Strategic Finance and Firm Governance

Status-quo and Perspectives of Strategic Financial Management within the Framework of Corporate Governance – Evidence from Swiss Stock-listed Companies

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> > submitted by

Christian Layr

from

Austria

Approved on the application of

Prof. Dr. Peter Leibfried

and

Prof. Dr. Dirk Schäfer

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St. Gallen, October 21, 2013

The President:

Prof. Dr. Thomas Bieger

For my parents.

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Abstract

This study examines the current state of strategic financial management within the framework of corporate governance, based on evidence from Swiss stock-listed companies. While existing research is focused on how corporate governance mechanisms impact the practice of financial management, much less is known about the self-perception of financial management as a facilitator of good governance. The study contributes to the existing body of knowledge by exploring how financial management and control intersect with corporate strategy and governance.

Three research questions underpin the study: 1) What is the role of financial management in strategy and governance of the firm? 2) How do management control systems contribute to strategy and financial governance? 3) What firm- and manager-fixed effects drive financial strategy and governance?

Findings suggest that financial management plays a central role in corporate strategy and governance of the firm. Specifically, results indicate that financial management has a substantial degree of involvement with respect to issues of strategy and governance. In contributing to these issues, those responsible take a pragmatic view balancing shareholder and other stakeholder claims. Furthermore, it can be demonstrated that management control systems are particularly important to financial governance and the effectiveness of implemented processes and strategies. Finally, while financial strategy and governance were found to be related to firm-specific effects, manager-fixed effects were found to be of minor importance.

Zusammenfassung

In der vorliegenden empirischen Studie wird der aktuelle Stand der finanziellen Führung im Kontext der Grundsätze der Unternehmensführung (Corporate Governance) bei Schweizer Aktiengesellschaften untersucht. Während der Fokus in der bisherigen Forschung häufig darauf gelegt worden ist, wie Corporate Governance Mechanismen die finanzielle Führung beeinflussen, ist weit weniger darüber bekannt, wie die finanzielle Führung selbst gute Corporate Governance fördert. Die Studie trägt somit zu einem besseren Verständnis der Schnittstelle zwischen finanzieller Führung, Strategie und Corporate Governance bei.

In der Studie wird drei Forschungsfragen nachgegangen: 1) Welche Rolle spielt die finanzielle Führung in der Strategie und Governance des Unternehmens? 2) Wie tragen Kontrollsysteme zur Strategie und Governance bei? 3) Welche Unternehmensund Management-Spezifika spielen eine Rolle in der Strategie und Governance von Unternehmen?

Die Studienergebnisse deuten darauf hin, dass die finanzielle Führung eine zentrale Rolle in der Unternehmensstrategie und Governance spielt. Bei der Ausführung dieser Rolle nehmen die handelnden Akteure eine pragmatische Haltung ein, insbesondere bei der Ausbalancierung der Interessen von Anspruchsgruppen. Darüber hinaus unterstreicht die Studie die Bedeutung von Kontrollsystemen für die finanzielle Führung im Allgemeinen und für die Effektivität der implementierten Prozesse und Strategien im Speziellen. Schliesslich konnte gezeigt werden, dass strategische finanzielle Führung und Governance durch Unternehmensspezifika beeinflusst werden, während Management-Eigenschaften für die Ausgestaltung der finanziellen Führung eine untergeordnete Rolle spielen.

