizon problem (Bizjak et al. 1993). The attention paid to deferred compensation, especially in the form of pension benefits, has increased, as political pressure may have lead companies to attempt to hide compensation in pension, or in other items that are hard to value.

With *long-term plans*, companies have moved from compensation based on annual performance targets to targets over several years. Because one plan can cover multiple years, the company may simultaneously have many overlapping plans and performance periods. These long-term plans can be paid in either equity or cash. Core and Guay (2001) argue that firms with severe cash constraints and high capital needs may substitute equity compensation for cash pay in order to ease liquidity constraints. In Europe, the use of long-term incentives

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29 The Deficit Reduction Act of 1984, with which the US government imposed a special excise tax on payments exceeding three times the executive’s average recent remuneration, leading to an increased use of Golden Parachutes (Jensen et al. 2004: 28).
has been most prevalent in the UK rather than in other countries (Conyon and Schwalbach 1999, 2000). However, since the real profitability may only be seen over the longer term, such as in the financial crisis, companies are increasingly moving towards long-term plans.

*Shares* can be granted, for instance, in the form of unrestricted shares, restricted shares, performance-based share targets or share units. Restricted share awards are a fixed quantity of shares with implicit or explicit restrictions on their sale. There can be an explicit requirement on the amount of company stockholding an executive must hold, or the sale of company stocks can be restricted for certain periods of time. Implicit restriction arises from fact that CEOs usually continue to hold on to these stocks after the lapse of the restrictions, as selling the stock may be a bad signal to the market (Hall and Liebman 1998). In many cases, executives can often only sell the shares that exceed the explicit requirement. In addition to implicit and explicit requirements, there may also be additional requirements for group insiders due to a quarterly reporting practice. This means that executives can only sell their non-sales-restricted shares that exceed the equity holding requirement outside of financial reporting periods, during so-called open periods. It prevents managers from holding well-diversified portfolios, and managers may have heavy investments in their own firms’ stocks.

Performance-based share targets have a performance condition for vesting. If the company does not perform well based on predetermined goals, such as accounting results, or compared to total shareholder return between peer companies, zero vesting can take place and, vice-versa, the set targets may vest with a multiplier. Share units or phantom shares follow the share price development, but are paid in cash. They may also have performance conditions for vesting. According to the agent theory, equity-based compensation makes an executive into an owner of the company, and therefore aligns managerial motives with those of the shareholders. However, shares have been blamed for having a negative impact on risk-taking, at worst leading to an avoidance of any risk-taking if a CEO has too much of his wealth in the firm’s shares (Puttonen, 2004). There won’t be any motivational impact if the ownership is too small, however (Puttonen, 2004). The stocks may have a forfeiture clause if the executive leaves the company, either voluntarily or involuntarily, which means the unvested shares will be forfeited.

Berger et al. (1997) propose that restricted stocks be viewed as a stock option with a zero strike price, with a linear pay-off function (Bryan et al. 2000). Stock options are rights to purchase a specified number of company stocks at a specified price. Once used as a compensation component, the payoffs are only positive if the share price is higher than the exercise price. Most of the options are awarded at an exercise price that is equal to the fair market value of the underlying stock (Murphy 1999). The duration can be up to as much as ten years, and they generally vest over a time period of some years.

Other forms of share-based compensation include *phantom shares*, which are similar to stock, but do not constitute a claim for ownership of the corporation. Owners may thereby make use of them to prevent a dilution of existing ownership. Phantoms entitle the executive to receive
any increase in the share price and to any declared dividends. *Equity units* entitle the holder to purchase shares at their book value and then resell the shares to the company at their later book value. Like phantom shares, equity units provide the owner with an entitlement for dividends.

*Options* can include performance conditions for vesting, or can be granted as units. They have a limited exercise period, which typically expires several years after vesting. Vested options can only be exercised if the current share price exceeds the strike price. Options are therefore sometimes blamed for encouraging excessive managerial risk-taking in order to temporarily push the share price above the exercise price. Options can be an aggressive tool, offering the holder the possibility of compensation that could increase by hundreds or thousands of percent if the share price development has been positive (Ikäheimo, 2003). CEOs mostly exercise options for cash, and do not hold the shares. In common with shares, executives cannot hedge the downside risk of the options, but, unlike shares, stock options do not provide the CEO with any entitlement to voting rights or stock dividends before he exercises them to obtain shares. Unvested options are forfeited when the executive resigns. Since the Clinton Tax Act, the proportion of basic salary and bonus in executive’s total compensation has decreased, but equity compensation has increased. The levels of each component have grown steadily, however.

Another form of compensation is share appreciation rights (SARs), which are economically equivalent to options, with one exception. With options, the executive has to purchase and sell the shares in order to receive profit, but, with SARs, the company pays the executive the excess above the exercise price in either cash or shares. A risk-averse individual will prefer fixed compensation to variable compensation, and, when granted variable pay, may require a premium for the risk. Studies related to equity compensation and annual bonuses are reviewed in the following sub-chapter.

### 2.3.2 Reasons to use equity compensation

Financial reporting and taxation have influenced the adaptation of different tools for use as compensation packages (Hall and Murphy, 2002). As with other financial decisions, companies need to take the after-tax cost into account when designing the compensation package. Back in 1990, Michael Jensen (1990) wrote an article "It's Not How Much You Pay CEOs, But How". The argument of the article was that boards would adjust pay according to company performance as shown by the stock price. Regulatory changes promoted the expansion of options, although Jensen favoured restricted stock. It can therefore be argued that the main drivers for equity plans are accounting and taxation (Elson, 2003). Other factors include the agency theory approaches for mitigating the agency problem and for retaining of executives.
At the beginning of the 2000s, most stock options that are issued to employees in exchange for services did not reduce the reported accounting income. By issuing options to employees at the money, the intrinsic\textsuperscript{30} value is zero, and no compensation expense is recorded. Not surprisingly, most stock options were therefore issued at the money. A recent study by Bear Stearns estimates “that the 2003 operating income of the S&P 500 would have been 8 percent lower had options been expensed”\textsuperscript{31}. The deductibility of the compensation of the CEO and the next four highest-paid executives was limited to USD 1 million in the US\textsuperscript{32} with the exception of performance-based compensation such as options. Compensation therefore included more stock options and less other components. Companies such as Yahoo and Microsoft gained significant tax benefits from equity programs in early 2000 by obtaining a deduction of the dollar value of stock granted or options exercised. Annual bonuses and salary were recognized as expense during the period in which they were earned, whether paid currently or deferred, whereas options have typically been taxed when they have been exercised and shares have been recognized as an expense during their vesting period. After 2005\textsuperscript{33} it was required to quote all option grants as expense, thereby eliminating the accounting incentive to issue options. Even though options are expensed, companies continue to use them, but for the right reasons and in the right amounts (Hall and Murphy, 2002). When the political environment impacts on compensation as explained above, it creates political costs. These are defined as “costs imposed on the executive and the corporation by the government's ability to tax and regulate. They include costs imposed by interested parties, which include, but are not limited to, politicians, regulators, unions, suppliers and customers” (Balsam, 2007: 291).

Although the use of equity compensation has often been argued based on the agency theory in order to align the interest of managers and shareholders, the taxation\textsuperscript{34} requirements for individual equity plan participants may force executives to sell part of their portfolio after they vest or are exercised. Shares are typically taxed as income when they vest, and, in order to cover taxation and social security costs, executives may sell part of them. Options are taxed when exercised, which forces the owner to exercise some part of the options at cash instead of shares in order to cover the taxation. However, several studies support the agency theory approach by relying on indirect accounting and stock return measures. The increase in shareholder value from equity plans cannot be directly measured. Mehran (1995) finds that the ROA\% is positively related to the percentage of equity-based compensation. Anderson et

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\textsuperscript{30} Intrinsic value is the difference between the underlying stock's price and the strike price. If the respective difference value is negative, the intrinsic value is given as zero. For example, if a call options strike price is USD15 and the underlying stock's market price is at USD25, the intrinsic value of the call option is USD10.

\textsuperscript{31} 2004 Earnings Impact of Stock Options on the S&P 500 and NASDAQ 100 Earnings, Bear Stearns Equity Research Publication, March 21, 2005. Stock Option Accounting:
http://www.bus.wisc.edu/update/december04/stockoptions.asp

\textsuperscript{32} Internal Revenue Code Section 162 (m)

\textsuperscript{33} June 15, 2005 Statement of Financial Accounting Standards No.123

\textsuperscript{34} Taxation rules vary by country. In Switzerland, shares are typically taxed at vesting, and options when exercised.
al. (2000) find that there was a clear correlation between the executives’ option compensation and company’s performance before the bursting of the IT bubble. Furthermore, Jones et al (2006) explain that the company’s performance influences the adoption of different option schemes. Brickley et al. (1985) suggest the share prices react to public announcements, with the share prices increasing when the public is satisfied with the announcement. In addition to this, stock prices go up when the market is booming even if the executives don’t contribute to this, and even if the company underperforms compared to the market.

The company can provide shares which vest over time in order to retain executives, with the equity being forfeited if the executive leaves the company. The compensation contract loses its retention effect if the new employer is willing to reimburse the amounts forfeited, however. In recent studies, Fee and Hadlock (2003) investigated the retention hypothesis, and, as suggested, there is no evidence of this contention. Therefore, companies may use other tools for retention, such as the limitation of alternative job opportunities through non-competing, non-disclosure and non-solicitation provisions (Balsam, 2007).

The equity plans have their downsides, and are not without cost to the company. *Dilution* is a major cost for equity compensation. When options are exercised and shares vested, they increase the potential number of shares outstanding and hence dilute the proportionate ownership of existing shareholders. Although the incentive from equity plans should, in theory, outweigh the dilutive effect of the grants. To prevent dilution and increase share price, companies may repurchase shares from the market (Fenn and Liang 2001). In addition to dilution, the cost to the corporation of granting an option or a share to an employee is the opportunity cost that the firm gives up by not selling the option or share in the market. The cost of options used for recommendations is sometimes only based on the overhang\(^{35}\). However, when options are granted and executives exercise them, they often exercise them into cash without holding equity long, therefore not becoming a shareholder (Elson, 2003).

It has been suggested that equity-based compensation will mitigate the agency problem, but high equity-based compensation for management often requires increased monitoring by the board in order to ensure that managers cannot benefit from short-term increases in stock prices at the expense of long-term value destruction. Theory posits that stock options offer risk-averse managers incentives to invest in high-risk, high-return projects on behalf of risk-neutral shareholders (Jensen and Meckling, 1976). Tian (2004) shows that stock options create incentives to decrease idiosyncratic risk, but to increase systematic risk. According to more recent studies, the impact of stock options has been found to be positive on future risk-taking (Cohen et al, 2000). This is due to the fact that executives do not bear the downside of the risk-taking. A level of option pay is strongly associated with the propensity of firms to engage in business portfolio churning, and these firms are likely to buy other companies and divest corporate divisions (Sanders, 2001). Agrawal and Mandelker (1987) argue that variance-increasing investments are more likely to be made by managers with larger stock.

\(^{35}\) Overhang is number of options granted plus options remaining to be granted as a percentage of total shares outstanding
holdings or options. Other researchers argue that the likelihood is much higher in case of options due to the fact that their ex-ante value increases with risk, with an exception of in-the-money options (Wiseman and Gomez-Mejia, 1998). Executive greed may even lead to earnings manipulation related to executive share ownership and equity compensation (Peng and Roell, 2005; Bergstresser and Philippon, 2006). Erickson et al. (2003) find that higher the higher the proposition of equity compensation for the five highest-paid executives, the higher the likelihood of accounting fraud. If fast-vesting options represent a substantial component of executive pay, they may provide managers with perverse incentives to self-deal in the pursuit of higher option pay-outs, and it is therefore recommended to reduce the proportion of options in total compensation (Chhaochharia and Grinstein, 2008). If the portion of equity payment is high, companies often pay lower dividends. The dividends pay-out ratio is negatively related to equity-based compensation (Lewellen et al., 1987) and stock options (Fenn and Liang, 2001). Jensen et al. (2004: 65) recommend cost-of-capital indexed options to ensure that executives “skin in the game”. These options only pay off when shareholders do better than breakeven at the cost of capital.

The criticism of option plans includes the actions that companies take after they have introduced the plans. Hall and Knox (2003) criticize companies for intervening in existing option plans, and argue that companies actively react to stock price decreases by making larger-than-average option grants in the following year. This is because executive pay-for-performance sensitivities decline significantly following stock price falls. It may therefore be concluded that restricted shares are often a superior way to compensate executives (Hall and Knox, 2003). However, stock compensation may sometimes increase risk-averseness above the optimal level, as the undiversified executives become fearful of losing what they have gained, and therefore do not increase shareholder wealth with their actions (Meulbroek, 2001). While company shareholders are well diversified and neutral to firm-specific risk, executives tend to be risk-averse and inherently undiversified with the monetary and human capital invested they have invested in their company (Jensen et al. 2004).

Jensen et al. (2004) argue that the agency costs of overvalued equity were the source of corporate scandals. They conclude that equity compensation accelerates or multiplies the problem, and that the agency problem of overvalued equity therefore needs to be solved by corporate governance systems. According to this, while possibly being a solution to agency problems, remuneration can also be a source of agency problems.

2.3.3 Issues with annual bonuses

Annual bonuses were subjected to ongoing public debate during the financial crisis. It was argued that they encouraged managers to take excessive risks in order to increase short-term profits at the expense of long-term performance.
The difficulty with annual bonuses is correctly defining the pay-for-performance relationship. Performance measures play a crucial part in the efficiency of annual bonuses. For instance, if they are based on net income, they provide incentives to increase accounting profits while ignoring the cost of capital. Plans based on “returns” such as ROE and ROA provide incentives to pursue only high return projects, ignoring projects earning lower returns, but which still are profitable (Jensen et al. 2004). The individual performance linked to the bonus is often a subjective evaluation. A CEO’s annual bonus is dependent on the performance appraisal by compensation committee, and the time and effort they devote to accurate and effective appraisal. Jensen et al. (2004) state that, in the worst case, annual bonuses create incentives to destroy value through shirking, value-destroying smoothing of results, or, depending on the form of the pay-performance relation, they can create incentives to destroy value by increasing the variability of results or engaging in other unethical behaviour. Therefore, recent compensation changes have introduced deferrals for annual bonuses, making them long-term awards in the nature of bonus-malus systems, and have introduced claw-backs in case of actions that have been compensated, but have destroyed long-term value. A truly performance-based bonus system would allow either negative or positive payment, but, for instance, deferring the positive payment over several years, when the unpaid bonus would be available to make up any future negative bonus (Stewart, 1990).

As early as in 2004, before the financial crisis, Jensen et al. (2004: 86) recommended that “boards must encourage and compensate senior management to investigate and take a conscious posture against unwise risk-taking, and management must ensure that the traditional budgetary target and bonus process does not destroy value by encouraging the assumption of unmanaged or hidden risks.” A great deal of debate of compensation could possibly have been avoided, if these recommendations had been followed.

2.3.4 Compensation-setting process

The general roles of the board of directors are to set the company’s strategic direction, to advise and monitor top management and to otherwise protect the interests of shareholders (e.g. Styles and Taylor, 2003; Hilb, 2005). Optimal board structure and corporate governance arrangements maximize the value of the firm, and not just the costs of managerial compensation. However, a board that is optimized for making compensation decisions may destroy value by making bad decisions on other, more crucial items (Core et al., 2004). Determining executive pay is an important task in fulfilling the board’s duties (Finkelstein and Hambrick, 1996). Even when CEOs cannot directly influence their own pay, they often propose the pay of their immediate subordinates, which in turn may influence their own pay, because paying the regular members of the top management team more necessarily reduces the gap between the CEO and the average executive team member. This, in turn, provides a legitimate reason to increase CEO compensation to ensure internal fairness. Corporate governance is part of the executive pay-setting. Jensen et al. (2004) suggest that changes in
both corporate governance and pay design could mitigate problems with appointments, pay-setting process, equity-based pay plans and problems with the design of traditional bonus plans. Today, many Swiss companies have established a compensation committee. This committee is the body of the board that is mainly responsible for setting executive compensation, although the influence of the executive management on pay determination may vary substantially across companies.

Executive pay level setting is a component of fundamental governance processes in an organisation (Hambrick and Finkelstein, 1995) that is influenced by socially constructed corporate governance arrangements and organisational processes, and may have implications for executive motivation and for the motivation of lower level employees (Bebchuk and Fried, 2004; Bratton, 2005; Conyon and Murphy, 2000; Finkelstein and Hambrick 1988; 1989; Gomez-Mejia, 1994; Jensen et al., 2004; Rosen, 1986; Ungson and Steers, 1984). Subjective performance evaluation may also play a role in setting executive pay (Gibbons, 1998). One role that is typically described for directors is the control over the process of hiring, promoting, assessing and firing top executives (Naveen, 2006). Assessment can be seen as having two components, one being the monitoring of what top management does, and the other is determining the intrinsic ability of the top management (Adams et al., 2009).

Remuneration decisions are not made by shareholders, although they may have say on pay at the AGM, but rather by boards of directors acting on a recommendation from the compensation committee, which is comprised of independent directors. According to Fama (1980) and Fama and Jensen (1983) it is important that board committees consist of independent directors who do not work for the firm or have any affiliation with the employees of the firm. Such directors are able to make unbiased judgments about the quality of the CEO and, in turn, about efficient compensation, hiring, and firing decisions. John and Senbet (2003) assume directors have biases, however, and recommend that compensation arrangements should be voted on by the shareholders. These committees may lack the information, expertise and negotiating skills necessary for contract negotiations especially with external CEO candidates. CEOs hired from the outside therefore earn higher levels of remuneration than CEOs promoted internally (Murphy and Zabojnik, 2003). Compensation committees rarely initiate new incentive plans or conduct market surveys by themselves or their own compensation experts. These proposals and tasks typically emanate from the company’s Human Resource department, often working together with external compensation consultants, and are dependent on top managers’ approval and revision before the outcome is delivered to the compensation committee for consideration (Jensen et al. 2004). In most cases, a CEO can participate in all committee meetings, excluding the ones that concern his or her own compensation. In the worst cases, the incoming CEO may negotiate his or her package, not with the compensation committee but with the company’s head of human resources, although there is a conflict of interests here. The CEO has power over the internal managers.

Krugman (2007:144) states “Corporate boards, largely selected by the CEO, hire compensation experts, almost always chosen by the CEO, to determine how much the CEO is
worth.” This argument is only true in companies with CEO duality. In practice, it is not CEOs who set their own compensation, but the compensation committees, as stated earlier. Boards of directors set their own compensation, however. There is the possibility of a moral hazard any time that additional compensation is required for directors, (Dalton et Dalton 2006). Hallock (1997) studied Forbes 500 firms in 1992, and found that compensation to both CEOs is higher if the board has directors with interlocking relations, for instance the CEO of company A sitting on the board of company B and the CEO of company B sitting on the board of company A.

Dual board structure
Swiss banking law mandates that publicly-listed banks have dual board structure, which is visualized in Figure 4. The functions of the Chairperson of the Board and the Group Chief Executive Officer (CEO) are assigned to two different people, thus ensuring a separation of powers. The board of directors is ultimately responsible for the firm’s strategy and the supervision of its executive management. Under the leadership of the CEO, the Group Executive Board (GEB) has operational management responsibility for the company and its business. “The advantage of the dual board system is that there is a balance of power. The disadvantage is that political power struggles can result, and these power struggles can be detrimental to the long-term competitiveness of the firm”. (Hilb, 2005: 45).

![Annual General Meeting](image)

Figure 4. Dual board structure.

Compensation committee
Many companies have a charter for the board of directors and their committees, which outlines in detail the purpose, tasks and responsibilities of the board and its committees. The role of the compensation committee, typically comprised of three to four non-executive and independent directors with a one year mandate, is to either determine executive compensation or to make recommendations to the full board of directors. The CEO and other executives may attend the compensation committee meetings without formal voting power, and the minutes of the meeting are usually made available to all members of the board of directors. In some companies, the internal audit function regularly reviews the compensation setting
process, and submits a report to the board of directors. The charter of a compensation committee can describe its aim as the establishment of a strong link between pay and performance, and the value of the position, or the individual qualification required for that position, will play a role in determining compensation levels (Hengartner, 2006). The board is expected to adopt the compensation committee’s recommendations with modifications that are as modest as possible (Newman and Mozes, 1999). With support of external compensation consultants, the compensation committee will typically survey market compensation levels, establish performance benchmarks and salary policies, and evaluate management’s performance against financial and non-financial goals. These activities, however, often depend on the management’s cooperation in providing background information and advice (Crystal, 1991), and social comparison also has an impact on the compensation levels. Compensation committees not only benchmark salaries against the external and internal market, but as according to their own experience. If the members of outside compensation committee are executives in other companies with higher salaries than CEO in the company in whose committee they sit, the salary level of the CEO will increase (O’Reilly et al., 1988; Main et al., 1995). Due to isomorphic pressure, boards that have affiliations with other firms may diffuse the adoption of certain pay practices to focal companies (Finkelstein and Hambrick, 1996). The compensation committee approves the annual bonus payment and any possible equity vesting for the CEO. Bonuses are typically awarded for achievement of accounting-based performance targets in the prior year, and are paid once a year. The board also approves director compensation, which is typically based on the annual fee, and is often a retainer. The Higgs Report (2004) recommends benchmarking non-executive directors’ fees to the daily remuneration of a senior representative of the company’s advisors, but without any option compensation to encourage directors to pay undue attention to share price.

Many companies rely on compensation consultants to establish market conditions, to compare the pay levels and structure of firms in the same industry and of similar size, and to make recommendations to the board of directors on how to compensate the CEO and his top management team. Salary survey data is typically reported in pay percentiles, and is adjusted for company size. Size is traditionally measured using company revenues, although market capitalization is increasingly used. It is argued that salary surveys increase pay levels, and that the size correlation mechanism rewards managers for increasing the size of the firm (Jensen et al. 2004). As suggested by Baker et al (1988), the size adjustments used in the survey instruments both formalize and reinforce the observed relation between compensation and company size. The client of compensation consultant may sometimes be the head of human resources, the chief financial officer or the CEO, creating a conflict of interest (Jensen et al. 2004).
2.3.5 Theoretical approaches to explain compensation

While this study is strongly based on agency theory, other approaches that supplement the theory are introduced in this sub-chapter. Maximizing firm value is the objective of firm, and should be complemented by a corporate vision and strategy (Jensen et al., 2004). Ideally, the remuneration philosophy developed by the compensation committee should reflect the company vision and strategy. There are many theoretical approaches to explain compensation as part of a pay setting, however. The complete contracting approach (Jensen and Meckling, 1976) is the most prominent approach in academic research on executive pay, and is sometimes referred to as Agency Theory. The second group is managerial power theory and class hegemony. These theories convincingly argue that agents are in the natural position to have discretion in setting their own pay due to principal agent relationships (Bratton, 2005; Jensen at al., 2004). This sub-chapter introduces the figurehead approach, market equilibrium theory and tournament theory.

Figurehead approach
Gomez-Mejia (1994) proposed that executive pay is part of the status that the executive enjoys within and outside the firm, and is intended to reinforce the figurehead image. Under figurehead approach, Ungson and Steers (1984) assume that there is a diversity of individual interests and behaviour that often causes conflicts in the firms. In the interplay of organisational politics with the involvement of bargaining and compromises, the units with the greatest power receive the greatest rewards (Ungson and Steers, 1984). Executives act as boundary-spanners for owners, regulators, employees, clients and the public. In this regard, the CEO plays a political or symbolic figurehead role when communicating within and outside the firm and when managing political coalitions as a political strategist. As an outcome of these different roles, executive pay is set by the individual’s ability to manage the complexity of the symbolic political roles, and is used as a token of the executive’s mandate (Ungson and Steers, 1984). Jensen et al. (2004) continue the description and argue that the optimal remuneration policies cannot be designed and managed without consideration of the powerful relations and interactions between the financial markets and the firm.

Market equilibrium theory
Economics studies explain pay levels using marginal productivity theory as a fundamental theory, setting pay by balancing demand and supply. That is called market equilibrium. The services that executives provide to the firm are treated as any other input production factor (Roberts, 1956). The value of this input is equal to the intersection of the supply and demand on the labour market for executives. The relationship between supply and demand and market equilibrium is presented in Figure 5. In this, equilibrium pay is equal to the executive’s marginal revenue product, which can be defined as the observed performance of the firm minus the performance of the firm with the next-best alternative, plus the costs of acquiring the executive’s services (Gomez-Mejia, 1994). The basic market assumption behind the theory is that there is competition on both sides of the labour market, and that a continuum of alternative jobs is open to the executive who are available to the firms (Roberts, 1956). The
result of the executive’s marginal revenue productivity is executive pay. In equilibrium, it is equal to the intersection of supply and demand on the market for executives. The price continues to change until market equilibrium is achieved. Real markets are more complex than the simple model presented here, however (Pekkarinen and Sutela 2004).

Figure 5. The relationship between supply and demand. (Adapted from Pekkarinen and Sutela, 2004).

To complement the market equilibrium theory, the opportunity cost perspective argues that, in order to hire or retain an executive, the level of pay must be at least equal to the amount that would be paid to an executive for his next-best alternative (Gomez-Mejia and Wiseman, 1997). The value of CEOs compensation package must therefore exceed the opportunity cost of the next-best opportunity, which can be a CEO’s current package or a possible competitor’s package. In addition to this, a substantial premium might be required in order to compensate the risk of taking on a new job, which is a gamble. In labour economics, the efficiency wage hypothesis argues that, at least in some markets, wages are determined by more than simply supply and demand. Moreover, the executives will put in extra effort if they are promised an above-market-level wage (Gintis 1976). The theory considers executive pay as being the result of the value of executive’s marginal revenue productivity plus a premium above the market level. There are several arguments for suggesting efficiency wages. If the pay is set at a level above market level, executives are less likely to leave the firm or to shirk their work, and will feel that their contributions to the firm are valuable. Executives subsequently have the incentive to put in extra effort, which reduces executive turnover and increases productivity (Prendergast, 1999). Beside of this, higher wages may decrease adverse selection by attracting more capable executives. Sociological theories such as Akerlof’s Theory even
suggest that higher wages encourage higher morale. Recent discussions on continuously increasing wages for CEOs could be explained by the efficiency wage theory. Boards would rather agree a pay strategy above the market level in order to attract, retain and motivate talents, and to acquire them from competitors.

Tournament theory
When wage differences are not based on marginal productivity, but on the relative difference between individuals, economics describes the situation under Tournament Theory. Pay is the prize received in a contest (Lazear and Rosen, 1981). The first prize in the tournament is the highest pay received by the CEO, the highest-ranking position in an organisation. Tournaments are an integral and invisible part of the organisation, where employees are promoted for being better than their competitors, and not for absolute performance. The first prize for the CEO provides incentives for the others to climb higher on the corporate ladder (Rosen, 1986) and indirectly increases the productivity of competitors at lower levels. High pay levels therefore also provide executives themselves with incentives, but serve more as incentives for their subordinates. When the top prize is set at a disproportionately high level, it has the effect of lengthening the career ladder of high-ranking managers (Crystal et al. 1988). Venkatasubramanian (2009) completes or contradicts this theory with his recent findings on the fairness of CEO pay. He studies the ratio between the CEO and the lowest-paid employee, and suggests that the ideal pay range for S&P 500 CEOs should be narrower, and only in the range of 8 to 16 times. Siegel and Hambrick (2005) report a negative relationship between top management team pay inequality and performance.

Since compensation is a widely studied area, plenty of other theories have been devised to explain it. Class Hegemony Theory argues that executives share a common bond. With a board of directors composed primarily of CEOs, executives will pursue their own goals and interests, and not those of the shareholders. According to Gomez-Mejia (1994), “board inputs are used to legitimize high executive pay, reflecting a shared commitment to protect the privileges and wealth of the managerial class”. Under Human Capital Theory, the value of the executive is the compensation based upon the accumulation of knowledge and skills, and the productivity influences on earnings (Agarwal, 1981). According to the Managerial Power Theory, the “separation of ownership and control in modern corporations gives top managers almost absolute power to use the firm to pursue their own personal objectives, such as increasing the level of pay and decreasing the risk of pay (Gomez-Mejia, 1984). According to Prospect Theory the executive is willing to take risks in certain circumstances in order to avoid losses or missing goals (Wiseman and Gomez-Mejia, 1998). Once the performance goals have been achieved, executives are unwilling to take additional risks. Under the Social Comparison Theory, board members use their pay as a reference point when setting the pay of executives (O’Reilly et al. 1998).
2.4 Agency theory

Agency theory cannot be excluded when studying executive compensation. Despite the fact that many different theories and approaches are used to explain executive pay, the perfect contracting approach of agency theory, as introduced by Jensen and Meckling (1976), still dominates the field (e.g. Berle and Means, 1932; Eisenhardt 1989). It argues that the separation of ownership and control in a large organisation creates a power base for executive management. If the manager of a firm owned all the shares of the company, the decisions made by that manager would be presumed to be those that would maximize long-run shareholder value, and there would be no need for additional incentive plans. Decisions in companies are not made by the owners, however, but rather by managers who hold significantly less than 100 percent of the company’s stock.

The agency theory leads to optimal pay design (Gomez-Mejia and Wiseman, 1997), which is based on market forces and behaviour and to the pay-for-performance studies (Gomez-Mejia, 1994; Barkema and Gomez-Mejia, 1998). However, Brecht et al. (2002) have recently challenged this theory by arguing that some of the incentive systems that are in common use and that were originally set up to reduce agency problem do not align principals and agents, due to the incorrect assumption that earnings and stock prices cannot be manipulated. Frey (2003) argues that it builds primarily or exclusively on extrinsic motivation. Problems of agency are central in the corporate governance literature, and executive pay-setting is a critical part of corporate governance.

Although the original foundation of agency theory goes back to the early 1930s (Berle and Means 1932), there have only been studies explaining both the nature of these conflicts, and how they may be resolved (e.g. Murphy 1999) since Jensen and Meckling (1976) proposed a theory of the firm based on conflicts of interest between the various contracting parties, the shareholders, the corporate managers and the debt holders. Agency theory is a useful addition to Organizational Theory (Eisenhardt, 1989), as it broadens it to include the agency problem that occurs when cooperating parties have different goals and there is a division of labour (Jensen and Meckling, 1976). Other existing corporate governance theories include Stewardship Theory, Resource Dependence Theory and Institutional Theory. Stewardship theory suggests that the top management can act in the best interests of the company, even without financial incentives and monitoring systems, and that the board supports strategy implementation rather than monitoring it. Under the Resource Dependence Theory, the board members can make resources available in order to coach the CEO, although the monitoring function still takes place. In Institutional Theory, corporate governance is imposed on organisations in the context of social and cultural constraints.

The economics literature refers to the theory of the firm as a “black box”, which operates to maximize the profits or the present value of the company. Within this theory, Jensen and Meckling (1976) examined the relationship between principal and agent as a contract under which one party, the principal, engages another party, the agent, to perform some service on their behalf. As a part of the relationship, the principal delegates some decision-making authority to the agent. Figure 6 visualizes the basic idea of agent theory.

A simple agency model is based on three basic assumptions (Gomez-Mejia and Wiseman, 1997).

1. Agents are risk-averse.
2. Agents behave according to self-interest assumptions.
3. The agents’ interests are not in line with the principals’ interests.

Given these assumptions, the goal of the agent theory is to determine the most efficient contract to govern the principal-agent relationship. Contracts can be either behaviour-oriented or outcome oriented. The first involves fixed basic salaries and hierarchical governance. The second includes performance-related pay, such as stock options and commissions (Eisenhardt, 1989). The first agency problem arises when the goals of the principal and agent conflict, and it is difficult or expensive for the principal to verify what the agent is actually doing. The second agency problem arises from risk sharing, when the principal and agent have different attitudes toward risk (Eisenhardt, 1989).

The principal-agent problem originates under conditions of incomplete and asymmetric information, arising from two agency problems: adverse selection and moral hazard. Principals can access only incomplete and potentially-manipulated information. Jensen and Meckling (1976) argue that, without additional costs, it is impossible for outside investors to
assure that the management is maximizing the shareholders’ interest. In addition to the inability of carry out direct observation, the divergent interests of the parties lead to a moral hazard or to inherent conflicts of interests between principals and agents, thereby creating agency costs. They can be offset to some extent by writing contract provisions involving bonding and monitoring in order to guarantee that the agent will act in the principal’s interest. Monitoring costs include mandatory auditing costs, and, since they are transferred to the agent through contracting, agents are likely to establish mechanisms designed to align the interests of the agent and principal. The terms “hidden action” and “hidden information” (Arrow, 1985) can be used when the agent’s action is not directly observable or the output is not completely determined by the agent’s effort. The costs incurred after monitoring and bonding are characterized as the residual loss, and are caused by agents acting in their own interests at the expense of those of the principal. The sum of the agent’s bonding, monitoring, and residual costs are collectively referred as “agency costs” Accounting plays an important role in the reduction of agency costs. Enforcement of the contract requires monitoring of manager’s activities, and this is one of the roles of auditing. Companies also choose their optimal capital structure in order to reduce these costs, although managers only bear a part of the risk of failure in case of debt capital.

The two main branches of agency theory include positivist agency theory and principal-agent research. The first focuses on the broad problem of the separation of ownership from control, and emphasizes how managers are disciplined by incentive schemes, external labour markets and capital markets (Fama, 1980; Fama and Jensen, 1983). The second branch takes the ownership and allocation of firms as given, and concentrates on the design of ex-ante employment contracts and information systems, and allows various relationships (Baiman, 1982). These theories do not close each other out, but are complementary.

In recent agency theory studies, Palia and Porter (2007) study agency theory in banks with the required capital and management incentive compensation for risk-taking, and present a significant and negative coefficient for capital and a significant positive coefficient for pay-performance sensitivity. They show that the moral hazard dictates the use of mandatory minimum capital requirements for commercial banks, and that incentive compensation aligns the interests of managers and shareholders, thus overcoming the inclination of managers to minimize risk at the expense of shareholder value.

Moral hazard

When Jensen and Meckling (1976) created agent theory, they studied the preferences of a manager and shareholders, providing explanations on the moral hazard arising from conflicts of interest. In this context, the manager does not fully bear the economic consequences of his actions, or cannot fully enjoy the excellent results while the ownership is separated (Jensen and Meckling, 1976). Moral hazard can be present at any time when two parties make an agreement with one another. Each party in a contract may have the opportunity to gain from acting contrary to the principles laid out by the agreement. For example, if a director is paid a flat fee with no linkage to company value, there is a danger that the director may not spend
enough time monitoring management, because his fee remains the same regardless of how much or how little the owner benefits from this work. According to Jensen and Meckling (1976), moral hazard can be somewhat reduced by placing responsibilities on both parties of a contract. For risk purposes, it would demand efficient monitoring of the manager’s actions by shareholders. This is impossible in most cases. However, it has been suggested that the design of executive compensation can solve this issue by tying compensation directly to company performance, i.e. the value of the firm.

Jensen and Meckling (1976) suggest that the moral hazard between managers and owners can be solved by making managers into owners of the firm. This results in the owner-managers having an opportunity to make entrepreneurial gains, and therefore provides an incentive to increase the value of the firm. Otherwise, the moral hazard problem leads owners to discount the value of their initial investments, and to reduce management compensation. Managers then have an incentive to choose a higher quality audit as a means of increasing their compensation. To avoid moral hazard, the director’s fee could be comprised of both cash and restricted shares. With such a fee, the director would have more incentive to not only monitor, but to also prevent losses for the company and the reduction of its share price.

**Equity compensation as a means to solve agency problem**

After the equity compensation boom in the early 1990s, the use of and debate on executive equity compensation schemes increased considerably (Blasi et al., 2003). Managers, owners, and customers are typically separate parties in publicly-listed companies. This separation allows gains to be made through specialisation, but creates conflicts of interest between the owners and the managers and between the customers and the owners. Based on the agency theory, company managers pursue their own short-term goals to the detriment of the owners of the company. Equity compensation can be used to resolve this problem by providing incentives for managers to act in line with the owners’ interests, although the performance factors themselves may be out of managerial control (Mayers et al., 1997). Incentive plans such as equity plans may result in a situation in which employees can only expect trivial personal gain from their contribution to firm’s value or profit (Oyer, 2004). Compensation can also be used to align their interests of those of the owners. Most of the equity studies focus on option compensation, either supporting it or criticizing it. Some findings related to options may also be applicable for short-term bonuses.

Dittmann and Maug (2007) calibrate the standard principal-agent model with constant relative risk aversion and log-normal stock prices for a sample of 598 US CEOs. The model predicts that most CEOs should not hold stock options. Instead, CEOs should have lower basic salaries and receive additional shares in their companies. These contracts would reduce average compensation costs by 20% while providing the same incentives and the same utility to CEOs.

Although agency theory is a unique, realistic and empirically testable perspective for problems of cooperative effort, some researchers (e.g. Eisenhardt, 1985) recommend using
multiple theories in addition to agency theory research and to go beyond economics literature. This study extends the view of agency theory with stakeholder theory.

2.5 Stakeholder theory

In their annual reports, companies often state that their objectives include maximizing shareholder value, increasing customer and employee satisfaction, producing high quality products and furthering their charitable ties to the local community, but “the proper and unique objective of every company in society is to maximize the long-run total value of the firm” (Jensen et al., 2004: 15). This goal requires dedicated employees and satisfied customers and the stakeholders will therefore need to taken into account in a journey towards value-maximisation. Jensen (2001) uses the term “enlightened value creation” and criticizes stakeholder theory for not providing a score for value creation, and not explaining whether the firm is better or worse off. Without a score, there is no basic method for holding management accountable for its performance. Stakeholder theory in this study is used as a conceptual framework, in order to not only take value creation for shareholders into account, but also value creation for the other relevant stakeholders.

The literature presents various views on stakeholder theory, but the key distinction can be drawn between the tenets of the theory and the conventional input-output model of the firm by converting the owner, supplier, and employee inputs into client outputs (Donaldson and Preston, 1995). The theory argues that every legitimate person or group participating in the actions of a firm aims to obtain benefits, and that the priority of the interests of all the stakeholders is not self-evident. Donaldson and Preston (1995) offer following four central theses related to stakeholder theory:

- Descriptive, by offering a model of the corporation
- Instrumental, by offering a framework for investigating the links between conventional firm performance and the practice of stakeholder management
- Fundamentally Normative, as stakeholders are identified by their interests and all stakeholder interests are considered to be intrinsically valuable
- Managerial, by recommending attitudes, structures, and practices, and requiring that simultaneous attention be given to the interests of all legitimate stakeholders

Jones and Wicks (1999) complements these theses with aspects of the normative by stating that firms should behave in certain ways, of the instrumental by stating that certain behaviour

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37 It insists on long-term value creation as the firm’s governing objective and provides a basis for decision-making or an evaluation of the success or failure of the firm or management.
of the firms lead to certain outcomes, and of the descriptive or empirical by evidence that firms behave in certain ways.

The theoretical foundation for this study is derived from the stakeholder-agency concept of the firm (Hill and Jones, 1992). The CEO and a chairperson are seen as agents of shareholder. This view includes contracts and costs to ensure proper actions on behalf of the shareholders (Jensen and Meckling, 1976). However, the firm will also seek to balance the interests of the various other stakeholders, rather than simply the shareholders, and will provide them with some degree of satisfaction (Abrams, 1951). The combined agency and stakeholder construction provides a basis for evaluating CEO and chairperson pay taking the public, regulators, shareholders, employees and clients into account.

Post et al. (2002), define stakeholders in their theory called Stakeholder view as parties that contribute, either voluntarily or involuntarily, to corporate’s wealth-creating activities, and potentially benefit or carry the risk. Phillips (2003) extends the benefits of stakeholders by providing principles of stakeholder fairness.

Both agency and stakeholder theories are primarily theories of the firm. The basic assumption according to stakeholder theory is that those firm that are managed for the optimal satisfaction of stakeholders, thrive better than those that only maximize the profits or interests of the shareholders. There can be numerous stakeholders, given that a stakeholder is any group or individual who can affect or be affected by the achievement of the organisation’s objective (Freeman, 1984). The definition is too broad; therefore Mitchell et al. (1997) therefore limited the term “stakeholder” to those with legitimate claims, regardless of their power to influence the organisation. Reed (1999: 467) defines a stake as “an interest for which a valid normative claim can be advanced”. Alkhafaji (1989) identifies the term “stakeholder” as an extension of shareholders, the group of people to whom management is traditionally responsive, also including customers, workers, suppliers, vendors and other relevant parties. Mitroff (1989) describes stakeholders as people who have a stake in an organisation and who interact with each other in a systematic way.

The ambiguous definition of stakeholder has caused several criticisms, and it has been questioned whether the theory works at the operational level. These critics maintain that the primary responsibility of the directors and executives of corporations is to maximize shareholder value (Gregg, 2001). However, in order to survive, corporations cannot ignore the fact that they are constellations of cooperative and competitive interests that possess intrinsic values (Donaldson and Preston, 1995). Stakeholder loyalty is a crucial factor for the success of an organisation. Walker and Marr, (2001) identifies at least two dimensions of loyalty that should be taken into account in the power of stakeholders: their feeling, either negative or positive, toward the organisation and their support, either likely or unlikely, the organisation in the future.
It may be beneficial to identify stakeholders through the actual or potential harm and benefit that they experience as a result of the firm’s actions. According to Clarkson (1995), the corporation, being a system of primary stakeholder groups, can only survive in the long run if it maintains its ability to create wealth and value for the whole system. Jones (1995) argues that the organisation will develop a competitive advantage if managers treat stakeholders in a trustworthy manner, since it is then able to reduce costs. Jensen argues that stakeholder theory as stated by Freeman (1984) and others contains no conceptual specification of how to make the trade-offs among stakeholders that he sees as being important. In the worse case, the theory is damaging to the welfare and to social welfare of firms. This may be one reason for its popularity, however. There is no way to keep score of the actions for which stakeholder theory makes managers unaccountable, and, simultaneously, managers should make all decisions that are necessary to increase the total long-term market value of the firm (Jensen, 2001). In publicly-listed companies, there is clear evidence that not only shareholders, but also regulators, and in worse case, taxpayers, are crucial stakeholders who must be considered when defining compensation for these key organisational roles. This study only uses stakeholder theory for CEO and chairperson compensation purposes to evaluate the rewards based on reward equity triangle explained below.

2.6 Reward equity triangle

Accounting or stock price performance is usually hypothesized to be a determinant of the level of executive compensation. The pay structure is important, as it is not about how much you pay, but how you pay (Jensen and Murphy, 1990b). Internal incentive structures affect organisational behaviour, while egalitarian pay systems sacrifice the organisational efficiency, as economic models do not capture human behaviour and motivation and create a gap between economic theory and compensation practices (Baker et al., 1988). Only a few studies concentrate on an integrated view of compensation from directors to employees. One of them is Ittner et al. (2003), who find that lower-than-predicted option grants to CEOs, directors and technical employees are associated with lower subsequent ROA.

Hilb (2006) suggests a Reward Equity Triangle concept for remuneration. Figure 7 shows the concept. It includes dimensions such as internal, external and performance related. The first dimension, internal, is based on competence and conformance with requirements. This can include the requirements of the job and the skills provided by the candidate. The second dimension, external, determines pay through relevant market comparisons. The third dimension is performance, determined by the variable portion of pay linked to firm performance, which has a direct impact and is measurable. The performance corner is in line with Porter (1992:81), who argues: “compensation systems need to move in the direction of linking pay more closely to long-term company prosperity and to actions that improve the company’s competitive position”. Based on the reward equity triangle according to Hilb
(2006), the objective is for employees, customers and shareholders to feel that they are being fairly rewarded internally and, externally in accordance with company success. There are plenty of conflicts between these three components and companies must strive for an optimization. The goal should also be integrated with the other HRM concepts.

The remuneration principles for compensation can be based on the reward equity triangle. In general, however, Hilb (2006) recommends a fixed remuneration policy for most of the board members, with exception of those cases where variable pay makes sense. The fixed proportion of remuneration is based on:

- **Internal fairness**: such as regular requirements, opportunity costs, the influence on firm success and the position within the board (Böckli 1992)
- **External fairness**: such as the fees competing firms pay for comparable positions

“The variable part is based on the firms’ performance, and connects the individual and the board team’s merit performance to the firms’ performance based on indicators relating to shareholders (EVA), employees, clients and the public. The pay mix between variable and fixed should depend on whether a board member has direct influence on firm performance, and whether it can be measured.” (Hilb 2006: 240).

The external labour market establishes certain compensation ranges for top executives (Roberts, 1959). The market place efficiently evaluates how well the executive is doing, and the compensation therefore cannot deviate too much from what the market considers to be appropriate. If the compensation deviates from the market, market forces will assure “ex post
settling up”, which means that the manager will be commensurately compensated at his next job (Fama, 1980). Due to globalization, today’s marketplace has increased, and this has had impact on pay levels in the local market. “When companies started to become global, executives in Europe started being compensated according to American standards. They stay in Europe, but are paid according to the US standards. As a consequence, director fees have been increasing in Europe” (Hilb, 2006: 130) together with the CEO pay.

This dissertation focuses on the banking industry, in which regulation plays a major and relatively easily-identified role (Hubbard and Palia, 1994). Accordingly, in competitive banking environments, CEOs would have to perform or be fired, and non-performing chairpersons would not be chosen again. Banks have commonly compensated top management with relatively low fixed pay, but with significant variable pay opportunities. According to agency theory, the benefit of variable performance pay decreases if the agent is risk-averse. Dohmen and Falk (2006) found empirical evidence that risk-averse agents self-select fixed-pay contracts rather than tournaments. If managers are risk-averse, they may operate by minimizing risk, even at the expense of shareholder return (Wiseman and Gomez-Mejia, 1998) and, vice versa, if less risk-averse, they may pursue actions with excessive risk-taking. This is due to the fact that managers have more control than shareholders over the firm’s day-to-day operations. It is assumed that firm risk is positively related to the value of the financial instruments tied to firm’s shares (Black and Scholes, 1973). It continues with the implicit assumption under risk-sharing that long-term incentives increase managerial risk-taking, which increases shareholder return (Eisenhardt, 1989; Jensen and Meckling, 1976). In addition to this, equity theory recognises that employee motivation is not a simple function of financial inducement, but is influenced by social comparisons (Adams, 1965; Cowherd and Levine, 1992).

The approach in this study analyzes CEOs as employees hired from either the internal or the external managerial labour market, and thus assumes that CEOs will compare their compensation with those of the other top executives both inside and outside the firm. In a similar manner, it is assumed that chairpersons compare their compensation with executives within the company and with both executive and director pay in other companies. Compensation acts as an equilibrating mechanism to match talented and skilled managers to the competitiveness of their environment. They are awarded higher levels of compensation in competitive environments and are likely to have a compensation structure that responds to the bank performance as measured by shareholder wealth (Hubbard, 1994). The components of the reward triangle in this study are further analysed for building the hypotheses.
2.7 Regulatory framework

Corporate governance is an instrumental part of the executive compensation process, therefore understanding the executive compensation package and its role in the firm requires a basic understanding of corporate governance. This sub-chapter defines corporate governance and its role in Switzerland, including the recent changes as a result of the financial crisis.

2.7.1 Corporate governance

Executive compensation has attracted widespread attention in recent years and has become one of the focus topics in corporate governance (Felton, 2004). A significant part of executive pay level setting can be seen as a part of the fundamental governance processes in an organisation (Hambrick and Finkelstein, 1995). According to SIX Swiss Exchange, the term "Corporate Governance" in listed companies refers to all of the principles aimed at safeguarding shareholder interests originating from the “agency” problem: the divergence of interests between the company management and the capital owners. Corporate governance principles aim at guaranteeing transparency and a healthy balance of management and control. Transparency of remuneration is one of these principles, and the best practice recommendations list what is recommended to be disclosed. Well-designed executive remuneration packages can mitigate agency problems by aligning the interests of managers and shareholders. Similarly, “well-designed corporate governance policies can mitigate the agency problems by defining rules, processes, checks and balances that help ensure that boards of directors faithfully fulfil their fiduciary duties to shareholders” (Jensen et al. 2004: 22).

The OECD (2004: 11) extends the definition of corporate governance beyond the protection of the shareholders interests: “Corporate governance involves a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance provides the structure through which the objectives of the company are set, and the means for attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives to ensure that the board and the management pursue objectives that are in the interest of the company and its shareholders, and should facilitate effective monitoring”.

The main principles of corporate governance mechanisms in publicly-listed companies can be factorised into external and internal governance\(^\text{38}\):

\(^{38}\) Jensen (1993) outlines four categories, which can be covered under external governance
• Internal governance: The AGM and the board of directors prevent corporate scandals
• External governance: The increasing threat of takeovers (e.g. when the firm’s performance is inferior) and legal, regulatory and competition mechanisms

Benz and Frey (2007) argue that corporate governance can learn from public governance. Institutions devised to control and discipline the behaviour of executives in the political sphere can give new insights into how to improve the governance of firms in four specific areas:

• Manager compensation in fixed pay
• The division of power within firms
• Rules of succession in top positions, and
• Institutionalised competition in core areas of the corporation, in the way that democratic government and public administration are organized

It has been shown that managers involved in accounting fraud had a 69 percent higher pay-for-performance sensitivity than managers not involved in frauds (Johnson et al., 2003). This was a result of their much higher stock and stock option compensation (Johnson et al., 2003). Because performance pay gives executives strong incentives to engage in manipulation activities, researchers suggest fixed pay. Public governance teaches that the persons who set the regulations should not be given an incentive to manipulate the corresponding criteria in their own favour (Benz and Frey, 2007). This could work at the board level, but, with only a fixed pay, it is hard to attract, motivate and retain talented and skilled CEOs at the executive level.

2.7.2 Corporate governance and compensation in Switzerland

The structure of the equity market in Switzerland changed after pension plans became mandatory in mid-eighties, which drove the institutionalisation of shareholders, who ended up holding almost 50% of all assets deposited in Swiss banks (Drobetz et al., 2007). One could argue the presence of a significant number of shareholders could reduce the cost of incentives with direct monitoring. However, or due to this, the market for corporate control only developed during the 1990s (Loderer and Zgraggen, 1999).

The regulatory framework for corporate governance in Switzerland, which came into the spotlight after the collapse of Swissair, is based on three sources. National law lays down general rules and principles for all public companies. The Corporate Law for Corporate Governance Systems is one source and has been under intense examination around the world for a while. A number of cases in which the governance system failed triggered a search for rules and institutions that could prevent similar failures from occurring in the future. Corporate governance in Switzerland was traditionally characterized by a low transparency
and non-existent requirements to disclose information. However, the grounding of Swissair and the increasing confrontation of Swiss companies with corporate governance issues from foreign and local institutional investors led the Swiss Exchange to revise their disclosure rules and recommendations. Corporate governance standards for listed companies are contained in the self-regulation of the Swiss Stock Exchange SIX. The compliance with the Corporate Governance Directive of the SIX Swiss Exchange (SIX) was only required from all the listed companies from 2002 onwards. The third source of corporate governance was initiated by Economiesuisse. The Swiss Code of Best Practice is a set of best practice rules and recommendations for all large companies, but they don’t apply equally to medium-sized companies. The recommendations of the Swiss Code of Best Practice are that the board should be composed of a majority of independent directors with no material relationships with the company.

Of these three sources, the Swiss Stock Exchange SIX plays the major role in implementing corporate governance principles in Switzerland, aiming at safeguarding shareholder interests by guaranteeing transparency guidelines and control. It has issued listing guidelines for the annual reports from 2002 onwards that require firms to disclose detailed information about their corporate governance. Part of this information is the total compensation of the highest-paid member of the board of directors and the total compensation for the top management team. While the Corporation Law only provides broad, generally-accepted accounting principles for annual reporting, the reporting duties included in the SIX Listing Rules require publication of an annual report and a semi-annual interim report based on much more sophisticated accounting standards. Under the Federal Act on Stock Exchanges and Securities Trading (SESTA), the SIX Swiss Exchange determines what information needs to be published so that investors can evaluate the properties of the securities and the quality of the issuers. Internationally recognized standards must be taken into account. As of 2005, all companies listed in the main segment of the SIX have been required to comply with international financial reporting standards or accounting principles that are generally accepted in the US. The reports must be audited. The Corporation Law states that auditors must have the “necessary” qualifications to perform their duties in auditing the financial statements, and must meet higher professional standards if the shares are listed on a stock exchange. The auditors are liable to the company itself, to any shareholder and to any creditor for damages caused by wilful or negligent breach of their duties. The shareholders’ meeting elects and re-elects the auditors, usually for a term of one year.

In October 2003, the Admissions Board of the SIX adopted rules on the disclosure of management transactions. Directors and officers have to disclose their transactions in the financial instruments of the company in which they served, and have to indicate their position, but not their name. Transactions carried out directly or indirectly that exceed CHF 100,000 were required to be reported within four exchange days.

The remuneration of board members and the executive management have been traditionally determined by the Board of Directors itself, with non-existent transparency and disclosure requirements. This has been a matter of serious concern to shareholders in listed companies, especially with the number of reported cases of excessive remuneration. A partial revision of the Federal Code of Obligations was aimed at improving transparency in relation to the remuneration of directors and officers of public companies, and requiring the aggregate and individual remuneration of directors, as well as their shares in the company, to be published. According to the SIX directives, it is mandatory to provide information on the total remuneration paid and the shares and loans granted to both directors and the management. With regard to the board member with the largest total compensation package, the compensation, shareholdings and any loans must be disclosed individually, although the director’s identity need not be made known. Increasing expectations of accountability and transparency have led to the introduction of new securities regulations in recent years. Furthermore, ad hoc publicity rules of the SWX require that listed companies inform all investors immediately and simultaneously of share price-sensitive information. The moment of publication should be such as to allow market participants sufficient time to process the notification.

Besides of disclosure, Swiss law regulates some of the compensation methods. Pension plan is a good example. Swiss law has limited the total salary that can be covered for pension purposes for a single member to CHF 820,800 in 2009; companies are free to choose a lower salary limit if desired.

Further issues addressed by the Federal Code of Obligations were the review by external auditors and sanctions for non-compliance with these requirements. Companies also need to disclose board members' total holdings of shares and options. However, banks in Switzerland only started to disclose their CEOs total compensation separately from aggregate figures of executive compensation in 2007. Compensation is published divided into basic salary, cash incentives and equity component.

The Sarbanes-Oxley Act (SOX) applies to any Swiss company whose securities are registered with the US Securities and Exchange Commission and are listed on a US stock exchange (Olgiati, 2004). Sarbanes-Oxley imposes duties on the board and management, in particular the appointment of an independent audit committee that deals with the appointment, remuneration and supervision of the auditors. Among other things, SOX further states that it is the duty of the CEO and the chief financial officer to issue periodic reports to the SEC, and introduces certain duties for in-house and outside counsel (Olgiati, 2004). SOX has also influenced the draft Swiss Federal Law on Admission and Oversight of Auditors, setting out requirements on the professional qualifications and independence of auditors. Importantly, it establishes a public oversight board that will implement a system for the admission of auditors, and requires that listed companies be constantly supervised.
In the light of the financial crisis, corporate governance issues and, in particular, compensation systems have been at the focal point of political debates in Switzerland, as elsewhere. Proposals for corporate governance reforms have been initiated on three different levels.

1. The Federal Council has submitted a comprehensive reform of the Swiss Stock Corporation Law with the objective of improving the position of shareholders. The aim is to revoke shareholders’ voting rights regarding senior management compensation.

2. A popular initiative against rip-off salaries was filed in February 2008. It demands rigid rules for listed companies at a constitutional level, such as the annual election of each board member, say-on-pay for remunerations of board and senior management, as well as a ban on advanced payments or bonuses in the case of the sale of a company.

3. FINMA issued a draft circular setting out the key principles on remuneration that will apply to all organisations regulated by FINMA, and covering all employees of the financial institution.

**Board configurations**

Swiss Corporation Law provides a relatively wide range of powers for board (Art. 716a CO), from the strategic leadership and organisational direction to the informative function, such as informing courts in case of crisis. Economiesuisse recommends direction and control for the configuration of board. Article 708 of the Swiss Code of Obligations requires that a majority of the board be made up of Swiss citizens. Bilateral treaties with the EU in 2002 made restrictions on board membership discriminatory, however. As of August 2002, Swiss-registered firms can have a boardroom majority made up of European Union citizens and European Free Trade Association (EFTA) nationals living in Switzerland, although the nationality requirement is expected to be abolished in the near future. With regards to the structure of the board of directors, the Swiss Code of Best Practice for Corporate Governance proposes that an audit committee, a remuneration committee and a nomination committee be established subject to specific criteria with respect to independence, and must be established accordingly. However, these are merely “soft” law provisions, and, due to the inalienable rights of the board, such committees merely have a decision-shaping, rather than decision-taking role” (Olgiati, 2004). The fulfilment of the expectations placed upon the committees necessitates an adequate allocation of time and resource. A chairperson of a committee plays an important role in ensuring a well-functioning committee. Main et al. (2008) study the role of remuneration committee and weight a committee’s chairperson role as an onerous appointment and a pivotal actor comparable to a role of the the chairperson of the audit committee.
2.7.3 The financial crisis and corporate governance

According to the McKinsey study (2008), a rapid growth in emerging markets such as Latin America, Asia and Russia and high saving rates have doubled the money available for further investment, and the economy was booming, creating a bubble similar to IT bubble. At a same time, the savings rate in the US was close to zero. Seven years from the burst of IT bubble, in 2007, the financial bubble ended with more severe impact on the economy and on the global financial system than IT bubble had had. The IT bubble mainly impacted those investors who had invested heavily in that sector. The uncertainty of losses in the financial crisis and the lack of trust lead to a panic, and people became risk-averse for a while. The money did not disappear, however, and looked for new investment opportunities.

After the summer of 2007, when financial markets were perceived to have low, stable inflation and unusually steady real economic growth, changes in the economy happened fast, and corporate governance accompanied with compensation debate became an ongoing theme in media (Bell, 2009). On 15 September, 2007 the Lehman Brothers investment bank filed for bankruptcy protection, which prompted a number of countries, such as the US, the UK, Germany, France and the entire EU, to launch substantial support programs for the financial sector. Other companies were also affected, with AIG requiring a US Federal Reserve Bank credit of $85 billion, Merrill Lynch being taken over by the Bank of America and the UK’s HBOS by Lloyds TSB, while Fortis was partly nationalized, and Wells Fargo and Wachovia announced a merger. In Switzerland, the UBS needed government support. The market capitalization value of the 100 largest, listed Western European banks shrunk by 80% during this time. According to the International Monetary Fund (IMF), total losses due to the financial crisis, which had amounted to USD 1 trillion in spring of 2008, had risen to USD 1.4 trillion by the beginning of October, 2008. In December 2008, the Swiss Federal Banking Commission and the UBS and Credit Suisse agreed on new capital adequacy rules.

The background to the credit crisis was created by low, real interest rates and an expansion of credit to a part of the population who had no chances to manage it, which increased risk enormously. The credits were securitized sub-prime securities, and were distributed on the market. Because these instruments were unknown in the market, it caused the prices of these assets to rise significantly. This shows that traditional banking activities were replaced by market-based intermediation, with non-banks acting in the same way as investment banks and hedge funds. Risk was perceived to diminish, and leverage increased as institutions expanded their balance sheets for a given amount of capital (Adrian and Shin, 2007). When the bubble burst, the crisis was blamed on greed, cheap money, macro-economic imbalances and financial innovation together with shortcomings of regulatory regime. Incentive plans are being blamed for encouraging and rewarding excessive risk-taking.

40 http://m.taloussanomat.fi/?page=showTable&tableID=536&newsID=20095176 (accessed in April, 2010)
The crisis led to a widespread increase in regulatory changes. President Obama presented a plan on January 21, 2010 aimed at restricting the activities of commercial banks by preventing them from owning, investing in or sponsoring private equity and hedge funds. The Obama administration also plans to limit the ability of the largest banks to use borrowed money to fund expansion plans. The legislation is intended to reduce speculative activity by financial institutions in order to avoid future financial crises. However, they substantially limit the banks' ability to generate earnings and investments. Restrictions on the banks' management of funds may affect hundred of hedge funds worldwide.

A great deal of effort and time was invested in reviewing the compensation practices. Since December 2009, both the US House of Representatives and the Senate have created a draft for executive compensation and corporate governance:


The first act requires annual shareholder advisory votes on compensation and golden parachutes, with a minimum of annual reporting of say-on-pay and golden parachutes votes by all institutional investors. The latter act gives shareholders say-on-pay with the right to a non-binding vote on executive pay. Based on the Wall Street Reform act, the compensation approved by majority say-on-pay is not subject to claw back, and all financial institutions are required to disclose compensation structures that include any incentive-based elements. Financial institutions with more than USD 1 billion in assets are required to disclose risky compensation practices as a part of solvency regulation. They need to complete a GAO study of the correlation between compensation structure and excessive risk-taking. The last act requires that public companies set policies for clawing-back executive compensation if it was based on inaccurate financial statements that do not comply with accounting standards. Both bills require compensation committees to be made up of independent directors, but the latter bill provides for committees with authority to hire compensation consultants, which, according to the first bill, should fulfil the independence criteria established by the SEC, and gives the SEC authority to grant shareholders proxy access to nominate directors, and also requires directors to win by a majority vote in uncontested elections. Obviously, the House bill and Senate bill have differences, with the first one including more provisions on executive compensation and corporate governance than the latter, and these differences will be one of many topics that the House and Senate conferees will address. In addition, there is also concern that changes to the proxy voting process will place a financial burden for companies and also create a way for a small minority of voters to unfairly influence the process and advance hostile take-over manoeuvres. (WorldatWork, 2010).

\(^{41}\) The House passed this measure on December 11, 2009

\(^{42}\) The Senate passed this Act on May 20, 2010
The leaders of the G20 countries published their compensation standards on April 2nd, 2009. They requested that Board of Directors actively take part in the development of compensation systems, their implementation and their governance. At the same time, the Financial Stability Board (FSB) issued Implementation Standards for Sound Compensation Practices, stating: “Sustained efforts by firms and authorities remain necessary in order to effectively align compensation structures in major financial institutions with prudent risk-taking” with an increasing focus on Compensation Committees to meet appropriate standards of expertise and independence.

The Code of Practice for FSA-regulated firms was produced in February 2009, with the aim of ensuring that firms have remuneration policies that are consistent with sound risk management. The committee concluded that the banking crisis has exposed serious flaws and shortcomings in the remuneration practices in the banking sector, and in particular in investment banking. It is even argued that remuneration played a role in causing the banking crisis. Sinclair et al (2009) argue that the excessive risk-taking of savings banks, especially in 2008, was due to compensation, the behaviour of the banks themselves or the behaviour of regulators, and that efficient regulation and supervision require conditions where the commitment of the various parties can be taken into account, including that market discipline and the actions of agents, such as bank management and regulators, should be controlled.

The increasing interest in the recent publications from the US have triggered companies to review their compensation methods and to issue new models. The UBS introduced its "New Compensation Model" for executive compensation based on best practices. The model introduces the following aspects:

1. Moving from transactional to strategic pay
2. Aligning group, division, business area and individual interests
3. Decoupling key management incentives from risk takers
4. Lengthening decision horizons for executives
5. Making remuneration policies consistent with good risk management
6. Developing the non-financial risk-related reward metrics
7. Ensuring valuation and risk reporting is subject to independent verification

Fundamentally, the financial crisis has taught the banks how to understand, assess, measure and manage risk. The failings in this area led to the widespread risk and inadequacies in managing liquidity funding risk and risk-weighted capital. The overall assessment and management of risk is a key strategic matter for the board of directors. Beside of risk management, valuation and liquidity issues, one prudent lesson from the financial crisis is related to compensation, which is further studied in this thesis. Throughout the financial sector, employee compensation has been linked to short-term measures of turnover or profit,

43 G20 meeting, Financial Stability Board
44 http://www.ubs.com/1/e/investors/compensationreport.htm
with no reference to long-term sustainable profitability or risk. The regulators in Switzerland require or recommend Economic Profit (EP) calculations, deferrals, claw-back clauses, risk-sharing on significant cash bonuses and clear linkage to long-term performance and performance related to peers. Moreover, it is necessary to understand the non-performance-related parts of the compensation and their value in a total package.

### 2.8 New corporate governance and integrated approach

Martin Hilb (2005) introduces a new corporate governance approach, which is based on the reverse KISS principle: situational, strategic, integrated and keep it controlled. “Keeping it situational implies that the targeted adaptation of Corporate Governance practices have to suit the (often-neglected) context of the company. Besides the board members themselves, the fit between the external and internal contexts represent one of the most important determinants of a firm’s success” (Hilb, 2006: 224). For success in the development, implementation, and control of an integrated corporate strategy, Hilb suggests four main preconditions:

1. Diversity: strategically targeted composition of the board-team
2. Trust: a constructive and open-minded board culture
3. Network: efficient board structure, and

The principle of “integrated” refers to the targeted strategic and integrated selection, evaluation, remuneration and development of board teams, instead of isolated Nomination and Remuneration Committees. “Keep it controlled” encompasses board functions such as: audit, risk management communication and evaluation (Hilb, 2006). With regard to compensation, integration plays an even more significant part. Figure 8 compares traditional corporate governance to the new corporate governance approach. The new framework integrates the interests of the shareholders, customers, employees and the public. “The objective based on this framework is for employees, customers and the shareholders to feel that they are being fairly rewarded internally, externally and in accordance with corporate success” (Hilb, 2005: 224).

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45 e.g. FINMA
The integrated board and management remuneration system requires the reviewing of compensation practises and pay mixes together with the different management levels. For this purpose, Hilb (2005) has developed incentive checklist showing the time-horizon of incentives, success level and stakeholder group. This study will review compensation based on the approach explained, starting from agency theory with, however, a separation of ownership, control and stakeholder approach.

Adams et al.(2009) suggest that board studies should be interpreted together with the director-selection process, and the effect of board composition on actions and firm performance. Most of the studies are conducted on the structural differences of board, and linking them to differences in behaviour. Large boards are blamed for being less capable in monitoring the CEO and reducing the free-rider problem. Further studies on board structure have recently focused on board diversity (Carter et al. 2003). The board hires, promotes, assess and dismisses top executives, as required, (Naveen, 2006). Assessment includes monitoring top management actions and ability, where the board obtains support from external sources such as auditors and regulators (Adams et al. 2009). The CEO holds more information than board, and may have a better understanding of the value of the project or the investments proposed to the board. Hermalin and Weisbach (1998) suggest that, as CEOs become more powerful, they use this power to improve their own wealth, which can be achieved by decreasing the volatility of their compensation. In his model, Hermalin (2005) suggests that CEO compensation is greater when the boards are more independent. Independent boards have greater propensity to monitor, which increases CEO risk and therefore the requirement for compensation, which, in turn, leads to more CEO effort, possible external EO hires and shorter CEO tenures. To sum up, the greater the effort and the less secure the job, the greater the CEO compensation.

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<th>Firm Characteristics</th>
<th>Sector</th>
<th>Stakeholder Orientation</th>
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<td>f.ex. Publicly listed company</td>
<td>f.ex. Bank Governance</td>
<td>Simultaneously adding value for:</td>
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<tr>
<td>Large company</td>
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<td>• The Public</td>
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Figure 8. New corporate governance (Adapted from Hilb 2005:11).
Corporate governance and the role of the board of directors have a fundamental importance in economics. Understanding the role of boards is necessary in order to understand the behaviour of corporate and policy setting aimed at regulating corporate activities (Adams et al., 2009). If the board mainly consists of outside directors, CEO turnover is more sensitive to performance than in boards dominated by insiders (Weisbach, 1988). Yermack (1996) finds a positive and significant coefficient between board size and financial performance, indicating that firms with small boards have a stronger relationship between poor performance and CEO turnover than firms with large boards. If the board is paid with incentives, the relationship is stronger (Perry, 1999). Brick et al. (2006) find strong positive correlation between excess CEO compensation and excess director compensation.

The empirical work on governance in this thesis is focussed on natural experiments in changes in regulations. If the bargaining model of Hermalin and Weisbach (1998) is correct, there should be no change in CEO compensation for those firms that were already compliant, while, after a short-term shock, CEO compensation should rise in the long run for those firms that have to come into compliance.

2.9 Factors influencing compensation

This study aims to find the determinants of CEO and chairperson compensation and what could we learn from the financial crisis. The framework arises from agency theory, in which the CEO and chairperson are agents of the shareholders, and well-designed compensation packages are used to align their interests. The design of corporate governance policies go together with compensation practices. The framework is complemented by stakeholder theory, taking other key stakeholders, such as clients, employees and the public, into account. Naturally, a profitable company increases benefits for all its stakeholders. A fair compensation therefore not only enhances the short-term benefit for shareholders with a focus on single financial figures, which may destroy the firm’s value in a long run, but also compensates for benefits for other key stakeholders. It is a complex equation, but can be simplified by choosing simple measurements. The CEO and chairperson compensation issues are studied in detail in Credit Suisse and the UBS in the period from 2002 to 2009. In both companies, the chairperson is a full-time director, without significant mandates outside the company, which is not the case with other board directors. Bryan et al (2000) report that firm characteristics that explain executive compensation also explain directors’ pay, and treat directors as agents of the shareholders, who need economic incentives in order to increase shareholder revenue.

Many of the previous empirical investigations related to CEO and director compensation have centred on economic determinants aiming at explaining compensation through factors such as firm size, profitability or growth. Compensation is fair and justified if there is a statistically
significant relationship between these characteristics. Although the results are mixed (Finkelstein and Hambrick, 1988), both firm size and financial performance are studied in this research. There is some evidence that non-economic factors can also be important in the determination of the executive pay level or pay mix. These include power, or the form of organisational control used (e.g., Allen, 1981; Gomez-Mejia et al. 1987). Power can be seen as negotiating power, especially where an external CEO is recruited. It is not studied separately, but under a factor of board size, since a larger board may be less efficient in the negotiations. Researchers have also suggested that the use of benchmark data from surveys and independent compensation consultants has an impact on salary levels (Baker et al., 1988). In both these cases, companies use these methods to determine the compensation levels. Aside from these exogenous benchmark factors, there may also be social psychological explanations for the salaries. If a director of the compensation committee is a CEO in another company, a social comparison may take place when determining CEO pay (O’Reilly 1988). By implying these, and other existing literature on agency and stakeholder theory, and through experiences in the field of compensation, the following factors can be identified as impacting the compensation.

Factors related to corporate governance

Large, dominant shareholders can influence both the pay mix and pay level, since they have better resources for monitoring management than the dispersed ownership. They also have an incentive to actively do this, given that it is harder for them to sell their shares without causing a stock price decline than for smaller investors. If there is a major shareholder in the company board monitoring the CEO, incentives maybe not required in order to align the CEO to shareholders interests. Based on empirical evidence, the existence of a major shareholder owning 5% of the firm decreased the CEO’s compensation (Core et al., 1999). Gomez-Mejia et al. (1987) find compensation most tightly linked to performance in firms with dominant shareholders owning at least 5% stake. Strong shareholders may also be able to set compensation according to their preferences, that is, tying pay to shareholder wealth creation (Blazekovic, 2004). The researcher finds that the more concentrated the institutional ownership, the lower is the executive compensation and the higher is the pay performance sensitivity. As a result, major shareholders are expected to have a negative impact on the pay level (Khan et al. 2005), but a significant impact on the performance relationship. The proportion of stock in the package decreases together with increases in insider, board and major shareholder ownership. The existence of international investors has an impact on the pay mix (Mäkinen, 2007), but, according to some studies, they increase the short-term pressure (Liljeblom and Vaihekoski, 2007). The number of foreign owners is expected to have a positive relationship on the compensation.

Another corporate governance related factor studied is board size. Jensen (1993) proposes that when the board size becomes large, they are less capable of holding frank discussions and are less effective in their monitoring than smaller boards. The relationship between the board size and compensation is assumed to be positive, both with full-time chairperson pay and CEO pay. In this study, the negotiation power is only studied under board size, not separately,
although previous studies suggest that this has a significant impact on executive compensation packages. Due to negotiation power, Agrawal and Knoeber (1998) argue that CEOs coming from outside the focal firm are paid better than CEOs coming from inside the firm. Gomez-Mejia and Wiseman (1997: 320) suggest that “executive pay is a compromise between the CEOs’ power to inflate their compensation and society pressures on boards to limit CEO pay” and that “the power of CEOs to influence boards provides a better explanation for the lack of pay-performance sensitivity than alternative explanations” (Gomez and Wiseman, 1997: 321).

Based on previous research, the lack of pay-performance sensitivity can be explained by negotiation power. This is especially the case if the board has a passive, rubber-stamping role (Pettigrew and McNulty, 1995), although compensation committees may enhance the board’s power position (e.g. Ferrarini et al., 2005; Andjelkovic et al., 2002). As the board size increases, the association between pay and performance decreases, and the probability of dismissal of the CEO due to poor performance decreases (Yermack, 1996).

The previous factors explain the focus on internal corporate governance, the board and shareholders. Beside of this, external corporate governance rules may impact directly on pay mix through regulations. Executive compensation is a highly political issue, and politicians and regulations have taken several actions. According to the previous empirical evidence, the changes in the regulations may not necessarily impact on the pay level, although they may originally have had that goal. In some cases, they even increase the overall pay level, as in case of the President Clinton’s Tax Act, which created a boom in the use of options, and finally resulted in a significant increase in pay levels. Increased transparency does not seem to have reduced compensation, in fact vice versa.

The public
The factors impacting on compensation are closely related to each other. For instance, the increasing transparency required by regulators has created attention from the public and the media regarding compensation. The public may create social pressure, which can also be seen as “politicised environment” (Finkelstein and Hambrick, 1988). Significant compensation packages are likely to draw the interest of the media and attention to a firm (Pollock et al., 2002). Not only do the decisions made by the CEO or the board need to take into account, a potential reaction of the public may also impact on the decisions to be taken. According to a study by Dial and Murphy (1995), the political pressures at General Dynamics led the company to replace a bonus plan with stock options. Jensen and Murphy (1990a) argued at the beginning of 1990 that public outcry over large bonuses and other financial rewards for CEOs prevented efficient contracts that would ensure strong pay-performance relationships. Beside this, “directors may be unwilling to provide generous pay packages, as the media may pinpoint such bad behaviour and a director’s reputation and further presence as a director may be at stake” (Schildknecht, 2004: 138). Simultaneously, the banks may need to attract a high-calibre executive to its top position who is able to deal with public pressure and scrutiny, and this is then associated with a pay premium. This relationship is not considered under the research. The relationship of public pressure is studied with regard to the pay level and mix.
Between 1992 and 2008, the negativity press coverage of CEO pay varied significantly. First of all with stock options being the most discussed pay component, and then cash bonuses. The negative press coverage related to a certain compensation tool may reduce its use, however, and increase other types of compensation. Weisbach (2007) argues that firms may camouflage executive compensation by letting it take on forms that are typically not discussed in the press, so as not to attract public attention. Kuhnen and Niessen (2009) argue that the reputational concern is the key element in public opinion. Managers seek to maximize their personal reputation in order to succeed in later career moves (Fama, 1980) and thereby set pay in a manner that does not upset the public. However, as suggested by Weisbach (2007) and Core et al. (2008), firms may react to public opinion by changing the type of compensation offered to executives, and not necessarily the levels of pay. Based on the text of all the newspaper articles published in the US on compensation, Kuhnen and Niessen (2009) suggest that public opinion may change the CEOs’ incentives, and may ultimately shape company outcomes.

Risk
There are two ways to review risk. The first is the risk related to the compensation, and the second is the risk related to the company. Bloom and Milkovich (1998) show that business risk is negatively related to the use of bonuses in managerial cash compensation contracts, and that manager receive higher levels of base pay for accepting greater business risk, and market uncertainty is assumed to increase the overall pay level (Mintzberg, 1973; Finkelstein and Boyd, 1998). Consistent with efficient risk-sharing, firms with higher risk tend to have lower pay-performance sensitivities in various occupations (Prendergast, 2002). Regarding their own pay, agency theory’s basic risk aversion assumption is that agents do not like variability or risk in their compensation, and are therefore risk-averse (Eisenhardt, 1989). Due to this, powerful managers may de-couple their pay from the company performance and shift the mix of compensation towards more stable elements, such as salary (Dyl, 1988), since executives cannot diversify their risk in the same way as shareholders, who can sell their equity holding or diversify their portfolio. For this reason, the manager’s entire portfolio of wealth is important for contracting purposes (Lambert et al. 1991).

External peers
Companies use several sources to carry out a peer comparison. One source can be a social comparison introduced earlier, increasing the transparency of the compensation figure, salary surveys and the support of external independent compensation consultants. Executive pay disclosure may turn executive pay into inflationary increases if the company wants to be among the highest paid (Lo, 2003) in order to attract the best talents. A severe competition for scarce skills, in which demand and supply are no longer met, may lead companies to start a compensation competition. Independent compensation may justify the salary increases by focussing on benchmark salaries in high-pay companies, and even to markets other than the one in which the company is located. Murphy and Sandino (2009) argue that these consultants may have potential conflicts of interest if they aim at cross-selling other services or ensuring that they obtain the repeat deal. That can lead to higher recommended levels of CEO pay.
The benchmarking exercise typically takes into account the complexity of the executive’s duties (Henderson and Fredrickson, 1996), the firm size, the number of employees, the industry and the level of internationalisation. According to Carpenter et al. (2001), top managers in global organisations are better paid, and have higher proportions of performance-based pay in their compensation contract than their peers in local or international companies. Similarly, Sanders and Carpenter (1998) report a positive relationship between firm internationalisation and total CEO compensation and the proportion of long-term CEO pay.

The candidate’s previous compensation can also be seen as a key benchmarking input, both as external and internal data, although with the continuous aim of paying a little bit more than a previous package. A number of studies have explored the relationships between firm, industry, and individual characteristics and CEO compensation (e.g., Ciscel and Carroll, 1980). Four basic variables have been found to be determinants of executive compensation: corporate size, firm performance, industry, and human capital attributes. Firm size is reviewed as a separate factor below.

**Firm size** and segment have been established as major determinants of CEO pay. There is plenty of research available linking firm size to CEO compensation, and there are several explanations for this finding (Ehrenberg and Milkovich, 1987; Gomez-Mejia et al., 1987). Size and segment account for more than 40% of the variance in the total pay (Tosi et al., 2000), and multi-segment firms provide top managers with higher cash compensation than single-segment firms (Anderson et al., 2000). This study is related to one segment, therefore comparison between segments is not relevant, but the relation between pay and size is of interest.

**Internal peers**
When defining CEO compensation, the board may review the compensation at a level below the compensation of the executive board. Simultaneously, it seems that, when defining the pay of the full-time chairperson, some companies compare the pay between CEO and the chairperson. There are certain hierarchical expectations, showing that the higher the level, the higher the compensation, although they won’t necessarily apply to all companies and industries. In addition to this, CEO celebrity or notoriety status may impact on the compensation (Hayward et al., 2004; Porac et al., 1999).

**Skills**
According to Murphy and Zabojnik (2003, 2004), general management skills are transferable across companies and industries and have become increasingly important for the CEO’s job. Since skills and knowledge accumulate over time, it seems reasonable to believe that an executive’s age is positively correlated with experience, integrity and skills.

**Performance**
Pay-for-performance is a fundamental basis of executive pay, and it is the response of pay to changes in a firm’s own performance. It is important to understand both absolute and overall
market performance, since the latter may indicate that the performance of the firm may not be fully attributable to the incumbent, as it may simply be following industry-wide movements (Bertrand and Mullainathan, 2001; Garvey and Milbourn, 2006) rewarding executives for luck (Brick et al., 2002). This may result in paying excessively to executives who actually manage lower-performing firms (Bertrand and Mullainathan, 2001). The majority of these studies have focussed on pay for financial performance. This dissertation extends the performance to take into account the performance for major stakeholders, such as employees, clients, the public and shareholders.

The influence of all these factors on compensation is studied. In summary, diversification, size and internationalization are well-established predictors of CEO total compensation levels. However, market uncertainty and public pressure have received little attention in prior research. What is certainly missing is a formal test of public pressure, which may overwrite any of the other factors influencing the compensation. Table 2 shows the factors influencing pay level and mix.

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Table 2. Traditional factors influencing compensation.

Current pay practices have been widely criticised as encouraging executives to take actions to increase short-term shareholder value at the expense of other stakeholders. In particular, ethical issues have arisen from the continuing debate on executive compensation. Stevens and Thevaranjan (2003) incorporate an explicit ethical dimension for the agent. Carr and Valinezhad (1994) describe social comparison theory and equity theory in relation to executive compensation from the view of balancing the various stakeholders’ interests as a main task of top management. Bloom (2004) discusses the various aspects of fairness and ethics in relation to general compensation and behaviour. Given the intrinsic limitations of the regulatory actions intended to discipline executive pay, redefining the corporate objective and designing executive compensation to take account of the interests of a broader group of stakeholders may help to address the current ethical problems with executive compensation.
This thesis aims to broaden the economic framework of the analysis beyond the agency theory model by incorporating a broader group of stakeholders into the model to provide useful insights.

2.10 Conceptual framework

In this study, a contribution is made to executive and director compensation, corporate governance and the small but growing literature on the impact of social pressure on economic decision-making (see, e.g., Akerlof, 1997; Carlin and Gervais, 2009). Festinger (1954) documented the existing tendency of individuals to make social comparisons, and this is followed by the consequences that these social comparisons can have on individual perceptions and behaviour (Adams, 1965). According to social comparison within welfare economics literature, Easterlin (1995) shows that individual happiness in a society is more dependent on relative than absolute earnings. Under the context of theories of justice and fairness, fairness implies that rewards are allocated in a manner that properly balances the interests of all parties (Finkel 2000) and that is typically determined through a social comparison process (Sheppard et al. 1992).

Advances in organisational research, particularly those focused on issues of justice and fairness, suggest that the full understanding of the outcomes of compensation systems requires the examination of their psychological, social, and moral effects (Bloom, 2004). For example, research on differences in pay levels within organisations indicates that paying top performers more than average performers makes sense, unless the differences become too large. When they do so, both individual and team performance are likely to suffer (Bloom, 1999). People seem to find those differences not only unfair, but immoral. “Virtue ethics views the cultivation of virtuous traits in the management’s character as morality’s primary function” (Rodgers and Gago, 2003: 191). This viewpoint focuses on the virtues of the decision makers, with guidance from moral and professional communities in addressing the ethical issues (Brooks, 2006). The compensation decisions take into consideration the economic and social consequences, as well as the reputation of executives, and relationships with close parties such as employees, clients and suppliers. When considering the acceptance of investments that will result in personal benefits, executives consider the impact on their reputation and on the business relationships (Rodgers and Gago, 2003).

Luttmer (2005) documents that one feels worse off when one’s neighbours earn more. Thus, to improve social ranking, a CEO needs to receive pay that is higher than that of his peers. Bebchuk and Fried (2003) argue that, while executive compensation is typically viewed as a potential solution to the agency problem, it is in fact likely to be a part of the agency problem. In this sense, excessive pay for executives may actually cause, rather than solve, managerial problems, such as inflating stock prices in case of options.
Complaints that the salaries of CEOs have become exorbitant, wrong, or unethical have increased during the crisis (Lavelle, 2002). Some part of the blame must go to the compensation consultants (see Bebchuck and Fried, 2003). Another part can be blamed on camouflage; executives use their technical expertise to show shareholders only what they wish them to see (Carr and Valinezhad, 1994). The failed corporation WorldCom, an entity driven by greed and self interest, went to the extreme of skewing shareholder belief, as they failed to disclose USD 400 million of loans granted to the CEO (Bebchuk and Fried, 2003).

Since the firm’s principal stakeholders include shareholders, employees, customers, suppliers, and the social community in which the organisation operates (Phillips, 2003), a stakeholder analysis of executive compensation, therefore serves as a useful model for a larger societal analysis, but also helps to bridge the gap between abstract ethical ideals and practical business constraints (Sen, 1997). High executive pay is seen as returns that could otherwise be returned to shareholders (e.g., Bavaria, 1991; Monks and Minow, 2004). From the standpoint of the stakeholders other than shareholders, it needs to be considered whether a high level of CEO pay is defensible if the least well-off would benefit from the CEO being paid less. In other words, it can be argued that high pay to the CEO is justified if the other stakeholders benefit. For instance, the lowest paid worker could benefit from a slight increase in a pay, clients through better quality products and the community through increases in the public good. The benefits can also be measured as customer and employer satisfaction, which indirectly leads to employee attrition or customer retention.

Public satisfaction can be easily recognised through media attention, which impacts on the firm’s reputation. Firms violating social norms face high reputational costs (Dyck and Zingales, 2002), as there is a positive relation between a firm's reputation and its financial performance (Kline et al., 2000; Roberts and Dowling, 2002). In the context of executive pay, norms reflect what would be an appropriate or fair compensation for incumbents and the others around them, which then reflects in public attitudes regarding fair pay (Kuhnen and Niessen, 2009). If firms do not follow the social norms, they may be forced to do so through the introduction of new law or constraints (Jensen and Murphy, 1990b), as happened with options and FAS 123 (R) 46. To avoid regulatory changes and reputational issues, firms may voluntarily response to public pressure by reducing the criticised element, while at the same time increasing other types of pay (Kuhnen and Niessen, 2009). This can be controlled in regressions due to lagged stock market returns, as they may be a driver of both public opinion and the value of executive compensation. This study takes wider key stakeholder groups into account, such as employees, public and customers, although shareholders are given pre-eminent status as the owners of the firm and have power over the board of directors. They are able to elect the members of the board, which in turn has the right to hire or fire senior executives.

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46 Public companies had to start expensing options beginning with their first annual reporting period after June 15, 2005
The main question in this research is what are the determinants of CEO and chairperson compensation in Credit Suisse and the UBS, and could we learn something regarding compensation from the financial crisis. What is missing according to previous literature is an integrated view of compensation, which not only takes CEO compensation into consideration, but also the compensation of the chairperson and the stakeholders. During the crisis, the public became an increasingly important stakeholder. Fairness in compensation in a publicly-listed company is strongly linked to the public. Furthermore, academics have long shown relatively little interest in understanding how the non-executive should be compensated, compared to the excessive amount of research on executive pay. It is of interest to understand both chairperson and CEO compensation, and the factors required for successful compensation.

The approach followed in this study analyses CEOs hired from either the internal or the external labour market, and chairpersons with rare skills contracted from similar settings. This study thereby assumes that both of these will compare their compensation with those of the other top executives or non-executives, both inside and outside the firm. This study follows the approach of Martin Hilb’s Equity Reward Triangle, which takes internal and external equity and corporate performance into account. According to Hilb (2006: 224), “the objective is for employees, customers and shareholders to feel that they are being fairly rewarded internally, externally and in accordance with corporate success”. One addition to the equation is corporate governance, as it is a crucial part of CEO and chairperson compensation, and can thereby not be ignored or built in the other concepts. Each of the concepts is explained in the following. The hypotheses will then be built based on them. Although plenty of studies have been conducted on executive compensation, the question about correct compensation level and the equity reward triangle is still relevant.
The objective is for employees, customers and shareholders to feel they are being fairly rewarded internally, externally and based on corporate success” (Hilb, 2006: 240). This concept is part of the HRM concepts, hence it is required to be integrated with the others and evolves from the corporate vision.

**Internal equity**
Non-financial costs such as internal equity are part of the evaluation when reviewing the compensation packages. Companies very often have a hierarchical system, in which a level above earns more than level below. In the peer analysis, however, the roles are reviewed at a similar level or at a similar position. If internal equity is ruined, it may create issues in the organisation. A good example of internal inequity is if the former CEO was rewarded less than a new one, and the former CEO stays on in the board. 84% of CEOs remain on the board, and 57% in a role of a chairperson (Dechow and Sloan, 1991). The gap between the CEO and the executive team needs to be considered as well, especially in a case of external recruitment, since vertical inequity is associated with high turnover (O’Reilly et al., 1996). The case companies in this study are from the same industry. The expectation is that within-firm wage differential between hierarchical levels is similar to that at similar sized firms in the same industry. Based on tournament theory, the ratios between the CEO, the chairperson and the average worker are studied. The main interest is to find out the size of the gap between the
CEO and the average paid employee. It is attainable, since based on Figurehead approach, CEOs often have power to influence the board’s compensation-setting decision for pay increases (Crystal, 1992; Finkelstein and Hambrick, 1989; Main et al. 1995). In addition to this, the CEO’s social capital reduces the probability of replacement (Shleifer and Vishny, 1989; Rose and Shepard, 1997, but increases compensation (Belliveau, et al. 1996). The choice of the compensation mix emerges as a remedy for the agency costs generated by the misalignment of management and shareholder interests in the dispersed ownership company.

External equity
The ratios between the CEO, the chairperson and the average employee are compared to the results of the previous studies. It is assumed that CEOs in the same managerial labour market have non-differentiable levels of managerial capabilities. The relatively small ratio compared to the others reflects the fact that the focal CEO’s relative superiority in managerial capability is less valued than it would be at other firms. Underpaid CEOs may require an immediate increase in compensation in the next year in order to restore equity. The marginal productivity with regard to supply and demand and efficiency wage theory suggest above-market average pay to attract, retain and motivate employees. Comparisons of the compensation level of CEOs who compete in the same managerial labour market will therefore best permit the inference of their perceived degree of inequity. This study compares the compensation of the UBS and Credit Suisse CEOs and chairpersons to external peer companies, based on the ratios, previous studies and the publicly disclosed data.

Performance-related equity
Under the optimal contracting approach, the executive compensation practices in large, listed companies are designed to minimize the agency costs arising from the relationship between executives and shareholders. To bridge the gap between ownership and control, equity-based compensation such as stock option plan or shares are granted in order to reduce the moral hazard problem arising from executives owning too little of the firm that they manage. It is important that the benefits to other stakeholders, such as clients, the public and the customers, are also measured in the performance part. The sole purpose of the company is to create value, and the prerequisite of the compensation is to enhance all activities that achieve that goal. This naturally benefits all the stakeholders. The intangible benefits for stakeholders can be measured with satisfaction surveys and the tangible benefits with mathematical proxies, such as ROI. Other intangible values include the reputation of an organisation, the well-being of the staff, and the impact on society or the environment at large.