Abbreviations

AAA	American Accounting Association
ACCA	Association of Chartered Certified Accountants
AICPA	American Institute of Chartered Accountants
BBRT	Beyond Budgeting Roundtable
BSC	Balanced Scorecard
CEO	Chief Executive Officer
CD&A	Compensation Discussion & Analysis
CFO	Chief Financial Officer
CG	Corporate Governance
CIMA	Chartered Institute of Management Accountants
CO	Swiss Code of Obligations
COSO	Committee of Sponsoring Organizations of the Treadway Commission
DCG	Directive Corporate Governance
EVA	Economic Value Added
FAO	Finance & Accounting Outsourcing
FEI	Financial Executives International
GAAP	Generally accepted accounting principles
IASB	International Accounting Standards Board
ICAEW	Institute of Chartered Accountants in England and Wales
ICFR	Internal Control over Financial Reporting
IIA	Institute of Internal Auditors
IMA	Institute of Management Accountants

MCS	Management Control Systems
OECD	Organisation for Economic Cooperation and Development
PCAOB	Public Company Accounting Oversight Board
SEC	Securities and Exchange Commission
SEM	Structural Equation Modelling
SESTA	Federal Act on Stock Exchanges and Securities Trading
SIX	Swiss Infrastructure and Exchange
SOX	Sarbanes-Oxley Act
TOB	Swiss Takeover Board
U.S.	United States
VBM	Value Based Management
WEF	World Economic Forum

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1 Introduction

Much has been said and written about corporate governance, and various initiatives (e.g. national and international "best-practice" codes) to promote "good" corporate governance have been initiated in recent decades. Nevertheless, anecdotal and empirical evidence suggests that the "conflict" between firm owners (shareholders) and their agents – the managers – is far from being resolved (Kutscher, 2013; Stewart, 2012).

In this respect, Switzerland is no exception. While some see uprising shareholders, vigorously asserting their rights, frequently reported under headlines such as "revolution of capital" (Lüscher, 2012) or "shareholder democracy" (Gnirke, 2012; Schmid, 2013), others see the transition to better corporate governance in stagnation (Otte, 2012).

The general debate, as well as research in the field of corporate governance, is frequently conducted from an "outside-in" or "macro" perspective, which focuses on the structures and processes put in effect to help oversee the corporation (Hambrick et al., 2008). Much less is known from a "micro" or "inside-out" perspective on corporate governance, i.e. how processes and structures inside a firm facilitate or inhibit good corporate governance (Hambrick et al. 2008).

One such promising micro-perspective is financial management (Wilson & Ervin, 1996; O'Regan et al. 2005; Hualun & Tao, 2006; Sterling, 2012). Financial management is not only concerned with the effective and efficient use of financial resources in the firm but also provides the information needed to diminish the information asymmetries between managers and shareholders. While the link between the financial management of a firm and corporate governance is intuitive, the link is

also frequently legally grounded. For example, Swiss corporation law (Swiss Code of Obligations, CO), article 716a states that, among others, the board of directors, as the highest governing body of the corporation, has the non-transferable and inalienable duty to organise "the accounting, financial control and financial planning systems as required for management of the company" (CO, Art. 716a). Thus, treating the financial management of a firm, on an operational level, as a "black box" may potentially obscure important aspects in the corporate governance discussion.

However, as important as financial management might be, it has potentially lost sight of the aims of good corporate governance (Leibfried, 2008). This could be due to the expanded scope of activities, requirements and responsibilities for the finance function in recent years, from traditional domains such as capital structure decisions and corporate disclosure to newer domains such as corporate and business strategy, business partnering and compliance (Economist Intelligence Unit, 2008).

This dissertation addresses the status-quo and perspectives of strategic financial management within the framework of corporate governance. Specifically, it aims to provide insights into current financial management practices at Swiss stock-listed companies. These insights are structures along the dimensions of the financial governance framework, as proposed by Leibfried (2008). The first dimension ("defining governance") focuses on how financial management is involved in the strategy process. The second dimension ("managing governance") emphasises management control systems implemented by financial management to achieve strategic objectives. The third dimension ("reporting governance") deals with issues of corporate disclosure. Lastly, the fourth dimension ("assuring governance") investigates aspects of the control system and risk management. (Leibfried, 2008)

The dissertation also investigates the extent and manner in which firm-fixed and manager-fixed effects relate to financial governance, specifically to finance and disclosure policies. This analysis will be put in the context of "financial conservatism", a phenomenon frequently associated with Swiss firms and which raises some important questions from a corporate governance perspective.