Corporate governance
Both internal and external corporate governance impact on pay. Based on the previous studies, the impact on mix is clear, but the impact on the level is not. Internal corporate governance refers to the board and their monitoring function, which, depending on the composition or size of the board, may require a pay mix with variable pay in order to align the interests of the CEO to the shareholders. External corporate governance has a direct impact on the pay mix through regulations and the law related to compensation, and indirectly through
the recommendation on the internal governance elements, such as the composition of the board.

2.11 Hypotheses

The following hypotheses are constructed based on the conceptual framework and the factors introduced. They are tested through a case study of two Swiss banks: the UBS and Credit Suisse.

In 2002, Economisuisse recommended separating the role of the CEO and the chairperson. This became a mandatory rule for publicly-listed banks. In addition to this, Economisuisse also recommended that the composition of the board should include non-executive directors. The first hypothesis focuses on the chairperson, and is based on the changes in corporate governance rules and the comparison to internal equity. It is assumed that the chairperson was an employee in the company before taking on the full-time board role, the current compensation will be impacted by the previous compensation, and that of the internal executive level roles:

H1: If a full-time chairperson was an employee of the company, the compensation level and mix do not differ significantly from executive pay.

The second hypothesis is based on the peer comparison, external fairness, marginal productivity and optimal wage theories. It is related to total compensation, including the components ranging from pension benefits to basic salary. External fairness in compensation is traditionally based on local market practices. The marketplace has become global, however. International mobility with assignments that offer the home country salary and set of benefits independent of the location have inflated compensation in many local markets. A good example is China, which is moving from a low-cost country towards higher employee costs. Together with increasing transparency, globalisation has created a trend of comparing compensation beyond the national boundaries. Given that the US has been a trendsetter in the field of compensation and the banking industry, it is assumed the compensation for CEO and chairperson will be benchmarked against the US market, instead of local market. This means that, in practice, compensation for the top roles will follow the US compensation standards. The other assumption behind the US standards is that if the CEO and chairperson are globally mobile, they are most likely not to join a company that has compensation levels below those in the US. In addition, pay equity perceptions also have an impact on voluntary turnover (Pfeffer and Davis-Blake, 1992).

H2: CEO and chairperson compensation follow the US market practice rather than compensation of local peers.
If it is overwhelming, social pressure from the media may impact on a company’s compensation decisions in order to avoid reputational issues. Dial and Murphy (1995) suggest that it can lead the company to change the methods in a pay mix, with the aim of decreasing compensation levels. Hengartner (2006) finds that social pressure based on number of newspaper articles has a significant positive association with all the measures of compensation (Hengartner, 2006). The following two hypotheses are based on social pressure from the public:

**H3:** Social pressure has impacts on the CEO and chairperson compensation level.

**H4:** Social pressure has impacts on the CEO and chairperson compensation mix.

Hypotheses 5 and 6 follow from corporate governance and moderator intervention on compensation. It is assumed that changes in corporate governance will need an injection from an external moderator. During the financial crisis, government regulations started to play a key role in the redesign of compensation practices, in a same way as it did in the 1990s, which lead to a increase in the use of options in compensation.

**H5:** Government rules shift compensation to other elements from the regulated ones impacting on CEO and chairperson compensation level.

**H6:** Government rules shift compensation to other elements from the regulated ones impacting on CEO and chairperson compensation mix.

CEOs have been blamed for being greedy, and highly variable pay opportunities have encouraged them to take excessive risk. If successful, risky actions can create excessive variable payments, although that may take place at the expense of long-term success. In addition to this, new, unregulated activities, such as sub-prime mortgages, may be difficult to evaluate with regard to risk and compensation. The manager’s appetite for risk is factorised under internal equity, but the schemes related to compensation are factorised under the corporate performance concept.

**H7:** Compensation schemes for CEOs and Chairpersons have encouraged excessive short-term risk-taking.

The challenge for compensation in banks can be better understood if the negotiation power of executives with regard to their contracts is taken into account. A risk-adverse candidate may negotiate a contract that does not necessarily take pay for long-term performance into consideration. There is ongoing pressure on profitable growth and higher share prices in order to recover investor trust after the crisis. Banks also face a host of other challenges, such as

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47The opposite argument is presented, for example, by Eisenhardt (1989), who states that a fixed wage might create an incentive for the agent to shirk, since his compensation will be the same regardless of the quality of his effort level (moral hazard).
aging ownership groups, management teams and boards, which creates an issue for succession planning. In a large corporation with dispersed equity ownership, boards normally subject their CEO to equity pay to reduce monitoring costs. Equity compensation is supposed to increase the pay-for-performance relationship. Accounting or stock price performance is therefore usually hypothesised to be a determinant of the level of executive compensation. To simplify performance analysis, it is assumed that if the share price develops positively over the long-term, value is added for the shareholders, including employees who own shares. If the company is profitable, value is actually created for all of the employees, the clients and the public. Performance is therefore measured by both shareholder wealth and accounting-based figures. It is argued that the short-term performance orientation was a sign of the failure of the compensation system in the financial services industry. Liljeblom and Vaihekoski (2007) a that, due to quarterly reporting and foreign investors’ interest, banks may have been facing increasing short-term pressure and have been more aggressive with their decisions when it comes to compensation. The following three hypotheses are based on the firm’s short-term and long-term financial performance:

H8: CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with the company’s short-term performance.

H9: CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with the company’s long-term performance.

H10: CEO and chairperson wealth in the UBS and Credit Suisse is positively associated with shareholder wealth.

Coombs and Gilley (2005) investigate the relationship between stakeholder management and executive pay with measures of community, diversity, employee and environment performance. Contrary to the effect hypothesized, stakeholder management exerts a negative influence on CEO salaries.

H11: CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with benefits for public, shareholders, employees and clients.

The hypotheses are tested based on data from the annual reports of the UBS and Credit Suisse, share price information from the SIX Swiss Stock Exchange and external market data from similar sized roles. Previous studies are used as comparison, and the research is complemented by data based on interviews. Chapter Three will explain the methodology and the data in detail.
2.12 Conclusions

The objective of this chapter was to derive the factors that affect CEO and chairperson compensation from agency and stakeholder theory, previous literature and the researcher’s experience in the field of compensation. Based on this, the conceptual framework was built up to include concepts impacting on pay level and mix during the financial crisis. Internal, external, performance related and corporate governance concepts were identified. Based on the framework, the hypotheses were built up to be tested in the empirical section.

The original aim of the compensation was to attract, motivate and retain employees. There is a demand and supply issue in the executive and non-executive market, with efficient wages showing the opportunity costs, creating a platform for attraction and retention issues. Motivation is related to pay mix and agency theory, which arises from the separation between ownership and control, but has serious monitoring issues. As a mitigation of the agency problem, it is suggested to use incentives to align the motives of the CEO and the chairperson to those of the shareholders. The sole goal of the company is to maximize its value. The majority of recent literature reviewed therefore focused on financial performance and CEO pay. Stakeholder theory extends the view to include other key stakeholders in the picture, and to justify the fairness of compensation with benefits to each of the stakeholders.

The challenges and the additional further requirements in the field of compensation have arisen from the financial crisis, which kick-started the review of the regulatory rules and have attracted enormous attention from the media with regard to compensation. The evidence of damage to the reputations of both persons and organisations can be widely seen in media. Well-functioning governance and monitoring systems therefore not only help to ensure organisational success, but also personal success.
3. **Empirical section**

In the light of the regulatory changes, it is time to review total compensation practices. Some of the prerequisites for a successful total compensation system include good corporate governance and a strong and independent board of directors. This chapter describes how the empirical study of CEO and chairperson compensation has been performed, and presents the findings of the case studies of Credit Suisse and the UBS. The objectives of this research are depicted, and the research terrain in which the research questions are to be answered is discussed. Furthermore, the research design is discussed in detail. The process of data collection by means of publicly available variables and semi-structured interviews is described, and the hypotheses are tested as part of an in-depth case study of Credit Suisse and the UBS. The market environment is described, and the case study findings are reported in the analysis. The hypotheses were derived from the literature review and the researcher’s personal experience in the field, and were built into the conceptual part of the study, which introduces corporate governance and factors impacting on CEO and chairperson compensation.

3.1 **Empirical objective**

This study aims at bringing additional empirical evidence to the debate regarding CEO and chairperson compensation using the empirical data from the Credit Suisse and the UBS that has been at the centre of discussion during the financial crisis. The main goal is to understand the determinants of the compensation and to answer the question of what could we learn from financial crisis. In the previous chapter, a theoretical framework was developed in order to explore the factors impacting the pay mix and the level of CEO and chairperson compensation paid to reward the benefits gained for stakeholders such as shareholders, customers, employees and the public. Compensation is used to attract, retain and motivate employees, and to help the organisation to achieve its strategic goals. It is suggested that the strategic goal of maximizing the company value should be broadened from shareholder value alone to include benefits to other stakeholders, since they are crucial for company’s success. Investors are sometimes only investing for short-term profits, whereas other stakeholders are long-term in nature. The framework is based on agency theory with inclusion of the stakeholder theory. Previously, non executive directors have not been widely researched under agency assumptions, since they have been expected to act aligned to shareholders as a nature of their
role. Most of the elements in the framework of CEO and chairperson compensation are based on previous research, but have not yet been reviewed together in a holistic model. To the researcher’s knowledge, this is one the first studies in this field including a timely analysis of the credit crisis.

With the integrated approach of internal, external and corporate equity, this study intends to deepen the understanding of factors impacting on compensation level and mix. The focus is on the highest management and governance level: the CEO and the chairperson, since it is assumed the compensation practices cascade down the organisation. Furthermore, the aim is to find out what could we learn from the financial crisis. From a practitioners’ perspective, this study should evoke awareness of successful compensation practices. To achieve this, it is of interest to study the compensation in two large companies in-depth in the middle of the financial crisis: Credit Suisse and the UBS. As both banks are publicly-listed companies, the annual reports are available, with certain compensation figures and policies. The intention is to complete the analysis with semi-structured interviews wherever possible, taking into account recent activities in the market and the possibilities to learn from them. The financial crisis, with government intervention and social pressure, is assumed to have had impact on CEO and chairperson compensation.

The research objective of this dissertation is:
To contribute to the understanding of academics and practitioners with regard to the compensation of the CEO and the chairperson, and to indicate what could be learned from the financial crisis.

The literature review showed; pay-for-performance analysis is one of the most popular research topics in senior management compensation studies, which have very mixed results depending on the research period and the market, although the US market is still predominant for research. Some scholars suggest that CEOs are overpaid, while others suggest they are earning what they should. Despite the fact that discussion of the compensation for these key people is increasing, together with the new regulatory requirements, the fundamental question of how to compensate these people has not yet been answered.

The empirical study in this research is descriptive (Yin, 1994) in nature; in other words, it aims to describe market characteristics or functions in a way that will provide information on groups or phenomena that already exist. Descriptive analysis defines the constructs of a theory (Snow and Thomas, 1994), but does not explain the nature of relationships (Smith and Albaum, 2005). The previous literature and theories are used as a basis for the conceptual framework, but have been refined with the multiple case studies. To perform an explanatory, hypothesis-driven analysis, the quantitative data set in this study is not sufficient to generalize the results and reject null hypotheses. The quantitative element is in a strong position, however, and is used to deepen the understanding of compensation practices and changes in the case companies. The framework and hypotheses were built up based on existing theories, literature and the iterative process between the multiple-case studies. The factors impacting
compensation and hypotheses were supported by case studies, and the factors were tested in real-life in the case study companies.

As the main aim, the empirical study attempts to provide insight into the following related questions:

1. **How are the CEO and the chairperson rewarded in Credit Suisse and the UBS?**
2. **How does public pressure affect CEO and chairperson pay in Credit Suisse and the UBS?**
3. **What could we learn from the financial crisis regarding CEO and chairperson compensation?**
4. **What are the similarities between the compensation success factors?**
5. **How can practitioners make successful compensation possible?**

Various sources deriving from the academic and business world are used to answer the research questions. The academic sources include academic journals, PhD theses, conferences, working papers and discussions with thesis supervisors. Data from practice consists of industry reports, stock market data, annual reports, news papers, public debate on TV, semi-structured interviews and the researcher’s own observations in the field of compensation during her daily work in the financial services sector in Switzerland.

The theoretical concept presented in this study is not a main focus, but its applicability into the real world. Following the aim to link theory and practice, this study targets a diverse community of readers, and in particular the academic world, boards of directors, top management, HR, finance and risk managers. It is suggested that compensation is a holistic, cross-functional interaction between finance, risk and HR at both the operational and board level. The board currently separates these functions over different committees with different participants. Furthermore, this study seeks for generalisation of its findings beyond Credit Suisse, the UBS and the Swiss market place.

### 3.2 Empirical methodology

Remenyi et al. (1988) describe research method as an approach to a problem that is put into practice in a research process. The procedural framework for conducting research defines what was done in the research, what method was used, what organisations were selected for the study and the limitations of the research. In this study, case study is used as a research method to answer the research question, and is complemented by data modelling and testing.
3.2.1 Case study method and design

Case study is particularly useful if it answers to “how” and “why” questions (Yin 1994). The main question in this study is “what”, but, despite the extremely topical phenomenon of the financial crisis; not much research is available yet. An in-depth-case study to find out the “how” and the “why” was therefore chosen in order to answer to the final question of “what”. The researcher has no control over the phenomenon, which makes the case study method very powerful (Yin 1994). In particular, contemporary events, such as the credit crisis, are more suitable for case study investigation, as opposed to historical events (Yin 1994). Based on these arguments, the research strategy of the case study and the design of the multiple case studies (Yin, 1998) using both qualitative and quantitative\(^{48}\) (Jensen and Rodgers, 2001; Yin, 1994) methods was chosen, focusing on an in-depth study of two firms, instead of research using a large sample of companies with secondary data. It would be challenging and extremely time consuming to find enough banks with a similar quality of data and similar conditions outside the US in order to be able conduct a large quantitative analysis for explanatory research purposes. The case study methodology brings qualitative understanding through data collection, such as via interviews and direct observations, but is complemented by quantitative research. The rest of this sub-chapter explains the case study method and the design in detail.

Eisenhardt (1989: 534) argues that case studies focus on understanding “the dynamics that are present within single settings”, whereas Yin (1994: 23) describes it as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident and where multiple sources of evidence are used”. Snow and Thomas (1994) include an intervention and its real-life context in the description, which requires the illustration and evaluation of certain topics, and if the intervention under evaluation has no clear set of outcomes, being typically performed in the fields that are not well known, the case study explores the situations where the intervention is being evaluated.

The replication approach followed in this multiple case study approach is based on Yin’s (1994) proposal:

- First, definition and design, consisting of theory, selection of cases and a protocol for data collection.
- Secondly, the cases studies are prepared, collected and analysed by individual reports.
- Thirdly, the analysis and conclusions are finalized with cross-case conclusions, policy implications and a summary report.

\(^{48}\) Qualitative methodologies are often understood as non statistical. It considers a vast number of different human actions and things without overemphasizing their frequency, recurrence or correlation. The distinguishing feature of qualitative and quantitative methodologies is the way scientific explanatory power is proven.
Three research designs types can be applied for case study: explanatory, exploratory and descriptive (Yin, 1994). There can be both exploratory and confirmatory aspects within a single case study (Miles and Huberman, 1994). Exploratory case studies typically examine the development and characteristics of phenomena, often with the goal of developing hypotheses of the cause-effect relationships and with the assumption that the underlying population is generally unknown and there are no existing theories. Explanatory studies specify a complete and logical series of causal events that connect variables and constructs in the story of why these occur (Miles and Huberman, 1994), with an aim of explaining and empirically testing the theoretical framework. The conceptual framework in this dissertation is built on existing theories, which are tested together with the hypotheses via case study. The use of case study research for hypothesis testing involves tests for causal relationships by comparing generalisations from the case study findings with the underlying theory, and not with the underlying population (Barkley, 2006). This approach has become popular in recent decades (Stake, 1995).

Hypotheses testing or causal relationships require that the number of case studies is expanded from the exploratory cases to a sufficient number of cases to permit generalisations from the findings. Descriptive case study aims to describe market characteristics or functions. The information provided is based on groups or phenomena that already exist, and defines the constructs of a theory (Snow and Thomas, 1994), but does not explain the nature of relationships (Smith and Albaum, 2005). The financial crisis is such a new phenomenon that little information exists regarding the impact of the crisis and the governmental requirements on compensation, which are currently under review, although plenty of models and theories are available. Descriptive research is therefore supported by explanatory characteristics. The characteristics of the descriptive case study design are a part of this case study, although it is suggested that the quantitative research should be expanded in future research. Descriptive study project is often arranged in distinct phases. First, the population under interest is distracted and sample-selected, and then the empirical data is gathered and analyzed with the same method as in earlier studies, or is slightly modified to the normative model by additional features, and the findings are finally assessed. Economic research often focuses on an extensive set of secondary or survey data for linkages or causal relationships between phenomena.

Case study research designs may be divided into four principal categories based on the number of cases: single-case vs. multiple-case and the number of units ie. sub-cases: holistic vs. embedded. Single cases are used to confirm or challenge a theory, or to represent a unique or extreme case (Yin, 1994) A multiple-case study derives general conclusions from a limited number of cases (Gummesson, 1991) and increases the external validity of the research through the implied “replication logic” inherent in its design (Yin, 1993). The number of cases needed will be a function of the complexity of the situation and the variety of external conditions (Barkley, 2006). The case study design in this dissertation is the multiple-case design. Multiple refers to the fact that several compensation case studies were conducted in the following organisations, Credit Suisse and the UBS. The multiple-case design was chosen
because it was believed that similar results would be found from each of the individual case studies from the same industry. Compensation in the UBS and Credit Suisse is studied as a holistic case study, opposed to being embedded in several units of analysis.

The case study strategy consists of established data collection and analysis methods, which can differ depending on the research questions (Yin, 1994). Qualitative ensures that the scientific character of the data collection performed under certain circumstances cannot be criticized, and that the role and level of interaction of the researcher in the data collection is very important (Grönfors, 1982). For example, data in interviews is derived from the participants’ perspective, and the observation methods and modes of analysis are not standard (Lee, 1999). CEO compensation has only been disclosed separate from the aggregated figures from 2007 onwards in Switzerland, and the quality and amount of data disclosed has not been standard. In order to understand the data and have a more complete picture, a qualitative approach is needed to complete the quantitative one. As such, qualitative approach supports the in-depth understanding of the phenomenon. This study analyzes the post financial crisis and the regulatory changes in an exploratory and descriptive way. Pre-post case studies include assessment before the phenomenon and follow-up assessment after the implementation (Jensen and Rodgers, 2001). The after-crisis assessment is not complete in this case study, as the future results are unknown, and further research is therefore suggested.

This study is based on deductive reasoning rather than inductive reasoning⁴⁹, but with some aspects from abductive⁵⁰ reasoning, with the refinement of existing models. Deduction refers to the reasoning chain that proceeds from known facts to details, from theory to details and is performed before the collection of empirical data. The theoretical framework, the empirical fieldwork and the case study analysis evolve simultaneously. This is particularly useful for the refinement of existing models and theories (Dubois and Gadde, 2002).

**Case study selection**

The selection process for cases is challenging, but is well guided by literature. Stake (1995) recommended that the selection offers the opportunity to maximize what can be learned, realizing that time is limited. Obtaining access to appropriate quantitative and qualitative data is a key factor during the research project, with the principle of reciprocity (Pettigrew, 1992). The cases that are selected should therefore be easy and willing subjects, which not necessarily the case given the sensitivity and public interest of the topic. Regardless of the relative size of the sample of cases, the multiple-case studies will not turn into macroscopic study (Yin, 1993). The logic behind choosing multiple-case studies is to focus on cases that predict similar results based on replicating literature or contrasting results, but with predictable reasons for replicating theory (Yin, 1994).

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⁴⁹ In case of inductive reasoning, the researcher has no prior assumptions of the phenomenon or its connections, which is typically rare in the science

⁵⁰ In case of abductive reasoning there is no full theory for the testing, only certain guiding principles
Credit Suisse and UBS were selected for the case studies for a number of reasons. First, the banking market in Switzerland is substantial and these two banks are the major players among the publicly-listed banks there. Second, CEO and chairperson compensation is under constant debate in public. The study of the subject thereby makes it possible to define a significant research topic and possibly important managerial implications. Third, the Swiss market has been highly regulated and the recent crisis has caused changes in the regulations and practices, for example, the UBS launched a New Compensation Model as a consequence of the crisis in 2009. Data is more easily accessible in publicly-listed banks such as Credit Suisse and UBS than in non-listed banks, although access to non-public information may be restricted. The early impacts of changes can be studied with latest annual report data, however, which enables the researcher to analyse the issues related to “post financial crisis” effects, although it is not confirmed that the crisis had definitely ended at the time of the research. The final reason for selecting the cases was that the researcher was in Switzerland at the time of the research, and was working in the compensation field in the financial services sector.

Limitations

As with any other research strategy, case study research has its limitations. It has been criticized for providing little basis for scientific generalisation (Dubois and Gadde, 2002). Case studies have also been criticized because some researchers try to describe everything and, as a result, describe nothing; case study researchers should therefore be selective (Dubois and Gadde, 2002). In summary, case study research is a comprehensive research strategy that includes the development of a theoretical model, research into the model design, data collection, and data analysis. Yin (1994) points out the major limitation that the results are only generalised from either single- or multiple-design to theory, and not to populations. Multiple cases strengthen the results by replicating the pattern-matching, thus increasing confidence in the robustness of the theory. Other limitations are that the responses from the interviews may be biased, and may not accurately reflect the situation.

The limitation of this multiple case study is that, although causal relationships are tested, the data set is not extensive, which reduces the effectiveness of the econometric analysis. It is therefore required that the study includes triangulation of data, interviews, histories and theories. A challenge in performing a case study is that there are “many more variables of interest than data points and, as one result relies on multiple sources of evidence, with data needing to converge in a triangulation fashion, another result benefits from the prior development of theoretical propositions to guide the data collection analysis” (Yin, 1994: 13). Flyvbjerg (2006: 242) states “good social science research is problem-driven and not methodology-driven.” This study is a blend of descriptive case study and statistical analysis to refine hypotheses, select explanatory variables and provide insights into the causal relationship between variables. Case study can establish the parameters, and then be applied to all research. In any case, case study is an ideal methodology when a holistic, in-depth investigation is needed (Feagin et al., 1991).
The objective of this study is to further understand what we could learn from the financial crisis with respect to CEO and chairperson compensation. It is argued that the mistakes made were caused by greedy executives together with the wrong remuneration and incentive structures. The framework and the factors of the study were based on existing theories and the literature. The role of the case study was to reveal how each of those factors appears in the CEO and chairperson compensation at the UBS and Credit Suisse and to test the hypotheses.

The criteria for interpreting the results are that they are:
1) Applicable to CEO and chairperson compensation in the banking industry
2) Relevant to the financial crisis
3) Not based on individual opinions, and are more than one data points

The quantitative model refined from existing models is explained in following sub-chapter.

3.2.2 Model specification

Although this is a multiple-case study, the quantitative research involved comprises a significant part of the empirical analysis. The models are built on already-existing models, with modifications based on conceptual framework and factors, which were carried out in an iterative process between existing theories, literature review and case studies. The model regresses the natural logarithms of cash compensation and total compensation, with the changes in the compensation being based on the factors identified in Chapter 2.

(1) \[ \ln(\text{Compensation}_{it}) = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \ldots + \varepsilon_{it}, \quad i=1,\ldots,N, \quad \varepsilon_i \sim iid(0,\sigma^2) \]

In this regression “(1) \( \ln(\text{Compensation}_{it}) \)” is the dependent variable of CEO or chairperson cash compensation (salary + bonus) or total compensation (cash compensation + long term compensation + allowances and benefits) for the firm \( i \) at time \( t \). These are estimated separately. The natural logarithm is more likely to be normally distributed than compensation variables. Independent variables \( X_1, X_2, X_3 \ldots \) are independent variables for the control of corporate governance and other factors identified in the conceptual framework.

(2) \[ \ln(\text{Compensation}_{it}) = \alpha + \beta_1 \ln(\text{Revenues}_{it}) + \beta_2 \ln(\text{Age}_{it}) + \beta_3 \text{Board Size}_{it} + \beta_4 \text{Dominant shareholder}(\%)_{it} + \beta_5 \text{Foreign ownership}(\%)_{it} + \beta_6 \text{ROA}(\%) + \varepsilon_{it}, \quad i=1,\ldots,N, \quad \varepsilon_i \sim iid(0,\sigma^2) \]

The OLS regression is run with following model, including factors such as the CEO’s age, since it seems reasonable to believe that an executive’s age has a positive correlation with experience, integrity and skills. Secondly, the size of the board may affect CEO compensation (Core et al., 1999). For example, a sizeable board can lead to a higher compensation due to the CEO’s increased rent-seeking opportunities (Bebchuk et al., 2002). Thirdly, shareholder
ownership concentration can affect CEO compensation. A large, dominant shareholder may monitor a CEO’s actions more effectively and mitigate potential agency costs, compared to the situation where a firm’s ownership is dispersed widely among several shareholders. Therefore, the presence of a dominant shareholder implies lower compensation (Shleifer and Vishny, 1986). Fourthly, foreign ownership may affect CEO compensation with increased equity compensation. As a control for firm performance, the percentage of ROA and revenues are used. Since the previous empirical studies have used both contemporaneous and lagged sales as a proxy for firm size, both contemporaneous and lagged specifications for Equation (2) are estimated. CEO and chairperson salary and bonus, and total compensation are estimated separately.

When single variables are used, all the variables are expressed in natural logarithms. This is used particularly following the previous pay-for-firm size elasticity studies (see Rosen, 1990; Murphy, 1999; Conyon and Murphy, 2000), the company size is expressed via revenues. The OLS regression models log-linear equation between compensation and revenues:

\[
\ln(\text{Compensation}_{it}) = \alpha + \beta \ln(\text{Revenues}_{it}) + \epsilon_i, \ i=1,\ldots,N, \ \epsilon_i \sim iid(0, \sigma^2)
\]

According to Conyon and Leech (1994), the Principal-Agent model gives partial theoretical justification for using linear models in pay and firm performance analysis. Based on agency theory, executive compensation is understood as a mechanism to align monetary interests between risk neutral shareholders and risk-averse executives. As an extension to agency theory, the model is expanded to include benefits to significant stakeholders. According to a study by Mäkinen (2007), the focus is on growth of compensation instead of estimating models in terms of levels.

\[
\Delta \ln(\text{Compensation}_{it}) = \alpha + \beta_1 \Delta \ln(\text{Shareholders}_{it}) + \beta_2 \Delta \ln(\text{Public}_{it}) + \\
\beta_4 \Delta \text{Employees}_{it} + \beta_5 \Delta \text{Clients}_{it} + \epsilon_{it}, \ i=1,\ldots,N, \ \epsilon_i \sim iid(0, \sigma^2)
\]

Equation (4) uses as shareholder benefits as a control, the accounting-based measure of firm performance as a change in the percentage of ROA, while the public is controlled as the annual changes in the number of published articles as a proxy for the public pressure of a particular firm. This measurement is assumed to have negative relation with compensation changes. Employees are controlled as annual changes in the FTEs, and clients as annual changes in the assets under management. Growth of the salary and bonus of the CEO and chairperson, and total compensation are estimated separately. Lambert and Lackert (1987) estimate shareholder return as a combination of both accounting- and market-based measures. By doing this, one set of regressions includes stock return together with ROA changes. Equation (4) is run for both contemporaneous and lagged firm performance measures.

Annual stock return is based on a firm’s continuously-compounded daily stock returns, i.e. \(\ln(p_t + d_t)/p_{t-1}\), where \(p_t\) is the price of a firm’s share in the last trade in period \(t\), \(p_{t-1}\) is the last trading price in period \(t-1\) and \(d_t\) is the dividend.
One model used in the case study was introduced by Jensen and Murphy (1990) to estimate the relationship between executive and shareholder wealth, which is measured as \( \ln[(p_t + d_t)/p_{t-1}] \times V_{t-1} \) where \( V_{t-1} \) is firm market value in the beginning of a period. To calculate the relation between the change in compensation and shareholder wealth, Jensen and Murphy use the following least squares regression equation together with both contemporaneous and lagged shareholder-wealth measures:

\[
\Delta(\text{Compensation}_{it}) = \alpha + \beta_1 \Delta(\text{Shareholder Wealth}_{it}) + \beta_2 \Delta(\text{Shareholder Wealth}_{i,t-1})
\]

In this equation (5), the sum of the coefficients \( \beta_1 \) and \( \beta_2 \) gives the effect of a change in shareholder wealth. The lagged measures are used since compensation decisions may be made before the final fiscal-year earnings are known, and thus may not accurately reflect the company's performance until the next year and may not reflect the actions of agents on the company value over a term longer than one year. In this analysis, the growth in compensation is equal to growth in the incumbents’ wealth, although Jensen and Murphy (1990) use the discounted present value of future payments. For the purpose of this analysis, the tenure of the incumbents in these positions is relatively short, and some of the incumbents relatively old, with probably not too many years in front of them. The changes in the compensation level will be extremely difficult to estimate in the future.

### 3.3 Limitations

Limitations of this study can be listed under two broad categories: methodological limitations and resource limitations. Methodological limitations arise in part from the case study method, and in particular from the multiple-case study approach with the two companies studied, which are not representatives of the general population of companies in Switzerland. However, based on their size and pioneering status in Switzerland, the other banks could be assumed to partially follow their practices. Yin (1994) posits that case studies only allow for analytic generalisation when two or more cases are shown to support the same theory. A second limitation is that the case study method has been perceived to have lack of rigour. According to Yin (1994), case study investigators have often allowed equivocal evidence or biased views to influence the direction of the findings and conclusions. Gathering and analyzing the data is therefore one of the key parts of this analysis. Thirdly, case studies are criticized for their length, and the fact that they create massive documents (Yin, 1994). It is important to focus on the most relevant details in order to avoid this. The outcome of these limitations lead is that the results cannot be generalized statistically, but only analytically (Eisenhardt, 1989). Even though the theoretical framework is validated, no inference can be made as to whether the model applies to a larger population or companies. Future research is therefore needed to determine whether the results apply to other companies or to whole industries, and under what conditions they would apply. However, further methodological
limitations may also arise from the combination of quantitative and qualitative results within the case study. Responses in the interviews may be biased, and may not accurately reflect the situation. Other methodological limitations are related to the measurement of variables: average executive team compensation values are included in the analysis for the time period that CEO compensation is not disclosed separately.

Resource limitations are intrinsic to a dissertation, particularly to those written by single investigators. Multiple investigators are less exposed to this problem, and have further advantages such as the convergence of observations (Eisenhardt, 1989: 538) as well as enhancing the creative potential of the study, since team members often have different perspectives and insights, and the convergence of observations from multiple investigators enhances the confidence in the findings. This can be compensated through regular discussions with other researchers. Two other constraints of the research were money and time. Time was a constraint from researcher’s side. The researcher was employed full-time while working on the dissertation. One advantage of this research might be that the researcher has been working in the field of compensation in the financial industry in Switzerland, closely following recent market activities and debate. Yin (1994) contends that all other research skills are of no value if an investigator seeks to use a case study to substantiate a preconceived position, and quantitative analysis based on modelling is supposed to decrease any bias.

### 3.4 Research procedures

This sub-chapter aims to explain how the research was conducted. It includes information on the data collection and analysis, and specific measures to maximize validity and reliability.

#### 3.4.1 Data collections

One of the major advantages of the case study method is that it ideally relies on the use of multiple sources of evidence, with data converging in a triangular fashion (Yin 1994). Triangulation is the application and combination of several research methodologies in the research of the same phenomenon. It has become the preferred line in the social sciences as an alternative to the traditional criteria of reliability\(^{51}\) and validity\(^{52}\). Traditionally, the strength of qualitative research lies in its validity. The use of a selection of data collection methods could

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\(^{51}\) Reliability is defined as repeatability

\(^{52}\) Validity is defined as closeness to truth
provide support in finding in-depth results. The combination of research methods proposed by triangulation improves validity. The methods incorporated in triangulation include a variety of sources of evidence, such as interviews, observations, documents and questionnaires.

This research draws on the triangulation of the data collection, using different methods to gather data such as semi-structured interviews, documents, observations around the topic and the public debate, which ensures reliability and constructs validity. As a method, interviewing relies heavily on the opinions, perspectives and recollection of the respondents, and interviews are therefore often combined with other data collection methods (Snow and Thomas, 1994). Both qualitative and quantitative sources are used from primary documents, such as companies’ public filings, and secondary documents such as the available surveys and media reports, up to in-depth interviews with the case companies. Interviews were only used to complete and understand publicly available data, which was collected between November 2009 and June 2010. Multiple sources of evidence are likely to diminish any propensity for bias. The basic proposition is to link all the data collected to the theory in an inductive process. Existing theories form a basis on which the analysis and interpretations are made. The goal of a theory is to explain clearly why and how specific relationships lead to specific events. The data collection methods used in this case study were document collection and interviews, which were completed with observations.

The study was conducted as a multiple-case study on two large, publicly traded banks. The stock market index and external compensation reports were used for comparative analysis.

Documents and archival records
The strengths of document usage are that they can be reviewed numerous times, since they are not created for the case study purposes. In the case of annual reports, they are typically exact and have a broad coverage. The weaknesses of document usage are that they can be biased and represent the biased opinion of the author. Access to certain documents outside the publicly-available ones may be difficult, and the bias selectivity in the data may occur without the knowledge of the reader.

As a starting point for the analysis, the annual report data and news releases from Credit Suisse and the UBS were collected from 2002 to 2009, including the CEO and chairperson compensation and compensation reports. Swiss stock-listed companies are characterised by large variations in terms of compensation structure (Hengartner, 2006); the main study therefore only includes two companies: the UBS and Credit Suisse, but the SMI index is used as a proxy for the share price development of other companies. The main part of the published data from corporate governance variables, such as executive remuneration, shareholdings, board composition and shareholder structure, was obtained from the annual reports of the companies. The Internet pages of the companies were used to search for additional descriptive data, such as company history. Share price information from the Swiss stock exchange SIX is used for the regression analysis during the same time period of 2002 and 2009, and overall market index data is collected for comparison purposes. Both accounting and stock market-
based measures are included in the assessment of firm performance, since both have been used in the previous literature. In the research field of economics and finance, most CEO pay-for-performance studies are based on stock market-based measures. In contrast, studies in the accounting literature typically use accounting-based or both measures according to Joskow and Rose (1994). The firm’s continuously-compounded daily stock returns are used as a stock market-based firm performance measure.

If the findings from all the methods under triangulation - documents, interviews and observations - draw the same or similar conclusions, validity has been established. By altering the research methods in light of the information resulting from the broad-based data analysis, the study follows an iterative approach sensitive to the richness of the subject matter. Such sensitivity is deemed necessary in order to explore the compensation practices selected.

**Personal interviews**
The main data collection method used in this study was the acquisition of documents such as annual reports and other public data, which were complemented by semi-structured interviews performed within the companies. The strength of interviewing is that it enables in-depth study of the phenomena. It is one of the most important sources of the case study information (Yin, 1994) and is typically very targeted and focussed on the study topic, and therefore provides insight (Yin, 1998). The interviews were semi-structured (Yin, 1994) with predefined overall topics, general discussion themes, targeted issues and specific questions, as well as a predetermined sequence for their occurrence. The interviewer is then free to cover issues that occur in the interview (Lee, 1999). The fact that questions and answers are not standardised in semi-structured interviews minimises the researcher’s effect on the interview results (Grönfors, 1982). The interviews were recorded.

**Event observations**
Participant-observation involves a research scenario in which the researcher not only observes, but also assumes a variety of roles within a case study situation, and may actually participate in the events being studied (Yin, 1994). Another distinctive opportunity is the ability to perceive reality from the viewpoint of someone ‘inside’ the case study, rather than external to it (Yin, 1994). Because the researcher was working in the field of compensation in the financial services industry in a FINMA-regulated company during the time of writing the dissertation, she could observe and participate closely in the discussions of the regulatory changes in compensation and the possible impacts of them.

### 3.4.2 Disclosed data

The general analytic strategy that this dissertation followed was to rely on the theoretical framework that Yin (1994) argues is the preferred strategy for analysing case study data. In particular, the theoretical framework is useful for focusing attention on selective data, but
The specific analytic technique was descriptive study, with explanatory aspects. The result of the explanation-building process is also the creation of a cross-case analysis, not simply an analysis of each individual case (Yin 1994).

The quantitative compensation data was collected from case companies’ annual reports. The public companies represented on the Swiss stock exchange are required to disclose the compensation of the highest-paid member of the board of directors and of the highest-paid executive. Table 4 lists all the compensation determinants required to be disclosed since 2007, based on Transparency Act effective as of Jan 1st, 2007. Today, the disclosure for executive compensation is highest than ever in Switzerland. Some of the data, such as aggregated figures was already available from 2002 onwards if the companies in question followed the Swiss Code of Best Practice and Directive on Corporate Governance. In addition to this, the companies disclose the content and the method for determining compensation. If the name of the individual director was not disclosed, the general rule was to keep the highest-paid director variable in the regression, since it was assumed that this would be the chairperson. If the highest-paid executive was not the CEO, the aggregate figure was diminished by the highest-paid compensation, and the rest is averaged and used as an estimate of CEO compensation. If the highest-paid executive was not separately disclosed, the average of executive pay was used. Recent research on executive compensation has moved beyond the focus on the CEO to study a wider number of top executives (Schaefer, 1998; Main et al., 1996; Murphy, 2003; Bushman et al., 2004; Carpenter and Sanders, 2002). This study extends the research to cover the chairperson.

### Disclosure requirements

<table>
<thead>
<tr>
<th>Total compensation of all board members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation of the highest paid board member with a name, usually the Chairperson</td>
</tr>
<tr>
<td>Total compensation of all executives</td>
</tr>
<tr>
<td>Compensation of the highest paid executive with a name</td>
</tr>
<tr>
<td>Individual disclosure of shareholdings and participation</td>
</tr>
<tr>
<td>Breakdown of the (total) amounts into specific elements of compensation:</td>
</tr>
<tr>
<td>1. Equity: Long Term Incentive: prospective</td>
</tr>
<tr>
<td>2. Bonus: Short Term Incentive: retrospective</td>
</tr>
<tr>
<td>3. Base Salary: Fixed Remuneration</td>
</tr>
<tr>
<td>4. Fringe Benefits: allowances etc.</td>
</tr>
<tr>
<td>5. Occupational Benefits: f. ex. pension fund</td>
</tr>
</tbody>
</table>

Table 4. Determinants of compensation disclosed by listed companies in Switzerland. This table is based on the Transparency Act as of January 1st, 2007.
3.4.3 Variables

The compensation programs for the CEO and the chairperson are challenging to design, since these key roles require incentives to carry out the full range of objectives. The chairperson typically monitors the CEO on behalf of shareholders, although the environment and the scope can be more complex nowadays. The aim is to adjust the maximum aggregate advantage of the interests, emotions, and priorities of different stakeholders: customers, employees, owners, creditors, suppliers, the environment and the community in which firm operates (Young, 2009)\(^{53}\). Successful compensation could therefore not only recognize the importance of the position, but the benefits for the different stakeholders. Success in achieving outcomes that enhance business value and facilitate sustainable profits deserves to be rewarded. In that context, business must be profitable in order to meet its social obligation of wealth creation. It is therefore suggested that compensation should be linked to the success in achieving these objectives, and it is important to find appropriate measurements for them. This does not say, however, that the compensation practice should be similar for the CEO and the chairperson, since the roles are different, with the first more operational than the second.

The CEO is hired to implement the strategic goals and objectives set by the company’s board of directors or together with the CEO. The role should inspire and manage employees in the organisation below by providing vision, direction, and leadership. If the company is successful and is able to meet the needs of its shareholders, public, customers and employees, the CEO should be appropriately appreciated and rewarded. The chairperson naturally requires compensation for the role of strategy setting and monitoring, but the incentive system could be different due to the different nature of the role. Both roles should reflect business results, however, with the goals and objectives of the firm beyond short-term profit or stock price or peer companies compensation. There are several performance measures to be considered, including financial, corporate citizenship, relative company share price performance and overall market situation. Non-performance based compensation, such as perquisites, club memberships and expense allowances are questionable if not related to business performance.

The main variables and compensation determinants used in the study, and their measurements, are explained below.

*Cash compensation* includes base salary and the cash bonus received during the year. It can include the employer’s contributions to pension plans. In the regression analysis, however, the cash compensation is related to the Swiss franc gross amounts of cash + bonus that the

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\(^{53}\) Board Guidelines for Setting CEO Compensation, Young (2009), accessed May 2010
http://www.cauxroundtable.org/newsmaster.cfm?&menuid=99&action=view&retrieveid=33
incumbent has received during the year as spendable income before taxation. Pension is only included in the total compensation figures.

*Total compensation* figures include base salary, bonus, long term incentives, allowances and pension in the pay mix, as reported in Swiss francs and the gross amounts in the annual statements. The long-term incentives may include shares and options granted, and are typically valued at the time of the preparation of the annual reports. The terms “pay mix”, “pay structure”, “compensation mix” and “compensation structure” are used interchangeably throughout the study.

If the equity is shown separately, the value is calculated based on its intrinsic value at December 31st, 2009:

*Share awards* are valued based on the share price at the end of the study period, which was December 31st, 2009.

*Stock options* are rights to purchase company stock at a specified exercise price over a stated option term. The value of stock option grants is typically calculated using the Black-Scholes option valuation model, adjusted for continuous dividends (Conyon and Sadler, 2001). Both the reported value in annual reports and intrinsic value are used, since alternative and less sophisticated approaches to the Black-Scholes valuation of stock options have provided similar results, and appear to be valuable (Lambert et al., 1991).

*Employee satisfaction* is measured based on attrition rates, and is calculated annually based on the number of employees or FTEs (full time equivalent) on the payroll at the end of each year. The study does not differentiate between voluntary and involuntary attrition. The change in number of employees is used as proxy for the benefits for employees or employee satisfaction. Satisfied employees perform well, and won’t be dismissed due to low performance. Simultaneously, a company showing a high performance does not require large-scale lay-offs, although they may be needed for organisational restructuring, which is excluded in order to simplify the measurements. Naturally, most of the satisfied employees will not leave the company on a voluntarily basis. In addition to that, the distinction needs to be made between *avoidable* and *unavoidable* attrition. First one covers voluntary leavers and latter one leavers due to retirement or death.

*Firm size* is measured as the logarithm of sales revenues, which are defined as gross income for financial firms (banks).

*Firm financial performance* has been the determinant of executive compensation that has mainly interested agency theorists (Jensen and Murphy, 1990a). The performance is measured as the percentage increase in the total shareholder return i.e., share price increase together with dividend yield. Another measure used is ROA%, which is an accounting-based performance measure.
Public pressure is proxied with the media, for example, based on articles and news published. The media have a high potential influence on public opinion, employees, clients and shareholders, which managers and board may have to cope with. The proxy for public pressure is number of annually published articles in Bilanz regarding compensation in Credit Suisse and the UBS. When calculating the hits, the companies can be mentioned in the same article or separately.

As a summary, performance to stakeholders is measured by:

- Shareholders: shareholder wealth, ROA%
- The public: number of articles published about compensation in Credit Suisse and the UBS
- Employees: year-end number of employees
- Clients: assets under management

Risks have been related to the level and mix of managerial pay (Miller et al., 2002; Hermalin and Wallace, 2001). Since it is hard to measure, it is calculated as the proportion of short-term variable pay in the pay mix. Previous studies have shown that “capital structure, measured as the debt-assets ratio, is not significantly related to the compensation structure” (Hengartner, 2006: 131). This is left out of the analysis, since it is obvious that highly leveraged banks took on excessive risk-taking, which caused the crisis.

CEO age is related to the level and structure of CEO compensation. Several studies link CEO age to the level of compensation (David et al., 1998; Conyon and Murphy, 2000; Hallock, 1997).

It is interesting to include some of the corporate governance factors in the analysis, since, based on the previous research, they seem to have impact on compensation. These are the following:

Dominant shareholder is an outside owner, measured based on the % of voting rights in the company. This is basically a CEO-related variable, but is used for analysis of the chairperson compensation as well, since it can be assumed that chairperson compensation practices are impacted by the CEO’s compensation. A large, dominant shareholder may monitor a CEO’s actions more effectively, i.e. mitigate potential agency costs, compared to a situation where a firm’s ownership is dispersed widely among several shareholders. The presence of a dominant shareholder therefore implies lower compensation (e.g. Shleifer and Vishny, 1986).

Foreign ownership is calculated based on % of voting rights. The presence of foreign owners may affect compensation. For example, a Finnish study shows that, in the past, foreign investors were perhaps more familiar with option schemes than Finnish shareholders, and imposed options on Finnish firms (Jones et al, 2006).
Board size may affect CEO compensation (e.g. Core et al. 1999). For example, a larger board can lead to a higher compensation due to increased rent-seeking opportunities (e.g. Bebchuk et al. 2002).

### 3.4.4 Quality measures of the research design

The quality of this paper is to be seen in its validity and reliability. Four tests are used to establish the quality of empirical research. These tests are construct validity, internal validity, external validity and reliability (Yin, 1994).