This dissertation's contribution to research and practices is twofold. First, it contributes to corporate governance discussion by providing a clearer understanding on the capabilities and limitations of the finance function in supporting good corporate governance. Second, it deepens the understanding of a finance executive's roles, responsibilities and beliefs.

The remainder of this study is structured as follows:

Chapter 2 sets out the foundations for the analysis. First, an overview is provided of the scope of financial management activities in practice. Second, an introduction to corporate governance is given, with a focus on corporate governance control-mechanisms and the legal- and non-legal sources of corporate governance in Switzerland. Third, the link between corporate governance and finance is elaborated in the context of selected issues of financial governance (Leibfried, 2008).

Building on the preceding chapters, chapter 3 develops the research questions, introduces the general empirical methodology and highlights this study's main contributions.

In chapter 4 the empirical results are presented. These include the main findings from the interviews with 37 Swiss finance executives and the implications of a structural model of financial governance that addresses selected issues of conservatism in financial management practice.

Chapter 5 provides a summary and discussion of the results and gives directions for further research.

2 Foundations

2.1 Financial Management

While, to the best of the author's knowledge, no comprehensive definition of the term "financial management" exists, it can be broadly described as the managerial responsibilities that arise from managing a firm's key resource, namely finance. (Brigham, 2013; Brealey et al., 2011; Copeland et al., 2005)

Within the "St. Gallen Management Model" (Rüegg-Stürm, 2005), financial management is an operational management process which has three generic purposes:

- 1. controllership, which consists of gathering, appraisal and customization of financial effects of managerial decisions and business events;
- 2. *investor relations*, which is based on controlling and reporting, including performance measurement and accounting for internal and external stakeholders; and
- 3. *financing and investments*, which includes the acquisition of capital based on risk and return considerations and the management of invested capital, including investment decisions.

In the absence of a comprehensive definition, financial management is best defined by its responsibilities and the activities it actually performs. According to a survey by the Economist Intelligence Unit, financial management responsibilities are increasingly expanding (Economist Intelligence Unit, 2008). The following paragraphs attempt to outline the current scope of financial management and related issues.

The Institute of Chartered Accountants in England and Wales (ICAEW) provides, to the author's knowledge, the most comprehensive framework of the scope of financial management (see Figure 1). It consists of the financial management activities and the drivers that shape their implementation. According to the ICAEW framework (ICAEW, 2011), the finance function performs five generic, interrelated activities. These activities all relate to the production and use of information. The framework also highlights three categories of drivers that shape the implementation of finance activities. According to the ICAEW framework, these drivers are the reason why idiosyncrasies in how the finance function is designed and what activities it performs may exist between firms.

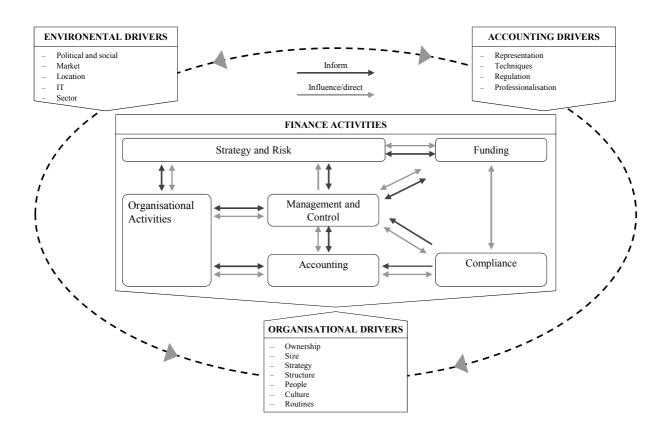


Fig. 1: ICAEW Framework of Financial Management (ICAEW, 2011, p. 2)

2.1.1 Financial Management Activities

The ICAEW framework (ICAEW, 2011) defines five core finance function activities: accounting, compliance, management and control, strategy and risk, and funding.