**Validity and reliability**

The definition of validity refers to the “truth: interpreted as the extent to which an account accurately represents the social phenomena to which it refers” (Hammersley, 1990:26). If a measurement actually measures what the research intends to measuring, the construct validity is high (Yin, 1994). Construct validity is met when specific types of changes are to be selected and related to the original study objectives. It needs to be demonstrated that the selected measures of the changes do reflect the specific types of changes that have been selected (Yin, 1994). A researcher has several choices to build construct validity, such as multiple sources or chain of evidence. The chain of evidence is an explicit link between the questions asked, the data collected, and the conclusions drawn (Yin, 1994). One tactic to improve construct validity involves having the key informants review the draft of the case study, which is applied in this dissertation. Another choice is use of triangulation, which also refers to the use of multiple sources of evidence (Yin, 1994). It can take following forms: triangulation of data sources, different evaluators, perspectives of the same data or methods (Patton, 1987). To meet construct validity, this study also relies upon the triangulation of data sources. It contains four sources for collecting data for the theoretical framework: documents, archival records, interviews and observations.

**Internal validity** refers to the absence of alternative explanations for a researcher’s claim of causation (Yin, 1994). For case study research, the concern over internal validity may be extended to the broader problem of making inferences (Yin, 1994). A case study includes an inference every time an event cannot be directly observed. Thus, an investigator will infer that a particular event resulted from some earlier occurrence, based on the interview and documentary evidence collected as part of the case study. If the investigator considers all the rival explanations and possibilities and checks that the evidence is convergent, internal validity will be ensured. Internal validity is only examined in the case of explanatory and causal case studies (Yin, 1994). Since this study has aspects of explanatory study design, internal validity was ensured by explanation-building. Another technique employed by the researcher was the use of her own expert knowledge, gained from working in the field of compensation in the financial services industry.
External validity means that a case study’s results can be generalised to a larger population beyond the immediate case study, or to another population (Lee, 1999). To prove external validity, a theory needs to be tested by replicating the study in another situation (Yin, 1994). External validity can be increased by using theories in single-case studies and by using replication logic in multiple-case studies. (Yin, 1998). There are two perspectives that need to be carefully considered when analyzing the external validity of this case study are: the ability to generalise the conclusions to other industries and markets, which may not necessarily be met.

Reliability is the fourth test for quality in research design, and measures the consistency and stability of scores. The study is reliable if another investigator following exactly the same procedures under conditions similar to those described by an earlier investigator and conducting the same case study all over again would arrive at the same findings and conclusions (Smith and Albaum, 2005). The goal of reliability is to minimize the errors and biases in a study (Yin, 1994). The scores are the results of a study, and consistency means study repeatability (Lee 1999, Yin, 1994). Stability refers to the ability to obtain the same results over time (Lee, 1999). The research can be replicated again with detailed data logging of the study process and findings (Yin, 1994). To increase reliability, the case study protocol included the theoretical framework, the research objective and questions, and the procedures and general rules that were followed in conducting this research. The case study database was also created to increase efficiency and to develop a formal mechanism, so that other investigators could review the evidence directly and not be limited to the written case study report. All the interviews were recorded.

3.5 The Swiss market environment

This sub-chapter describes the Swiss market environment, where the case companies are headquartered, starting with some facts and figures on cultural aspects based on the GLOBE study.

Switzerland is a nation with a small number of inhabitants, 7.6 million, of which 1.5 million are foreigners, who live on a small surface area of about 41,300 square kilometres in the centre of Europe surrounded by five countries. There are four different linguistic areas in Switzerland: German, French, Italian and Rhaeto-Romanic, each of which have some cultural differences. For the purpose of this study, the focus is in German-speaking Switzerland, where both of the case companies have their headquarters.

Switzerland has a long history in banking, which has been characterised by stability, privacy and protection of the clients' assets and information. Bank secrecy dates back to the Middle Ages, and was codified in a 1934 law. According to the Great Council of Geneva in 1713,
bankers were required to keep registers of their clients, but were prohibited from sharing the information with anyone except the client, unless the City Council agreed the need to divulge information. Since those days, the government has established laws to combat money-laundering and cracked down on numbered accounts in the 1990s. The first stock exchanges were opened after the middle of the 1800s: Geneva in 1855 and Zurich in 1873. At a same time, banks were closely linked with intense railway building. A consistent monetary system using the Swiss franc was introduced in 1848. The value of the Swiss franc (CHF) has been relatively stable compared to other currencies, even today. The significant role of the banking industry can be explained by the fact that the financial sector comprised an estimated 14% of Switzerland's GDP in 2003, and employed approximately 180,000 people, which represented about 5.6% of the total Swiss workforce. In addition to this, it is estimated that one-third of all funds held outside the country of origin are currently kept in Switzerland. By 2007, Swiss banks managed CHF 6.7 trillion (Wikipedia). The Bank of International Settlements, an organisation that facilitates cooperation among the world's central banks, is headquartered in Basle, Switzerland. It chose Switzerland for the location because of the country's neutrality. The UBS and Credit Suisse are respectively the largest and second-largest listed Swiss banks, and accounted for more than 50% of all deposits in Switzerland in 2007. Both of them have extensive branch networks throughout the country and in most international centres. Due to their size and complexity, the UBS and Credit Suisse are subject to an extra degree of supervision by the Federal Banking Commission. However, all banks in Switzerland are regulated by Swiss Financial Market Supervisory Authority (FINMA), which derives its authority from a series of federal statutes.

Culture in German-speaking Switzerland

According to Globe study (House et. al, 2004) the German-speaking Swiss society has a high level of Power Distance (4.9), although Should Be is significantly lower (2.9). Power Distance is defined as how an organisation or society expects and agrees that the power should be unequally shared or distributed. Swiss society values autonomy, equality and loyalty. Institutional Collectivism reflects the degree to which organisational and societal institutional practices encourage and reward the collective distribution of resources and collective action. It is lower in German-speaking Switzerland than in French-speaking part, and below the world score. The In-Group Collectivism score, which reflects the degree to which individuals express pride and cohesiveness in their organisations or families, is also low. Focus on individuality is common in German-speaking Switzerland. Performance Orientation refers to the extent to which an organisation or society encourages and rewards group members for performance improvement and excellence. It is (As Is and To Be) ranked in the top position in Switzerland in the Globe study (Weibler and Wunderer, 2007). Humane Orientation reflects “the degree to which individuals in organisations or societies encourage

54 The GLOBE (Global Leadership and Organizational Behavior Effectiveness) study aims at determining the extent to which the practices and values of business leadership are universal (i.e., are similar globally), and the extent to which they are specific to just a few societies. All the cited definitions are from the GLOBE study.
and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others”. The As Is value is low, but To Be is ranked well above the world average (House et., 2004: 25). Gender Egalitarianism is defined as the extent to which an organisation or a society minimizes gender role differences. As Is results are one of the lowest, but To Be is ranked higher.

Compensation in Swiss big banks
Beside of FINMA requirements, the banks listed in the SIX Swiss Exchange’s are required to comply with the following regulatory requirements regarding corporate governance: the SIX Swiss Exchange’s (SIX) “Directive on Information Relating to Corporate Governance”; the Swiss Code of Obligations (CO) articles 663b bis and 663c (paragraph three) regarding the transparency of compensation paid to members of the Board of Directors and senior management; and the standards established in the Swiss Code of Best Practice for Corporate Governance, including the appendix on executive compensation. According to Hengartner (2006), the compensation trend for CEOs in Switzerland has been increasing during 2002 and 2004. However, the levels have been significantly lower than the US CEO compensation figures. The average total compensation has increased from CHF 2.0 million to CHF 2.5 million, but with large variability between individuals. It is therefore difficult to compare Swiss CEO compensation between different industries, or even companies. The average cash compensation has been a major part of the total compensation, and the median CEO did not receive any equity compensation, with the value of options granted decreasing during the period, but value of shares increasing. According to the US practices, it seems that Swiss companies started to shift from options to shares during the early 2000s, and simultaneously increased the cash compensation. The average proportion of equity compensation increased from 13.2% to 13.9% by 2004, however. The proportion of compensation for non-executives between cash and equity has been similar to that of the CEO. They received approximately 14% of their total compensation in equity-based pay, which is substantially less than in the US. The non-executive directors received 50% of their compensation in equity in the US (Yermack, 2004). The following chapters will investigate compensation in Credit Suisse and UBS in more detail.

Many European banks did not have deferred compensation plans like their US peers, and had to introduce these plans to stay competitive. Equity-based compensation concepts were introduced in the 90s. Compensation was a black box for a long period of time, since it was seen as a management tool to run the organisation, and was therefore not transparently disclosed and was subject to confidentiality. It remained a black box for a long period of time, there was little intention to disclose it and it was subject to high confidentiality. However, since increased transparency, the public has obtained an overview of the absolute levels of compensation. It has been higher in the banking industry than in the others, especially in investment banking, but has only has gained attention due to the financial crisis. Global standards of compensation were driven by American banks, which set the conditions of compensation, since investment banks originated from the US. In order to enter the market and to attract talented bankers, banks in Europe had to adapt or even improve the US
compensation practices. This is a dilemma, as there is no adjustment mechanism to review the compensation. Banks are waiting for regulators and politicians to intervene, which may cause issues, because if they go in the wrong direction, such as towards penalty taxation for bonuses in Switzerland, the amount over CHF 2 million would attract a higher taxation rate. This is not in the interest of the industry.

Both CS and the UBS have the highest level of disclosure for executive and director compensation in Switzerland. The new regulations include: Commission Recommendation on the remuneration of directors of listed companies (30.04.2009) by end of 2009. Financial Services Authority (UK): reforming remuneration practices in financial services, Policy Statement 09/15 as of January 1st, 2010. G-20 Pittsburgh Summit: Promoting responsible remuneration practices in the financial sector, September 24-25, 2009, the Federal Reserve’s plan for bailout companies: Major banks have to present their compensation plans to bank regulators, who would then evaluate them to see if the pay incentives properly balance the goals of short-term growth and long-term stability (September 18th, 2009).

3.6 Research findings: Credit Suisse

This chapter presents the qualitative findings on Credit Suisse. First, it presents the company history and a current overview. Secondly, it discusses the key stakeholders. Thirdly, this chapter reviews corporate governance within Credit Suisse and then the compensation-related items, from the compensation-setting process to recent changes in the design. Finally, the impact of financial crisis is studied and a short summary of the results is provided. Performance-related quantitative analysis is studied under of cross-case analysis chapter.

3.6.1 Credit Suisse: company overview

The Credit Suisse (CS) was founded on 1856 in Zurich as Schweizerische Kreditanstalt (SKA) by Alfred Escher in order to drive the expansion of the railway network and the industrialisation of Switzerland. From the end of 19th century, the SKA played a leading role in the Swiss underwriting and syndication business. One sign of its pioneering spirit was that it created a pension fund to provide retirement benefits. It opened its first branch outside Switzerland in New York in 1940, which was granted a license as a full-service bank 24 years later, allowing it to take deposits and to carry out all other types of banking in the US. Since then, CS has expanded either organically or via acquisitions. The first documented big losses

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55 The overview is based on the data on Credit Suisse Internet page, accessed in June 2010
took place in 1976, due to the Chiasso affair\textsuperscript{56}, which resulted in the biggest loss SKA had suffered in its entire history. Each crisis was seen as a development opportunity. The crisis prompted the bank to strike out for new shores, and transform itself from a traditional Zurich institution into an international financial service provider. In 1982, the Swiss American Securities Inc. (SASI), a subsidiary of SKA founded in the 1970s, became a member of the New York Stock Exchange, and the SKA thereby became the first Swiss bank to have a place on the New York Stock Exchange via its subsidiary. Later on, in 1988, CS made its major acquisition by acquiring a controlling stake of The First Boston Corporation, which was created as the investment banking arm of the First National Bank of Boston in 1932 and went public in 1934\textsuperscript{57}. Finally, in 1996, CS Holding became the Credit Suisse Group as a holding company for CS and CS First Boston.

A raft of acquisitions took place at the beginning of 20\textsuperscript{th} century, making CS into one of the biggest Swiss banks and into a full service finance house: Bank Leu, the Swiss Volksbank, the Neue Aargauer Bank, as well as strategic alliances with insurance companies such as Swiss Re and Winterthur. The conglomerate did not last long in that form, however. The organisation was restructured into two business units in 2002: Credit Suisse and Credit Suisse First Boston. This was followed by split into a third unit, Winterthur, in 2004 and was followed by the sale of Winterthur to AXA and the launch of CS as an integrated global bank. The major mergers and acquisitions are listed in Table 5.

\textsuperscript{56} The Chiasso affair was a major scandal involving fraudulent banking and foreign exchange trading at the bank's Chiasso branch.

\textsuperscript{57} Over 200 years ago, the forerunner of First Boston, the founder of the Massachusetts Bank, financed the first US ship to China. https://www.credit-suisse.com/who_we_are/doc/company_profile_en.pdf
Table 5. An overview of the key mergers, acquisitions and divestments at the Credit Suisse Group up to 2009.

Today, CS is a global bank with headquarters in Zurich, serving clients in private banking, investment banking and asset management. It manages assets of CHF 1,270.9 billion. CS is active in more than 50 countries, with regional headquarters in Switzerland, the UK, China and the US, and employs more than 48,000 people from approximately 100 different nations. The registered shares of CS Group AG (CSGN) are listed in Switzerland (SIX) and as American Depositary Shares (CS) in New York (NYSE). The Group’s long-term ratings are: Moody’s Aa2, Standard & Poor’s A, Fitch Ratings AA-.

CS is lead by Brady Dougan and the board is chaired by Hans-Ulrich Doerig. The vision of CS is to become the world’s most admired bank, renowned for its expertise in private banking, investment banking and asset management, and most valued for advice, innovation and execution. The mission of CS is to set new standards in partnerships with clients and to provide them with integrated financial solutions. Cultural diversity is essential to the success of CS, and it strives to create an open, respectful workplace that encourages people to work together and with clients to deliver superior products, services and results, and to support the success and prosperity of the CS stakeholders. Table 6 shows the evolution of the CS vision, mission and strategy from 2002 to today, and the respective CEO and Chairman at a time. The table starts from the time of Lukas Mühlemann, when the company was focussing on sustainable growth, which changed over this period into a focus on customers.

58 March 31, 2010
<table>
<thead>
<tr>
<th>Year</th>
<th>Vision</th>
<th>Mission</th>
<th>Strategy</th>
<th>Chairperson</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>World's most admired bank</td>
<td>Client-focused integrated bank strategy, Global expertise of Private Banking, Investment Banking and Asset Management with Shared</td>
<td>Hans-Ulrich Doerig</td>
<td>Brady W. Dougan</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>The world's premier and most admired bank</td>
<td>Partnering with clients, providing them with integrated financial solutions. Cultural diversity and open and respectful work to deliver superior results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>World's premier bank, expertise in investment banking, private banking and asset management, and most valued for its advice, innovation and execution.</td>
<td>Shareholder value creation from banking. Integrated global bank to serve clients in investment banking, private banking and asset management.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>World's premier bank, expertise in investment banking, private banking and asset management, and most valued for its advice, innovation and execution.</td>
<td>Above-average growth markets, Switzerland and diversifying geographic mix; innovative products and solutions, productivity improvement; integrated business model across segments</td>
<td>Oswald J. Grübel (May 2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>The leading global private bank and the leading bank in Switzerland for client satisfaction, employee excellence and shareholder returns.</td>
<td>Achieve sustainable growth by focusing on customer satisfaction, product innovation, insurance</td>
<td>Walter B. Kielholz (Apr 2009)</td>
<td>Oswald J. Grübel and John J. Mack</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Achieve sustainable growth by focusing on customer satisfaction, product innovation, insurance</td>
<td>in asset gathering and investment banking by being a leader in private wealth management, global asset management, insurance</td>
<td>Lukas Mühlemann</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Achieve sustainable growth by focusing on customer satisfaction, product innovation, insurance</td>
<td>Strengthen CS position in Asset management and Financial intermediation.</td>
<td>Lukas Mühlemann</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>Achieve sustainable growth by focusing on customer satisfaction, product innovation, insurance</td>
<td>Strengthen CS position in Asset management and Financial intermediation.</td>
<td>Lukas Mühlemann</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Evolution of the CS vision, mission and strategy with top management in charge during 2002-2010.

### 3.6.2 Credit Suisse: stakeholders

As the CS mission and strategy states, clients and skilled employees are at the heart of the company. This study extends the stakeholders to include clients, employees, shareholders, and the public. It is of interest to understand the CS value creation for these groups. Based on the interviews in CS and the annual reports, all these stakeholders are extremely important to CS and, although not clearly stated under vision, mission or strategy. CS is committed to good corporate citizenship as an integral part of its business strategy and as a foundation for its

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59 Corporate citizenship can be defined as follows: A firm's sense of responsibility towards the community and the environment (both ecological and social) in which it operates, and from which it draws resources and sustenance. Firms express this citizenship (1) through their waste and pollution
lasting economic success. It aims to create value in the long-term by executing core competency in line with the highest industry standards as a financial intermediary and risk assessor. It can therefore be assumed that the goal of CS is to create long-term added value for its clients, employees and shareholders, and for the economy and society as a whole. The following part of the sub-chapter explains who these stakeholders are.

Credit Suisse serves its diverse clients through its three divisions: Private Banking, Investment Banking and Asset Management. The first offers financial solutions and comprehensive advice to private, corporate and institutional clients. Investment Banking provides a wide range of financial products and services, including global securities sales, trading and execution, prime brokerage and capital raising services, corporate advisory and comprehensive investment research. Its clients include corporations, governments and institutional investors around the world. The third division, Asset Management, manages global and regional portfolios, mutual funds and other investment vehicles for governments, institutions, corporations and individuals worldwide. On March 31st, 2010, CS were managing clients’ assets to a total amount of CHF 1,270.9 billion. The business and services provided have changed slightly from 2002 – 2010, with a focus on integrated banking and the divestment of insurance operations. Its clients cover a wide range, from private clients and institutions to governments from different regions. In principle, the single individual representing government can simultaneously represent three of the stakeholders of CS: government, shareholder and client.

CS has 48,000 employees across the globe, with over 100 different nationalities. CS considers its skilled employees from a wide range of cultures to be one of its greatest strengths, and aims to be employer of choice, providing employees with attractive talent development and promoting equal rights in a working environment free from discrimination. Being an employer of choice requires a holistic approach in building up a working environment in which employees are constantly and voluntarily dedicated and committed to business success. Hilb (2006) goes beyond this definition, and argues that the employees working for an employer of choice would be committed to such an extent that the employees become human entrepreneurs inside the company, with excellent networking skills. A “glocal” entrepreneur does not wait passively until change happens, but pro-actively seeks opportunities for positive changes and innovations. Employers of choice employ leaders who are passionate about people, who are clear and concise when communicating strategic direction, and who possess a sound ability to implement the practices of their people (Looi et al., 2004). Successful companies invest appropriately in their talents and measure the impact of their investments on the bottom line. These organisations create an environment that enables employee engagement and produces extraordinary results. CS has measured employee satisfaction and

reduction processes, (2) by contributing educational and social programs, and (3) by earning adequate returns on the employed resources. (Source: Business Dictionary)

60 By definition, the term “glocal” refers to an individual, group, division, unit, organisation, or community that is willing and able to “think globally and act locally.”
loyalty over the years. As early as 2001\textsuperscript{61}, CS reported that regular survey and interviews are used to “highlight new developments and employee concerns, as well as areas where action is required”. However, regardless of the great prospects for management talent, the number of employees decreased significantly at the beginning of 2000. Mostly involuntarily, as 2001 was marked by a collapse in global growth, and this created a difficult environment for the whole world economy. The changed market conditions had a particularly negative effect on the financial services industry, and impacted on CS.

Table 7 shows the change in the number of employees from 2002 to 2009. It decreased by 47\% from 2002 to 2004, but has been reasonable stable since then, even during the time of the financial crisis.

<table>
<thead>
<tr>
<th>Year</th>
<th># Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>78,457</td>
</tr>
<tr>
<td>2003</td>
<td>60,837</td>
</tr>
<tr>
<td>2004</td>
<td>41,200</td>
</tr>
<tr>
<td>2005</td>
<td>44,600</td>
</tr>
<tr>
<td>2006</td>
<td>44,900</td>
</tr>
<tr>
<td>2007</td>
<td>48,100</td>
</tr>
<tr>
<td>2008</td>
<td>47,800</td>
</tr>
<tr>
<td>2009</td>
<td>47,600</td>
</tr>
</tbody>
</table>

Table 7. Number of employees in CS during 2002-2009.

Shareholders as owners of the company are often considered in academic studies to be the most important, or even the only true stakeholders. Financial performance is the established measure for company success towards shareholders. The purpose of the company is to create wealth for their owners or, in publicly-listed companies, for their shareholders; although this could not happen without clients and employees. CS has a wide group of shareholders, and they may often be simultaneously in the role of other stakeholders, such as the public, employees and clients. At the end of 2008, CS had 148,621\textsuperscript{62} shareholders, of which 91\% were private Swiss investors, 3\% institutional Swiss investors and 6\% were foreigners. The total number of shares was 1,185 billion but majority of them (53\%) were not registered in a share register. 23\% of the shares were registered in Switzerland and 24\% outside of Switzerland.

The biggest CS institutional owner is Qatar Holding, which acquired 9.9\% of the voting rights during the credit crisis in 2008. Other significant shareholders as of September 25\textsuperscript{th}, 2009, are the Olayan Group, which held 6.6\% of the shares and Morgan Stanley, with less than 5\% of the voting rights. The representatives of the biggest shareholders are directors in the Credit Suisse board: Jassmin Bin Hamad J. J. Al Thani from Qatar Holding has been on the board since 2010, and Aziz Syriani from the Olayan Group since 1998.

\textsuperscript{61} Credit Suisse Group Sustainability Report 2001: 7
\textsuperscript{62} SIX is required to notify the company and the SIX if their holding reaches, falls below or exceeds the following thresholds: 3\%, 5\%, 10\%, 15\%, 20\%, 25\%, 33 1/3\%, 50\% or 66 2/3\% of the voting rights, whether or not the voting rights can be exercised
The last stakeholder, the public, is seen as the society or community where the company operates. By adding long-term value to the public, a profitable company brings taxation income, innovations and development to the community. In the worst case, the company may destroy long-term value at the expense of short-term value, and the government may therefore need to support the company. To ensure long-term value, perfect risk-management is required, and even better monitoring of management actions. CS combines profitability with responsibility towards stakeholders, the society and the environment through an open dialogue with the public, support of humanitarian, cultural and charitable organisations, and sponsorship in education, sports and culture. It offers clients innovative, sustainable business solutions and continuously improves its environmental performance. CS reviews risk through a process that ensures that business transactions that may involve environmental, social and human rights risks will be examined. The value to the public can be measured through long-term profitability, the supports towards society projects and articles published about Credit Suisse. Based on the interviews conducted at CS, communication towards the media, which often drives public opinion, is important. As an example, the media often publishes the monetary amounts of the reported executive compensation without digging into the reasons behind them. In some cases, the award granted may only become available later on, when the value is significantly different from the reported one. Part of the public dialogue includes discussions with regulators.

### 3.6.3 Credit Suisse: corporate governance

This sub-chapter explains the role between the CEO and the chairperson. The compensation decisions lie entirely with the Compensation Committee, in which the chairperson has no voting rights.

Hilb’s (2006) “New Corporate Governance” framework integrates the interests of shareholders, customers, employees and the public with its reverse KISS principle which is an abbreviation of integrated approach of following functions: Situational, Strategic, Integrated and Keep it controlled. Situational implementation adapts the governance to a specific company’s characteristic needs and requirements. Strategic requires that a supervisory board is closely involved in steering a business strategically. Integrated board combines the approach for the nomination, assessment, remuneration and promotion of executive and board members. Keep it controlled requires a holistic monitoring approach that goes beyond the financial and broad performance evaluation from the viewpoints of shareholders, clients, employees and the public. After the financial crisis, one additional suggestion could be made regarding the integrated board: not only HR, but also audit and risk could be part of the integrated approach. To comply in this approach, the board members need to bring the

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63 Credit Suisse Group Sustainability Report
expertise and skills required, and need to spend enough time with their mandates. A board of the appropriate size would decrease the free-rider problem. This subchapter first reviews external governance through regulative activities, and then internal governance via the board of directors.

Corporate governance practice in Switzerland is strongly influenced by national culture, which was reviewed in the chapter covering the Swiss market environment. This sub-chapter only focuses on the legal requirements. As a global, publicly-listed bank, with headquarters in Switzerland, the activities of CS are highly regulated. Continuously developing corporate governance requirements have a significant external impact on CS processes. According to the interviews, the changing regulatory environment with its new demands could even be a threat to CS and the other banks, since these requirements increase the costs of compliance, and may pull down margins, with an adverse impact on profitability. In the worst case, the rules would limit talent competition and make it difficult for public companies to attract, retain and motivate talented and skilled employees.

During the financial crisis in 2009, major regulatory bodies such as FINMA, the US Federal Reserve (Fed) and the FSA published new regulations or guidelines aiming at reforming compensation practices. CS has been a pioneer in implementing the new rules. When the Swiss Code of Best Practice increased transparency recommendations in 2002, they were immediately implemented by CS. The board and management spent a great deal of time during 2008 - 2009 to build up a response to the new regulatory requirements. The interviews showed that heavy and fast regulatory changes take a great deal of time away from the real activities, such as carrying out business and implementing the strategy. FSB principles and G-20 are established global regulations, but, as a global company, CS cannot only consider rules for single local markets. CS is in ongoing discussion with regulators, who are not yet sufficiently coordinated to create a level playing field. This makes it challenging for a global company to build up a single global compensation concept.

From the shareholders’ perspective, internal corporate governance can be associated with the annual general meeting of the shareholders and the active governance managed by shareholders’ representatives, the board of directors. Internal governance mechanisms can be considered as primary factors in the detection and prevention of corporate scandals. Internally, the actions of CS are monitored and steered by the board of directors, lead by a chairperson who represents the shareholders and ensures their financial interests. A chairperson is actively involved in the development of strategy and group objectives, representing the group vis-à-vis stakeholders and coordinating board committees. As part of his stakeholder responsibilities, the Chairman of the CS board represents the board towards the media. The requirements of transparency and openness force companies to take this

According to a MODE model, countries can be divided into five groups by their level of orientation towards competition and cooperation. In this model, it is suggested that Switzerland has compromise culture with regard to these dimensions (Hilb 2005: 25)
function very seriously, and it is therefore under increasing attention. A CEO has responsibility for the operational management, and the strategy implementation, as well as defining internal guidelines and policies. Table 8 below shows the responsibilities of the chairperson and the CEO in CS, following the Swiss Corporation Law and the Economiesuisse recommendations. Based on agency theory, it is the responsibility of the board to monitor a CEO in order to mitigate the principal-agent problem. When the role is broadened from monitoring to the board’s involvement in strategic decision-making, researchers find evidence of a positive and significant correlation to corporate performance (Judge and Zeithaml, 1992). Accordingly, the new corporate governance approach (Hilb, 2006) suggests that the strategic direction of the company is a central board function, alongside the often-dominant monitoring functions, which CS applies and emphasizes in its annual report. The chairperson of CS is actively involved in building company strategy, although it is initially built up by the CEO and his team.

<table>
<thead>
<tr>
<th>Chairperson</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Coordination of the work of the Board and its committees</td>
<td>● Operational management of the Group</td>
</tr>
<tr>
<td>● Active involvement in developing the strategic business plans and objectives of the Group</td>
<td>● Implementation of business strategy and financial plans</td>
</tr>
<tr>
<td>● Active representation of the Group vis-à-vis investors, stakeholders and the public</td>
<td>● Definition of guidelines for the internal organization and other general policies of the Group</td>
</tr>
</tbody>
</table>

Table 8. Responsibilities of the chairperson and the CEO in CS (2010).

All the members of the CS board are non-executive, but not necessarily independent. Full time non-executive and independent directors are still compensated as full-time executives with monthly salaries, incentives and pension contributions. According to the 2009 annual report, the independence within CS is determined by whether the “board member has held executive positions for the prior three years in the group or its subsidiaries or has been employed by an affiliate of the external auditor for the prior three years” or whether he “maintains a direct or indirect material business relationship with the group or any of its subsidiaries” or “has had an interlocking directorate anytime during the prior three years”65. The factors set forth in the Organizational Guidelines and Regulations (OGR), the Committee Charters and the applicable laws and listing standards are taken into account, and all board members are assessed annually by the Chairman’s and Governance Committee. As of December 31, 2009, all members of the board were independent, with the exception of Urs Rohner, the Vice-Chairman, as he was the Chief Operating Officer (COO) and General

65 The interlocking relationship can be defined, for example, as follows if a member of the executive board serves on the compensation committee of another company that employs the board member.
Counsel of the Group until the AGM in April 2009. None of the CEOs or chairmen were appointed from outside the firm during the period 2002 - 2009.

Hilb (2006) suggests four main preconditions for the board in the order of success for developing, implementing and controlling corporate strategy in an integrated way. The first precondition is *diversity*, which means that the composition of the board-team needs to be strategically targeted. The second is *trust*, which is described as a constructive and open-minded board culture. The third is *network*, which requires an efficient board structure. And the final one is *vision*, with stakeholder-oriented board measures of success. The CS Articles of Association (AoA) provide that the board consists of no fewer than seven members. Hilb (2006) suggests that seven should be the maximum number of board members for a large company in order to ensure the successful management of the composition. Today, CS has 15 board members, of which 10 (67%) are either from Switzerland or the EU as required by the Swiss Code of Obligations, and the remaining 5 (33%) are from the US (3), Canada (1) and Qatar (1). In order to emerge successfully in the new markets and to transform from a global to a truly “glocal” company, it is recommended that the openness to new cultures at the CS board level should be carried forward to the next level, beyond Europe and North America. Ruigrock et al. (2007) suggest that it is important to understand the characteristics of the board, and the qualifications and affiliations that these directors bring to the boardroom, and that it is important to take national circumstances into account rather than relying on research results from other countries.

Most of the members of the CS board exhibit characteristics similar to those of a chairperson: white, male and at least 50 years old. The exception with regard to age and cultural diversification is the representative of a major shareholder, Qatari, who is less than 30 years old. The exception for gender diversification is the female US/Irish representative. The know-how of most of the CS board members is well focused and targeted for the purpose of a bank, with degrees in law and economics, and experience in the banking or insurance business. Needless to say there are exceptions, such as Brabeck-Lemathe, Koopmann and Syz. The experience of first is from Nestlé, the second from the Bobst group, which is a supplier of equipment and services to packaging manufacturers, and the last from SIG Holding. There will be changes in the composition of the board in the near future, since the upper age limit for a board membership is 70. The next to retire will be the Chairman Doerig, who will be succeeded by Rohner in 2011. The board members are elected for a term of office of three years, and re-election is permitted. The composition of board, with committee memberships, age, education and other mandated issues, is shown in Appendix 4, and in the bios of the CEOs and chairmen in Appendix 3.

Members of the board are expected to attend all board meetings. The board met 11 times in 2009. Besides general meetings, the board operates through a number of separate committees (with the times they met in 09 shown in brackets), such as: Compensation Committee (10), Chairman’s and Governance Committee (8), Audit Committee (9) and Risk Committee (6). The executive board attends some of these meetings to ensure effective interaction with the
board, but private meetings without executives take place as well. The Corporate Secretary, Pierre Schreiber, partners the board and the committee meetings. All the committees, with the exception of the Chairman’s and Governance committees, perform a self-assessment once a year. During the assessment, they review their own performance against the committees’ objectives and the responsibilities listed in the charter, and determine any special focus objectives for the coming year. The members of the board are generally committed to ensure compliance with international best practice in corporate governance. The Group strives to act with integrity, responsibility, fairness, transparency and discretion at all times, and to provide an accurate, fair and transparent picture of the Group’s financial condition with strong internal and external auditors who play a critical role in providing an independent assessment of the group’s operations and internal controls. The following paragraphs list the responsibilities of the separate committees.

The responsibilities of the *Chairman’s and Governance Committee’s* (CGC) include the evaluation of the independence of the board members and the review of corporate governance guidelines for further approval by the board. Even though executive compensation is linked to corporate governance, it is not under the responsibility of this committee. However, other HRM functions, such as is identifying, evaluating, recruiting and nominating new board members in accordance with the internal criteria and subject to applicable laws and regulations, and providing guidance for the annual performance assessment of Chairman, the CEO and the members of the Executive Board, are the responsibilities of CGC. The linkage between performance and pay is left to the Compensation Committee. The CGC provides the board with recommendations for the appointment, promotion, dismissal or replacement of members of the executive board, but does not determine their compensation. Together with the Chairman and the CEO, it reviews the succession plans for Group’s senior executive positions. Hilb (2006) recommends an integrated view for HRM and that they should be ideally combined into one committee. In addition to HRM, the committee has an advisory function towards the chairperson and supports him in the preparations for general board meetings.

To support the integrated view of HRM, two members from the CGC participate in the *Compensation Committee* (CC), together with one additional member. They review the performance of the business and the top management team (TMT), and the compensation plans. Based on performance, the CC determines the variable compensation pools and the compensation payable to the members of board, the executive board, the internal audit and certain other members of senior management, for further approval by the board. The committee is assisted by external legal counsel and an independent global compensation consulting firm, Johnson Associates, Inc\(^{66}\).

\(^{66}\) Johnson Associates does not provide any other services to the Group other than assisting the Compensation Committee
Supervisors actively check that the composition of the compensation committees meets the appropriate standards of expertise and independence. Performance is based on absolute performance and relative peers, such as JP Morgan and the Deutsche Bank. The peer group is reviewed each year, and the Compensation Committee adds qualitative measures related to audit issues, any violations, and talent retention and employee satisfaction to a scorecard. For instance, in 2009, CS entered into deferred prosecution agreements and an agreement with the OFAC to provide a total of USD 536 million to settle a previously disclosed investigation into US dollar payments during the period from 2002 to April 2007 involving parties who are subject to US economic sanctions. HR provides information, and coordinates the bonus pool calculations so that the CC can define them and obtain approval from the board of directors. The proportion of the CEO is taken from this pool. The CC uses an external consultant for CEO compensation using market intelligence such as CEO pay position last year and the trend in peers pay. The peer group is in a same process at a same time, however, so the analysis is based on historical figures and estimates.

The Audit Committee (AD) supports the board in monitoring and assessing the integrity of the consolidated financial statements, as well as disclosures of the financial condition and the results of operations and cash flows. It monitors processes designed to ensure an appropriate internal control system, including compliance with legal and regulatory requirements, the qualifications, independence and performance of the external auditors and of the internal audit. The AC also assists in monitoring the adequacy of financial reporting processes and systems of internal accounting and financial controls. It oversees the work of the external auditor and pre-approves the retention of, and the fees paid to the external auditor for all audit and non-audit services.

The last, but very important committee is the Risk Committee (RC), whose main duties are to assist the board in assessing the different types of risk to which CS is exposed, as well as the risk management structure, organisation and processes. The RC approves selected risk limits and makes recommendations to the board regarding all its risk-related responsibilities, including the review of major risk management and capital adequacy requirements.

As confirmed by rating agencies and index providers, CS has regularly received good ratings in the area of sustainability that have been above industry average. It is included in the following sustainability indexes: FTSE4Good, Dow Jones Sustainability World and Dow Jones STOXX Sustainability. The sustainability reporting is based on the guidelines of the Global Reporting Initiative (GRI), which is the internationally recognized voluntary standard for companies that wish to create transparency regarding the financial, ecological and social aspects of their activities, products and services.

The highest level of internal governance in CS is the Annual General Meeting (AGM). Corporation Law assigns several fundamental, non-transferable powers to the shareholders’ meeting. In particular, the shareholders may vote on the appointment and removal of directors and statutory auditors, on the approval or rejection of the annual business report, on the
setting of dividends and on any amendment to the articles of association, including changes to the share capital. In addition, the shareholders may bring actions against the company in order to protect their rights, or against liable directors or officers in case of non-compliance with their statutory duties (Lorenzo, 2004). The shareholders’ meeting elects each member of the board of directors, mostly on nomination and motion by the incumbent board, but sometimes on the counter-motion of the shareholders. The shareholders’ meeting may also remove directors and auditors, provided the matter has been included on the agenda within the stipulated period.

To summarize, every function that impacts on compensation is divided between different committees. The Compensation Committee, which recommends the payments with the assistance of an external consultant, has no deep dive into the company’s figures from the audit committee, into the risk involved or into performance evaluation. The final figures are based on the productions of each separate function.

### 3.6.4 Credit Suisse: compensation setting process

The Compensation Committee (CC) discusses and determines the CEO’s compensation in the light of his performance in achieving the group’s goals and objectives based on the evaluation of the Chairman’s and Governance Committee’s (CGC), and the benchmarking exercise conducted by the external, independent global compensation consulting firm, Johnson Associates. The previous year’s compensation is taken into account in the determination. In addition to this, the CC also proposes individual compensation for the board members, for the further approval by board. Each individual in question abstains from the respective decision. The CC consists on no fewer than 3 independent members, and holds at least 4 meetings each year. The members in 2009 were Aziz Syriani (Chairman), Peter Brabeck-Letmathe and Walter Kielholz. The main meeting is held in January, aimed at determining or recommending the overall compensation pools for the divisions and the compensation payable to the CEO, the board members and certain other senior groups, for approval by the board.

Salaries for members of the executive board, including the CEO, are reviewed annually. The CC approves the salaries of all members of executive board, including the CEO, with information to the board. The compensation of the board members is only recommended by the CC, but is left for the further approval by the board. A chairperson cannot approve his own compensation, however. Members of the board with functional, non-executive duties receive fixed and variable compensation for their services during the year, as set by the board. The variable compensation for a chairperson depends on both the performance of the group and his/her personal performance, which are evaluated by the other committee, the CGC. All variable compensation has to be approved by the board. The annual variable compensation component usually represents the most significant part of a CEO’s total compensation, depending on the executive’s performance. The baseline for the total variable pool is set at the
beginning of the year based on pre-defined financial and non-financial performance targets, to be assessed at the end of the year against the peers. The performance criteria takes the following into account: financial performance with risk and capital adequacy measures; results of regulatory reviews, internal audits, compliance reviews; market share development and stakeholder view, such as client satisfaction surveys; investor feedback; employee engagement results (satisfaction survey); and consideration of the group’s performance against that of its peer companies. The following sub-chapter explains these components in details.

3.6.5 Credit Suisse: compensation components

According to remuneration reports of CS, compensation is largely made up of basic salary, variable bonus, share grants, pension and benefits. CS has not granted any options since 2003. Basic salary is part of the fixed compensation, and it is supposed to reflect seniority, experience, skill sets, the individual performance and market practice. Incentive-based remuneration, such as accounting-based bonuses and equity, are used to mitigate the principal-agent problem. The value of a firm’s stock is determined outside the executives’ direct control, however. As a separation between the executive and the director, the director’s pay is typically and partially explained by the assumption of agency theory and optimal contracting theory stating that the board of directors and the compensation committee already act in shareholders’ interest, and do not require any incentives. Optimal contracting theory assumes that there is no principal-agent relationship between shareholders and the board of directors. Consequently, there are no agency costs between the shareholders and the board members, and incentive compensation is irrelevant. Yermack (2004) documents that the pay-performance sensitivity of outside board members is several orders of magnitude lower than that of CEOs.

According to the agency theory, CS compensates the board with restricted shares, assuming that the agency problem exists between the shareholders and attempts to align the interests of the board with those of the shareholders. The equity-based compensation predicts subsequent firm performance, is restricted for a period of four years and is not subject to the achievement of any specific performance conditions. Compensation committee uses benchmark data for their evaluations of what is to be paid to a chairperson. Significant roles receive variable cash components due to the importance of their functional non-executive duties in the board. These roles include a chairperson and the chairs of the compensation, risk and audit committees, and the awards are linked to the relative performance of the business and the individual, and the time commitment involved. Short-term incentive is paid in cash. 2009 variable pay was deferred, and comprised share-based and other deferred awards, which are subject to vesting, holding and future service requirements in the form of Scaled Incentive Share Units (SISU) and the Adjustable Performance Plan (APP) awards. The pure fee structure with restricted shares applies to the other directors. The incentives of each director will generally increase
over his tenure due to an accumulation of equity retainer. CS has implemented a share holding requirement for top roles. The minimum share ownership threshold for the CEO and the other executive board members, approved by board, is 350,000 shares. If the ownership of shares is below the threshold, the CEO will not able to trade his shares.

During the financial crisis, there was plenty of debate on bad compensation methods. Some researchers argued that a badly implemented accounting-based bonus plan could be adjusted by the executive to at least some extent, and focuses on annual and past performance. They recommend long-term or deferred payments, such as equity, to more closely reflect a firm’s future growth potential. Without coherent corporate governance practices within a firm, however, any compensation packages may be implemented badly, which could potentially spur a decrease in the shareholders’ wealth. The following sub-chapter describes the findings on the changes that CS made as a response to the financial crisis and the new compensation requirements.

### 3.6.6 Credit Suisse: changes in compensation design

Since the beginning of financial crisis, CS has made enormous efforts to review its compensation practices. Given that the bonuses were under public debate and that deferrals were required, they found that it was important to strike an appropriate balance between fixed and variable compensation. Accordingly, and in line with recommendations by regulators, the proportion of total compensation that CS paid as the basic salary for managing directors and directors increased with effect from January 1st, 2010. That was not supposed to increase the overall cost base, but rather to achieve a shift in the proportion of fixed versus variable compensation for senior employees. The salary increases were thereby offset by reductions, primarily in unrestricted cash. Together with the deferrals on cash payments, these were the major changes implemented. The fixed component of remuneration needs to be sufficient to allow a truly flexible pay-for-performance part. The bankers may have received CHF 250k as annual salary, but then received millions in bonuses, as bonuses were needed to keep up the appropriate living standards. The new rules focus on deferrals that are linked to future performance. A programme of this kind was CS introduced in 2003, linked to peer group comparison, and was called PIP. The first PIP program, PIP I, vested in April 2010 and ended up with significant amounts of pay for key people. The PIP scheme was designed to run over a five-year time period in order to retain key players when internal conditions were difficult. In the performance evaluation for PIP I, CS outperformed in 7 of the 8 performance criteria. If the program had been introduced in other banks, it is probable that 7 out of 8 cases would not have paid out at all. The performance in CS was outstanding and resulted in multiplier of 4.8 with a payment of over CHF 70 million to the CEO. The mechanism behind the figure was

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67 Group insiders can trade their unrestricted shares outside the closed periods four times a year
not understood by public, however, and they only looked at the total amount. This follows the logic that if heavily leveraged instruments have a high downside and upside potential, the public recognizes this, but ignores the downside of possible zero payment.

Growing concern regarding the leverage component is the subject of public debate. Options have the biggest leverage, and underwater options cause issues. Many of CS programs were not successful, given that a significant portion of the compensation turned out to be zero. Some companies ended up revaluing or backdating options, which is not a good practice. In CS, it was thought that options do not work as a compensation tool. If managers want options, they can buy them from market. This is a tricky thing, even with shares, as many share programmes did not perform over the years, and were even destroying the value. This is something that is ignored in the current public debate, because the disclosed equity compensation is based on the value at grant. What really matters, however, is the actual amount delivered. The value has typically been much less than at a time of grant, which is not seen by public.

The review and completion of CS compensation practises took place following the market turmoil of 2008 and the unprecedented level of political and regulatory focus on compensation at financial institutions during 2009. In the fourth quarter of 2009, FINMA promulgated the Circular on Remuneration Schemes, which became effective on January 1st, 2010. Beside of FINMA, the US Federal Reserve (Fed) and the FSA published new regulations or guidelines in 2009, aimed at reforming compensation practices. The FSB issued a set of principles for sound compensation practices at significant financial institutions, which were endorsed by the G-20 in October 2009. While the specific details of these regulations vary, many of their general principles are common. These include consideration of risk in compensation decisions, closer involvement of the risk function in compensation governance, stricter conditions on variable compensation and a broader and more transparent compensation disclosure. As a result of requirements and the discussions held with regulators during 2009, CS adjusted its compensation instruments and processes for most senior employees, managing directors and directors. It was the first financial institution to align its compensation model to the G-20 best practice guidelines in 2009. Shareholders were given a vote on compensation plans at the AGM.

The changes take risk in compensation decisions into account, and attempt to further align the interests of employees with the long-term success of the company and to link the delivery of compensation with the future financial performance on the basis of share price and the group return on equity (ROE) development, and ensuring a continued focus on a strong control culture. Successful, fair compensation consists of linkage to performance, using different measures such as ROE, risk-adjusted return and conducting a peer group analysis, and does not only focus on a share price. If ROE was the only performance driver for executives, they could benefit by simply keeping the capital higher in order to increase the ROE. CS disclosed economic value for the entire variable pool of the bank for the first time in 2009. It was also the first bank to meet the G20 and FSB criteria to tie compensation system to risk-adjusted
performance. This means that more predictable performance metrics were required, and an adjustment mechanism to downsize the payment where the market conditions require this.

CS implemented some new features to ensure that short-term variable awards are linked to future financial performance. Beside of the increased basic salary, the new features of the compensation design were an increase in the proportion of variable compensation that is deferred; and the introduction of two new instruments for deferred variable compensation, the Scaled Incentive Share Unit (SISU) and the Adjustable Performance Plan (APP) award. SISUs are share-based instruments with four-year vesting, and are linked to the long-term development of the CS share price and Group average ROE. The APP is a cash-based plan with three-year vesting and positive and negative adjustments linked to the adjusted profit or loss of the future business area and the ROE. Deferred variable compensation for 2009 for managing directors and directors, including the CEO, was awarded as 50% in SISUs and 50% in APP awards.