2.1.1.1 Accounting

According to the ICAEW framework, accounting consists of three sub-activities: (1) transaction processing, (2) accounting and reporting and (3) financial controls (ICAEW, 2011).

The validity of information, financial controls, the weighing of costs and benefits of financial controls, as well as the different information requirements for compliance and management and control represent significant challenges within these key activities. Specifically, ICAEW (2011) identifies the design of accounting systems that are capable of meeting compliance and management control requirements as a major challenge.

Transaction Processing

Transaction processing is concerned with the recording and settlement of transactions, which includes coding and recording of cash obligations, payments and receipts via the book-keeping system (ICAEW, 2011). It consists of capturing financial transactions and recording the effects of transactions in accounting records. It provides information and raw data for internal (management) and external (financial) reporting.

A financial transaction is defined as: "An economic event that affects the assets and equities of the firm, is reflected in its accounts, and is measured in monetary terms." (Hall, 2008, p. 42) Financial transactions originate from three generic transaction cycles that cover the economic activities of a firm from a process perspective, as depicted in Figure 2.

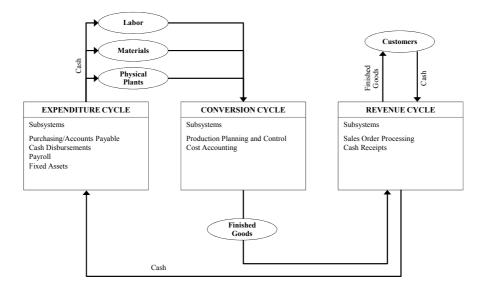


Fig. 2: Transaction Cycles (Hall, 2008, p. 42)

Every transaction cycle is covered by accounting records (e.g. documents, ledgers, journals) which are processed in computer-based systems (see Figure 3). The accounting records are represented by specific file types in these systems: the master, transaction, reference and archive files (Hall, 2008).

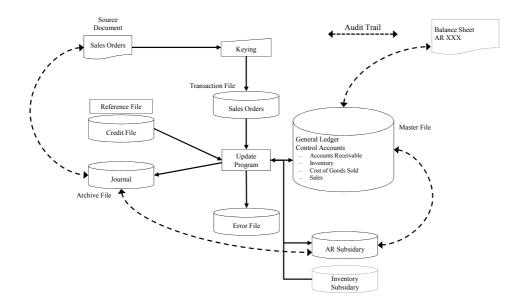


Fig. 3: Accounting Records in a Computer-based System (Hall, 2008, p. 52)

Reporting

Reporting encapsulates activities that deal with the aggregation of transactions to ultimately generate the balance sheet and the profit and loss statement (ICAEW, 2011).

In a recent revision of the conceptual framework for financial reporting, the IASB has revised its definition of the objective of financial reporting. According to the IASB, the general aim of financial reporting is "[...] to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity" (IASB, 2012, p. 1). In contrast to previous versions of the conceptual framework, which listed employees, suppliers, customers, governments and the general public as addressees for financial reporting, the revised version limits the range of addressees to providers of funds (EY, 2010, p. 1).

The revised framework also specifies qualitative characteristics for useful financial information. The fundamental qualitative characteristics of financial information are its predictive and confirmatory value, which determine its relevance for decision-making. This also requires the financial information to represent economic phenomena faithfully, which means in a manner which is complete, neutral and free from error (EY, 2010). In addition to these fundamental characteristics, the following enhancing qualitative characteristics are described by the IASB (2012):

- *Comparability*: allows users to discover similarities and differences among items, over periods and between reporting entities.
- Verifiability: allows users to reach a consensus on whether a particular representation is accurate.
- *Timeliness*: means the financial information is available at the decision date.
- Understandability: means that financial information is classified, characterized and presented in a clear and concise way.

Financial Controls

Financial controls are required to ensure that transactions are recorded and reported accurately (ICAEW, 2011).

Financial controls, or more precisely the internal controls of financial reporting (ICFR), are part of the broader concept of internal control (e.g. the COSO framework). ICFR consists of those controls that are specifically designed to address risks related to financial reporting.

For example, in the U.S., the Securities and Exchange Commission (SEC) requires that "management is responsible for maintaining a system of internal control over financial reporting ("ICFR") that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles." (SEC, 2007, p.2)

The control environment and control activities are key components of the ICFR. The control environment represents the structures and values within the organization and is strongly influenced by factors of company culture such as "tone at the top" (CAQ, 2010). Control activities are "the specific policies and procedures designed to mitigate financial reporting risk" (CAQ, 2010, p. 5). They consist of segregation of duties, preventive controls (e.g. separating approval and payment, limiting access to IT systems) and detective controls (reconciliations, performance monitoring), entity-level controls (e.g. audit committee) and process-level controls (e.g. matching of delivery receipts with vendor invoices) (CAQ, 2010).

2.1.1.2 Compliance

According to ICAEW (2011), compliance needs to be established with respect to:

- *regulatory requirements* (from governmental or other regulatory bodies) concerning financial reporting (e.g. statutory accounts), and
- tax requirements as laid out by national (and international) authorities.

Compliance has become a priority for the finance function since regulations such as the Sarbanes-Oxley Act of 2002 (SOX) have come into effect (Romano, 2004 & 2008). SOX was designed to enhance the reliability of financial reporting and to improve audit quality. Thus it strongly affects the responsibilities of auditors, boards of directors and managers (Berkstresser, 2012). SOX also triggered the establishment of both the Public Companies Accounting Oversight Board (PCAOB), which is responsible for overseeing financial statement audits of publicly-traded corporations, and U.S. auditing standards: "Sarbanes-Oxley's establishment of the PCAOB, which ended more than 100 years of self-regulation at the federal level by the public company audit profession, is perhaps the most fundamental change made by SOX" (EY, 2012, p. 2).

Although codified in the U.S., SOX also had implications for firms outside the U.S., predominantly for those companies listed on U.S. stock exchanges (Ribstein, 2003).

SOX consists of eleven sections. By way of example, sections 302, 404, 409 and 802 will be described briefly in the following paragraphs.

- Section 302: Corporate Responsibility for Financial Reports

Section 302 of SOX prescribes that the CEO and CFO are directly responsible for the accuracy, documentation and submission of all financial reports as well as the internal control structure. Statutory financial reports must include certification that the signing officers have reviewed the reports and that the reports are correct (no material untrue statements and fair presentation of the financial condition) as well as certification that the signing officers are responsible for the internal controls and have disclosed any deficiencies of the internal controls, fraudulent activities or significant changes to the internal controls (Perino, 2002; Wagner & Dittmar, 2006; Coates, 2007).

- Section 404: Management Assessment of Internal Controls

Section 404 is considered to be the most challenging aspect of SOX for companies (e.g. PWC, 2004; Deloitte, 2004). It requires that a firm includes in its financial reports a control report which provides an assessment of the effectiveness of the company's internal control over financial reporting. This implies that managers are responsible for identifying deficiencies in the internal control systems. When these deficiencies become material, they need to be disclosed. According to the SEC, a material weakness is one or more control deficiencies that create a reasonable possibility of a material misstatement in the annual or interim financial statements (SEC, 2007). In order to comply with Section 404, most companies adopted the framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (Brown & Nasuti, 2005). The COSO framework (COSO, 2004) will be described under point 2.1.1.4, later in this section.

In addition, the effectiveness of the internal control system must be attested by a registered external auditor (Perino, 2002; Wagner & Dittmar, 2006; Coates, 2007).

- Section 409: Real-time Issuer Disclosures

Section 409 requires that: "[e]ach issuer [...] shall disclose to the public on a rapid and current basis such additional information concerning material changes in the financial condition or operations of the issuer, in plain English, which may include trend and qualitative information and graphic presentations, as the Commission determines, by rule, is necessary or useful for the protection of investors and in the public interest" (SOX, 2002, Sec. 409(1)).