Compensation was an issue that came under increased and intense scrutiny in Switzerland in 2009. CS responded to the need to change reward mechanism, although CS had been using deferred, share-based compensation instruments for many years. It is important to understand that the public debate was based on the amounts involved. The method that enabled such significant payments was criticised, and changes were required. The changes that were recommended, legally required and implemented do not necessarily decrease the amounts to be paid, however.

3.6.7 Credit Suisse: the financial crisis

The financial services sector witnessed extraordinary changes to the competitive landscape due to consolidation and government intervention, with several bankruptcy protections with state guarantees, liquidity, funding, capital injections and full-scale nationalism. Going forward, this has caused the regulatory supervision to be increasingly tighter. The longer-term implications of increased political influence remain to be seen. In Switzerland, a more conservative capital regime was introduced for large Swiss banks, including Credit Suisse, requiring increased capital and a leverage ratio.

The integrated, client-focused bank strategy of CS, which was launched in 2006, was seriously tested in 2008. CS made a net loss of CHF 8.2 billion in 2008, and net valuation reductions in investment banking amounted to CHF 10.9 billion. These were substantial losses, but its financial strength with institutional investors support allowed CS to work through the financial crisis without any government aid. The priorities of changes were established in 2007, at an early stage of the crisis, with the major one being reducing risk by implementing a comprehensive and aggressive plan. In CS, the CEO has had an important role in organizing the company in such a way that the government support is not required.
The financial crisis precipitated fundamental changes in the financial services industry. As a result, future challenges arise from the increased regulatory scrutiny, higher capital requirements, more conservative client behaviour, the market’s desire for less complex products and substantially lower asset bases. Due to this, CS is focussing even more on addressing the needs and aspirations of the clients with a skilled workforce, with the aim of attracting, developing and retaining talented people while remaining sensitive to the ongoing public debate about compensation. One of key objectives of CS is to help restore public trust in the financial sector and enhance the stability of the financial system. CS attempts to manage capital and liquidity conservatively, and strives for top quartile efficiency levels, while being careful not to compromise standards or growth. As part of the commitment to support this process, CS has helped the clients to invest in growth and to manage difficult restructuring and liquidity situations throughout the period, and also engaged in an open and constructive dialog with politicians and regulators to promote a coordinated global approach to banking supervision in an effort to build the more robust financial system that is essential to economic growth.

3.6.8 Credit Suisse: summary

The vision of CS is to become the world’s most admired bank and, through its mission, it aims to support the success and prosperity of the CS stakeholders. The importance of stakeholders, i.e. employees, clients, the public and shareholders, has been raised to the top level. This is not directly seen to be linked to compensation, however, other than through financial performance. The representatives of the biggest shareholders are directors in Credit Suisse board: Jassmin Bin Hamad J. J. Al Thani from Qatar Holding has been a member of the board since 2010, and Aziz Syriani from the Olayan Group since 1998.

One of the main findings is that the communication to public is seen to be important to Credit Suisse. The media often publishes the compensation amounts without digging into the reasons behind them. IN some cases, access to the granted award may only become available later on, when the value is significantly different than the reported one. The second finding is that cooperation between regulators in building relevant rules is crucial. In the worst case, the rules would limit the competition of talents and make it difficult for public companies to attract, retain and motivate talented and skilled employees. If the issue is the compensation level, not all the rules suggested may solve it. Deferrals and relative peer performance may end up in significant amounts, as was the case for the PIP awards granted in 2005 and 2006. They follow the mechanism exactly as suggested today by FINMA. However, the suggestion is not to focus on the levels, but on the mechanism behind them, which leads to the findings at board level.
The Credit Suisse board of directors has different incumbents in different committees, who focus on HR, auditing and risk. The isolation of these key functions may make it difficult to have a holistic view when monitoring the CEO and the top management, and when attempting to link the performance and pay correctly. The Board size is sufficiently large, which may provide space for a free-rider problem. The impact of board size to compensation is studied under the cross-case analysis.

3.7 Research findings: UBS

This chapter presents the qualitative findings on the UBS. It follows the same logic as the chapter on the Credit Suisse. First, it presents the company history and the current overview. Secondly, it discusses the key stakeholders. The third chapter reviews corporate governance in the UBS and then the compensation-related items, from the compensation-setting process to the recent changes in the design. Finally, the impact of financial crisis is studied and short summary of the results is given. Performance-related quantitative analysis is studied under the cross-case analysis chapter.

3.7.1 UBS: company overview

The UBS was founded in its current form in 1998, from the merger of Union Bank of Switzerland (UBS) in Zurich and the Swiss Bank Corporation (SBC) in Basle. It continues to have two headquarters, one in Basle and one in Zurich. Both merged banks have long roots in Switzerland’s history: SBC reaches back to 1872 under the name of the Basler Bankverein and the UBS to 1912 from the merger of Toggenburger Bank, founded in 1863, and Bank in Winterthur, founded in 1862. The current logo of UBS is a blend of logos of the UBS and SBC banks. The three keys are from SBC, and were introduced in 1937 to symbolise "confidence, security, and discretion".

SBC was a forerunner in having branches outside Switzerland, with a branch in London as early as 1898 and another in New York in 1939, whereas the UBS only opening its branches in London in 1967 and New York in 1975. After World War I, the UBS bank faced rapid inorganic growth, and became a typical representative of Swiss universal banking with private, corporate and retail clients and asset management in Switzerland, but mainly carrying out commercial banking for corporate clients abroad. At the end of 2000, the UBS merged with PaineWebber Inc, a full-service securities firm founded in 1879 and located in New York. Table 9 shows the key mergers, acquisitions and divestments in UBS history up to 2009.
The beginning of 2000 was a time of success for the UBS. In January 2001, the UBS was the largest private bank in the world, with $433.5 billion in assets under management. The UBS was also the sixth-largest bank and one of the 50 largest companies in the world according to the Financial Times' annual listing of the top 500 global companies in 2003. In August 2004, the UBS was named the world’s 45th most valuable brand, worth 6.5 billion US dollars, moving to the 44th position a year later. Later in 2007 UBS was heavily impacted by the financial crisis and had to make significant efforts to raise sufficient funding to cover the loss and to make a turn-around back to a profitable business, which it managed by first quartile of 2010. Appendix 7 shows the ranking of UBS and Credit Suisse compared to peers at the end of 2009.

Today, like its competitor CS, the UBS is a client-focused financial services firm aiming at generating sustainable earnings, creating value for its shareholders, and becoming the choice of clients in following businesses: wealth management, asset management and investment banking services. The UBS provides its private, corporate and institutional clients with advice, products and services on a global and regional basis. In 2010, UBS is a global company with offices in more than 50 countries and about 37% of its 64’000 employees

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68 Scorpio Partnership Ltd. survey
69 Global Brand Scoreboard published in BusinessWeek
working in the Americas, 37% in Switzerland, 16% in the rest of Europe and 10% in Asia Pacific, and it is managing client assets of CHF 2,233 billion. UBS shares are listed on the SIX Swiss Exchange, the New York Stock Exchange (NYSE) and the Tokyo Stock Exchange (TSE), where it aims to delist in the near future. The Group’s long-term ratings are: Moody’s Aa3, Standard & Poor’s A+, Fitch Ratings A+.

The vision of UBS is to become the leading, client-focused global bank. This involves becoming economically profitable in every segment, market and business where UBS operates, and becoming the top tier-bank in every growth region. Strategically UBS aims to transform the way it operates, which impacts on reputation, integration and execution, by re-focussing the business portfolio to fully capitalizing its strengths, impacting on clients, businesses and geographies and generating more value from the assets. Table 10 shows the evolution of the UBS vision and strategy from 2002 to 2010, with the respective CEO and chairperson at the time. From the time of Ospel, it has transformed from a product-based company to a client-based company, focussing on key clients to generate more value.

<table>
<thead>
<tr>
<th>Year</th>
<th>Vision</th>
<th>Strategy</th>
<th>Chairperson</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>The leading client-focused global bank.</td>
<td>Wealthy investors, institutional and corporate clients, Switzerland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td>Kaspar Villiger</td>
<td>Oswald Gründer</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td>Client-focus, wealth and asset management, investment banking services, value creation for the shareholders, economically profitable</td>
<td>Peter Kurer (Feb 2009)</td>
<td>Marcel Rohner (Feb 2009)</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
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<td></td>
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<tr>
<td>2005</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>Wealth management, asset management and investment banking and securities trading – as well as retail and corporate banking in Switzerland.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td>One of the world’s pre-eminent financial firms.</td>
<td></td>
<td>Peter A. Wuffli (Jul 2007)</td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td>Offer products and services via different channels, organic growth.</td>
<td>Marcel Ospel (Apr 2008)</td>
<td></td>
</tr>
</tbody>
</table>

Table 10. Evolution of the UBS vision and strategy, with the top management in charge during 2002-2010.

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70 Invested assets in December 31st, 2009, including all client assets managed by or deposited with UBS for investment purposes.
3.7.2 UBS: stakeholders

Based on its vision of being a leading, client-focused global bank, the UBS is interested in the concerns and expectations of a diverse group of stakeholders, ranging from clients, investors and employees, as well the communities in which it has a presence and the regulators. The financial crisis emphasized that “success depends upon behaving responsibly towards, and interacting honestly and transparently with the stakeholders”\textsuperscript{71}. Most of all, UBS aims to create long-term value and sustainable shareholder returns, which has been a fundamental result of a lesson learned from the financial crisis. Taking stakeholders into account and moving the short-term focus to long-term thinking and sustainable banking has been the key for the UBS turn-around. The first challenge was earning the trust of stakeholders, so that the UBS would be able to create sustainable earnings and long-term shareholder value. The expectations of clients and other stakeholder are heightened, and the demand and supply for products needs to be met, therefore client focus is very important for a profitable business.

Today, UBS focuses on high net-worth clients. There is a wide range of clients, from government to families around the world, who are served through three businesses: Wealth Management and Swiss Banking, Global Asset Management and Investment Bank. Wealth-management businesses are separated into the Americas and the rest of the world. The first provides advice-based relationships through financial advisors to high net-worth and ultra-high net-worth clients, core affluent individuals, families in the US and Canada, and the business booked in the US. The latter serves high net-worth and ultra-high net-worth individuals around the world in more than 40 countries outside the Americas. In addition to this, the domestic private and corporate client business is built under the wealth management and Swiss banking business. It has a leading position across its client segments in Switzerland. Global Asset Management is diversified across regions, capabilities and distribution channels. The asset classes include equities, fixed income, currency, hedge fund, real estate, infrastructure and private equity investment capabilities that can also be combined in multi-asset strategies. The fund services provide legal support for fund set-up, and accounting and reporting support for all retail and institutional funds. The third business, Investment Bank, provides securities and other financial products, and conducts research in equities, fixed income, rates, foreign exchange and precious metals. The advisory services are also provided under investment banking. The client groups consist of corporate and institutional clients, governments, financial intermediaries and alternative-asset managers and private investors.

The UBS has 64,000 employees of 150 different nationalities in 57 countries across the globe. Due to the financial crisis, the number of employees was decreased from 83,560 at the end of 2007 to 65,233 at the end of 2009 through restructuring and divestments. Together with this

\textsuperscript{71} Annual Report 2009:58 Corporate Responsibility
restructuring, however, engaging, developing and retaining a high-impact workforce was a priority for the UBS in 2009. The expertise, talent and commitment of the firm’s employees are needed in order to provide competitive strength in the financial services industry. Like other large global banks, UBS invests in its workforce to ensure that the right skills and experience are in place to meet client needs and to grow the businesses, aiming to be employer of choice, to provide attractive talent development and to promote equal rights in a working environment free from discrimination. Table 11 shows the change in the number of employees between 2002 and 2009. The number grew from 2003 until 2007, but has since reduced dramatically by 16.5%.

<table>
<thead>
<tr>
<th>UBS</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td># Employees (FTE)</td>
<td>69'061</td>
<td>65'929</td>
<td>67'424</td>
<td>69'569</td>
<td>78'140</td>
<td>83'560</td>
<td>77'783</td>
<td>65'233</td>
</tr>
</tbody>
</table>

Table 11. Number of UBS employees between 2002 and 2009.

Beside of its wide group of clients, served globally by multinational teams, UBS has a broad shareholder structure. At the end of 2009, UBS had 363,060 shareholders, of which 97.5% were private investors and 2.5% institutional investors. The majority of the shareholders (90.3%) were Swiss, and only 9.7% foreigners. The shareholders owned 3,558 million shares, of which 37% (1’314 million) were unregistered. The most significant shareholder, Chase Nominees Ltd from London, increased its stake in the company from 7.19% to 11.63% in 2009, while DTC (Cede & Co) from New York had holding of 8.42% in 2009. Its ownership has decreased each year since the credit crisis. The Mellon Bank NA from Everett holds 3.21% and Nortrust Nominees London 3.07%. The other major shareholders since end of 2009 were the Capital Group Companies, Inc. from Los Angeles with a holding of 5.09% on January 1st, 2010 and BlackRock Inc. from New York, with a holding of 3.45% of the total share capital in December 2009.

The public is seen as the society and the community where the company operates. With regard to the community, the UBS continued to address key stakeholder expectations and concerns in 2009 by contributing to the fight against money laundering, corruption and terrorist financing (AML), implementing an environmental management program and a human rights statement, and by undertaking community investment activities. The UBS has an ongoing dialogue with external parties in the approach to corporate responsibility. In 2009, communications with experts and stakeholders covered a series of topics ranging from general responsibility to specific environmental and social issues pertaining to particular industries. The negative publicity in the media due to the bonus payments made during the crisis has resulted in a low level of awareness of these activities in the public, however.
3.7.3 UBS: corporate governance

UBS is listed on both the SIX Swiss Exchange and the New York Stock Exchange (NYSE). It thereby needs to comply with the corporate governance rules in the both market places, such as those related to the board structure and compensation, and providing sufficient transparency of the compensation paid to members of the board of directors and senior management. The UBS meets these standards, and additionally complies with the majority of NYSE standards for US domestic issuers. With good corporate governance, UBS aims for better long term corporate performance and improved shareholder value.

In addition to stock market-related external governance rules, regulators are revising the regulatory framework of the financial services industry, and are expected to tighten the requirements. The G-20 stipulated the broad guidelines of re-regulation to counter the crisis and to avoid future meltdowns. Other regulators impacting on the financial services industry in Switzerland are the Financial Stability Board, the International Monetary Fund and the Basle Committee on Banking Supervision. There is still a lack of co-ordination in these activities, and debate continues. The Swiss Financial Market Supervisory Authority (FINMA) has already introduced increased capital requirements and liquidity constraints for the largest Swiss banks. One alignment with the new regulations is the increased value of the role of risk management. As such, however, it won’t solve the problem. The executives and board of directors need to ensure proper internal governance and to obtain access to the complete picture and a full understanding of the risk exposure across the globe and the businesses the company is involved with.

The UBS operates under a strict dual-board structure: the Board of Directors (BoD) and the Group Executive Board (GEB). The responsibilities are shared between chairperson and the CEO. The chairperson leads the board of directors with the ultimate tasks of deciding the strategy of the company, supervising and electing executive board members and approving the financial statements. These tasks are managed under separate committees, however, which are co-ordinated by the chairperson. The CEO manages the business at the operational level, and recommends and implements the company’s strategy. The roles and responsibilities of the chairperson and the CEO are shown in Table 12. The shareholders elect each board of directors at the AGM based on the proposals of the board’s Corporate Governance and Nomination Committee, and confirm their membership on an annual basis. The Chairperson of the UBS chairs the Governance & Nomination Committee, which, in addition to the process of appointing new board members, also manages the succession of the CEO. One of the main tasks of the chairperson, not shown in Table 12, is therefore the succession planning. However, the chairperson himself or herself is internally appointed by board of directors, together with vice-chairperson, committee members and company secretary who acts as the secretary to the board meetings. The minimum service time of the directors is expected to be
three years, although the age limit is 65 years, but can be exceptionally extended to 70\textsuperscript{72}. The approach is consistent with the one in Credit Suisse.

<table>
<thead>
<tr>
<th>Chairperson</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>● decides on the strategy of the Group upon the recommendation of CEO</td>
<td>● management of business</td>
</tr>
<tr>
<td>● supervision over the management and elects GEB members</td>
<td>● implementation and the results of the firm's business strategies</td>
</tr>
<tr>
<td>● approval of financial statement</td>
<td>● coordinates BoD tasks</td>
</tr>
</tbody>
</table>

Table 12. Responsibilities of the chairperson of the board and the CEO in the UBS (2010).

With the exception of current UBS Chairman, Kaspar Villiger, all members of the board are independent. For a director to be considered independent he may not have any material relationship with UBS, either directly or as a partner, controlling shareholder or executive officer of a company that has a relationship with UBS, or have been employed by the company during the last three years. In connection with his service on the board, Villiger has a full-time employment contract with the UBS. The board meets as often as business requires, but at least six times a year. A total of 23 meetings were held in 2009, of which seven included executive board members.

Of its 13 board members, 7 (54\%) are from Switzerland or the EU, 2 members are solely US citizens and 3 members have dual-nationality, US or Canadian and European. There are no representatives from Asia or Latin America on the board. Most of the members exhibit characteristics similar to those of a chairperson: white, male, at least 50 years old, although there are two female representatives, providing gender diversification. None of the CEOs or Chairmen was appointed from outside of the firm during 2002 and 2009. The composition of board is shown in Appendix 6, and the detailed bios of the CEOs and Chairmen in Appendix 5. The know-how of most of the members is well focused and targeted to the purposes of a bank, with degrees in law or economics and experience in the banking or insurance business. Sergio Marchionne, whose experience was from Fiat, i.e. car manufacturing, did not stand for re-election at the 2010 AGM.

The board assesses its own performance at least once per year, and the performance of each of the committees. This review seeks to determine whether the board is functioning effectively and efficiently, and it is conducted together with a self-assessment of individuals by the

\textsuperscript{72} "Articles of Association of the UBS AG"
Governance and Nominating Committee (GNC). The board of the UBS has the following committees.

In addition to the performance assessment responsibility, the appointment of new board members and CEO succession planning, the Governance and Nominating Committee (GNC) is mandated to support the board to establish best practices in corporate governance across the company. The committee may use external advisors. It met 11 times in 2009.

At board level, the UBS has separated CEO succession planning and corporate governance from the other HR functions. The Human Resources and Compensation Committee (HRCC) is responsible for providing support in the setting of guidelines on compensation and benefits, which was a significant task in 2009, and the HRCC therefore met 14 times. The committee approves the total individual compensation of the Chairman and the executive board members, as well as the company secretary and Head of the Group Internal Audit. Together with the Chairman, it provides the board with a proposal for total individual compensation for the independent directors and scrutinizes the executive performance assessment and the succession planning of the executive board members other than the CEO. The HRCC also reviews the compensation disclosure included in this report. The committee uses external advisors.

The Corporate Responsibility Committee (CRC) supports the review and assessment of corporate responsibility expectations of its stakeholders and the reputation related to it. Headed by the Chairman of the CRC, the committee includes two additional members. It only met twice in 2009, but this was together with executive board and other senior managers who conduct the advisory panel to implement the recommendations.

The bank’s risk management and control framework review is supported by The Risk Committee (RC). This includes the operational and credit risks based on the location, funding and liquidity risks, the balance sheet management and any consequent reputational risk. Part of the responsibilities is to support the board in the establishment of the bank’s risk capacity and risk appetite, together with overseeing the bank’s risk profile. The Group executive board is supposed to provide the committee with relevant information. The committee met 14 times in 2009.

The Audit Committee (AC) comprises fully independent board members, and thereby excludes the Chairperson of the Board, Kaspar Villiger. All the members are required to be financial experts and having accounting and financial management expertise according to the rules established by the US Sarbanes-Oxley Act of 2002. The main responsibilities are monitoring the work of the auditors who audit the financial statements, and having oversight over accounting policies and financial reporting, and disclosure controls and procedures. Annual and quarterly reports are made under the Committee review. It also assesses external auditors and their lead audit partner. The AC met 14 times in 2009.
During the financial crisis, the UBS constituted the Strategy Committee on 1 July 2008, taking over the strategic responsibilities of the former chairperson’s office. It was only intended to be a temporary committee. While it met extensively in 2008, no meetings took place in 2009, and it was disbanded on the 25th June 2009, with its responsibilities being transferred to the board.

The highest level of governance is with the shareholders at the Annual General Meeting (AGM). According to Corporation Law, the shareholders have the final say on the composition of the board. They may vote on the appointment and removal of directors and statutory auditors, the approval or rejection of the annual business report, the setting of dividends and any amendment to the articles of association, including changes to the share capital. Although the current board nominates its members, counter-motions from the shareholders may sometimes take place. The shareholders’ meeting may also remove directors and auditors, provided the matter has been included on the agenda within the stipulated period.

With regard to indexes that measure the sustainability of the UBS, as confirmed by rating agencies and index providers, the UBS has participated for years in the FTSE4Good, the Dow Jones Sustainability World and the Dow Jones STOXX Sustainability indexes. The UBS scored well in the social dimension last year, and was one of the financial sector’s leaders in the environmental dimension in the Dow Jones Sustainability Index (DJSI), but, due to the financial crisis, did not score well in the economic dimensions. The UBS therefore dropped out of the DJSI STOXX index. Other indexes, such as climate strategies within banks, as published by Sustainable Asset Management (SAM), showed the UBS ranked among the top 5% of banks.

3.7.4 UBS: compensation setting process

Before 2008, the Chairman of the board, Marcel Ospel took a leading role in the mid- and long-term strategic planning, the selection and supervision of the CEO and the members of the executive board (GEB), mid-term succession planning and the development and shaping of compensation principles. A minimum of half of the annual incentive compensation awarded to senior executives took the form of UBS shares that vest or became unrestricted over five years. The attempt was to ensure focus on long-term decisions and actions, and to aid the retention of executive talent. The cash component of fixed and variable amounts in Swiss francs in the total compensation was still significant, however, supporting short-term performance goals.

Since then, the practice has changed, and the responsibilities have been separated under various board committees. At the senior executive level, the Human Resources and Compensation Committee (HRCC) regularly reviews the individual employment agreements.
These contracts provide for a general 12-month period of notice to protect UBS's franchise and competitive position. There are special agreements for a Chairman and Vice Chairman for HRCC, which reflect the fact that these officers are appointed by shareholders for a defined term. None of the agreements between executives or directors provide for any additional severance payment in case of termination, apart from contractual salary, pension and bonus entitlements, which can still represent a remarkable amount.

The total compensation recommendation and approval process for the chairperson and CEO follows the matrix shown in Table 13. The Chair of the HRCC recommends a compensation for a chairperson on approval by the HRCC. The CEO’s compensation needs to be approved by the board, but is recommended by the HRCC. The CEO does not determine his own compensation, but recommends the compensation for his direct subordinates, i.e. the executive board, for approval by the HRCC. The compensation is benchmarked against the relevant labour market, which, for senior executive compensation, the UBS had defined as: the Bank of America, Merrill Lynch, Barclays, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan Chase, Morgan Stanley and RBS.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairperson</td>
<td>Chair of HRCC</td>
</tr>
<tr>
<td>CEO</td>
<td>Chair of BoD/HRCC</td>
</tr>
<tr>
<td>GEB</td>
<td>CEO</td>
</tr>
</tbody>
</table>

Table 13. Compensation-setting authorities in UBS.

One of the most important responsibilities of the HRCC is to decide upon further approval by the board for the final outcome - the actual amount of variable cash and equity compensation to be awarded to executive board members for performance. It is a combination of a detailed and balanced review of firm’s performance, the relevant business divisions and the specific individual’s performance. At the beginning of the year, each UBS senior executive agrees individual objectives and KPIs. Among other things, the performance is measured by economic profit and other financial and non-financial factors, such as leadership effectiveness, strategy execution, and impact on reputation. Individual performance assessments are conducted by the board against these objectives, which have a focus on clients, economics, technical expertise, leadership, cross-business cooperation, strategic impact, risk management and personal objectives. This 360-degree assessment is both qualitative and quantitative, and the outcome impacts on the total compensation. In consequence, compensation levels may vary from year-to-year. Contractual and related commitments and relevant market data also applies. The final decisions regarding compensation for executives reflect the desire of both the management and the HRCC to appropriately recognise performance in the light of absolute and relative overall performance. Shareholders have an opportunity to express their views through a non-binding advisory vote.
on the compensation report during the AGM, but the ultimate decision on compensation is legally within the powers of the board.

On behalf of the board, the HRCC reviews the Total Reward Principles and submits them to the board. These include the design of the total compensation framework, the compensation strategy, the programmes and the plans. Significant changes or new plans require the board’s approval. In accordance with the changing regulatory environment, compensation structures are reviewed with human resources (HR) and the risk management function to ensure that they do not encourage excessive or unnecessary risk-taking. Co-operation also takes place with the Governance and Nominating Committee and the full board of directors on reviewing the succession plans for GEB members, including the CEO. In 2009, Sally Bott chaired the committee, which consisted of Bruno Gehrig and Helmut Panké. Hostettler & Partner AG provided independent external advice to the committee, and Towers Perrin supported the committee with market data during the year.

### 3.7.5 UBS: compensation components

The compensation structure went through major restructuring due to the crisis. The most significant change was in the compensation for the chairperson, who, in principle, had not received a variable, performance-dependent cash bonus in the old style since 2009, but received a fixed basic salary comprising cash and the right to receive a pre-determined number of UBS shares that vest after four years. The number of shares is supposed to keep the chairperson’s pay aligned to sustainable added value. The shares remain subject to forfeiture if there is a loss-making year during the vesting period, however. Accordingly, the remuneration of the other independent board members consists of an annually-reviewed fee and does not include any variable component, and is therefore not dependent on the financial performance. Their agreements do not provide benefits on the termination of their term of office. Fees are proposed by the chairperson to the HRCC and to the full board for approval. They are paid 50% in cash and 50% in sales-restricted UBS shares, but members can elect to have all of their remuneration paid in blocked UBS shares. These shares are attributed with a price discount of 15% and are restricted from sale for four years from the date they are granted. Typically, the independent board members have a full-time job in addition to their UBS mandate and other board memberships. The fee from the UBS is additional to the income received from elsewhere. The sole exception is the chairperson, who has a full-time agreement.

The executive board members (GEB) are entitled to a fixed salary, and may receive variable compensation in cash and equity. Besides this, they receive pension contributions, benefits and allowances. Basic salaries are fixed, and are reviewed annually by the HRCC. Any adjustments are limited to significant changes in market rates or to movements in the foreign exchange (FX) rate relative to the Swiss franc. During 2009, the banking industry faced
increasing regulatory pressure to ensure that salaries comprise a sufficient proportion of total remuneration, while still allowing a firm to operate a flexible incentive policy. UBS increased employee basic salary levels in certain parts of the business where this was deemed both necessary and appropriate. Otherwise, the basic salaries were only adjusted in salaries paid in currencies other than the Swiss franc, due to movements in the FX rates. The general pension plan in Switzerland is made up of two defined contribution elements, and is capped: one plan covering basic salary and the other covering variable compensation. Management in the UBS shares the same retirement plan benefits as all other employees.

The variable compensation element was redefined during 2009. The UBS introduced many new incentive plans, such as the Cash Balance Plan (CBP), the Performance Equity Plan (PEP) and the Incentive Performance Plan (IPP), which are defined as follows. Table 14 shows an overview of the compensation structure with these elements for the CEO and the chairperson.

<table>
<thead>
<tr>
<th>Pay</th>
<th>Chairperson</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Base salary and fixed quantity of shares</td>
<td>Base salary</td>
</tr>
<tr>
<td>Variable Cash</td>
<td>No</td>
<td>Cash Balance Plan (CBP)</td>
</tr>
<tr>
<td>Variable Equity</td>
<td>No</td>
<td>Performance Equity Plan (PEP) Incentive Performance Plan (IPP)</td>
</tr>
</tbody>
</table>

Table 14. Pay mix of the chairperson and the CEO in the UBS in 2009 onwards.

The Cash Balance Plan (CBP) only applies to GEB members to link performance over the long-term through a cash deferral system to ensure that possible risk events are captured. This means that instead of an annual bonus, the entire possible cash incentive is only paid out over a three-year period. Generally, 50% of a GEB member’s variable incentive is delivered via the CBP. A minimum of 40% of a cash incentive award is deferred, which allows a maximum payout of 60% per year subject to an additional cash-cap. The deferral is paid out during the following two years, subject to forfeiture in certain events, including termination for just cause, financial losses or behaviour harming reputation. If an executive leaves the UBS, any remaining balance in the plan will be kept at risk until the time called for by the plan.

Variable equity plans for GEB members consists on Performance Equity Plan (PEP) and Incentive Performance Plan (IPP). They comprise the remaining 50% of their variable incentive award. The UBS does not grant options, except in special circumstances. The first plan runs over three-year time period, focusing on creating mid- to long-term added value based on the strategic business plan. The restricted performance-based shares are granted at
the beginning of performance period, and they cliff vest after three years, subject to the achievement of the predefined economic profit (EP)\(^{73}\) and total shareholder return (TSR)\(^{74}\) targets. The grants can vest between zero and two times. EP is only realized when the return on capital achieved that is greater than the firm’s cost of capital. TSR is measured over a three-year period relative to the Dow Jones Banks Titans 30 Index\(^{75}\). GEB members have to be employed by the company in order to be eligible for vesting. The awards are also subject to forfeiture in certain circumstances, including in the event of certain harmful acts and reputational risk.

GEB members and certain other senior employees are also eligible for the Incentive Performance Plan (IPP), which is designed to support alignment to long-term sustainable performance and the value of UBS shares. It is also used for retention purposes. Participants are granted a specific number of restricted-performance shares that cliff vest between one and three times the grant after a five-year time period. The vesting depends on the achievement of the share price target at the end of the five-year performance period, adjusted for dividend. Entitlement and forfeitures are subject to same conditions as outlined above in relation to PEP awards.

In addition to fixed and variable pay, there is an Equity Ownership Plan (EOP), which provides the eligible employees with the possibility of receiving a part of their annual variable compensation above a certain threshold in the form of a mandatory EOP award. This award can be in UBS shares or in notional UBS shares.

Although a number of new instruments were introduced in the UBS, they are based on the fixed basic salary, variable cash and equity. These basic instruments are reviewed and modified to better fit the current regulatory environment with deferrals and additional performance conditions.

3.7.6  UBS: changes in compensation design

The previous chapter introduced the compensation components of the UBS. This chapter will outline major changes to them due to the financial crisis. At the start of 2009, in response to lessons learned from the financial crisis, the UBS acted as a forerunner in implementing a new compensation model, which included an executive compensation framework. It

\(^{73}\) Economic profit is a market-recognized standard for measuring risk-adjusted profit. It is calculated by subtracting the cost of equity from the annual net profit attributable to UBS shareholders.

\(^{74}\) Total shareholder return measures the total return of a UBS share with both the dividend yield and the capital appreciation of the share price.

\(^{75}\) Dow Jones Banks Titans 30 Index\(^{©}\) comprise the top 30 global, listed companies in the banking sector, as defined by Dow Jones. They are assessed in the index by market capitalization, revenues and net profit.
introduced significant deferrals for senior management, emphasized compensation at risk and integrated the economic profit to compensation accruals. Thus, for the 2009 performance year, senior management was rewarded based on longer-term risk-adjusted performance. With the Performance Equity Plan, the Cash Balance Plan and Incentive Performance Plan, a key long-term performance and retention tool was introduced in 2010. For some roles, the balance between fixed and variable pay was improved by shifting variable-to-fixed part.

During 2009, a further remuneration review took place introducing an increase in the amount deferred into UBS shares for higher-paid staff in the spring of 2010 for the 2009 performance year, a reduction in the fixed threshold, a limit on the amount of the incentive that may be paid out immediately in cash and the inclusion of additional forfeiture provisions applying to unvested shares in the case of special events. In addition, the IPP with a five-year performance period was introduced for senior employees.

UBS believes that the compensation in 2009 complies materially with the relevant rules and guidelines issued by the G-20, FINMA, the US Federal Reserve, the UK FSA and other jurisdictions in which the UBS has a substantial presence. These rules require substantial deferrals into shares over a period of at least three year for senior management and risk takers in particular. These awards are also required to be subject to forfeiture in accordance to a future under-performance or the restatement of financial results.

3.7.7 UBS: the financial crisis

The UBS was severely affected by the financial crisis that unfolded in 2007 and worsened in 2008. It entered 2008 with significant legacy risk positions related to US real estate and other credit positions, which exceeded the firm’s risk-bearing capacity. The balance sheet was too large, and the systems of risk control and risk management that should have limited exposure had failed. The UBS incurred significant losses on the risk positions in 2008. It is argued that the UBS placed too much emphasis on growth, and not enough on controlling risks and costs. In particular, the main topics for blame are with regard to the compensation systems, performance targets and executive governance structures, with confusion about accountability and complex relationships between business divisions.

To support a turn-around, the top management was changed, and so was the compensation structure. The UBS introduced a new funding framework and improvements to the firm’s risk decision-making processes. In addition, the UBS wrote down positions in the investment bank’s fixed income, rates and currencies business that were related to the deteriorating

76 These events include material financial losses, restatement, breach of risk or compliance parameters, and reputational risk
conditions in the US sub-prime residential mortgage market in 2007. It had to ask the Swiss National Bank and the Swiss government for help in stabilising the bank. Long-term investors from the Government of Singapore Investment Corporation Pte Ltd (GIC) and an undisclosed investor in the Middle East subscribed to an issue of CHF 13 billion of new capital. In addition, UBS sold treasury shares and replaced its 2007 cash dividend with a stock dividend. Since then, the first quarters of 2010 have been profitable, and, as part of the recovery, the Swiss government exited its investment in UBS with a profit of CHF 1.2 billion.

3.7.8 UBS: summary

The UBS recognizes the importance of stakeholder - employees, clients, the public and shareholders. According to findings in CS, there is no clear linkage between benefits to stakeholders and compensation, other than through financial performance.

UBS was seriously affected by the credit crisis, but a successful business transformation managed to turn the business profitable again in 2010. To support this, it made changes in its top management, internal governance rules and risk management and introduced a new compensation model. However, although the responsibilities under former chairmen were separated into various cooperating committees, the audit committee and risk committee operated separately from the committees working on compensation issues. For instance, the Audit Committee, which had the deep dive into the figures, is comprised of fully-independent board members, and thereby even excludes the board chairperson. Most of the board members are employed by other companies outside their board mandates, and the time they can spend on a mandate is limited.

3.8 Cross-case findings

Eisenhardt (1989) argues that the cross-case analysis should preferably be used when searching for patterns. For her, the overall idea is to force the researcher to go beyond the initial impressions by using structured and diverse lenses on the data. In the following chapter, the descriptive statistics of compensation in Credit Suisse and the UBS are presented. The results of OLS regressions on the compensation of commonly-used determinants in the literature are then compared with the results from previous studies, shareholder wealth is analyzed and the results of the new stakeholder regression are shown. The data of Credit Suisse and the UBS is analyzed across the cases in order to identify similarities and differences. This analysis will serve as the basis for the conclusions and recommendations that will be set forth in the final chapter of this dissertation.
3.8.1 Compensation in Credit Suisse and the UBS

Current public criticism targets the disclosed compensation amounts for top executives and directors. It ignores the importance of the compensation structure and the combination of the different elements in total compensation, which are studied in this chapter. The summary statistics of CEO and chairperson annual compensation in CS and the UBS, hand-collected from annual reports, are presented here. Unlike the U.S., where publicly-listed firms were already required to disclose very detailed information on top executives’ compensation some years ago, CEO pay was lumped together with that of the total management team (TMT) in these case companies in Switzerland until 2006. The average of the TMT compensation is therefore used as a proxy for CEO compensation, which is one limitation of the study. One needs to be cautious with these figures, since there may be measurement error biases associated with aggregated data. When the highest-paid executive’s compensation is disclosed separately, and this executive is not the CEO, the amount is extracted from the aggregated figure before calculating the average. The compensation of the highest-paid director, which has typically been the chairperson, was already disclosed at the beginning of the research period, in 2002. Regulatory requirements for disclosure increased in 2008 as a result of the Transparency Act, which came into force in 2007 and required companies to disclose detailed compensation information, including a comparison with the previous year. The most reliable and comprehensive figures are therefore those from 2007 onwards.

The pay is measured based on the total compensation figures disclosed in a particular year. These include basic salary, the short-term and long-term incentives granted, pensions and taxable allowances, such as child, housing and general expense allowances. Swiss law limits the total salary that can be covered for pension purposes by a single person to CHF 820,800 (2009), therefore, the amounts of pension are not enormous in the total figures.

The value of the shares under long-term incentives is typically based on the time at which the preparation of reports took place, for example, the UBS uses the average price of UBS shares over the last ten trading days in February, before they publish the annual report. Share options, if granted, are shown at their fair value at grant under long-term incentives. The wealth change implied by the stockholdings of the director or executive are excluded, since they often reflect the compensation of previous years’, or the individual’s own investments, although the figures are shown separately.

Another limitation of the study is the high turnover of incumbents in the CEO and chairperson roles. The compensation data used in the regression analysis is taken at the end of each year, and only includes those who were active in the payroll at the time. Given that both companies have full-time executive chairmen, they also received salaries. At the end of the research time, from 2002 to 2010, CEO and chairperson tenure decreased due to the financial crisis. Some of the incumbent changes took place mid-year, but most of them during the AGMs. The compensation changes are therefore not necessarily related to the same incumbents.
shows the respective CEO and chairperson at any particular time. Marcel Ospel and Walter Kielholz had the longest tenures as full-time chairmen in the UBS and CS board. Oswald Grübel served as a CEO of CS between 2003 and 2007, but, after his retirement, was asked to join the UBS as a CEO in 2009. Other limitations to the consistency of the data are that CS had CEO duality until 2003: Lukas Mühlemann served as both CEO and Chairman. Grübel was asked to succeed him in a CEO function together with Mack, but took on a sole charge at CS a year later. For further information on CEOs and chairmen, the bios of the respective incumbents are listed in Appendix 3 and Appendix 5 showing their exact periods of office and providing additional information about their career, education and board memberships.

<table>
<thead>
<tr>
<th>Year</th>
<th>CS Chair</th>
<th>CS CEO</th>
<th>UBS Chair</th>
<th>UBS CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Lukas Mühlemann</td>
<td></td>
<td>Marcel Ospel</td>
<td>Peter A. Wuffli</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>Walter B. Kielholz (until 4/09)</td>
<td></td>
<td>Peter Kurer (2/09)</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>Oswald J. Grübel, John J. Mack</td>
<td></td>
<td>Kaspar Villiger</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td>Oswald J. Grübel (until May 2007)</td>
<td></td>
<td></td>
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<tr>
<td>2006</td>
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<td>2010</td>
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</table>

Table 15. CEOs and chairpersons in Credit Suisse and UBS between 2002 and 2010.

CEO celebrity status may have an impact on the compensation level (see Hayward et al. 2004). Although this is relationship is not statistically studied in this research, the CEOs of both CS and the UBS have typically been respected and have ranked high in the Bilanz CEO Rating - even during years with poor performance. Among the SMI index companies, the CS CEO was ranked at 13th and the UBS CEO at 10th place in 2008. A year earlier, the CS CEO had been ranked as 5th and the UBS CEO as 19th. Based on power, the UBS CEO Oswald Grübel was ranked at 4th and the CS CEO Brady W. Dougan at 14th place in 2009.77 The Vice-chairman of CS, Peter Brabeck-Lethmathe, who holds mandates in Nestle and Roche besides CS, ranked in first place, and the CS board member Ernst Tanner, who was a key person in Swatch, in the 19th. Other CS board members in the list were Urs Rohner (51st), Hans-Ulrich Doerig (24th) and Walter Kielholz (24th). The respective members of the UBS board ranked as follows: Peter Voser (10th), Sergio Marchionne (18th), Kaspar Villiger (42nd), Bruno Gehrig (55th) and Rainer-Marc Frey (74th). Grübel was listed in the first place in the top banker list, and Dougan followed him in second place. Marcel Ospel accumulated significant wealth during his career, and was listed as the 290th wealthiest person in Switzerland with a fortune of CHF 150 million.

Compensation levels

CEO and chairperson compensation in CS and the UBS is handled by board committees that focus on remuneration, with the support of independent compensation consultants for peer analysis. American banks are a significant part of the peer group, showing that the compensation and equity plans have been basically adopted from that market. Both companies have implemented new regulatory requirements, and intend to stay on top of the development. The levels of compensation and the changes to them compared to the average worker’s compensation in the financial services sector for simple routine jobs are described in the following. The data for average worker compensation has been obtained from the Swiss Earnings Structure Survey conducted by Swiss Federal Statistics Office. Figures calculated based on the annual wage index changes are used for the years where data is missing. The CEO and chairperson compensation data compared to average worker compensation for CS is summarised in CHF in Table 16 over the period of 2002-2009, and in Table 17 for UBS. The compensation figures shown in Tables 16 and 17 between 2002-2009 do not include any exercises of options or sale of shares, but estimated their values at grant.

Total compensation levels are highly variable year-on-year, as they include performance-driven components. The relative weight of the components therefore varies significantly. In 2008, fixed pay was a major part of the total compensation. The data suggests that the level of chairperson compensation decreased substantially (CS: -18.2%; UBS: -94%) between 2002 and 2009 in terms of the published figures, which have not been corrected for inflation. The difference is only slightly higher if inflation is corrected for using the GDP deflator (CS: -25.5% and UBS: -94.6%). Inflation has been relatively low in Switzerland, and the GDP deflators had grown from 101.269 to 110.968 78 by 2009. At the beginning of the study period, the chairperson’s total compensation in nominal terms (real terms)79 was: CHF 8.0 million (CHF 8.7 million) in CS, and CHF 11.3 million (CHF 12.4 million) in the UBS: whereas the respective figures were CHF 6.5 million and CHF 0.7 million in 2009. The CS CEO and chairperson roles were combined in 2002. The compensation figure of CHF 0.7 million for the Chairman of the UBS, Kaspar Villiger, is pro-rated from Feb 15th onwards based on the date he assumed this role. He was offered a basic salary of CHF 2 million, but voluntarily decided to reduce it to CHF 0.85 million. According to the new compensation framework of the UBS, he would have been eligible to receive a pre-determined, fixed number of UBS shares in addition to his basic salary, but he decided not to accept for a share award. Before 2009, the basic salary of the UBS chairman remained constant at CHF 2 million, combined with a significant upside potential for both short-term and long-term variable pay. The direction has been similar in CS, but without any major changes in structure up to 2009, although the pay level decreased during the crisis.

78 The GDP deflator is derived by dividing the current price GDP by the constant price GDP and is considered to be an alternate measure of inflation. 2003: 102.281; 2004: 102.865; 2005:102.976; 2006: 105.099; 2007: 107.753; 2008: 110.087
79 Nominal figures shown in Table 16 and Table 17
The CEO’s total nominal compensation (real compensation) increased in CS by 141.3% (119.9%) from 2002 to 2009. In the UBS, on the other hand, it decreased by -72% (-74.4%). At the beginning of the study period, the CEO’s total compensation in nominal terms (real terms) in CS was CHF 8.0 million (CHF 8.7 million) and CHF 10.7 million (CHF 11.7 million) in the UBS, whereas the respective figures were CHF 19.2 million and CHF 3 million in 2009. Both the UBS and CS conducted structural changes in compensation design and moved the weight of incentives from a short-term to a long-term focus. Due to the change, the combination of CEO salary and bonus decreased by -84.3% (-85.7% real terms) in CS, and by -53.9% (-58 % real terms) in the UBS. The trend seems to be moving towards higher portions of long-term compensation plans when considering CEO pay, and towards a higher fixed portion together with reducing variable opportunity when it comes to chairperson pay. As an example, all the variable compensation for the CS CEO in 2009 was deferred, and was subject to the performance criteria for SISUs and APP awards. The financial crisis and incumbents changes in the CEO and chairperson positions explain some of the variation in the annual growth rates of compensation. The compensation decreased dramatically during the crisis, but increased back to its previous levels during 2009 for the CS CEO, with a smaller increase for the chairperson. The UBS top roles did not see a similar recovery, but this was partly due to voluntary agreements.

The growth trend of average worker compensation diverges clearly from the development of total compensation of either the CEO or the chairperson, as it is not that volatile. If all the nominal monetary variables are deflated to real francs in the year 2009, the overall increase in the financial services sector has been 2%, with a mean total compensation of CHF 74,039 in 2009, whereas it was CHF 72,599 in 2002, and the increase in nominal terms has been 11.8%. This is a fairly moderate increase compared to the CEO or chairperson compensation levels, although they both have decreased significantly by 2009. These figures are not comparable to the CEO and chairperson roles, which are far more complex and strategic than these simple routine jobs, but they can be used to show the development of the compensation ratios between the CEO, the chairperson and the average employee. The ratio based on nominal figures between the CS CEO and the mean worker total compensation was 120 in 2002, but increased to 267 in 2009, mainly due to increase in executive long term incentive plans. The respective ratios decreased in the UBS from 162 to 41. The companies did not pay variable payments during the financial crisis, and the ratios fell to 40 (CS) and 25 (UBS) in 2008.

The pay levels of directors other than the chairperson are not shown in the tables, but can be described briefly as follows. The pay for a chairperson of the Compensation Committee, who approves the compensation for the Chairperson of the Board, has been relatively stable. Aziz Syriani in CS received a fixed basic fee of CHF 350k during the last three years (2007-2009), variable cash of CHF 225k and shares with a value of CHF 227.5k at grant, totalling CHF 750k, whereas the basic fee in the UBS was CHF 325k, although the retainer varied from CHF 650k to 300k. The UBS compensation committee chairs earnings were as follows: Rolf A. Meyer earned a total of CHF 975k, Joerg Wolle CHF 625k and Sally Bott 875k through a
one-off payment in 2009. The chairs of Compensation Committee typically earn more than other directors, except for risk and audit, which are seen as very important functions.

<table>
<thead>
<tr>
<th>Figures as at Dec 31st in CHF</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change from 2002 to 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEO salary</strong>*</td>
<td>7'958'225</td>
<td>3986667</td>
<td>11733333</td>
<td>7700000</td>
<td>10462500</td>
<td>3400000</td>
<td>1250000</td>
<td>1250000</td>
<td>-84.3%</td>
</tr>
<tr>
<td><strong>CEO salary + bonus</strong>* and % of change**</td>
<td>7'958'225</td>
<td>14035414</td>
<td>21383333</td>
<td>16933333</td>
<td>18925000</td>
<td>21407000</td>
<td>2860000</td>
<td>19200000</td>
<td>141.3%</td>
</tr>
<tr>
<td><strong>CEO long term comp</strong>*</td>
<td>0</td>
<td>9'782'080</td>
<td>9'650'000</td>
<td>9'233'333</td>
<td>8'462'500</td>
<td>17'900'000</td>
<td>0</td>
<td>17'870'000</td>
<td></td>
</tr>
<tr>
<td><em><em>CEO total comp.</em> and % of change</em>*</td>
<td>7'958225</td>
<td>14035414</td>
<td>21383333</td>
<td>16933333</td>
<td>18925000</td>
<td>21407000</td>
<td>2860000</td>
<td>19200000</td>
<td>141.3%</td>
</tr>
<tr>
<td><strong>Chairperson salary</strong></td>
<td>5'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>1'778'409</td>
<td></td>
</tr>
<tr>
<td><strong>Chairperson salary + bonus and % of change</strong></td>
<td>7'958'225</td>
<td>5000000</td>
<td>8000000</td>
<td>7100000</td>
<td>9000000</td>
<td>8500000</td>
<td>2000000</td>
<td>4128409</td>
<td>-48.1%</td>
</tr>
<tr>
<td><strong>Chairperson long term comp</strong></td>
<td>0</td>
<td>5'674'140</td>
<td>4'000'000</td>
<td>5'000'000</td>
<td>7'000'000</td>
<td>6'100'000</td>
<td>0</td>
<td>2'350'000</td>
<td></td>
</tr>
<tr>
<td><strong>Chairperson total comp and % of change</strong></td>
<td>7'958'225</td>
<td>10698140</td>
<td>12024000</td>
<td>12124000</td>
<td>16024000</td>
<td>14624000</td>
<td>2024000</td>
<td>6506504</td>
<td>-18.2%</td>
</tr>
<tr>
<td><strong>Worker's total comp. and % of change</strong>*</td>
<td>66'180</td>
<td>66369</td>
<td>66600</td>
<td>67370</td>
<td>71220</td>
<td>71998</td>
<td>72744</td>
<td>74039 (est.)</td>
<td>11.8%</td>
</tr>
<tr>
<td><strong>Worker's real total comp. and % of change</strong>*</td>
<td>72'599</td>
<td>72135</td>
<td>71997</td>
<td>72755</td>
<td>75400</td>
<td>74313</td>
<td>73835</td>
<td>74039 (est.)</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>GDP Deflator</strong></td>
<td>101.27</td>
<td>102.28</td>
<td>102.87</td>
<td>102.98</td>
<td>105.10</td>
<td>107.75</td>
<td>110.09</td>
<td>110.97</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>Ratio between CEO and worker</strong></td>
<td>120</td>
<td>211</td>
<td>321</td>
<td>251</td>
<td>266</td>
<td>297</td>
<td>40</td>
<td>267</td>
<td>121.8%</td>
</tr>
<tr>
<td><strong>Ratio between Chairperson and worker</strong></td>
<td>120</td>
<td>161</td>
<td>181</td>
<td>180</td>
<td>225</td>
<td>203</td>
<td>28</td>
<td>90</td>
<td>-24.8%</td>
</tr>
</tbody>
</table>

Table 16. CEO and chairperson compensation during CS in 2002-2009 and comparison with the average worker’s compensation. Total compensation includes: cash, bonus, long-term plan, pension and benefits such as child and housing allowance

*For the years 2002-2006, the average of the TMT members’ compensation is used as a proxy for CEO compensation

**Source: Swiss Federal Statistics Office, Swiss Earnings Structure Survey, simple jobs in the financial services industry. Calculated figures are used for the missing years.
<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change from 2002 to 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEO salary</strong></td>
<td>1'246'080</td>
<td>1'246'080</td>
<td>1'246'080</td>
<td>1'246'080</td>
<td>1'246'080</td>
<td>1'500'000</td>
<td>1'500'000</td>
<td>3'000'000</td>
<td>140.8%</td>
</tr>
<tr>
<td><em><em>CEO salary + bonus</em> and % of change</em>*</td>
<td>6'509'019</td>
<td>6'601'388</td>
<td>7'585'356</td>
<td>8'143'942</td>
<td>9'496'385</td>
<td>1'543'395</td>
<td>1'543'395</td>
<td>0</td>
<td>-53.9%</td>
</tr>
<tr>
<td><strong>CEO long term comp</strong></td>
<td>4'019'975</td>
<td>6'509'019</td>
<td>9'405'430</td>
<td>9'284'390</td>
<td>9'500'000</td>
<td>1'543'395</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>CEO total comp. and % of change</strong></td>
<td>10'699'119</td>
<td>13'062'425</td>
<td>17'233'556</td>
<td>17'166'422</td>
<td>18'987'134</td>
<td>3'291'723</td>
<td>1'814'702</td>
<td>3'000'000</td>
<td>72.0%</td>
</tr>
<tr>
<td><strong>Chairperson salary</strong></td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>2'000'000</td>
<td>602'083</td>
<td>-69.9%</td>
</tr>
<tr>
<td><em><em>Chairperson salary + bonus</em> and % of change</em>*</td>
<td>9'500'080</td>
<td>11'500'000</td>
<td>11'625'000</td>
<td>12'550'000</td>
<td>12'000'000</td>
<td>2000'000</td>
<td>2'000'000</td>
<td>0</td>
<td>-70%</td>
</tr>
<tr>
<td><strong>Chairperson long term comp</strong></td>
<td>9'065'830</td>
<td>9'500'078</td>
<td>12'054'813</td>
<td>13'670'052</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>93.7%</td>
</tr>
<tr>
<td><strong>Chairperson total comp and % of change</strong></td>
<td>11'341'588</td>
<td>18'798'498</td>
<td>21'289'398</td>
<td>23'975'954</td>
<td>26'591'803</td>
<td>2'568'379</td>
<td>2'400'092</td>
<td>676'571</td>
<td>-94.0%</td>
</tr>
<tr>
<td><strong>Workers total comp. and % of change</strong></td>
<td>66'180</td>
<td>66'369</td>
<td>66'600</td>
<td>67'370</td>
<td>71'220</td>
<td>71'998</td>
<td>72'744</td>
<td>74'039</td>
<td>11.8%</td>
</tr>
<tr>
<td><strong>Workers real total comp. and % of change</strong></td>
<td>72'599</td>
<td>72'135</td>
<td>71'997</td>
<td>72'755</td>
<td>75'400</td>
<td>74'313</td>
<td>73'385</td>
<td>74'039</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>GDP Deflator</strong></td>
<td>101.27</td>
<td>102.28</td>
<td>102.87</td>
<td>102.98</td>
<td>105.10</td>
<td>107.75</td>
<td>110.97</td>
<td>9.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Ratio between CEO and worker</strong></td>
<td>162</td>
<td>197</td>
<td>259</td>
<td>255</td>
<td>267</td>
<td>46</td>
<td>25</td>
<td>41</td>
<td>-74.9%</td>
</tr>
<tr>
<td><strong>Ratio between Chairperson and worker</strong></td>
<td>156</td>
<td>261</td>
<td>296</td>
<td>330</td>
<td>353</td>
<td>35</td>
<td>33</td>
<td>9</td>
<td>-94.2%</td>
</tr>
</tbody>
</table>

Table 17. CEO and chairperson compensation in the UBS during 2002-2009 and comparison with the average worker’s compensation. Total compensation includes: cash, bonus, long-term plan, pension and benefits such as child and housing allowance.

*For the years 2002-2006, the average of the TMT members’ compensation is used as a proxy for CEO compensation.

**Compensation determinants**

Table 18 introduces the corporate governance based determinants for CS and the UBS, such as board size, foreign ownership and dominant shareholder figures that are assumed to have a linkage to compensation. Recent studies have also provided some evidence of a linkage between CEO age and compensation, with age reflecting experience and skills, and thereby increasing the package. The sizes of the board have been studied to see whether this increases the compensation levels. The board size has been increasing in the both companies since 2004, and amounted to 15 directors in CS and 16 in the UBS up to 2009.

Both companies have a relatively high proportion of stock owned by foreign shareholders. The percentage of foreign shareholders is below 10%, but they own more than 30% of the registered shares. When CS was raising Tier 1 capital from investors in 2008, Qatar Holding LLC, a company controlled by the Qatar Investment Authority, increased their ownership to 99.8 million shares, which is 8.9%, of the registered shares, and became the dominant...
shareholder. Voting rights of nominees are restricted to 5%, while clearing and settlement organisations are exempt from this restriction. The dominant shareholders of the UBS were Chase with an 11.63% stake and DTC with 8.42%. Other shareholders were BlackRock Inc with a holding of 3.45%, the Capital Group Companies with a holding of 4.90% and the Government of Singapore with 6.45% stake. Other factors, such as the ages of incumbents in the CEO and chairperson roles are shown in each year. It is notable that the CEOs of UBS have been younger than CS CEOs up to 2009.

<table>
<thead>
<tr>
<th>Figures as at Dec 31st</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Foreign ownership %</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>38%</td>
<td>36%</td>
<td>46%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6%)</td>
<td>(10%)</td>
<td>(10%)</td>
<td>(6%)</td>
</tr>
<tr>
<td>UBS Foreign ownership %</td>
<td>49.8%</td>
<td>31.9%</td>
<td>36.3%</td>
<td>39.5%</td>
<td>41.8%</td>
<td>41.8%</td>
<td>37.2%</td>
<td>39.6%</td>
</tr>
<tr>
<td></td>
<td>(7.3%)</td>
<td>(7.9%)</td>
<td>(8.7%)</td>
<td>(9.5%)</td>
<td>(10.3%)</td>
<td>(10.8%)</td>
<td>(8.7%)</td>
<td>(9.7%)</td>
</tr>
<tr>
<td>CS Dominant shareholder's %</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>6.98%</td>
<td>5%</td>
<td>8.9%</td>
<td>8.9%</td>
</tr>
<tr>
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<td></td>
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<td>Axia</td>
<td>Axia</td>
<td>Qatar</td>
<td>Qatar</td>
</tr>
<tr>
<td>UBS Dominant shareholder's %</td>
<td>7.68%</td>
<td>8.27%</td>
<td>8.76%</td>
<td>8.55%</td>
<td>8.81%</td>
<td>7.99%</td>
<td>7.19%</td>
<td>11.63%</td>
</tr>
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<td></td>
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</tr>
<tr>
<td></td>
<td>4.54%</td>
<td>5.77%</td>
<td>9.95%</td>
<td>13.21%</td>
<td>14.15%</td>
<td>9.89%</td>
<td>8.42%</td>
<td>DTC</td>
</tr>
<tr>
<td>CS CEO age</td>
<td>53</td>
<td>59/60</td>
<td>60</td>
<td>61</td>
<td>62</td>
<td>48</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>UBS CEO age</td>
<td>45</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>49/43</td>
<td>44</td>
<td>44/66</td>
</tr>
<tr>
<td>CS Chairperson age</td>
<td>53</td>
<td>52</td>
<td>53</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td>57</td>
<td>69</td>
</tr>
<tr>
<td>UBS Chairperson age</td>
<td>52</td>
<td>53</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td>57</td>
<td>58/59</td>
<td>59/68</td>
</tr>
<tr>
<td>CS Board size</td>
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<td>10</td>
<td>12</td>
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<td>12</td>
<td>13</td>
<td>13</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 18:CS and UBS: Corporate governance indicators and CEO and chairperson age. Sources: UBS annual reports.

**External peers**

Compared to previous studies conducted in Switzerland, the ratios between CEO, chairperson and average employee figures exceed the ratio in Switzerland. However, different industries and company sizes are not directly comparable. The common determinant between European and the US market is that pay levels increase with the size of the company, and the peer group therefore needs to take similar size into consideration (e.g. Murphy, 1999; Conyon and Murphy, 2000). However, there is some evidence indicating that the CEOs of large Swiss corporations were the best paid in Europe in early 2000 (Schütz, 2005). The average (median) CEO in 2004 in Swiss stock-listed companies received a total compensation of CHF 2.5 million (CHF 1.0 million) and average (median) cash compensation of CHF 1.6 million (CHF 0.9) (Hengartner, 2006). 2004 was a good year in both CS and the UBS, which increased the variable compensation paid from the previous year, and the total pay figures were many times higher than in the study by Hengartner. Over the years 2002 to 2004, boards in Switzerland partially replaced option-based compensation with shares, and increased the proportion of cash compensation (Hengartner, 2006). If only the largest companies are studied later than 2000, the median total compensation in SMI companies dropped from 2007 to 2008. The
median total compensation for the chairperson in SMI companies dropped by 29.6% to CHF 0.8 million and the average (median) total compensation of CEOs by 25% from CHF 9.3 million to CHF 6.9 million (30.8% to CHF 5.4 million) (Kuipers et al. 2009). While CEO basic salaries remained basically unchanged (CHF 2.1 million vs. CHF 2 million), variable pay decreased (Kuipers et al. 2009). 2008 was an extremely tough year for CS and the UBS, without variable payments, which keeps the levels far behind the ones reported in the study.

Since it is hypothesized the compensation in CS and the UBS follow US practices, they can be compared with the reported absolute compensation figures in the large US banks during 2007 and 2009 shown in Table 19. 2007 mean base salary is lower than in the UBS and CS, but mean total compensation in Swiss francs is almost at the same level as in CS, but significantly higher than in the UBS, due to the fact that the UBS did not pay any variable pay for the CEO and chairperson in that year. The discrepancy between Swiss and US data is that the CEO and chairperson roles are typically represented by the same person; whereas these roles are separated in Swiss banks. Due to the credit crisis, Merrill Lynch was merged with the Bank of America, and the overall mean compensation decreased to CHF 10.3 million, while the compensation in the CS returned to the pre-crisis level in 2009.

Based on the earlier studies before the crisis, the compensation ratios between the CEO and the employees have been lower in CS and the UBS than in the US. The use of option plans has not been as aggressive as in the US, but share plans were adopted early for top management in Europe. The UBS had already established a Share Participation Plan for the members of the bank's management in 1969. According to Institute of Policy Studies (2009), which is not sector-specific, the average CEO to average worker ratio increased in the US from 42\(^\text{80}\) in 1980 of to a peak of 531 in 2000 (Felton, 2004) during the IT boom and option exercises, and then decreased each year, reaching 344 in 2007 and 319 in 2008.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Role</th>
<th>Salary / fees 07 (CHF)</th>
<th>Total Comp. 07 (CHF)</th>
<th>Salary / fees 09 (CHF)</th>
<th>Total Comp. 09 (CHF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of America</td>
<td>CEO &amp; Chairman</td>
<td>1'554'597</td>
<td>25'702'472</td>
<td>607'888</td>
<td>31'019'401</td>
</tr>
<tr>
<td>Merrill Lynch</td>
<td>CEO</td>
<td>59'792</td>
<td>1'529'691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citigroup</td>
<td>Chairman</td>
<td>387'337</td>
<td>6'322'030</td>
<td>139'914</td>
<td>295'374</td>
</tr>
<tr>
<td>Citigroup</td>
<td>CEO</td>
<td>259'100</td>
<td>594'699</td>
<td>133'437</td>
<td>133'437</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>CEO &amp; Chairman</td>
<td>621'839</td>
<td>72'858'801</td>
<td>621'839</td>
<td>10'221'641</td>
</tr>
<tr>
<td>JP Morgan Chase</td>
<td>CEO &amp; Chairman</td>
<td>1'036'398</td>
<td>28'811'873</td>
<td>1'036'398</td>
<td>9'607'412</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>CEO &amp; Chairman</td>
<td>829'119</td>
<td>1'658'237</td>
<td>745'530</td>
<td>10'385'747</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>678'312</td>
<td>21'982'543</td>
<td>547'501</td>
<td>10'277'169</td>
</tr>
</tbody>
</table>


\(^{80}\) http://www.aflcio.org/corporatewatch/paywatch/pay/
\(^{81}\) http://money.cnn.com/news_specials/storysupplement/ceopay/
Equity holding

Optimal contracting theory assumes that, on average, the managerial ownership levels are set to the value-maximizing level (e.g. Core et al., 2003). According to McConnell and Servaes (1990), there is a positive relationship between increases in ownership and firm performance when managerial equity ownership is below 50 percent. Schmid and Zimmermann (2007) suggest that Swiss managers hold their equity when they are convinced that the firm will perform. However, a number of shareholding requirements have been put in place to prevent top management selling all their equity, making them share the pain with the shareholders when share prices decline. The disclosed ownership amounts are shown in Table 20 for CS and Table 21 for UBS. The data shows both vested and unvested equity.

Table 20 shows the CS data. The equity holdings have been disclosed from 2007 onwards. The questionnaire of equity transactions is completed once a year, with one question regarding the shareholding of the incumbent and his/her close family. PIP I is award vested and was therefore paid in 2010. The costs of the award were fully absorbed in the earlier years and the targets were disclosed, but the actual payment is disclosed in 2011 PIP II award vested in 2011. The PIP I and PIP II CEO’s targets shown in a Table 20 were granted to the CEO in his former role. The table only shows targets, since neither of the plans had vested during the research time period. The units can convert into group shares determined by multipliers based on the achievement of pre-defined targets: earnings performance; group absolute share price performance and group relative share price performance to peer. PIP I units settle between zero and nine group shares (vested 4.8) and PIP II between zero and six. 2010 compensation and their estimates are excluded from this study, and these figures are therefore only considered as target amounts. Due to the fact that CS did not grant options after 2003; the option holdings were acquired by the named individuals in their previous capacities as members of the senior management. All 2009 variable pay was deferred to SISUs and APP awards, each of them having a base and a leverage component. An ISU is similar to a share, but offers additional upside depending on the development of the Group share price with base and leverage components. Loss ratio in ISU comp plan has been around 8-10%.

<table>
<thead>
<tr>
<th>CS Figures as at Dec 31st</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair - Share Grants</td>
<td>0</td>
<td>64,172</td>
<td>84,300</td>
<td>69,445</td>
<td>81,169</td>
<td>104,363</td>
<td>0</td>
<td>43,754</td>
</tr>
<tr>
<td>Chair - Retention Award</td>
<td>0</td>
<td>61,920</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair - Total Shareholding</td>
<td>850,584</td>
<td>79,937</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair - Loans</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>1,800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - Unvested Shares</td>
<td>156,673</td>
<td>99,211</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - Total Shareholding</td>
<td>191,016</td>
<td>296,727</td>
<td>424,529</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - ISUs</td>
<td>202,928</td>
<td>408,154</td>
<td>90,956</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - Options</td>
<td>408,400</td>
<td>408,400</td>
<td>408,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - PIP I</td>
<td>271,898</td>
<td>271,898</td>
<td>271,898</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - PIP II</td>
<td>78,102</td>
<td>78,102</td>
<td>78,102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20. Credit Suisse chairperson and CEO equity holding.
Table 21 shows the data for the UBS. UBS executives generally received a majority of their compensation in UBS shares or options until 2008. During the crisis, the CEOs and chairmen either voluntarily waived their rights to long-term plans, or forfeited them. A large one-time SAR\textsuperscript{82} award with a strike price of CHF 10.10 in 2009 was made to Oswald Grübel, who had forfeited his PIP rights in CS in order to avoid any conflict of interest when hired by the to UBS after his retirement. If Grübel had exercised his options at the end of 2009, \textit{ceteris paribus}, he would have cashed CHF 23.8 million, but, with a strike price of CHF 10.10, the fair value of them was CHF 13,120,000 at the grant date of 26 February 2009.

<table>
<thead>
<tr>
<th>UBS Figures as at Dec 31st</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair - Share Grants</td>
<td>75'155</td>
<td>78'698</td>
<td>186'642</td>
<td>136'044</td>
<td>139'091</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Chairperson Options</td>
<td>75'000</td>
<td>127'000</td>
<td>0</td>
<td>390'000</td>
<td>300'000</td>
<td>940'000</td>
<td>372'995</td>
<td>0</td>
</tr>
<tr>
<td>Chair - Total Shareholding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>769'483</td>
<td>416'088</td>
<td>22500</td>
<td></td>
</tr>
<tr>
<td>Chair - Loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - Options</td>
<td>65'385</td>
<td>84'653</td>
<td>198'919</td>
<td>221'348</td>
<td>187'675</td>
<td>990'000</td>
<td>1'055'043</td>
<td>4'000'000</td>
</tr>
<tr>
<td>CEO - Share Grants</td>
<td>51'164</td>
<td>55'163</td>
<td>144'046</td>
<td>100'884</td>
<td>96'798</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO - Total Shareholding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>501'846</td>
<td>711'366</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 21. UBS chairperson and CEO equity holding.

The proposition of equity as a percentage of total compensation is shown in Table 22. The values are based at grant, since the tables showing the ownership reflect the different incumbents of the roles. In addition, some of the unvested equity was forfeited later on. Table 22 shows the proportion of long-term awards have been significant in the compensation packages when granted, consisting of around half of the package before the financial crisis. According to Kuipers et al (2009), the average total compensation of CEOs in SMI companies consisted of 29% as basic salary, 16% as cash bonus, 40% as long-term incentives and 15% as other compensation in 2008. Chairmen had 66% in fixed, 2% cash bonus, 16% in long-term incentives and 16% in other payments. These figures included one-time payments.

In addition to measuring the impact of share performance on total compensation, it is also important to understand the share ownership of executives and the changes to wealth due to share price changes. These can be substantial. In addition to the decrease in compensation for the current year, the CEOs and chairmen realised significant decreases in wealth through their company shares, and lost these if they forfeited the equity or the options expired. The shares already owned by them may increase the value back again in the long-term. Depending on the time of valuation, the equity with current share prices differ significantly from the time of the grants. The average wealth loss of the CEOs amounted to CHF 9.5 million (median CHF 1 million) (Kuipers et al. 2009).

\textsuperscript{82} Stock appreciation rights (SARs) essentially is a cash bonus plan, although some plans pay out the benefits in the form of shares and are comparable to options, as in the UBS plan.
Table 22. Equity as a percentage of total compensation.

One-time payments

2007-2008 were difficult years for the UBS, and led to management level restructuring. Marcel Ospel did not stand for re-election in April 2008, and received a pro-rata compensation for 2009. He was contractually entitled to receive a payment based on his average remuneration over the last three years and certain employment benefits until the expiry of their 12-month notice period. Due to a poor performance Ospel was not awarded any incentive awards for that time, and he relinquished CHF 2.3 million of contractual payments. Table 23 shows the one-time payments that the UBS awarded to the CEO and the chairperson at the end of their services in 2007 and 2009. These are not included in the total compensation figures in the regression analysis. In 2009, UBS paid Kurer a flat salary of CHF 1 million and a one-time pension contribution of CHF 3.332 million, while Rohner received CHF 1.5 million to compensate his notice period in 2009 and CHF 1.2 million for his pension plan. Wuffli received incentives and pro rata salary in 2007. One may argue that the UBS paid these amounts as a compensation for poor performance.

Table 23. UBS one-time payments in 2002-2009.

Public pressure

Tosi et al. (2004) suggest that there is weak evidence of a positive association between the political uncertainty perceived by top managers and CEO cash pay. Joskow et al. (1996) argue that political pressures constrain CEO pay levels in the electric utility industry. Dial and Murphy (1995) describe how the political pressures at General Dynamics, a defence contractor, led the company to replace a controversial bonus plan with conventional stock options. Numerous newspaper articles had criticized the payment of large bonuses to executives during their downsizing and restructuring strategies. In this study, public pressure is measured as articles published regarding compensation in CS and the UBS in Bilanz during 2002-2009. Table 24 shows the increase in numbers in 2008 and 2009, compared to other years. The UBS is more frequently mentioned in the articles than CS. In 2009 there were 60% more articles about UBS compensation than about CS compensation.
Table 24. Number of articles about compensation in CS and the UBS in Bilanz in 2002-2009.

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>78</td>
<td>49</td>
<td>60</td>
<td>92</td>
<td>113</td>
<td>118</td>
<td>130</td>
<td>125</td>
</tr>
<tr>
<td>UBS</td>
<td>90</td>
<td>60</td>
<td>68</td>
<td>111</td>
<td>147</td>
<td>154</td>
<td>238</td>
<td>204</td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
<td>109</td>
<td>128</td>
<td>203</td>
<td>260</td>
<td>272</td>
<td>368</td>
<td>329</td>
</tr>
</tbody>
</table>

3.8.2 Pay-for-performance

During the crisis, corporate board members were concerned about CEO pay. Shareholders expressed outrage, and media attention increased. The wealth creation of the CEO is out-of-step with that of the other stakeholders. If the shareholders have to carry the loss, so should the management. This sub-chapter studies the pay–for-performance linkage in CS and the UBS, starting from EBIT and compensation, shareholder wealth and ending up with the benefits for the stakeholders. Both CS and the UBS follow the same regulations, and disclose their pay–for-performance practise for their top executives. According to Kuipers and Schmid (2008), the predominant performance measures used in SMI companies are financial measures, such as share price, TSR, ROE and EBITDA, although many of the companies also consider qualitative measures. Performance in this study is measured as shareholder wealth change in the respective year and previous one, and benefits to the other stakeholders. However, ROA is used as an accounting-based performance measure, as it is also used in the previous literature. In addition, cash bonuses are assumed to be based on the accounting-based figures. Both measures aim to enhance long-term performance, but may diverge yearly.

The link between pay and performance is important in managerial compensation, and effective compensation systems tie executive pay to performance. However, not all the influencing factors can be controlled by the researcher. If the study finds a negative correlation between pay and performance instead of a no-pay-for-performance relationship, the study may lack control over the factors that drive up pay, but drive down performance. These factors could include the benchmarking practices of the companies, which may increase the pay while performance is going down. Several methods are available for addressing the problem, however. First, one can control some of the factors that are known to play a role. This study controls the size, which is measured by revenues or sales. The performance is linked to both the respective year and the one-year lagged performance. If there are dynamic effects in the past values of compensation that affect performance, this may also bias the estimates. There are complex methods available to address this problem, and they should be used once increasingly reliable data for a longer time period becomes available. Sign-on bonuses and severance payments are excluded from the analysis. It is assumed that the link between severance payment and performance is negative, and the sign-on bonus has no
significant performance relation. The unvested portion of the equity-based pay is frequently forfeited when contracts are terminated.

**Compensation and performance**

Over the period 2002-2009, CEO mean compensation increased substantially in CS, but decreased in the UBS. At the same time, the EBIT of CS increased by 329.5% and decreased by -156.7% in the UBS, as shown in Table 25. The changes in EBIT are multiples of the compensation magnitudes, but the total direction is same. The annual percentage changes in compensation and EBIT diverge in some years. In 2003 and 2004, for example, both of them increased from the previous year, but, in 2005, EBIT increased by about 13%, whereas CEO compensation in CS decreased -21%. A similar change took place in the UBS in 2006, when EBIT decreased by -12%, and total compensation for the CEO and chairperson increased by 11% and chairperson compensation decreased in 2009 although EBIT increased by 88%. The direction of the changes in CS chairperson compensation and EBIT has been parallel each year. However, the development of CEO and chairperson fixed salary and short-term bonus compared to firm performance seems to be divergent in CS, whereas they are more aligned in the UBS. Total compensation and EBIT increased in 2003, when bonus and salary decreased in CS. There was a decrease in the total compensation of the chairperson (-9%) in 2007, when both the SMI index (-3.43%) and EBIT (-21%) decreased, but this was not reflected in total compensation of the CEO, although it was reflected in bonus and salary. All the figures sank in 2008 due to the financial crisis. CS and UBS annual stock returns are inline with the SMI changes, although with significantly higher magnitudes in 2008 than in the overall SMI. As financial uncertainty rose in 2008, implied volatilities increased for both interest rates and equities, combined with the lower interest rate environment. The increase in volatilities of equities was much more severe than the increase in volatilities of interest rates. The implied volatility roughly returned to pre-crisis levels of 23.6% in 2009.

The bank's ROA is used as a financial metric for evaluating management performance in the literature. Since banks are highly leveraged, a 1% ROA indicates huge profits. Technology companies may have ROAs over 5%, but the figures are not directly comparable to banks. Table 24 shows the ROA % and ROE% development in CS and the UBS. ROA% was negative (-0.35) in CS in 2002, but increased (1.19) up to 2006, before turning negative (-0.93) in 2008, but went positive again (0.62) in 2009. The UBS had positive ROA % in (0.26) 2002, but it decreased to negative for whole 2007-2009 time period.
The global economy experienced one of its most difficult times during 2008-2009, with the financial crisis evolving into recession. Governments and central banks took further action to stabilise the markets and stimulate the economy, with the aim of restoring investor trust globally. Starting in October 2008, the Swiss National Bank cut the national interest rates on several consecutive occasions, effectively instituting a zero-rate policy in a bid to boost the economy. Switzerland's largest banks and financial institutions suffered marked losses in 2008. Contrary to CS, the UBS required a government rescue deal in late 2008, but refunded it later on. When the economic outlook gradually improved in 2009, stock prices began to recover, and the UBS became profitable again in the first quarter of 2010. Table 25 shows the CS financial performance in the period of 2002-2009 and Table 26 shows the respective performance for the UBS.

The market capitalization and total assets of CS and the UBS were at their highest levels in 2006, just before the credit crisis. The figures show that the UBS has already been hit in 2007, and suffered three consecutive years of loss, while CS had a difficult year in 2008. The fluctuation of share prices, decreasing from the CS year-end price of CHF 85.3 to CHF 29 and from CHF 95.35 to CHF 14.84 for the UBS, shows that the trust of investors reduced dramatically during the crisis. Both accounting and stock market-based measures for financial performance are used in this study, as they have been used in the previous literature. Most of the CEO pay-for-performance studies in economics and finance use stock market-based measures, but studies in the accounting literature typically use accounting-based measures or both together (Joskow and Rose, 1994).

<table>
<thead>
<tr>
<th>Figures as at Dec 31st</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMI Change</td>
<td>18.51%</td>
<td>3.74%</td>
<td>33.21%</td>
<td>15.85%</td>
<td>-3.43%</td>
<td>-34.77%</td>
<td>18.27%</td>
<td></td>
</tr>
<tr>
<td>SMI Annual return %</td>
<td>-32.64%</td>
<td>16.98%</td>
<td>3.67%</td>
<td>28.68%</td>
<td>14.71%</td>
<td>-3.49%</td>
<td>-42.72%</td>
<td>16.78%</td>
</tr>
<tr>
<td>CS Annual stock return</td>
<td>-69.6%</td>
<td>53.0%</td>
<td>15.1%</td>
<td>19.5%</td>
<td>31.1%</td>
<td>-15.1%</td>
<td>-78.2%</td>
<td>55.36%</td>
</tr>
<tr>
<td>UBS Annual stock</td>
<td>-17.43%</td>
<td>20.41%</td>
<td>12.67%</td>
<td>27.11%</td>
<td>27.25%</td>
<td>-33.28%</td>
<td>-128.63%</td>
<td>10.50%</td>
</tr>
<tr>
<td>CS ROA %</td>
<td>-0.35</td>
<td>0.52</td>
<td>0.62</td>
<td>0.58</td>
<td>1.19</td>
<td>0.92</td>
<td>-0.93</td>
<td>0.62</td>
</tr>
<tr>
<td>UBS ROA %</td>
<td>0.26</td>
<td>0.40</td>
<td>0.47</td>
<td>0.68</td>
<td>0.51</td>
<td>-0.23</td>
<td>-1.06</td>
<td>-0.20</td>
</tr>
<tr>
<td>CS ROE %</td>
<td>8.90</td>
<td>17.80</td>
<td>27.70</td>
<td>39.70</td>
<td>28.20</td>
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<td>-58.70</td>
<td>-7.80</td>
</tr>
<tr>
<td>CS EBIT mCHF</td>
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<td>1420</td>
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<td>8'711</td>
<td>17'351</td>
<td>13'746</td>
<td>-15'433</td>
<td>8'246</td>
</tr>
<tr>
<td>UBS EBIT mCHF</td>
<td>4'537</td>
<td>8'177</td>
<td>10'467</td>
<td>17'737</td>
<td>15'523</td>
<td>-2736</td>
<td>-21'292</td>
<td>-2'569</td>
</tr>
</tbody>
</table>

Table 24. Financial development of CS, UBS and the SMI Index. Sources: Credit Suisse and UBS annual reports, SIX Swiss Stock Exchange.
### Table 25. Financial performance of CS during 2002-2009.

<table>
<thead>
<tr>
<th>Financial Highlights (CHF)</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIAS (m)</td>
<td>-4'448</td>
<td>770</td>
<td>5'628</td>
<td>5'850</td>
<td>11'327</td>
<td>7'760</td>
<td>-8'218</td>
<td>6'724</td>
</tr>
<tr>
<td>EPS</td>
<td>-2.78</td>
<td>4.13</td>
<td>4.85</td>
<td>5.18</td>
<td>7.54</td>
<td>7.07</td>
<td>-8.01</td>
<td>5.28</td>
</tr>
<tr>
<td>ROE</td>
<td>-10.00%</td>
<td>16.60%</td>
<td>15.90%</td>
<td>15.40%</td>
<td>27.50%</td>
<td>18.00%</td>
<td>-21.10%</td>
<td>18.30%</td>
</tr>
<tr>
<td>Net new assets</td>
<td>-1.4</td>
<td>4.8</td>
<td>28.2</td>
<td>57.4</td>
<td>88.4</td>
<td>43.2</td>
<td>-3</td>
<td>44.2</td>
</tr>
<tr>
<td>Market capitalization(m)</td>
<td>36'909</td>
<td>54'943</td>
<td>53'097</td>
<td>81'847</td>
<td>99'949</td>
<td>76'024</td>
<td>33'762</td>
<td>60'691</td>
</tr>
<tr>
<td>Total assets (m)</td>
<td>955'656</td>
<td>962'164</td>
<td>1'089'485</td>
<td>1'339'052</td>
<td>1'255'956</td>
<td>1'360'680</td>
<td>1'170'350</td>
<td>1'031'427</td>
</tr>
<tr>
<td>Shareholders’ equity (m)</td>
<td>31'394</td>
<td>34'692</td>
<td>36'273</td>
<td>42'118</td>
<td>43'586</td>
<td>43'199</td>
<td>32'302</td>
<td>37'517</td>
</tr>
<tr>
<td>Share Price</td>
<td>30.0</td>
<td>45.3</td>
<td>47.8</td>
<td>67.0</td>
<td>85.3</td>
<td>74.5</td>
<td>29.0</td>
<td>51.9</td>
</tr>
<tr>
<td>Dividend</td>
<td>0.1</td>
<td>1.5</td>
<td>4.9</td>
<td>2.0</td>
<td>2.2</td>
<td>2.5</td>
<td>0.1</td>
<td>2.0</td>
</tr>
</tbody>
</table>

1) Distribution of a 20-for-1 stock dividend, 2) Par value repayment (for PB&GAM disposal), Share split as of 10 July 2006 2:1


<table>
<thead>
<tr>
<th>Financial Highlights (CHF)</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIAS (m)</td>
<td>3'530</td>
<td>6'239</td>
<td>8'089</td>
<td>14'029</td>
<td>12'257</td>
<td>-5'247</td>
<td>-21'292</td>
<td>-2'736</td>
</tr>
<tr>
<td>EPS</td>
<td>2.87</td>
<td>5.59</td>
<td>7.68</td>
<td>6.97</td>
<td>6.2</td>
<td>-2.4</td>
<td>-7.63</td>
<td>-0.75</td>
</tr>
<tr>
<td>ROE</td>
<td>8.90%</td>
<td>17.80%</td>
<td>27.70%</td>
<td>39.70%</td>
<td>28.20%</td>
<td>-9.40%</td>
<td>-58.70%</td>
<td>-7.80%</td>
</tr>
<tr>
<td>Net new assets</td>
<td>36.2</td>
<td>50.8</td>
<td>88.9</td>
<td>148.5</td>
<td>151.7</td>
<td>140.6</td>
<td>-226</td>
<td>-147.3</td>
</tr>
<tr>
<td>Market capitalization(m)</td>
<td>79'448</td>
<td>95'401</td>
<td>103'649</td>
<td>131'949</td>
<td>154'222</td>
<td>108'654</td>
<td>43'519</td>
<td>57'108</td>
</tr>
<tr>
<td>Total assets (m)</td>
<td>1'346'678</td>
<td>1'550'056</td>
<td>1'734'784</td>
<td>2'058'348</td>
<td>2'396'511</td>
<td>2'274'891</td>
<td>2'014'815</td>
<td>1'340'538</td>
</tr>
<tr>
<td>Shareholders’ equity (m)</td>
<td>38'952</td>
<td>35'310</td>
<td>34'978</td>
<td>44'015</td>
<td>49'686</td>
<td>36'875</td>
<td>32’531</td>
<td>41’013</td>
</tr>
<tr>
<td>Share Price</td>
<td>67.2</td>
<td>84.7</td>
<td>95.4</td>
<td>55.4</td>
<td>65.9</td>
<td>46.4</td>
<td>14.8</td>
<td>16.1</td>
</tr>
<tr>
<td>Dividend</td>
<td>1.0</td>
<td>1.3</td>
<td>1.5</td>
<td>1.6 (2)</td>
<td>2.2</td>
<td>n.a.(1)</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

1) Distribution of a 20-for-1 stock dividend, 2) Par value repayment (for PB&GAM disposal), Share split as of 10 July 2006 2:1

### Correlations between CEO and chairperson wealth change

The correlation matrix of change in CEO and chairperson cash payment and total compensation related to corporate governance measures such as dominant shareholder, foreign owners, board size and performance measures of ROA% and stock return is shown in Appendix 8. CEO age is often used in the studies, and is therefore added to the correlation
matrix. The number of employees, assets under management and articles written in Bilanz are also used to capture the impact of the different stakeholders, such as clients, the public and employees, on compensation levels. The consistent factor in all these correlation matrixes is that ROA%, stock return and revenue are positively and are strongly correlated with the changes in CEO and chairperson cash payment and total compensation. Age, foreign ownership, board size, invested assets and the number of employees are either negatively or positively correlated, and their strength varies. There is therefore no clear evidence for a general result. Public pressure and a dominant shareholder have a strong negative correlation on the wealth change.

**CEO and chairperson pay for firm size results**

Tosi et al. (2000) argue that the main determinant of compensation levels is the firm size. Table 27 shows the elasticity of CEO compensation with respect to firm size, and reports the estimates over the period 2002-2009. The estimated elasticity coefficients for total pay with respect to revenues are statistically significant at the 1% or 5% level in relation to the CS CEO, the CS Chair and the UBS CEO. The coefficients are in the range from 0.504 - 1.386, which does not support previous findings, which did not differ remarkably from 0.3 (Baker et al. 1988 and Rosen, 1990). The studies do not provide any possible reason for this phenomenon, however. The effect of stock returns on log compensation is in the range from 0.10 - 0.15 (Rosen, 1990). Baker et al. (1988) report elasticities of firm size and compensation in the range from 0.25 - 0.35. Conyon and Murphy (2000) find pay-for-firm size elasticities of $\beta = 0.3$ for the U.S. ($\beta = 0.3$), but not for U.K. firms ($\beta = 0.2$).

The estimated “semi-elasticity” of CS CEO salary and bonus with respect to revenues is 0.941, and 1.386 for total compensation, with the CS chairperson showing 0.958 and 1.322, the UBS CEO 0.374 and 0.504 and the UBS chairperson 0.361 and 0.480.

<table>
<thead>
<tr>
<th></th>
<th>CS CEO</th>
<th>CS Chair</th>
<th>UBS CEO</th>
<th>UBS Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and Bonus</td>
<td>0.941</td>
<td>0.958***</td>
<td>0.374*</td>
<td>0.361</td>
</tr>
<tr>
<td>Total Pay</td>
<td>1.386***</td>
<td>1.322***</td>
<td>0.504**</td>
<td>0.48</td>
</tr>
</tbody>
</table>

1. The estimated model is $\ln(\text{pay}) = \alpha + \beta \ln(\text{firm revenue}) + \varepsilon$

***, **, * statistically significant at 1%, 5% and 10% levels, respectively based on two-tail t-test

Conyon and Murphy (2000), salary and bonus elasticity in the US in 1997: 0.316 and total pay: 0.413 and in the UK: 0.197 and 0.217

Table 27. Pay-for-firm size elasticity in CS and UBS during 2002-2009.

Comparing the findings to those of Conyon and Murphy (2000) and Mäkinen (2000) for 1997, a 10% rise in firm sales increased CEO cash compensation *ceteris paribus* by
approximately 3.2% in the U.S., 2.9% in Finland, and 2.0% in the U.K. Similarly, a 10% rise in revenues increased CEO total compensation *ceteris paribus* by 4.1% in the U.S., 3.0% in Finland and 2.2% in the U.K. The findings suggest that the CS CEO and chair pay-for-firm-size elasticities were higher than in the other markets, although the time period of the studies differs, even though the relationship between CEO cash pay and revenues was not statistically significant.

OLS regression is run with the controls of CEO age, corporate governance indicators, such as foreign ownership, ownership concentration and the size of the board. The revenue in period t and period t-1 are used as proxies for firm size. Table 28 shows the results. The pay levels are not significantly related to firm size when revenue is contemporaneous, but some of the results are statistically significant if it is lagged by one year. The pay-for-firm-size elasticity estimates deviate substantially from the range of 0.2 - 0.3 up to 1.8. The positive effect of age, approximately 0.32 - 0.34, is only related to the UBS CEO cash pay and total pay, while CS chairperson total pay is negatively related to age at -0.21. On the contrary, foreign ownership negatively affects both the CS CEO and chair total compensation. The effect is -19.55 - -19.935. The findings for the size of the board indicate an effect of about 0.167 on the compensation levels on the CS chair, and 5.6 for a dominant shareholder. Interestingly enough, there is negative relationship between the CS chairperson compensation and laged revenues, and the UBS CEO age is positively related to pay level. From a corporate governance perspective, both the CS CEO and chairperson pay levels are negatively related to foreign ownership, but positively related to dominant shareholders and the size of the board. Based on cross-sectional estimates, Randøy and Nielsen (2002) provided evidence of a statistically significant and positive relationship between the size of the board and CEO compensation, foreign board membership and CEO compensation. This study supports the first finding, but not the latter one. Previous findings state that shareholder concentration, measured as the ownership stake of the largest outside shareholder, is negatively associated with the total compensation level (e.g. Werner and Tosi, 1995; Khan et al., 2005, Hengartner, 2006). The findings in the study show a positive relationship between the CS chair total pay and dominant shareholder ownership. Other relationships are negative, but not statistically significant.

### Pay-for-firm size elasticity

<table>
<thead>
<tr>
<th>2002-2009</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CS CEO</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
</tr>
<tr>
<td>ln (salary and bonus)</td>
<td>ln (total pay)</td>
</tr>
<tr>
<td>Constant</td>
<td>-13.735</td>
</tr>
<tr>
<td>ln (revenues)</td>
<td>1.038</td>
</tr>
<tr>
<td>ln (total pay)</td>
<td>0.115</td>
</tr>
<tr>
<td>Board size</td>
<td>0.123</td>
</tr>
<tr>
<td>R²</td>
<td>0.889</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.331</td>
</tr>
<tr>
<td>Observations</td>
<td>7</td>
</tr>
</tbody>
</table>

1. The dependent variable is in natural logarithms. Monetary values are deflated by industry deflator in 2009 Swiss francs.
2. t-test values are in parentheses ***, **, * statistically significant at 1%, 5% and 10% levels, respectively based on two-tail t-test.

### CEO and chairperson pay-for- performance results

Table 29 shows the elasticity between the change in the respective year’s ROA%, an accounting-based measure of firm performance, and the change in one–year-lagged ROA%. In line with the findings of Mäkinen (2000), there is no statistical evidence of a contemporaneous association between the change in compensation and the change in ROA%, except in the change in CS CEO total pay. However, changes in one-year-lagged accounting-based performance measures, which can be associated with the change in compensation, are statistically significant in the UBS with regard to both CEO and chair pay, but there is no evidence of any significance in the CS figures.