In practice, Section 409 requires the so-called 8-K filing to be extended (it adds new events that have to be reported) and to be published more quickly (within four business days) (Pinsker, 2006). Pinsker (2006) reports that while the increased timeliness and scope of disclosures can be valuable to investors and stakeholders, firms in practice find it very difficult to comply with these requirements. According to Pinsker, these prescriptions created substantial compliance costs for many firms.

- Section 802: Criminal Penalties for Altering Documents

This section of SOX states that "whoever knowingly alters, destroys, mutilates, conceals, covers up, falsifies, or makes a false entry in any record, document, or tangible [...]" (SOX, 2002, Sec. 802, § 1519) can be fined or imprisoned up to 20 years (or both). Furthermore, it requires that all audit or review workpapers have to be maintained for five years "from the end of the fiscal period in which the audit or review was concluded" (SOX, 2002, Sec. 802, § 1520a). Violators will be fined and/or imprisoned for up to 10 years.

Li et al. (2010) report that SOX extended the responsibilities of chief financial officers (CFOs) and that the turnover of CFOs has increased substantially in the past years as firms that experience adverse SOX 404 opinions frequently replace their CFOs with better-qualified ones. Thus, a CFO's professional qualification is seen as an important factor for internal control quality.

Besides the liability issues associated with deficiencies in SOX compliance, empirical evidence suggests companies with weak controls will suffer further adverse consequences such as negative stock returns (De Franco et al., 2005; Beneish et al., 2007, Hammersley et al., 2007), higher cost of capital (Ashbaugh-Skaife et al., 2007) and higher audit cost (Raghunandan, Rama, 2006; Hoitash et al., 2007). Hoitash et al. conclude: "Collectively, this research suggests that ineffective controls adversely affect shareholder wealth" (Hoitash et al., 2007, p. 7).

2.1.1.3 Management and Control

Management and control, frequently also called "performance management", covers the generation and dissemination of information required to align business operations with an organisation's objectives (ICAEW, 2011).

Otley (1999) describes performance management as a framework based on a set of questions to which organizations continuously have to provide answers in order to cope with changing environments. The questions cover the following topics:

- **Objectives**: how are the key objectives defined and measured?
- *Strategy*: what plans and activities are required for goal achievement?
- **Performance**: what performance targets needs to be achieved?
- **Rewards and penalties**: What rewards can managers and employees expect if the targets are met? What penalties come into effect if targets are not met? How are these formulated and quantified?
- Information flows: What feedback loops are necessary to enable learning?

Tuner (2007) describes performance management as a process of understanding the economics of the relevant industry, defining the company's specific business strategy and understanding the required value chain. Specific performance measures can be deduced based on this understanding (Turner, 2007, p. 2).

Performance Measurement

According to ICAEW (2011), the main challenges for performance measurement lie in the differences between operational and accounting information. While operational information is directly linked with organisational activities, and thus of high relevance to management and control, its validity and reliability is frequently questionable. Accounting information on the other hand may have high validity and reliability but low relevance, e.g. due to its specific timeliness. Thus, there will be an inherent tension in the assessment of the operational performance of the firm, depending on whether one looks at the accounting or the operational information (ICAEW, 2011).

As a consequence, different approaches to performance measurement have evolved in practice.

Advocates of the value-based management (VBM) approach argue that the performance measurement should be based on residual income-based measures, such as the economic value added (EVA) concept (Ittner & Larcker, 2001, p. 358). The value-based performance measure approach requires the primary objective of the firm to be stated in terms of economic values, since changes in economic value measures track changes in shareholder wealth more closely than traditional accounting measures. Empirical evidence by Anctil (1996), Rogerson (1997) and Reichelstein (1997) give support to this view.