<table>
<thead>
<tr>
<th>ΔROA</th>
<th>ΔROA t-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ΔCEO salary + bonus</strong></td>
<td><strong>ΔCEO total pay</strong></td>
</tr>
<tr>
<td>CS</td>
<td>UBS</td>
</tr>
<tr>
<td>0.168</td>
<td>(0.374)</td>
</tr>
<tr>
<td>0.563**</td>
<td>(2.652)</td>
</tr>
<tr>
<td>0.260</td>
<td>(1.137)</td>
</tr>
<tr>
<td>0.398</td>
<td>(1.382)</td>
</tr>
<tr>
<td>Observations</td>
<td>6</td>
</tr>
</tbody>
</table>

1. The estimated model is Δ(pay)=α+Δ(ROA)+ε

***, **, * statistically significant at 1%, 5% and 10% levels, respectively based on two-tail t-test.

t-test values in parentheses


Another OLS regression is run to study the pay-for–stakeholder-elasticity. The results in Table 30 show the statistical significance of CS chairperson total pay in relation to all four stakeholder measurements. Public pressure, which is measured by the number of articles in Bilanz, has a small negative relation, but FTEs, clients measured by invested assets and ROA% have a positive relation. The chairperson cash pay-off in the UBS shows significance with following measures: a weak negative relation to the public and the employees, but...
positive to assets. CEO pay does not show evidence of statistical significance with factors other than ROA% (a positive relationship). Compensation practices and benefits to stakeholders are only related to chairperson pay, bit not to CEO pay, which contradicts the findings of Tosi et al. (2004), who found weak evidence of a positive association between the political uncertainty perceived by top managers and CEO cash pay.

### Table 30. Pay for stakeholder elasticity in CS and UBS during 2002-2009.

<table>
<thead>
<tr>
<th>Pay-for-stakeholder elasticity</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2009</td>
<td>CS CEO</td>
</tr>
<tr>
<td>Independent variables</td>
<td>CS chairperson</td>
</tr>
<tr>
<td>ln (salary and bonus)</td>
<td>UBS CEO</td>
</tr>
<tr>
<td>ln (total pay)</td>
<td>UBS Chairperson</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
</tr>
<tr>
<td>-90.960 28.667</td>
<td>-38.671 35.768*</td>
</tr>
<tr>
<td>(1)</td>
<td>(0.832)</td>
</tr>
<tr>
<td>ROA %</td>
<td>0.5488</td>
</tr>
<tr>
<td>0.331 0.963***</td>
<td>0.848***</td>
</tr>
<tr>
<td>(0.618) (4.75)</td>
<td>1.113*</td>
</tr>
<tr>
<td>News (public pressure)</td>
<td>1.106*</td>
</tr>
<tr>
<td>-0.022 0.002</td>
<td>(1.867) 2.048</td>
</tr>
<tr>
<td>(1.771) (0.52)</td>
<td>(0.763) (0.208)</td>
</tr>
<tr>
<td>Employees (FTE)</td>
<td>-0.006 0.008***</td>
</tr>
<tr>
<td>0.00002 0.0002</td>
<td>0.000003 0.00002***</td>
</tr>
<tr>
<td>Invested assets (clients)</td>
<td>-0.00004 -0.00003</td>
</tr>
<tr>
<td>3.859 -0.446</td>
<td>-0.00019*** -0.0001</td>
</tr>
<tr>
<td>(1.181) (0.36)</td>
<td>(2.127) (0.605)</td>
</tr>
<tr>
<td>R²</td>
<td>0.049</td>
</tr>
<tr>
<td>0.644 0.916</td>
<td>8.196** 4.096</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.035</td>
</tr>
<tr>
<td>0.170 0.803</td>
<td>8.868 0.931</td>
</tr>
<tr>
<td>Observations</td>
<td>88</td>
</tr>
<tr>
<td>8 8</td>
<td>8 8</td>
</tr>
</tbody>
</table>

1. The dependent variable is in natural logarithms. Monetary values are deflated by industry deflator in 2009 Swiss francs.
2. t-test values are in parentheses ***, **, * statistically significant at 1%, 5% and 10% levels respectively based on two-tail t-test

The shareholder wealth measure, similar to that of Jensen and Murphy (1990), measures the individual’s salary plus bonus and total compensation in a relation to shareholder wealth change. Jensen and Murphy separated an executive's compensation into five components: yearly salary plus bonus, pay-related wealth, stock options, stock, and threat of dismissal assuming that all changes in salary and bonus are permanent and that the CEO receives the change in salary and bonus only until the age of sixty-six. Changes in other forms of pay are temporary. The assumption is too general for the case study research. The tenure of incumbents in the CEO and chairperson roles in CS and the UBS has not been very long during the research period. Furthermore, the incumbents are aging. Only one CEO in the data was below the age of sixty six between 2007 and 2009, and any PV analysis is therefore not expected to impact the data. The crisis showed that bonuses do not continue growing in the year of extremely bad performance. Contemporaneous shareholder wealth has a positive association with CS CEO and chairperson pay, while lagged wealth does not show any statistical significance.

The results suggest that the salary and bonus change for the CS CEO will change over two years (wealth change t + wealth change t-1) by CHF 0.060 for each CHF 1,000 change in shareholder wealth, and by CHF 0.11 for total compensation. Respectively, the UBS CEO CHF change in pay and bonus is CHF 0.016 and, in total compensation, CHF 0.049. Changes in the CS chairperson’s wealth are CHF 0.066 for cash pay and CHF 0.120 for total pay, with the UBS chairperson’s wealth being CHF 0.035 and CHF 0.073 respectively. The results in
CS and the UBS differ quite significantly from the previous studies. Kuipers et al. (2009) suggest there is a positive association between total compensation and shareholder return in SMI companies. Changes in total compensation and wealth based on shareholding compared to total shareholder return (TSR) is CHF 0.80 for each CHF 1,000 change in shareholder value in the past and current year together. This consists of a change of CHF 0.50 in direct compensation and CHF 0.30 in share ownership. Direct compensation results in UBS and CS show that chairperson and CS CEO pay changes are around CHF 0.1, but the UBS CEO pay changes are significantly lower, around CHF 0.049.

Previous US studies show the total change in CEO wealth is USD 5.25 per USD 1,000 change in shareholder wealth (Jensen and Murphy, 1990). However, this research period is not comparable to that of the financial crisis. The results suggest that managers’ compensation has not been highly dependent on shareholder wealth, CHF 1’000 increase or decrease impact less than CHF 0.1 on their pockets.

### Correlation between pay and company performance

<table>
<thead>
<tr>
<th>2002-2009</th>
<th>Dependent variable</th>
<th>CS CEO</th>
<th>CS chairperson</th>
<th>UBS CEO</th>
<th>UBS Chairperson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td>ln (salary and bonus)</td>
<td>ln (total pay)</td>
<td>ln (salary and bonus)</td>
<td>ln (total pay)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.305'667** (0.545)</td>
<td>1'070'834** (3.199)</td>
<td>375'2858*** (7.812)</td>
<td>644'1713*** (2.246)</td>
<td>2'572'011 (1.639)</td>
</tr>
<tr>
<td>(shareholder wealth)</td>
<td>0.00003 (0.239)</td>
<td>0.000029** (2.531)</td>
<td>0.00008** (4.81)</td>
<td>0.00019 (1.889)</td>
<td>0.00001 (0.549)</td>
</tr>
<tr>
<td>(shareholder wealth)_{t-1}</td>
<td>0.00009 (0.676)</td>
<td>-0.00018 (1.658)</td>
<td>-0.00001 (0.844)</td>
<td>-0.00007 (0.687)</td>
<td>0.00000 (0.132)</td>
</tr>
<tr>
<td>R²</td>
<td>0.1398 (0.676)</td>
<td>0.7372 (1.658)</td>
<td>0.8858 (0.844)</td>
<td>0.5602 (0.687)</td>
<td>0.1120 (0.132)</td>
</tr>
<tr>
<td>Observations</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

1. The dependent variable is in natural logarithms. Monetary values are deflated by industry deflator in 2009 Swiss francs.
2. t-test values are in parentheses ***, **, * statistically significant at 1%, 5% and 10% levels respectively based on two-tail t-test.

Table 31. Correlation between pay and company performance in CS and UBS during 2002-2009.

### New compensation structures

As a learning lesson from the crisis, and based on government regulations, long-term value creation and risk-adjusted compensation are the key elements for future compensation in both CS and the UBS. The success of these tools and the final impact on pay level and the relation to performance will only be seen in the future. If the impact is level, there is a risk that highly talented executives may seek better opportunities outside highly-regulated companies in order to keep their annual earnings at the same level. Another risk is that companies will find own ways to compensate outside the regulations and the disclosure requirements.

Outrageous and excessive compensation causes issues with society by damaging it. There is a dilemma, here, however, as there is no adjustment mechanism to review the compensation. Banks are waiting for regulators and politicians to intervene, which may cause issues if they take the wrong direction, such as penalty taxation for bonuses. The requirements are increasing on an almost monthly basis, but the direction is same: to limit annually-paid bonus amounts. The key feature is the fact that various banks do not coordinate compensation with governmental actions. They work in isolation, and do not perform any work voluntarily. The
European Parliament recently approved a curb by creating a new law to limit risk in a sector that shored up by the taxpayer. The law would only allow 30 percent of a bonus to be paid up front from 2011 onwards, with the rest deferred by up to five years (Jones, 2010). However, after couple of years, executives have their deferred cash payments from the bonus systems of several years being paid out at the same time. The payments can easily equal the amounts paid before the crisis. The new rules also force banks to set aside more capital against repackaged securities held on their trading books. The aim is to learn from the financial crisis, in which the value of securities linked to defaulting home loans crashed, forcing governments to step in with rescue packages.

One of the regulatory requirements is higher transparency from today onwards. FINMA requires CS and the UBS to disclose separate one-time payments, such as sign-on bonuses and severance payments, in aggregate levels from 2010 onwards. However, higher transparency does not require higher linkage to performance, although the requirement to publish non-performance-related components aims to increase the awareness of them. The attention towards the media and the communication outside the company therefore increases. It may require separate compensation communications, such as press releases, to explain higher awards for individuals, as there will be an increasing level of mismatch between the disclosed figures and the compensation due to the deferrals. The media may therefore simply add the figures together and publish it as the total compensation amount.

It can be argued that the most recent crisis was not caused by excessive compensation: there were other reasons behind it. The regulators and politicians did not much to prevent it, however. The actions only took place afterwards, by handing the compensation decisions to regulators, but left the responsibility with the board. It seems that the regulators do not believe that board can solve the compensation issue without their intervention. This may lead to limitations of the natural development of the compensation and the real market methods. If companies have to use government funds, the public will try to find the people responsible for the corporate failure. The compensation levels are now under discussion, even focussing on the companies that did not need a bailout, with the logic behind the compensation being ignored. The absolute numbers create emotions such as jealousy. The question of how to design the compensation system is important in order to support doing the right thing at the right time. Value creation needs to be taken into account. This can be done via total shareholder return, by paying a percentage of this for compensation. In any case, compensation needs to create an incentive for correct right behaviour: no excessive risk-taking, no reputational issues and compliance. Retention is crucial, as top financial professionals can immediately move from banks to, for example, hedge funds. There are examples of banks that have tried to change the compensation levels, but have failed in talent acquisition. It can be argued that it is unfair to heavily regulate the compensation in government bailout companies, given that they may end up losing talent, if this has not happened already, and that they won’t be able to attract the top people. Many people lost a lot of money during the crisis, and some of them lost their jobs. However, it was seen as unfair that the industry recovered so quickly, and that their employees were compensated based on
that. The incentive schemes of the banks contributed to the financial crisis, which is a simplistic view and has resulted in all the attention. One issue is leverage of compensation, and a question whether executives should have leverage in their pay package. The option could be to disconnect their pay from leverage to avoid executives influencing the compensation, but that would be contrary to agency theory.

3.9 Summary of the results

The basic discussion regarding the hypotheses and the summary of results is provided in this sub-chapter.

Since the scandals in 2000, such as Enron, and the recent financial crisis, CEO compensation has been a popular topic of wide public debate, especially in the US and Europe. The crisis was caused by the failure of the sub-prime market, and it was claimed that this was stimulated by compensation, with a lack of clarity on how to compensate the new, unregulated activities in banking sector. Compensation practices were based on historical, lagging performance, instead of current or long-term performance, and lacked a holistic view of the benefits for the different stakeholders. Shareholders lost billions of dollars, and the scandals were said to be related to CEO compensation. Two variable pay tools were blamed for involvement in the crisis. At the beginning of 2000, the scandals were blamed on share options, but options remained a part of the compensation. They were only reduced later, when the accounting and taxation benefits were removed. The recent financial crisis was related to cash bonuses. According to Ikäheimo (2008), bonuses in banks that were related to the wrong measurements and were defined over a short period could have caused some of the trouble in the financial sector. Not only the CEO and other employees, but also a chairperson whose role is to monitor that CEO’s actions are in line with the shareholders long-term interests, were compensated in CS and the UBS with short-term variable pay. In combination with the fierce competition in the financial sector, it is clear that the regulation on the part of the government were inadequate. According to government intervention with possible limits on the compensation, it was confirmed that the compensation level had not been correct, and that high short-term compensation opportunities encouraged risk-taking at the expense of the shareholders and taxpayers. But long term opportunities did not do this.

The problem with CEO compensation is that institutional investors have primarily very little incentive to either make long-term investments in companies or to actively serve on their boards of directors. It means that the owners of public corporations are seldom actively involved in corporate governance or in the close monitoring of executive compensation. If they are unhappy with a company they will usually simply sell their stock. Instead, the burden falls almost entirely on the directors, who are effectively self-elected, since institutional investors do not oppose the board's raft of directors. The outside directors of most of
corporations may also have large ownership stakes in the companies they serve. While most of the outside directors are well intentioned and are usually highly capable, their own interests can sometimes diverge from the interests of the owners. Executive incentives have mostly been based on short-term financial metrics and shareholder returns. The financial results are the consequence of a firm's strategy formulation and implementation. Effective incentive systems should focus on other metrics as well. In addition to this, companies should design compensation packages to attract the right people to implement the company's strategy. For instance, below-market salaries coupled with aggressive incentive pay linked to individual performance are likely to attract self-motivated, entrepreneurial individuals.

When performance is analysed compared to the benefits for the stakeholders, it is important to define what is being calculated as part of the compensation. With deferrals becoming more popular, some of the compensation elements are related to success in a previous role. New regulations may also force companies to shift pay elements to areas that are not regulated. Pension schemes can be significant part of the compensation in the other countries, and has enabled companies to hide compensation. Therefore, instead of spending time enhancing compensation structures, companies may spend time finding out the best ways to avoid the rules. During the time of the crisis, it was typical to argue that corporate governance had failed because it could not prevent the crisis. However, only time will show whether the changes in the regulations are sufficient, or are only a solution to prevent a bigger crisis for the time being, such as SOX, but not to prevent the next crisis. Time will also show whether the government intervention was sufficient or was completed. The leverage ratios have increased throughout the time. This means the banks still have significant risk in their activities. Although measures and controls of risk are becoming more regulated, it does not significantly decrease the leverage ratios.

The first hypotheses built were based on internal and external equity.

**Insider chairperson’s pay does not differ significantly from CEO pay**

\[ H1: \text{If a full-time chairperson was an employee of the company, the compensation level and mix do not differ significantly from executive pay.} \]

Based on internal equity, it was assumed that full-time chairperson compensation would follow executive compensation if the chairperson had been an employee of the company before the appointment. All three chairmen in the CS board during the study were previously employees. Lukas Mühlemann even served the dual role of CEO and chairman. The UBS chairmen Marcel Ospel and Peter Kurer had employment relationships with the company prior to their election as chairman. The latest Chairman, Kaspar Villiger, was elected from outside the company.

To support the hypothesis, the compensation ratios between the CEO, the chairperson and the average employee are analyzed from 2002 to 2009. There is robust evidence that the ratio for
both CEO and chairperson pay increased substantially at the beginning of 2000, but decreased during the financial crisis, only to recover again during 2009. Before the financial crisis in 2006, the ratios in Credit Suisse were 266 for the CEO and 255 for the chairperson. The respective ratios in the UBS were 267 for the CEO and 353 for the chairman. Compensation ratios decreased significantly in the UBS as early as 2007, and were 25 and 33 in the UBS, and 40 and 28 in Credit Suisse in 2008. 2008 and 2009 were exceptional years, however, with variable pay rewards at zero due to the crisis. For a better understanding of the compensation practices between the outside and the inside chairman, it is necessary to review the raw data. Although he joined from outside of company, Kaspar Villiger, was offered CHF 2 million annual basic salary, which is in line with the prior incumbents in the role, but he declined the offer and voluntarily chose to reduce it to CHF 850’000. Simultaneously, he declined his restricted share awards. Before Villiger’s time, the UBS compensated full-time chairmen with pay practices similar to those for the CEO. However, the UBS states that, due to the crisis, the pay practice was changed, and an outside incumbent was elected to the role. It remains unclear whether internal candidates would have been compensated differently. Chairmen in Credit Suisse enjoyed higher base salaries than CEOs, but with lower bonuses, otherwise the pay level and structure did not differ dramatically.

Both CS and the UBS have used the awards given to the CEO and other top executives in previous years when determining the compensation for the current year. Even if CEOs cannot directly influence their own pay, they often propose the pay of their immediate subordinates, which in turn may influence their own pay.

**CEO and chairperson are compensated based on the US market**

The second hypothesis was based on the assumption that CEO and chairperson compensation follow the US market practice.

**H2: CEO and chairperson compensation follow the US market practice rather than compensation of local peers.**

The salary data with pay mixes and levels supports this hypothesis. It has been typical to pay levels of millions of USD to CEOs and chairmen in the banking industry. High bonuses, equity ownership and low salaries were part of the package. Overall compensation levels in Switzerland are significantly lower. Similarly, the compensation ratios between top management and the average worker are rather US-level than Swiss market level. 75% of the share options issued by major companies in America went to top-five executives Newing (2003:6), Hilb (2005, 128). This increased the average compensation of CEOs. It's also illuminating to consider how much American CEOs are paid relative to CEOs in other countries. In 2002, the pay of top American CEOs was over 400 times average earnings. Due to the financial crisis and governmental efforts, it is expected that this ratio will decrease, at least in major banks and insurance companies that have received government bailout money. The Economist (2000) ranked the CEO pay ratio in Switzerland in 1999 as being 11 times that
of the average employee. Both companies were using stock option in the compensation, but reduced them later following the US practice.

The banking industry was highly developed in the US, and the companies targeted high talents from that market and brought them to Switzerland. In order to do so, they had to compensate them at the same level and mix as in the US market. The credit crisis was truly an eye-opener. It started from the US and cascaded down to other countries around the globe. The system collapsed, and this was partly blamed on the wrong incentive structure. Practices that had been copied from the pioneer country, with high transparency and exceptional disclosure requirements, suddenly became extremely lousy, and almost illegal. Companies in Switzerland were blamed for their bonus systems, for which they had take responsibility, although they were replicated from the US. The banks now have to construct their own compensation plans; there are no pioneering efforts, and, unfortunately, not much cooperation, since compensation still is a sensitive topic in Switzerland and is seen as part of the company strategy. FINMA makes its own contribution to the mess with circular regarding remuneration, which requires the fine-tuning of certain compensation tools, such as bonuses with deferrals, and linking them to different metrics. In addition, companies need to exercise better governance of their variable pay pools. All the governmental interventions were well aimed, but the results can produce the opposite effect, such as happened with Clinton’s Act in the case of options. If uncapped, bonus deferrals may result in extremely high payments in the future. As a first step, the FINMA requirements meant that banks increased their basic salaries to balance the compensation between fixed and under-risk. An extremely skilled labour force is valuable for each company, and will always require a higher level of compensation than less-skilled employees. However, it can be questioned whether the companies should pay similar levels and mixes independently of the location in the current global economy, since the local market should typically be in the driver’s seat in defining the package. It will certainly be difficult to decrease the levels once a high level has been introduced. The post-crisis effect is clearly visible in the US data, Merrill Lynch was merged with the Bank of America, and the overall mean compensation decreased to CHF 10.3 million, while compensation returned to the pre-crisis level in CS.

Social pressure impacts on the compensation level and the mix, but only on a voluntarily basis

Hypotheses 3-4 were based on the assumption that social pressure impacts on CEO and chairperson compensation level and mix:

H3: Social pressure has impacts on the CEO and chairperson compensation level.
H4: Social pressure has impacts on the CEO and chairperson compensation mix.

Under the assumption that newspapers continually strive to publishing articles that the public is interested in, the proxy used for a politicised environment is a number of newspaper articles published in *Bilanz* related to compensation in CS and the UBS. The overall theme among the
public in Switzerland tends to be negative when it comes to compensation. The media have a high potential influence on public opinion, and on the opinions of the employees, clients and shareholders that the managers and the board may have to deal with. Tosi et al. (2004) find weak evidence of a positive association between the political uncertainty perceived by top managers and CEO cash pay. Numerous newspaper articles have harshly criticized the payment of large bonuses to top executives for their downsizing and restructuring strategies.

Companies, mainly top management and board, deal with plenty of different types of pressure. One for sure is pressure for solid financial performance, which mainly comes from shareholders. If the company does not perform, CEO may have to leave, but typically with a “golden handshake”. The reputational issue does not impact too much, if both CEO and chairperson are close to a retirement age, and are not seeking for next board membership or CEO position. However, the reputation is truly an issue, when the incumbents are far from the retirement age.

Companies, and in particular the top management and the board, deal with many different types of pressure. One of these is certainly the pressure for a solid financial performance, which mainly comes from the shareholders. If the company does not perform, the CEO may have to leave, but typically receives a “golden handshake”. The reputational issue does not impact too much if both the CEO and the chairperson are close to retirement age, and are not seeking re-election to the board or advancement to the CEO position. Reputation is an issue, however, when the incumbents are far from retirement age.

Companies can’t ignore the public, however, as public opinion may impact severely on share prices, if investors sell their shares in a panic, clients withdraw their assets or talented employees leave the company. Public opinion was against high bonuses during the crisis, especially in cases in which the company did not perform well financially. This was the case, for example, in the UBS, which ended up changing both the CEO and chairman. During the crisis, both CS and the UBS spent an enormous amount of time renewing their compensation practices and their communication to the public. If the firms perform well financially, the levels of compensation won’t necessarily change with new rules. However, in the case of CEO pay, the amount of fixed income was increased to balance the pay mix between fixed and variable pay. The companies did not significantly change the tools in the pay mix, but added some measurements, such as economic profit and deferrals to bonuses. The real impact will only be seen in the future. In any case, both companies reacted immediately to public pressure. In the UBS, variable payments were reduced on a voluntarily basis to reflect financial loss. Both Grübel and Villiger waived their variable payments for 2009. It seems that social pressure makes ethically responsible CEO and chairperson voluntarily change their pay level or mix for the current year. Public pressure is statistically significant in pay for stakeholder elasticity for chairperson compensation in both companies.

*Government rules impact on the pay mix, but not necessarily on the compensation level*
Being closely linked to social pressure, the new regulatory changes will have an impact on compensation for those companies who are not already compliant. According to Hemalin and Weisbach (1998), companies who are not already compliant with the new regulations will realize long-term increases in the compensation levels after a short-term shock, as was the case following Clinton’s Act in the case of options. This will be left to further studies, since the time period is too short to analyze the impact of the changes.

**H5:** Government rules shift compensation to other elements from the regulated ones impacting on CEO and chairperson compensation level.

**H6:** Government rules shift compensation to other elements from the regulated ones impacting on CEO and chairperson compensation mix.

Sahlman (2009) blames regulators for the financial crisis, because they did not understand the linkage between incentive behaviour and company risk, and argues that moral hazard led to the macroeconomic crisis. Compensation plays one part, but it is important to combine it with a holistic view with the right people and skills, corporate culture and control mechanisms. This task can be too hard and complex for government to solve, and it is suggested that it should be left with the board of directors, although efforts should instead be made to ensure the quality and skills of the directors and to ensure that they spend enough time on company issues. This would most probably avoid repeating the same mistakes, since government mainly can propose easy fixes and more reporting. This won’t help much if no-one reads and understands the reports, as was the case in US companies, which have incredibly transparent annual reports. If the companies deal with high risk, for example AIG, the company should pay relatively high compensation for the risk in order to attract extremely bright and talented individuals. In the worst case, it will be hard to acquire the best individuals for the top positions if the government restricts the compensation levels, which will decrease the ability of the company to survive.

Without coherent corporate governance practices within a firm, executives compensation packages may be implemented badly, potentially spurring a decrease in shareholder wealth through corporate scandals (Mäkinen, 2007: 151). Jensen et al. (2004) propose changes to both corporate governance and pay design to mitigate problems in appointment and pay-setting process, equity-based pay plans, and in the design of traditional bonus plans. Traditional plans have encouraged managers to ignore the cost of capital, to manage earnings in ways that destroy value, and to take steps to deceive investors and the capital markets. Both the UBS and Credit Suisse made immediate changes to the pay mix of the CEOs and the chairmen. Only the levels were impacted, since the variable payments were zero in the worst performing period. The possibility for high payments was not capped by the governmental changes, however. The impact on the pay mix was more on the balance between fixed and variable, which increased basic salary and made the variable pay portion more long-term through deferrals. Therefore, supporting the hypotheses, the companies seem to shift regulated payment to other compensation tools. In these case studies, the short-term variable
pay was partly shifted to basic salary and partly modified towards long-term cash payments with deferrals. These changes may not necessarily impact on the actual total pay levels.

**Compensation encouraged for excessive short-term risk-taking**

It is argued that the decisions executives made leading to the crisis put themselves, their companies, their employees, their customers and their communities at risk. It is therefore suggested that the performance should be holistically reviewed based on the major stakeholders in order to avoid similar mistakes.

**H7: Compensation schemes for CEOs and Chairpersons have encouraged excessive short-term risk-taking.**

Both the UBS and Credit Suisse had bonus plans linked to annual financial performance, which encouraged the leaders to increase short-term profits, which, in these cases, was at the expense of long-term performance. However, the CEOs and chairmen had significant equity holdings in both cases, for example, UBS executives generally received a majority of their compensation in UBS shares or options until 2008, which, according to agency theory, should align their interests to those of the shareholders. The incumbents took a significant loss together with shareholders. It seems that short-term bonuses are superior to equity as a compensation method to drive the actions of the CEO and the chairperson. Together with linkage to incorrect financial measures, a one-year-lagged performance period, it seems that bonuses were the drivers for short-term risk-taking. There are many other parts in the puzzle, however, and bonuses can therefore only be seen as encouraging risk-taking. New unregulated activities, such as sub-prime mortgages, may not be easy to understand for risk purposes and compensation. Having the proper control systems in place and the strong involvement of the board in analysing and deciding the appropriate leverage ratio and investments would be required in order to prevent a similar crisis in the future. It is suggested that the board should build on the deep knowledge of the company’s HRM and finance. The Board of Directors has been charged with the responsibility of serving the interests of shareholders. One of these interests is monitoring the performance and effectiveness of management, including the CEO’s.

According to Korn Ferry's 1996 Annual Board of Directors Study, the respondents overwhelmingly ranked their responsibility to shareholders as their most important duty as a board member. Second in importance was selecting the CEO. Outside directors stated that reviewing the performance of the CEO was the third objective of the chairman. One of the challenges that banks are facing is aging ownership groups, management teams and boards. Incentives clearly need to be linked to proper measurements. It is suggested that performance should not only be reviewed for shareholders, but also for employees, clients and the public. Companies also need to assure longer tenure and horizons for their executives. A CEO who is afraid of being fired for not making short-term financials will not focus on the long term. A board that is actively engaged in strategy formulation and implementation and that
compensates a CEO for strategy implementation milestones and monitoring long-term performance is more likely to understand, appreciate, and encourage a CEO's efforts, even if they yield short-term financial results that are below expectations (Narayanan, 2009).

The last four hypotheses were related to pay-for-performance: short-term and long-term financial performance, wealth changes and stakeholder performance.

*The linkage between compensation and performance provides mixed messages*

**H8:** CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with the company’s short-term performance.

**H9:** CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with the company’s long-term performance.

There is no evidence of the contemporaneous link between a change in CEO and chairperson compensation and the change in ROA% (Return on Assets). However, one-year-lagged accounting-based firm performance measures are associated with the change in CEO total compensation. Compared to EBIT (earnings before interest rates and taxation), the total compensation in the time period of 2002-2009, which can be considered as a long-term performance period, have increased or decreased overall in the same direction as the company’s EBIT. Mean compensation increased substantially in CS, but decreased in the UBS over the period 2002-2009 at the same time that the firms’ EBIT increased by 329.5% in CS and decreased by -156.7% in the UBS. The changes in EBIT are multiple in magnitude compared to compensation, but the total direction is the same in the time period. This could support the contention that compensation is linked to long-term performance, but the short-term results are not consistent. The annual percentage changes in compensation and EBIT diverge in some years. In 2003 and 2004, both EBIT and CEO compensation increased in CS compared to the previous year, but, in 2005, EBIT increased by about 13%, whereas CEO compensation decreased by -21%. A similar change took place in the UBS in 2006, when EBIT decreased by -12%, but total compensation for the CEO and the chairperson increased by 11%. Chairperson compensation decreased in 2009, although EBIT increased by 88%. In CS, the direction of changes in chairperson compensation and EBIT were consistent in each year. However, the development of the CEO and chairperson fixed salary and short-term bonus compared to firm performance seems to be mixed in CS, whereas they are more aligned in the UBS. When bonus and salary decreased in CS in 2003, total compensation and EBIT increased. There was a decrease in the total compensation of the chairperson (-9%) in 2007, when both the SMI index (-3.43%) and EBIT (-21%) decreased, although this is not reflected in the total compensation of the CEO, but is in bonus and salary. All the figures fell in 2008 due to a financial crisis.
CEO and chairperson’s wealth has been related to shareholder wealth

H10: CEO and chairperson wealth in the UBS and Credit Suisse is positively associated with shareholder wealth.

The shareholder wealth measure used is very close to that of Jensen and Murphy (1990), with the exception that Jensen and Murphy separated an executive's compensation into five components: yearly salary plus bonus, pay-related wealth, stock options, stock, and the threat of dismissal. Due to the lack of public data available, the measure is limited to the individual’s salary plus bonus and total compensation, which includes the cash compensation, long-term variable pay and disclosed allowances and benefits. The results do not show significant changes in CEO or chairperson compensation compared to shareholder wealth. They suggest that the salary and bonus change in the CS CEO will change over two years by CHF 0.060 for a CHF 1,000 change in shareholder wealth and by CHF 0.106 per CHF 1’000 for total compensation. The UBS CEO’s respective Swiss franc change in pay and bonus is CHF 0.016, and CHF 0.049 in total compensation compared to a CHF 1,000 change in shareholder wealth. Changes in CS chairperson wealth are CHF 0.066 per CHF 1,000 for cash pay and CHF 0.120 for total pay. The respective UBS chairperson wealth changes are CHF 0.035 and CHF 0.073. These figures are significantly below the ones reported by Jensen and Murphy (1990), showing a total change in CEO wealth of $5.25 per $1,000 change in shareholder wealth. The reason for the huge difference could be the limited access to the data that is necessary in order to obtain the complete picture. This study excludes the option exercises and the sales of shares, and only includes the long-term variable pay at grant value. The value of total compensation would be even lower if the 2009 year-end share prices were taken into account. Tosi et al. (2000) argue that the main determinant of compensation levels is firm size. The results suggest that managers’ compensation is not highly dependent on shareholder wealth, with a CHF 1’000 increase or decrease impacting by less than CHF 1 on their pockets.

Moreover, the estimated “semi-elasticity” of the CS CEO salary and bonus with respect to revenues is 0.941, and 1.386 for total compensation, and 0.958 and 1.322 respectively for the CS chair, 0.374 and 0.504 for the UBS CEO, and 0.361 and 0.480 for the UBS chair. The elasticities are higher than reported by Baker et al. (1988), who found that firm size and compensation elasticities were in the range from 0.25 to 0.35. The previous empirical studies commonly report an almost uniform 0.3 point estimate for CEO pay-for-firm-size elasticity, but this study does not support this finding. With a 10% rise in firm revenues, UBS CEO and chair cash pay would increase ceteris paribus by 3.7% and 3.6%, whereas CS CEO and chair pay would increase by 9.4% and 9.6% respectively.

There also are some interesting corporate governance findings. First, the dominant shareholder is positively and statistically significantly associated with the level of compensation, but foreign ownership is negatively associated. Ownership concentration, as measured by the voting share of a largest shareholder, is positively related to the level of
compensation. Third, the size of the board is positively related to the level of compensation, especially to the level of the base salary and bonus.

Compensation has not been based on benefits for the public, the shareholders, the employees and the clients

H11: CEO and chairperson compensation in the UBS and Credit Suisse is positively associated with benefits for public, shareholders, employees and clients.

Tosi et al. (2004) found weak evidence of a positive association between the political uncertainty perceived by top managers and CEO cash pay. The change in salary and bonus was computed separately for each CEO within a company. Pay-for-stakeholder elasticity shows statistical significance for the CS chairperson total pay in relation to all four stakeholder measurements. Public pressure, which is measured by news, has a negative relation, but FTEs (full-time employees), clients measured by invested assets and shareholder return measured by ROA% has a positive relation. Contemporaneous shareholder wealth has a positive association with CS CEO and chairperson pay, although lagged wealth does not show any statistical significance. The results were not statistically significant for the UBS.
4. Conclusions and implications

First, this chapter presents a summary of the key findings and conclusions, followed by a discussion of both the theoretical and practical implications. To finish off, the study limitations are determined and suggestions for further research are illustrated.

4.1 Conclusions

Compensation systems mirror corporate culture and governance; they therefore have to be specific to individual organisations (O’Hara, 2009: 64). The aim of this study was therefore not to design an optimal remuneration policy, but to provide recommendations for the practice. The objective was to increase the understanding of CEO and chairperson pay, and the lessons that can be learned from the financial crisis.

To study the research question and a set of sub-questions, this dissertation reviewed literature on compensation, corporate governance, the financial crisis and theoretical models that address compensation, and applied Martin Hilb’s New Corporate Governance Approach (2005), agency and stakeholder theories, to a holistic and integrated framework as a recommendation for compensation that takes performance into account with regard to employees, clients, the public and shareholders. Agency theory explained the use of optimal contracting and equity compensation to reach the goal of shareholder value maximization by mitigating the agency problem. Agency problems were analyzed between the CEO and the shareholders, and also between the chairperson and shareholders. Stakeholder theory provided an approach that also considered the other stakeholders, and has been included in the value creation process and the pay-for-performance concept. Although they often mention this in their annual reports, companies do not take performance for other stakeholders into account when defining the pay level and mix. The impact of the lack of value creation for these stakeholders arises in particular during times of crisis and, at worse, creates significant reputational issues, social pressure and result in new regulations that impact the compensation mix. Table 32 shows the conceptual framework of the study. In addition to the performance related factors, both internal and external equity impacts on the level and mix of the pay. Since bad corporate governance can lead to “value-destroying pay practices” (Jensen et al,
2004:3), corporate governance, either internal or external, is another factor. The impact of the financial crisis placed a severe test on this framework and has played a significant role in a redesign of remuneration policies.

Table 32. Conceptual framework of the study.

This dissertation investigated whether the level and mix of compensation that were granted and the changes to these factors were linked to performance, and whether the level of compensation has been fair or has rather been based on individual greed. In order to answer the research questions and test the hypotheses, an in-depth post crisis case study with both explanatory and descriptive elements was conducted in Credit Suisse and UBS, using both interviews and archival data over the time period from 2002 to 2009. It is argued that the crisis in corporate governance had the following similarities with the bursting of the “IT bubble”: Insider greed (social sphere) and high risk strategies (ecological sphere), both of which affect public trust (Taylor, 2003). Managements and boards supported high risk strategies, and were compensated based on the short term results gained at the expense of long term performance (Gladwin et al., 1995).

The empirical study provides further insights into the following study questions:

1. **How are the CEO and the chairperson rewarded in Credit Suisse and UBS?**
In order to answer the first question, sources of public information, such as annual reports, were analysed. They were complemented by semi-structured interviews.

Every organisation faces the challenge of finding the right people, who will fit in with the corporate culture and implement the strategy. The external market, principally the USA, has driven the compensation-decisions in the banking industry, and Switzerland has followed its lead in order to be able recruit the best talent from the market with the result that Switzerland-based managers were compensated based on US practices. Since the fight for this talent is fierce, it has been difficult to adjust those compensation models inherited from the USA. There is no automatic solution to the compensation issue, and although the regulators intervened with pay regulations during the financial crisis, the responsibility for pay decisions, is left with the boards.

The UBS Chairman Ospel earned CHF 24 million in 2005 (Schletti, 2006) and Grübel, the former Chairperson at CS, was compensated with 4,000,000 share options at lower than market strike price to replace the forfeitures in CS when he joined the UBS as CEO. The CS CEO was awarded USD 17.9 million for making company profitable in 2009, which made him the second-highest paid banker in the world in 2009. The levels are higher than in average in Switzerland. Average total CEO compensation in listed companies in Switzerland was CHF 2.5 million, and the average cash compensation was CHF 1.6 million in 2004 (Hengartner, 2006). CEOs in UBS and CS enjoyed a compensation that was almost ten times higher than these figures, with higher portions of equity as well, which was only granted for only a relatively small group of highly paid CEOs in the Swiss market in the same year.

Evidence from the previous studies show that the CEOs of large Swiss corporations are the best paid in Europe (Schütz, 2005: 73). The difference in pay between CEOs, chairpersons and average employees increased dramatically during the last decade, and, based on previous research, was due to equity compensation. The role of annual bonuses has also been significant in the banking industry. There is robust evidence that the ratios for both CEO and chairperson pay increased substantially at the start of 2000, but decreased during the financial crisis, only to recover again during 2009. Before the crisis in 2006, the ratios in CS were 266 for the CEO and 255 for the chairperson. The respective ratios in UBS were 267 for CEO and 353. Compensation ratios decreased significantly in UBS in 2007, and, in the year 2008, reached 25 and 33 in the UBS, and 40 and 28 in Credit Suisse. The change in CEO and chairperson total compensation is closely related to the variable pay awards, both cash bonuses and equity. During the financial crisis in 2008, these payments were zero in both companies. Significant pension payments were made in UBS in 2009, however, with a total value of CHF 4.6 million, and are excluded from the figures. If these figures, the SARs and the base salary paid to a former CEO in 2009 were included, the ratios would have recovered to the pre-crisis level of 260 for the CEO in the UBS, but to 78 for the chairman, although the recipients in these figures were four different people: Dougan, Grübel, Kurer and Villiger. These figures are significantly higher than ratios in Switzerland, but are at a similar level to
the USA. At the beginning of 2000, the average compensation ratio in Switzerland was 11 (Economist 2000), compared to 475 in the USA in 1999.

The combination of high compensation and poor long-term company performance during the crisis raised questions of compensation and performance, although it seems that the period of low performance only lasted 2-3 years, and that both CS and UBS have returned to a profitable level, CS in 2009, and UBS in 2010. The findings of this study suggest that pay-for-performance relationship and compensation in CS and UBS was based on one-year-lagged historical accounting based of ROA%, instead of current or long term performance. There was no statistical significance between the respective year’s ROA% and compensation. The impact of the incorrect valuation of risks that the companies took was therefore only reflected in compensation later on. The study finds no significant relationship between pay and clients and employees, but a small negative impact caused by the public. A holistic view of the benefits to the different stakeholders therefore does not seem to exist. Even the ratio of compensation change to shareholder wealth change is very small. The shareholder wealth measure suggests that the salary and bonus change in CS CEO/ chairperson wealth over two years is CHF 0.60/0.066 per CHF 1,000 change in shareholder wealth and the change in total compensation is CHF 0.106/0.120. The figures in the UBS are CHF 0.016/0.035 and CHF 0.049/0.073, respectively. Market capitalization of both the UBS and the CS dropped in 2008, and did not recover to the pre-crisis level before the end of 2009. The results are lower than in US studies. Before the market crises, US CEOs were compensated USD 3.25 per USD 1,000 change in shareholder wealth (Jensen and Murphy, 1990a). Pay-for-performance elasticity in the sample differs significantly from the figure of 0.3 in previous studies (Baker et al.1988; Rosen, 1990), which may partially be due to the financial crisis.

2. How does public pressure affect CEO and chairperson pay in Credit Suisse and UBS?

The transparency of the disclosed data has improved in Switzerland from 2002, leading to increasing media interest in compensation. Before that, compensation was an important and highly confidential strategic tool. Increased transparency without clear communication led to misunderstandings among the public, who only focussed on compensation levels. Since then, the politically-charged environment and market uncertainty has had an impact on the tools used to compensate the top management, either through mandatory changes or recommended changes. Publicly-listed banks consider reputation as a crucial factor, and therefore take pressure from the public seriously. Communication with the public and continuous justification of compensation must be part of the agenda of both banks. Because, in the worst case, increasing public pressure could lead to overregulation, which may limit competition. As forerunners in the banking industry in Switzerland, both the CS and the UBS changed their compensation practices before the mandatory requirements came into effect during the financial crisis. However, it is suggested, the holistic view of pay as compensation for stakeholder performance, together with clear explanations, could provide a slight relief from public pressure.
In addition to the increasing pressure from the public, banks also need to deal with the ongoing pressure from shareholders to achieve earnings. At the same time, companies are involved in a fierce fight for talent. Obtaining the best talent from the market, creating superior earnings and keeping the public happy is a challenging combination, especially at the time of market crisis. With regard to talent, banks also face the problem that the population is aging. Across the country, the management teams and the boards of directors of many banks are aging. Grübel, for example, had already retired from CS when UBS recruited him to lead the bank. Both the chairpersons of the UBS and the CS are approaching the retirement age of 70.

3. **What could we learn from the financial crisis regarding CEO and chairperson compensation?**

Due to the crisis, clients require lower risks and more transparency than before. Regulators are pushing for stricter capital and liquidity requirements, closer international coordination, transparency and reporting. At the same time, the banks are focussing on higher margins and returns in order to enhance profitability with reduced risk tolerance. Having to make more money with lower risk, lower costs and higher transparency is a contradictory situation. In order to succeed, the banks need to have a competitive advantage that allows the company to improve earnings to a level higher than the cost of investments, and to outperform its competitors. To do this, they need the best people from the market, and the necessary compensation to attract, retain and motivate them. Together with this, there is a growing understanding that proper talent management is the key to organisational performance.

The regulators and public opinion are reflected in the compensation levels, but not necessarily in the methods. The crisis was not caused by the compensation, but it showed there was a mechanism for compensating excessive risk taking, which destroyed company value in the long term. Not even those elements that were based on agency theory, such as equity, were able to mitigate the agency problem, although equity ownership in the top level was significant. The importance of annual cash overdrove the importance of the long term instrument. A holistic view is therefore required in order to understand all the functions and figures of the company, from risk management to HR. The board would be required to spend more time in understanding the company’s financial positions and monitoring the activities in a holistic way, instead of silo committees. Board members typically have full-time jobs in addition to their board obligations, and the time that can be devoted to this mandate is therefore limited. Major responsibility stays with full-time chairperson, which justifies his compensation being linked to company success, while keeping the pay of most of the other directors based on a fixed fee. In addition to that, large boards may provide broad expertise, but boards that are too large can be ineffective, and may end up as governance supporting bad compensation practices.

The study suggests creating a holistic view on compensation, rather than restricting compensation levels and fine-tuning existing methods, which may not be a sustainable solution and may create issues in the future.
4. What are the similarities between the compensation success factors?
The purpose of the company is to maximize value creation, which does not happen without key stakeholders. When the value creation benefits all of the components, the compensation can be more easily justified as being fair. According to the theories and the recent activities in the market, successful compensation supports sustainable, long-term performance, and aligns the interests of CEO and chairperson to those of the relevant stakeholders. Agency theory suggests that problems of diverged interest can be mitigated by making an agent into an owner of the company through equity compensation. The empirical study has shown, however, that although a proportion of the equity is significant, levels such as CHF 10 million in cash tend to keep the added-value of the equity component low. Cash is available immediately, or within a one-year time period, whereas equity may be blocked for many years, and the executive then needs to pay taxation at the time of vesting, which is typically a third of the value, forcing the executive to sell part of the ownership immediately in order to cover these costs.

The main success factors behind compensation arise from internal, external and performance equity with the correct level of corporate governance. When, for example, external equity is related to an incorrect market and peer group, the compensation cannot be successful in the long run, as it differs from local market practices. Beside of this, the mistake might be difficult to correct. This study does not suggest levels on pay, but argues it is justified that top-level leaders who create significant value for the stakeholders should receive a satisfactory return for this.

5. How can practitioners make successful compensation possible?
Compensation decisions are typically made by a small group of board members in compensation committees, often based on the recommendations of HR or independent consultants. If the ownership and responsibilities of the compensation are part of a holistic approach in HRM arising from company vision, without significant impact of external independent consultants and without separate board committees viewing HRM, risk and audit, there may be better chances of getting compensation decisions right.

Besides that, the measurement of performance would be suggested to be related to stakeholder value creation and should be easy to understand and communicate. Employee satisfaction can be measured internally using satisfaction surveys, but attrition rates may tell a more realistic story than the surveys. Both involuntary and voluntary attrition give indications of the level of satisfaction, either directly or indirectly. When it is due to lay-offs, involuntary attrition has an impact on both the employees who have to leave and on the employees who keep their jobs, with the latter possible worrying about their jobs or experiencing sadness regarding those who were made redundant. Reduction of workforce has become a widely practiced cost cutting strategy (Cascio, 1993) for improving organisational performance (Mellahi and Wilkinson 2004). The conceptual framework suggests, however, that these activities need to be carried out holistically. The low performance should be reflected in the other factors as well, such as shareholder return, executive compensation and messages to the public. If the company is
paying significant bonuses or pension payments to their executives while shareholders are simultaneously impacted by sinking share price, employees are losing their jobs and clients are experiencing higher fees and a lower standard of service, the equation simply won’t work. The overall conclusion of this dissertation is that although some fine-tuning of compensation metrics have taken place since the financial crisis, such as the introduction of risk-adjusted compensation and economic profit, a holistic view of pay-for-performance is required. If the company fails with one stakeholder, its performance may be affected in the long term, even though it may remain profitable in the short term. Keeping all the stakeholders satisfied is a challenge, especially at a time of a crisis. Fair and justified compensation takes value creation for key stakeholder groups into account, which is assumed to dilute the negative impact of pay.

Jensen and Murphy (1994) argue that it is not “how much you pay, but how”. The methods of compensation utilised are increasingly important in order to pay for actual performance, and have a strong impact on level. If a company only compensates with a fixed base salary, the level will not change significantly, regardless of poor or good performance. This is not an effective tool for driving forward the strategy for long-term sustainable performance. Some methods to avoid regulated compensation levels, such as options, were spread quickly in the USA to avoid taxation over USD 1 million compensation during the 1990s, leading to significantly high compensation levels. Companies suddenly started paying hundreds of millions to their top executives in the shape of options. This was not the original intention.

The global economy experienced one of its most difficult years in 2009, with the financial crisis evolving into a recession, resulting in an injection of excessive governmental regulation. In view of these complex circumstances, there seems to be a tendency to over-regulate compensation matters. While a regulatory framework is needed, it should not be too restrictive - otherwise companies will not be able to develop and operate compensation systems that are competitive in the market and that support sustainable long-term performance.

### 4.2 Theoretical implications

The overall contribution of this dissertation can be viewed from both a theoretical and an empirical point of view. From a theoretical point of view, a key contribution of this dissertation is that it integrates a wide range of research from the fields of executive compensation, director compensation and theories (e.g. Jensen and Meckling, 1976; Abrams, 1951; Hilb, 2005; Murphy, 1999; Core et al. 1999). The study has broadened the usual

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83 Clinton’s tax policy in 1995
empirical approach to the study of compensation from agency theory to behavioural aspects, since emotional debates on compensation are unavoidable, especially in times of crisis. The framework integrates key elements of these theories, and adds new elements that have arisen from the new regulations in the banking industry. It therefore extends the pay-for-performance concept from shareholders to include other key stakeholders, such as clients, employees and the public. A strong financial performance is often a benefit for most of them. The framework is based on, and contributes to, Martin Hilb’s holistic and integrated framework on corporate governance and pay equity. The study also contributes to a small but growing literature on the impact of media and public opinion on corporate decisions (e.g., Dyck and Zingales, 2002; Core et al. 2008) through the analysis of the impact of public pressure on the composition of CEO and chairperson pay in Switzerland. Public outrage can change the composition of executive and director compensation, and therefore may alter CEOs’ incentives and behaviour and result in companies shifting compensation away from the type that is most visible to the public - specifically, options until 2008, and bonuses afterwards.

It is obvious that the pay-for-performance linkage needs to be strong in order to support the company goal of maximising value. Beside this, compensation is also supposed to attract, retain and motivate highly talented staff. This study provides insights that can have important implications for the agency and stakeholder theories. First, the dissertation has provided valuable insights into the importance of aligning executive compensation with integrated and holistic performance for stakeholders, such as clients, shareholders, employees and the public. The measures need to be sensible and easy, although the metrics and weight may change based on the strategic importance and direction and on the regulatory requirements. It is not only absolute performance that is important, but also performance in relation to peer companies and the market. As a second insight, the dissertation has provided evidence about the strength of public pressure, which may override factors impacting the pay mix, but not necessarily the level of pay. And, last but not least, both internal and external corporate governance impact the pay level and mix.

4.3 Practical implications

The findings make a contribution to the corporate governance bodies and the diverse community of readers, from HR to managers. From an empirical point of view, this dissertation makes the following important contributions. First, this study provides valuable empirical data on the executive compensation in two Swiss banks during the time of the financial crisis and in the years before it. Secondly, this study includes a comprehensive case analysis of the compensation, market and regulatory environment and the changes it
experienced due to the crisis in the financial services industry. The study does not enter into the question as to whether the financial crisis has ended\(^4\), but assumes it has. This study seeks to generalise its findings beyond Credit Suisse, the UBS and the Swiss market place, although this may require some further studies. Although the focus of the study is on CEO and chairperson remuneration, “similar issues pertain to employees who are not at the top of the corporate hierarchy” (Jensen et al. 2004: 2).

The findings are especially interesting for boards of directors who have responsibility for compensation decisions. The understanding of the performance-for-stakeholders can be crucial for reputational reasons. Furthermore, the findings can be interesting for regulators; fine-tuning compensation levels and regulating certain tools or pay levels may not be a sustainable solution in the long run, and may simply postpone some issues or create them larger. It is suggested that compensation should be reviewed as a part of HRM, including assessment and selection in a holistic way in order to hire the right people with the right skills. Given that organizations are increasingly unable to differentiate themselves from competitors in terms of the strategies they adopt, the way to sustain a strategic competitive advantage in the future may be through the acquisition and development of human capital (Bartlett and Ghoshal, 2002). It is also suggested that a holistic cross-functional interaction should be created between business and functions such as finance, risk and HR at both the operational and board level. The board of directors currently divides HRM and other functions between different committees with different participants.

Since the mandatory separation of the roles of CEO and chairperson in the financial services sector in Switzerland, compensation was not necessarily differentiated between CEO and full time chairperson, but aligned between these two roles until the financial crisis. The roles were benchmarked as internal peers, rather than being separated into governance and operational roles. Other non-executive and independent directors have typically been compensated differently based on fixed fees, however, although variable pay may be awarded to key committee roles. During the financial crisis, this practice was introduced also to chairpersons compensation.

The results of this study indicated that the pay-for-performance relationship has not been strong, and has only had statistical significance with one-year-lagged accounting based on performance. This is due to the significant number of annual cash bonuses that did not take current or long term performance into account. Although only roughly 50% of the pay mix, the cash portion granted seemed to provide a greater incentive towards short-term results than the equity part of the mix. Although, together with shareholders, top roles suffered significant decreases in wealth due to sinking share prices, the cash awards were still substantial. The regulators are therefore recommending that deferrals on the cash bonuses be mandatory, or

\(^4\) According to Paul Krugman, the crisis will continue deeper than ever, given the failure of government to continue their actions. Krugman: Depression and the failure of government actions http://uk.reuters.com/article/USTEE6661QO20100707 (accessed July 2010)
have actually enforced this. This study extends the view from the fine-tuning of a compensation tool with financial metrics and the restriction of the levels to be paid out in a certain year to a holistic view of compensation.

Organisations that wish to create successful compensation for their top management that will support long-term sustainable performance, the individual needs of executives and non-executives and the overall corporate strategy should consider the stakeholder view of performance, and not simply focus on shareholder return or wealth, which is also important as well. As the owners of the company, shareholders are naturally the most important ones, but clients, employees and the public are also needed in order to outperform the market. It is suggested that performance should be reviewed based on the value created for the different key stakeholders. The performance part of compensation thereby needs to take the retention or satisfaction of these groups into account. It should be noted, however, that the measure of satisfaction has failed if employees are extremely happy, but are leaving to join competitors. If each of the stakeholders benefits significantly from the value creation, it is justifiable for top managers do so as well. Vice versa, if a company conducts significant lay-offs, experiences falling share prices and requires a government bailout, any compensation that is higher than normal cannot be justified. Together with this, any misbalance in the stakeholder benefits may impair the justification and fairness of high compensation. For example, high dividend payments to shareholders with simultaneous lay-offs and salary freezes for the existing employees may not support the justification and fairness of record high levels of total management compensation, although the financial performance measure would support this. Focussing on shareholder return alone may ignore the other stakeholders and lead to the unconscious and indirect destruction of the shareholder value via the lack of commitment from the other stakeholders.

Another contribution of the study is related to the public. The media and various politicians seem to have their own view on what is considered to be excessive compensation and what not, although they may not be compensation experts holding in-depth knowledge on a company’s financial status. Earlier government interventions in compensation have shown, however, that the regulatory actions actually applied to constrain the pay levels have not always been successful, and have created contradictory reactions. Since compensation is a complex and important tool, companies may spend enormous amounts of time to find solutions to avoid the regulations by shifting from regulated activities to non-regulated ones. It is therefore not recommended to restrict compensation levels in certain tools, or to only introduce new financial measures that can be easily manipulated where necessary. It has been suggested that certain aspects should be included when assessing pay-for-performance, such as peer comparison with other companies in order to reduce compensation based on luck alone when the total market is going up, the introduction of claw backs for excessive risk-taking that is only detected in the future, and the reduction of all the contractually-agreed guaranteed payments to a minimum.
If they spent enough time with the auditors, risk managers and finance, a well-functioning internal governance body operating through the board of directors would immediately spot some of the activities that are destroying value rather than creating it. Today, these roles are divided among separate committees, and committee members typically have full-day jobs outside the board. The amount of time that they can spend on these activities is therefore limited. It seems that the company has to either increase monitoring costs directly with the board of directors or to include plenty of complexity in the compensation contracts, and thereby, in the worst case, maximising the costs of compensation.

### 4.4 Limitations

The findings and their interpretation must be considered in the context of the study’s limitations. First of all, the study was performed as a multiple-case study in the Swiss market, limited to two publicly-listed companies in the banking industry. Although it strives for the generalise its findings beyond Credit Suisse, UBS and the Swiss market place, the industrial and company conditions need to be taken into account if the results are to be broadened. Therefore, even though an empirical data and theoretical triangulation has been performed, the results can only be generalized to other contexts with care.

A primary set of limitations is related to the measurement of the variables. First, in the regression of the CEO compensation, average executive team compensation was used for the time during which CEO compensation was not disclosed separately. Given the sensitivity of the data, there was no access to non-published information. The relatively small sample size suggests that results can only be viewed as preliminary, and it is suggested that the regressions should be run again when the future years’ data becomes available. There is currently no absolutely similar kind of research on the market, and the possibility of comparing the results with other banks or markets was therefore limited. In addition, several incumbents represented the roles of both a CEO and a chairperson over the time period from 2002 - 2009. The compensation may have changed due to a new incumbent, but would have not necessarily changed if the former incumbent had continued in the role. There are also concerns regarding the use of the interviews, since access to interview people was refused in one of the case companies. The number of people interviewed was therefore relatively low. The measurement used for the stakeholder benefits are very simplistic, as it is difficult to access internal company data regarding employee satisfaction or to conduct wide client satisfaction survey. Therefore, there were no significant effects with other variables other than the public, historical ROA% and the small relationship between shareholder wealth and compensation.

Another potential limitation is that the companies that were researched in the empirical study were limited to only two banks from all the banks in the world. It is therefore difficult to
generalise the results to a wider population. However, it is important to note that the companies which were studied were the largest publicly-listed banks in Switzerland, and are heavily regulated. It could be assumed the other banks and even other companies in the financial services sector may follow the same practices in Switzerland, the UK and the USA, making the fact that they were based in one country less relevant. Moreover, the researcher analyzed multiple case studies; Herriott and Firestone (1983), as quoted in Yin (1994), note that the evidence from multiple cases is often considered to be more compelling, and that the overall study can therefore regarded as being more robust. However, these limitations create a need for further research.

4.5 Suggestions for future research

This study seeks to generalise its findings beyond Credit Suisse, the UBS and Swiss market place. It may require further studies to test and apply the framework presented in this study in the other countries and industries, however, to corroborate the results of this study, it could therefore be suggested to duplicate this study with data from the UK or the USA, where much of the existing literature on executive pay has been produced.

UBS and CS quote the stakeholder view in their annual reports but, based on the empirical analysis, this did not exist in relation to compensation over the time period from 2002 - 2009. Introduction of more predefined measures, together with future disclosed compensation values after 2009, could therefore be suggested for future research. The intervention of government, both through bailouts and the intention to change the regulations in the compensation rules, shows that the board is not regarded as being capable enough in deciding compensation. However, it is not clear yet what will happen after the interventions or whether the intervention will be completed. A study of an argument of Hemalin and Weisbach (1998), stating that the companies who are not already compliant with the new regulations will realize long-term increases in compensation levels after a short-term shock, is therefore suggested. It would be suggested to study whether the companies shift the compensation from regulated tools to non-regulated, or to stealth compensation (Bebchuk and Fried, 2004).

The study also raised a topic of the public pressure through media attention. It seems, however, that analysts are in the driver’s seat when it comes to influencing shareholder attitudes. An additional study of the relationships between extended stakeholders, including the relationship between the analysts and managers could therefore add some extra knowledge to the results.
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Appendix 1: Data sources of the case study

Documents used in the case study:
All the documents and data were downloaded from Internet pages.
Annual reports from 2001-1009 and company information were downloaded from company Web pages:

Credit Suisse: Investors – Annual Reports, accessed March 2010-July 2010
https://www.credit-suisse.com/investors/en/reports/annual_reporting.jsp

UBS: Investors – Annual Reports, accessed March 2010-July 2010

Share price information from the Swiss Stock Exchange, accessed April 2010

FINMA Circular on Remuneration Schemes, accessed March 2010:
http://www.finma.ch/e/regulierung/Documents/finma-rs-2010-01-e.pdf

Economiesuisse Swiss Code of Best Practice, accessed March 2010:
http://www.economiesuisse.ch/web/de/dossiers/corporate_governance/Seiten/default.aspx

Bilanz articles published on compensation, CS and UBS:
Articles from April 2003 onwards: archive, accessed May 2010

Articles up to March 2003: archive, accessed May 2010

Interviews and meetings

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Company</th>
<th>Role / Title</th>
<th>Time of Interview</th>
</tr>
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<tr>
<td>Philipp Hess</td>
<td>CS</td>
<td>Chief of Staff</td>
<td>12.05.2010</td>
</tr>
<tr>
<td>JoAnn Bolzer</td>
<td>CS</td>
<td>Corporate Secretary</td>
<td>12.05.2010</td>
</tr>
<tr>
<td>Harald Stoehr</td>
<td>CS</td>
<td>Senior Adviser for HR and Compensation</td>
<td>12.05.2010*</td>
</tr>
<tr>
<td>Urs Rohner</td>
<td>CS</td>
<td>Vice Chairman of the Board</td>
<td>meeting 18.05.2010</td>
</tr>
<tr>
<td>Axel Lehmann</td>
<td>UBS</td>
<td>Member of the Risk Committee</td>
<td>meeting 04.06.2010**</td>
</tr>
</tbody>
</table>

* and several phone calls
** UBS decided not to participate in the interview
Observations
During the time of writing the thesis, the researcher was the Head of Compensation and Performance Management in Zurich Financial Services for Global Life business. The experience of being simultaneously an employee and a researcher was enriching from both an academic and professional point of view. The researcher participated in FINMA related discussions in the company and has had a close look at FINMA circular and the changes related in it from the Zurich point of view. The topic related to bonuses and financial crisis has been extremely visible in SF1 and other TV channels, and in published media such as the Tagesanzeiger. One cannot avoid these discussions in Zurich, Switzerland.
Appendix 2: Interview themes
The interviews were performed as semi-structured interviews. The following themes provided structure and support. The interviews may differ, however, depending on the experience of the interviewee.

1. Please tell me about your work experience in the field of compensation. Please also describe your role in compensation-setting processes within your company and any other.
2. How have CEO and chairperson compensation changed over time?
3. What have been the main change drivers during the time?
4. What has been the role of your company in adjusting to new compensation methods, and why?
5. What will happen next with regard to CEO and chairperson compensation in your company?
6. What have been the success factors in compensation design? What kind of challenges have appeared?
7. What are the challenges facing the compensation field and the CEO job market?
Appendix 3: Credit Suisse: Bios of CEOs and Chairmen
This data is taken from annual reports and the CS Internet page.

CEOs
May 5th, 2007 -

Brady W. Dougan, born 1959, a US citizen, is the CEO of Credit Suisse Group AG and Credit Suisse AG. Before his appointment as CEO, he served as the CEO of the Credit Suisse Investment Bank and its predecessor firm, Credit Suisse First Boston, from July 2004. He also served as the CEO of Credit Suisse Americas, with oversight of Investment Banking, Private Banking and Asset Management in the region. Dougan started his career in the Derivatives Group at the Bankers Trust Company, and joined Credit Suisse First Boston in 1990. He holds a B.A. in Economics and an M.B.A. in Finance from the University of Chicago, Illinois.


Oswald J. Grübel, born 1943, a German citizen, became a Co-CEO of the Group in January 2003 and a sole CEO in 2004. He was a member of Credit Suisse Group Executive Board until 2007. Grübel also was a member of the Credit Suisse Group Executive Board from 1997 to 2001. After starting his career with Deutsche Bank, Grübel joined White Weld Securities, Zurich and London, which was later merged into Credit Suisse First Boston. He was in the trading area in 1970, where he became Chief Executive Officer in 1978.

Jan 1st, 2003 – 2004

John J. Mack, born 1943, a US citizen, became Co-CEO of the Credit Suisse Group in 2003, but returned to Morgan Stanley as CEO in 2004 until his retirement in January 2010. Before that, Mack was CEO of Credit Suisse First Boston (CSFB) and Vice Chairman of the Group Executive Board from July 2001. After a long career at Morgan Stanley, most recently as President and Chairman of the Operating Committee, he became President, Chief Operating Officer and a Director of Morgan Stanley Dean Witter & Co in May 1997 when the firm was created by the merger of Morgan Stanley and Dean Witter. He is the current Chairman of the Board at Morgan Stanley. Mack serves on the Board of Celiant Corporation, Warren, (since 2001), and the New York Stock Exchange, as well as on the International Advisory Panel for the Monetary Authority of Singapore. He is also a member of the Chairman’s Advisory Committee of the National Association of Securities Dealers. Moreover, he serves on the Board of Catalyst, a non-profit organization to advance women in business. Mack holds a degree from Duke University.

Lukas Mühlemann, born 1950, a Swiss citizen, became Chief Executive Officer of the Credit Suisse Group on December 31, 1996 and was elected Chairman of the Board on May 26, 2000. He joined Swiss Reinsurance Co., on September 1, 1994 as Chief Executive Officer and served as Deputy Chairman of Swiss Reinsurance Co. until 6 May 2002. He was appointed managing director of McKinsey's Swiss offices in 1989; and became a member of the board of directors of McKinsey & Company Inc., in New York in 1990. He served on the boards of Swissair, the Zurich symphony and the Zurich opera. In addition, he is also the President of the Harvard Club of Switzerland. Mühlemann studied business law at St. Gallen University and business administration at Harvard Business School.

Chairmen
April 24th, 2009– April 2011

Hans-Ulrich Doerig, born 1940, a Swiss citizen, is the Chairman of the Board of Directors and the Chairman’s and Governance Committee of the Credit Suisse Group AG. From 2003 to 2009, he served as full-time Vice-Chairman of the Board of Directors and Chairman of the Risk Committee, and was Vice-Chairman of the Group Executive Board until 2003 and Chief Risk Officer until 2002. He served as Chairman and CEO of Credit Suisse First Boston in 1997. The Board has determined him to be independent under the Group's independence standards. He will be succeeded by the Vice-Chairman, Urs Rohner in April 2011. He is a Board member of Bühler AG, Uzwil, Vice-Chairman of the University of Zurich, Chairman of Fondation Simón I. Patiño and President of Friends of the Art Museum Zurich. Doerig holds a doctorate in Economics and Law from St. Gallen University (HSG) in Switzerland.

Jan 1st, 2003 – April 24th, 2009

Walter B. Kielholz born 1951, a Swiss citizen, has been a member of the Credit Suisse Board since 1999 and a member of the Compensation Committee since 2009. He served as Chairman of the Board and the Chairman’s and Governance Committee from 2003 to 2008, and as Chairman of the Audit Committee from 1999 to 2002. His term as a member of the Board expires at the AGM in 2012. The Board has determined him to be independent under the Group’s independence standards. Kielholz was Swiss Re’s CEO from 1997 to 2002. A board member since 1998, he became Executive Vice-Chairman of the Board of Directors of Swiss Re in 2003 and Vice-Chairman in 2007 and has served as the Chairman since May 2009. Kielholz joined Swiss Re, Zurich, in 1989. In 1986, he joined Credit Suisse, Zurich, responsible for client relations with large insurance groups in the Multinational Services department. From 1998 to 2005, and again since 2009, Kielholz has been a member of the International Business Leader Advisory Council and a member of the International Advisory Panel, advising the Monetary Authority.
of Singapore’s financial section on reforms and strategies. In addition, Kielholz is a member and former Chairman of the Supervisory Board of Avenir Suisse and holds other mandates. Kielholz holds a degree in Business Finance and Accounting from University of St. Gallen.


Lukas Mühlemann serves as dual CEO and Chairperson. See the biography in the CEO section.
### Appendix 4: Credit Suisse: board of directors 2002-2010

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Year</th>
<th>Nat. Born</th>
<th>M/F</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hans-Ulrich Doerig</td>
<td>Chairperson</td>
<td>2009-2010</td>
<td>CH</td>
<td>M</td>
<td>Economics (doctorate in 1968) and Law, St. Gallen University (HSG)</td>
</tr>
<tr>
<td></td>
<td>Vice-Chairperson</td>
<td>2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Member of the Chairman's and Governance Committee</td>
<td>2005-2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chair of the Risk Committee</td>
<td>2003-2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urs Rohner</td>
<td>Vice Chairperson</td>
<td>2009-2010</td>
<td>CH</td>
<td>M</td>
<td>Graduated in Law at the University of Zurich</td>
</tr>
<tr>
<td></td>
<td>Member of the Chairman's and Governance Committee</td>
<td>2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Member of the Risk Committee</td>
<td>2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peter Brabeck-Lemathe</td>
<td>Vice Chairperson</td>
<td>2008-2010</td>
<td>AT</td>
<td>M</td>
<td>Economics at the University of World Trade in Vienna</td>
</tr>
<tr>
<td></td>
<td>Member of the Chairman's and Governance Committee</td>
<td>2008-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Member of the Risk Committee</td>
<td>2008-2010</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Member of the Compensation Committee</td>
<td>2008-2010</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Chair of the Compensation Committee</td>
<td>2002-2003</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Vice-Chairperson</td>
<td>2002-2004</td>
<td></td>
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</tr>
<tr>
<td>Jassmin Bin Hamad J. Al Thani</td>
<td>Board Member w/o Committee</td>
<td>2010</td>
<td>QA</td>
<td>M</td>
<td>Royal Military Academy, Sandhurst, UK</td>
</tr>
<tr>
<td>Robert H. Benmosche</td>
<td>Member of the Compensation Committee until 2009, rejoined 2010</td>
<td>2003-2010</td>
<td>US</td>
<td>M</td>
<td>B.A. degree in Mathematics from Alfred University</td>
</tr>
<tr>
<td></td>
<td>Board Member w/o Committee</td>
<td>2002</td>
<td></td>
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<tr>
<td>Noreen Doyle</td>
<td>Member of the Risk Committee</td>
<td>2009-2010</td>
<td>US/IE</td>
<td>F</td>
<td>B.A. in Mathematics from The College of Mount Saint Vincent and MBA from The Amos Tuck School of Business Administration at Dartmouth College</td>
</tr>
<tr>
<td></td>
<td>Member of the Audit Committee</td>
<td>2007-2008</td>
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<td>Member of the Risk Committee</td>
<td>2004-2006</td>
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<tr>
<td>Walter B. Kielholz</td>
<td>Member of the Compensation Committee</td>
<td>2009-2010</td>
<td>CH</td>
<td>M</td>
<td>Degree in Business Finance and Accounting at the University of St. Gallen.</td>
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<tr>
<td></td>
<td>Chairperson</td>
<td>2003-2008</td>
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<td></td>
<td>Chair of the Chairman's and Governance Committee</td>
<td>2003-2008</td>
<td></td>
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<tr>
<td></td>
<td>Chair of Audit Committee</td>
<td>2002</td>
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<tr>
<td>Andreas N. Koopmann</td>
<td>Member of the Risk Committee</td>
<td>2009-2010</td>
<td>CH</td>
<td>M</td>
<td>Master's Degree in Mechanical Engineering from the Swiss Federal Institute of Technology and an MBA from IMD</td>
</tr>
<tr>
<td>Jean Lanier</td>
<td>Member of the Audit Committee</td>
<td>2005-2010</td>
<td>FR</td>
<td>M</td>
<td>Masters of Engineering, Ecole Centrale des Arts et Manufactures, Masters of Sciences Cornell University</td>
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<tr>
<td>Aziz R. D. Syriani</td>
<td>Chair of the Compensation Committee</td>
<td>2004-2010</td>
<td>CA</td>
<td>M</td>
<td>Law degree University of St. Joseph, Master of Laws Harvard University</td>
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<td>Member of the Chairman's and Governance Committee</td>
<td>2002-2010</td>
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<tr>
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<td>2005-2006</td>
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<td></td>
<td>Member of the Compensation Committee</td>
<td>2003</td>
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<td></td>
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<tr>
<td></td>
<td>Member of the Risk Committee</td>
<td>2002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Role</td>
<td>Year</td>
<td>Nat.</td>
<td>Born</td>
<td>M/F</td>
</tr>
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<tr>
<td>David W. Syz</td>
<td>Member of the Audit Committee</td>
<td>2004-2010</td>
<td>CH</td>
<td>1944</td>
<td>M</td>
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<tr>
<td>Richrd E. Thornburgh</td>
<td>Member of the Chairman's and Governance Committee, Chair of the Risk Committee, Member of the Risk Committee</td>
<td>2009-2010</td>
<td>US</td>
<td>1952</td>
<td>M</td>
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<tr>
<td>John Tiner</td>
<td>Member of the Audit Committee</td>
<td>2009-2010</td>
<td>GB</td>
<td>1957</td>
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<tr>
<td>Anton van Rossum</td>
<td>Member of the Risk Committee, Member of the Compensation Committee</td>
<td>2008-2010</td>
<td>NL</td>
<td>1945</td>
<td>M</td>
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<tr>
<td>Peter F. Weibel</td>
<td>Member of the Chairman's and Governance Committee, Chair of the Audit Committee</td>
<td>2004-2010</td>
<td>CH</td>
<td>1942</td>
<td>M</td>
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<tr>
<td>Thomas W. Bechtler</td>
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<td>2006-2008</td>
<td>CH</td>
<td>1949</td>
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<td></td>
<td>Member of the Risk Committee, Member of the Compensation Committee, Chair of Audit Committee</td>
<td>2003-2005</td>
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<tr>
<td>Ernst Tanner</td>
<td>Member of the Audit Committee, Member of the Risk Committee, Board Member w/o Committee</td>
<td>2009-2008</td>
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<tr>
<td>Marc-Henri Chaudet</td>
<td>Member of the Audit Committee (until 2004), Member of the Compensation Committee</td>
<td>2003-2002</td>
<td>CH</td>
<td>1936</td>
<td>M</td>
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<td>Thomas D. Bell</td>
<td>Member of the Audit Committee (until 2004)</td>
<td>2002-2003</td>
<td>US</td>
<td>1949</td>
<td>M</td>
</tr>
<tr>
<td>Daniel L. Vasella</td>
<td>Member of Compensation Committee (until April 2003)</td>
<td>2002-2003</td>
<td>CH</td>
<td>1953</td>
<td>M</td>
</tr>
<tr>
<td>Lukas Mühlemann</td>
<td>Chairperson (until 2003)</td>
<td>2002</td>
<td>CH</td>
<td>1949</td>
<td>M</td>
</tr>
</tbody>
</table>
Appendix 5: UBS: Bios of CEOs and Chairmen

The data has been taken from annual reports and the UBS Internet page.

CEOs

Feb 26th, 2009 - 

Oswald J. Grubel, born 1943, a German citizen, was named UBS Group Chief Executive Officer (Group CEO) in February 2009. Before joining UBS, he was the CEO of Credit Suisse Group and Credit Suisse, stepping down from this role in May 2007. He was the CEO of Credit Suisse Financial Services from 2002 to 2004, and co-CEO of the Credit Suisse Group from 2003 to 2004. He is a board member of the Spanish residential estate La Zagaleta, of the Swiss American Chamber of Commerce, the Institute of International Finance and the Financial Services Forum. He is also a member of the Shanghai International Financial Advisory Council, the Institut International d’Etudes Bancaires and the International Monetary Conference.

Jul 6th, 2007 – Feb 26th, 2009

Marcel Rohner, born 1964, a Swiss citizen, was appointed Group Chief Executive Officer (Group CEO) of the UBS in July 2007 and Chairman & CEO Investment Bank in October 2007. He became a member of the Group Executive Board (GEB) in 2002. Between 2002 and 2007, he was CEO of Wealth Management & Business Banking, and was additionally named Chairman in 2004. Before that, in 2001 and 2002, he was Chief Operating Officer (COO) and Deputy CEO of the Private Banking unit of UBS Switzerland. In 1999, he was named Group Chief Risk Officer (Group CRO), after being appointed Head of Market Risk Control of Warburg Dillon Read in 1998. Between 1993 and 1998, Rohner was with the Swiss Bank Corporation’s investment banking arm and, in 1995, was appointed Head of Market Risk Control Europe. He is Vice Chairman of the Swiss Bankers Association, Basel and the Vice Chairman of the Board of Trustees of the Swiss Finance Institute. Rohner graduated with a Ph.D. in economics from the University of Zurich and was a teaching assistant at the Institute for Empirical Research in Economics at the University of Zurich from 1990 to 1992.


Peter A. Wuffli, born 1957, a Swiss citizen, was named President of the Group Executive Board in December 2001 and Group Chief Executive Officer in September 2003. He was previously the Chairman and CEO of UBS Asset Management, and, from 1998 to 1999, Group Chief Financial Officer of the UBS. From 1994 to 1998, he was the Chief Financial Officer at Swiss Bank Corporation (SBC) and a member of SBC’s Group Executive Committee. He joined McKinsey & Co as a management consultant in 1984, where he became a partner in 1990. Wuffli graduated in economics and social sciences from the University of St. Gallen and holds a doctor’s degree in international management.
Chairmen

Feb 15th, 2009 –

**Kaspar Villiger**, born 1941, a Swiss citizen, was elected to the Board of Directors (BoD) at the 2009 Annual General Meeting (AGM) and was thereafter appointed Chairman of the BoD. He chairs the Governance and Nominating Committee and the Corporate Responsibility Committee. He was elected to the boards of Nestlé, Swiss Re and the Neue Zürcher Zeitung in 2004, all of which he resigned from in 2009 when he took on the position of Chairman of the UBS. He served as Finance Minister and Head of the Federal Department of Finance from 1995, until he stepped down at the end of 2003. He simultaneously served as President of the Swiss Confederation in 1995 and 2002. Villiger was elected as a Swiss Federal Councillor in 1989, and served as the Minister of Defence and Head of the Swiss Federal Military Department. As a co-owner of the Villiger Group, Mr. Villiger managed the Swiss parent firm, Villiger Söhne AG, from 1966 until 1989. In addition, Mr. Villiger held several political positions, first in the parliament of the Canton of Lucerne and, from 1982, in the Swiss Parliament. He graduated from the Swiss Federal Institute of Technology (ETH) in Zurich with a degree in mechanical engineering in 1966.

April 23rd, 2008 – Feb 15th, 2009

**Peter Kurer**, born 1949, a Swiss citizen, was elected to the BoD at the annual general meeting (AGM) held in 2008, and was thereafter appointed Chairman of the BoD. He chaired the Corporate Responsibility committee and the Strategy committee. He served as a member of the UBS Group Executive Board (GEB) from 2002 until his election to the BoD in April 2008. Kurer had served on the Group General Council of the UBS since 2001, when he joined the firm. Between 1991 and 2001, he was a partner at the law firm Homburger AG in Zurich, following his time with the Zurich office of Baker & McKenzie law firm between 1980 and 1990, first as associate and later as partner. He was a law clerk at the District Court of Zurich from 1977 to 1979. He is a member of the board of Avenir Suisse as well as a member of the visiting committee of the University of Chicago’s Law School. He is also a member of the board of trustees of a foundation which acts as an advisory board to the program for law and economics at the University of St. Gallen, and is a member of the Continuing Education Committee, Executive School of Management, Technology and Law, University of St. Gallen. Kurer graduated as doctor iuris from the University of Zurich, and was admitted to the Zurich Bar as an attorney-at-law. He holds an LL.M. from the University of Chicago.
2001 – April 23rd, 2008

Marcel Ospel, born 1950, a Swiss citizen, was elected to the Board at the AGM in April 2001, and was thereafter appointed as Chairman. Prior to this mandate, he served as Group Chief Executive Officer of the UBS. He was the President and Group Chief Executive Officer of Swiss Bank Corporation (SBC) from 1996 to 1998. After being a member of the Executive Board of SBC Warburg from 1990 on, he was appointed CEO of SBC in 1995. He was in charge of Securities Trading and Sales at SBC from 1987 to 1990. He was a Managing Director with Merrill Lynch Capital Markets from 1984 to 1987, and worked in the Capital Markets division at SBC International London and New York from 1980 to 1984. He began his career at Swiss Bank Corporation in the Central Planning and Marketing Division in 1977. Ospel graduated from the School of Economics and Business Administration (SEBA) in Basel.
## Appendix 6: UBS: Board of Directors 2002-2010

**HRCC = Human Resources and Compensation Committee**

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Year</th>
<th>Nat.</th>
<th>Born</th>
<th>F/M</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaspar Villiger</td>
<td>Chairperson&lt;br&gt;Chair of the Governance and Nominating Committee&lt;br&gt;Chair of the Corporate Responsibility Committee</td>
<td>2009-2010 2009-2010 2009-2010</td>
<td>CH</td>
<td>1941</td>
<td>M</td>
<td>Diploma in mechanical engineering, ETH</td>
</tr>
<tr>
<td>Sergio Marchionne</td>
<td>Vice-Chairperson&lt;br&gt;Member of the Corporate Responsibility Committee&lt;br&gt;Member of the Governance and Nominating Committee&lt;br&gt;Member of the Strategy Committee&lt;br&gt;Member of the Compensation Committee</td>
<td>2008-2010 2009-2010 2008-2009 2008-2009 2007-2008</td>
<td>CA/CH</td>
<td>1952</td>
<td>M</td>
<td>Philosophy, University of Toronto, Law at Osgoode Hall Law School, business at the University of Windsor</td>
</tr>
<tr>
<td>Sally Bott</td>
<td>Chair of the HRCC&lt;br&gt;Member of the Corporate Responsibility Committee&lt;br&gt;Member of the HRCC</td>
<td>2009-2010 2008-2010 2008-2009</td>
<td>US</td>
<td>1949</td>
<td>F</td>
<td>Bachelor in Economics at Manhattanville College</td>
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<tr>
<td>Michel Demare</td>
<td>Member of the Audit Committee</td>
<td>2009-2010</td>
<td>BE</td>
<td>1956</td>
<td>M</td>
<td>MBA from the Katholieke Universiteit Leuven</td>
</tr>
<tr>
<td>Rainer-Marc Frey</td>
<td>Member of the Risk Committee&lt;br&gt;Member of the Strategy Committee</td>
<td>2008-2010 2008-2009</td>
<td>CH</td>
<td>1963</td>
<td>M</td>
<td>Degree in economics from the University of St. Gallen</td>
</tr>
<tr>
<td>Bruno Gehrig</td>
<td>Member of the HRCC&lt;br&gt;Member of the Governance and Nominating Committee&lt;br&gt;Member of the Audit Committee</td>
<td>2008-2010 2008-2010 2008-2009</td>
<td>CH</td>
<td>1946</td>
<td>M</td>
<td>PhD in economics, University of Bern</td>
</tr>
<tr>
<td>Ann. F. Godbehere</td>
<td>Member of the Audit Committee&lt;br&gt;Member of the Corporate Responsibility Committee</td>
<td>2009-2010 2009-2010</td>
<td>CA/UK</td>
<td>1955</td>
<td>F</td>
<td>Certified general accountant</td>
</tr>
<tr>
<td>Axel P. Lehmann</td>
<td>Member of the Risk Committee</td>
<td>2009-2010</td>
<td>CH</td>
<td>1959</td>
<td>M</td>
<td>PhD and a master's in business administration and economics, University of St. Gallen</td>
</tr>
<tr>
<td>Helmut Panke</td>
<td>Member of the HRCC&lt;br&gt;Member of the Risk Committee&lt;br&gt;Chair of the Nominating Committee&lt;br&gt;Member of the Nominating Committee</td>
<td>2008-2010 2008-2010 2006-2008 2004-2006</td>
<td>DE</td>
<td>1946</td>
<td>M</td>
<td>PhD in physics, University of Munich</td>
</tr>
<tr>
<td>William G. Parrett</td>
<td>Chair of the Audit Committee&lt;br&gt;Member of the Audit Committee</td>
<td>2009-2010 2008-2009</td>
<td>US</td>
<td>1945</td>
<td>M</td>
<td>Bachelor degree in accounting, St. Francis College, certified public accountant</td>
</tr>
<tr>
<td>David Sidwell</td>
<td>Chair of the Risk Committee&lt;br&gt;Member of the Corporate Responsibility Committee</td>
<td>2008-2010 2008-2009</td>
<td>US/UK</td>
<td>1953</td>
<td>M</td>
<td>Degree from Cambridge University, chartered accountant</td>
</tr>
<tr>
<td>Peter R. Voser</td>
<td>Member of the Governance and Nominating Committee&lt;br&gt;Chair of the Audit Committee&lt;br&gt;Member of the Strategy Committee&lt;br&gt;Member of the Audit Committee&lt;br&gt;Member of the Board</td>
<td>2009-2010 2007-2009 2008-2009 2006-2008 2005-2006</td>
<td>CH</td>
<td>1958</td>
<td>M</td>
<td>BA, University of Applied Sciences in Zurich.</td>
</tr>
<tr>
<td>Joerg Wolle</td>
<td>Chair of the HRCC&lt;br&gt;Member of the Governance and Nominating Committee&lt;br&gt;Member of the Nominating Committee</td>
<td>2008-2009 2008-2009 2006-2008</td>
<td>DE/CH</td>
<td>1957</td>
<td>M</td>
<td>Doctorate, Technical University of Chemnitz</td>
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<tr>
<td>Wolfgang Mayrhuber</td>
<td>Member of the HRCC&lt;br&gt;Member of the Corporate Responsibility Committee.</td>
<td>2010 2010</td>
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<td>1947</td>
<td>M</td>
<td>Mechanical engineering, Technical College in Steyr and Bloor Institute in Canada. Executive Management Training, MIT</td>
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<tr>
<td>Name</td>
<td>Role</td>
<td>Year</td>
<td>Nat. Born</td>
<td>M/F</td>
<td>Education</td>
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<tr>
<td>Ernesto Bertarelli</td>
<td>Member of the Governance and Nominating Committee</td>
<td>2008-2009, 2006-2009</td>
<td>CH</td>
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<td>Bachelor of Science, Babson College and an MBA from Harvard University</td>
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<td>2005-2008</td>
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<td>2004-2005</td>
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<td></td>
<td>Member of the Board</td>
<td>2002-2004</td>
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<tr>
<td></td>
<td>Member of the Compensation Committee</td>
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<td></td>
</tr>
<tr>
<td>Peter Kurer</td>
<td>Chairperson</td>
<td>2008-2009, 2008-2009</td>
<td>CH</td>
<td>M</td>
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</tr>
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<td></td>
<td>Chair of the Corporate Responsibility Committee</td>
<td>2008-2009</td>
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<td></td>
<td>Chair of the Strategy Committee</td>
<td>2008-2009</td>
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<tr>
<td>Gabrielle Kaufmann-Kohler</td>
<td>Chair of the Governance and Nominating Committee</td>
<td>2008-2009, 2006-2009</td>
<td>CH</td>
<td>F</td>
<td>legal studies, University of Geneva and doctorate, University of Basel</td>
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<td></td>
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<tr>
<td>Marcel Ospel</td>
<td>Chairperson</td>
<td>2001-2008</td>
<td>CH</td>
<td>M</td>
<td>Degree from SEBA in Basel</td>
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<td>Chairman of the Corporate Responsibility Committee</td>
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<td>Rolf A. Meyer</td>
<td>Chairman of the Compensation Committee</td>
<td>2002-2008, 2002-2008</td>
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<td>Political Science (Ph.D.) and MBA (lic. oec. HSG), University of St.</td>
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<td>Peter Spuhler</td>
<td>Member of the Compensation Committee</td>
<td>2004-2008</td>
<td>CH</td>
<td>M</td>
<td>Economics, University of St. Gallen</td>
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<td>Lawrence A. Weinbach</td>
<td>Chairman of the Audit Committee</td>
<td>2002-2008</td>
<td>CH</td>
<td>M</td>
<td>Certified Public Accountant, Bachelor of Science in Economics,</td>
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<td></td>
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<td></td>
<td>Wharton School of the University of Pennsylvania</td>
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<tr>
<td>Marco Suter</td>
<td>Vice Chairman</td>
<td>2005-2007, 2006-2007</td>
<td>CH</td>
<td>M</td>
<td>Graduated from the Commercial School in University of St. Gallen and</td>
<td></td>
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<tr>
<td></td>
<td>Chairman of the Corporate Responsibility Committee</td>
<td></td>
<td></td>
<td></td>
<td>the American Institute of Banking</td>
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<td>Sir Peter Davis</td>
<td>Member of the Compensation Committee</td>
<td>2004-2007, 2002-2005</td>
<td>UK</td>
<td>M</td>
<td>Graduated from Chartered Institute of Marketing and holds a Hon LL.D (</td>
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<tr>
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<tr>
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<td>Non-executive Vice Chairman</td>
<td>2002-2006, 2002-2006</td>
<td>CH</td>
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<td>Doctor iuris and attorney-at-law, University of Basel</td>
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<td>Alberto Togni</td>
<td>Executive Vice Chairman</td>
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<tr>
<td>Johannes A. de Gier</td>
<td>Member of the Board (until AGM 2004)</td>
<td>2003-2004, 2002-2003</td>
<td>NL</td>
<td>M</td>
<td>Law degree, the University of Amsterdam.</td>
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<tr>
<td>Hans Peter Ming</td>
<td>Member of the Compensation Committee</td>
<td>2002-2004, 2002-2004</td>
<td>CH</td>
<td>M</td>
<td>Doctor iuris from the University of Zurich</td>
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## Appendix 8: Correlation matrix

### CS CEO

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<tr>
<th>Salary + bonus % of change</th>
<th>Total compensation % of change</th>
<th>CS Revenue</th>
<th>ROA%</th>
<th>Age</th>
<th>Foreign Ownership %</th>
<th>Dominant Shareholder</th>
<th>Public Pressure</th>
<th>Board Size</th>
<th>Employees</th>
<th>Clientel/invested assets</th>
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<td>1.000</td>
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<td>0.894</td>
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<td>0.248</td>
<td>0.518</td>
<td>0.473</td>
<td>0.037</td>
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<tr>
<td>Stock return</td>
<td>0.115</td>
<td>0.786</td>
<td>0.567</td>
<td>0.519</td>
<td>-0.649</td>
<td>0.067</td>
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### CS Chairperson

<table>
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<tr>
<th>Salary + bonus % of change</th>
<th>Total compensation % of change</th>
<th>CS Revenue</th>
<th>ROA%</th>
<th>Age</th>
<th>Foreign Ownership %</th>
<th>Dominant Shareholder</th>
<th>Public Pressure</th>
<th>Board Size</th>
<th>Employees</th>
<th>Clientel/invested assets</th>
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<td>Salary + bonus % of change</td>
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<td>ROA%</td>
<td>ROA%</td>
<td>Age</td>
<td>Foreign Shareholders</td>
<td>Dominant Shareholder</td>
<td>Public Pressure</td>
<td>Board Size</td>
<td>Employees</td>
</tr>
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<table>
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<th>Salary + bonus % of change</th>
<th>Total compensation % of change</th>
<th>UBS Chairperson Revenue</th>
<th>ROA%</th>
<th>ROA%</th>
<th>Age</th>
<th>Foreign Shareholders</th>
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<th>Clients/Invested assets</th>
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<td>-0.056</td>
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<tr>
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<td>0.036</td>
<td>-0.036</td>
<td>-0.056</td>
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</table>
Curriculum Vitae

Marika Staljon Bührer

Education

2007 - 2011  Doctoral studies at the University of St. Gallen, Switzerland

1996 - 2000  Master of Science (Economics and Business Administration) from the Aalto University School of Economics (formerly: Helsinki School of Economics) Finland, Major: Finance, Minors: Quantitative Methods and Economics

1995  Matriculation examination – Helsingin normaalilyseo, Finland

Work experience

2006 - present  Zurich Financial Services, Zurich Switzerland – Compensation Roles, latest position Head of Compensation, Global Life

2004 - 2006  Nokia, Espoo Finland and Zurich Switzerland – Compensation Roles

2002 - 2004  TeliaSonera, Helsinki Finland – Analyst

2000 - 2001  Accenture – Consultant