However, as intuitively compelling as the value-based performance management approach might be, firms frequently find it difficult to decide on a single primary performance measure. Anecdotal evidence suggests that firms in practice prefer to follow a measurement diversity approach. Within this approach it is argued that as broad a set of measures as possible is best suited to keep managers from "[...] suboptimizing by ignoring relevant performance dimensions or improving one measure at the expense of others" (Ittner et al., 2003, p. 715).

Thus, firms in practice frequently establish a mix of non-financial and financial performance measures, where the non-financial measures are expected to capture strategically relevant, forward-looking aspects of business that are not accurately reflected in short-term accounting measures (Ittner et al., 2003).

Performance measures must be aligned with the firm's strategy and/or value drivers. If strategy and performance are not aligned, so-called *measurement gaps* evolve, which are assumed to be detrimental to performance (Ittner et al., 2003). Performance measurement techniques such as the balanced scorecard (BSC) are frequently associated with this approach.

The BSC approach was invented by Robert S. Kaplan and David P. Norton in the mid-1990s. They proposed the balanced scorecard as a management system to overcome the shortcomings of performance measurement on a strictly financial basis: "[...] financial measures tell the story of past events, an adequate story for the industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation." (Kaplan & Norton, 1996, p. 7)

Thus, Kaplan and Norton propose four dimensions of performance: financial, customer, internal business process, and learning and growth, as well as up to four measures for each dimension that should represent the critical factors for organizational success (Figure 4).

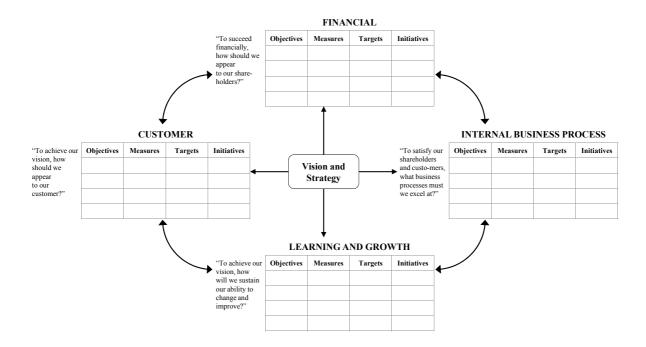


Fig. 4: Balanced Scorecard (Kaplan & Norton, 1996, p. 68)

The BSC approach emphasises linking performance measures with business unit strategy. According to Otley (1999), many organizations are weak in this respect, and the BSC could be a practical technique for them.

However, the BSC approach has also come under criticism, as summarised by the following quote from Jensen: "The balanced scorecard is the managerial equivalent of stakeholder theory. Like stakeholder theory, the notion of a "balanced" scorecard appeals to many, but it is similarly flawed. When we use the dozen or two measures on

the balanced scorecard to measure the performance of people or units, we put managers in the same situation as managers trying to manage under stakeholder theory. We are asking them to maximize in more than one dimension at a time with no idea of the trade-offs between the measures. As a result, purposeful decisions cannot be made." (Jensen, 2002, p. 247)

Due to the broad range of performance dimensions, it becomes increasingly difficult for firms to plan ahead and to explain variances in planned versus actual performance (Anderson, 2004). The planning process itself also contains some critical aspects, due to the de-coupling of planning activities from the actual implementation. Such problems arise frequently where managers and employees are not sufficiently involved in understanding, setting and agreeing plans/targets against which their performance will be assessed (Brignall & Ballantine, 2004). As a consequence, managers and employees are not committed to the plans and targets, which frequently leads to dysfunctional behaviour: "Negative consequences can include operational actions which conflict with financial targets, lack of accountability and targets and plans detached from organizational realities." (ICAEW, 2011, p. 40)

Budgeting

Budgeting is a central tool of management and control and is frequently seen at the core of financial management (Pfläging, 2003). "Budgeting has traditionally been a central plank of most organizations' control mechanisms, as it is one of the few techniques capable of integrating the whole gamut of organizational activity into a single coherent summary." (Otley, 1999, p. 370) Budgeting is a performance management process that involves agreeing and coordinating targets, rewards and action plans as well as measuring and controlling performance against this agreement (Hope & Fraser, 2003). The traditional budgeting process typically follows the schema depicted in Figure 5 below.

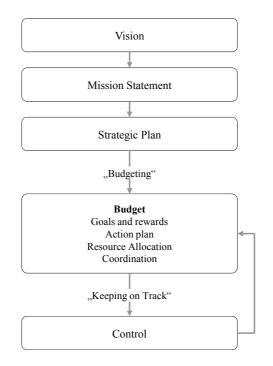


Fig. 5: Budgeting Process (Hope & Fraser, 2003, p. 5)

The budgeting process typically starts with an assessment of the level of output required to achieve the overall objective. The level of spending required to fund the activities necessary to produce the output is determined based on this assessment. Otley explains: "In order to develop a budget there is a need for an underlying plan by which the organization's objectives are expected to be achieved and which serves as the basis for the cost structure underlying the budget." (Otley, 1999, p. 370)

According to Otley (1999), the virtue of the budgetary control process is that it provides a framework which integrates all aspects of an organization's activity, and against which actual performance can be assessed. (Otley, 1999)

However, the traditional budgeting process is frequently criticised; its command and control logic basis is seen as a barrier against change (Pfläging, 2003). Furthermore, the process itself is described as too long and too costly, adding little value to the corporation: "It was designed to enable leaders to plan and control their organizations from the centre. Enabling business units and subunits throughout the organization to

focus on creating value for customers and shareholders was never part of its design." (Hope & Fraser, 2003, p. 17) In today's dynamic and complex markets, it is argued, only organizations that are capable of self-organization will succeed (Pläging, 2006). This is supported by the argument that the way planning and budgeting is performed heavily influences the behaviour of the actors involved. "They [the fixed performance contracts] determine how people behave in any given situation" (Hope & Fraser, 2003, p. 18). Hope and Fraser (2003) go on to argue that many corporate scandals (e.g. Enron, Worldcom) are rooted in the way people are incentivised.

Based on this critique, Hope and Fraser propose a different planning and control approach which they label "beyond budgeting". Beyond budgeting "[...] offers an alternative management model based on the decision-making needs of front-line managers. It is a coherent set of alternative processes that support relative targets and rewards, continuous planning, resources and demand, dynamic cross-company coordination, and a rich array of multilevel controls" (Hope & Fraser, 2003, p. 19). At the core of their concept lie the principles of adaptive processes and radical decentralisation (Becker, 2004). According to Becker (2004), the cornerstones of the principle of adaptive processes are:

- 1. relative benchmarks
- 2. rolling strategic and performance planning (rolling forecasts)
- 3. flexible resource allocation (internal markets)

And the cornerstones of radical decentralization are:

- 1. empowerment (shared beliefs and defined boundaries)
- 2. balance of intra-firm competition and cooperation
- 3. decentralization of responsibilities
- 4. timely, open information flows

In practice, several corporations across a wide range of industries and countries have already successfully implemented the beyond budgeting concept. Among the pioneers were firms such as Svenska Handelsbanken, W.L. Gore & Associates, Dell, Aldi, Egon Zehnder, Toyota etc. (Hope & Fraser, 2003, Pfläging, 2003). Furthermore, the concept is promoted by the Beyond Budgeting Round Table (BBRT), a community of academics and practitioners founded in London in 1998 by Jeremy Hope, Robin Fraser and Peter Bunce. Most importantly, BBRT prepares case study reports of successfullyimplemented beyond budgeting approaches in order to provide a knowledge base and learning platform for organisations that manage without budgets (Lingnau, 2004).

Hope and Fraser (2003) argue that, as a consequence of the implementation of beyond budgeting, more adaptive and customer focused organisations evolve: "Performance responsibility is transferred from the center to business units and, in more mature cases, to the front line. The heightened sense of ownership and commitment that comes from involving local people in setting goals and actions provides the driving force for continuous improvement" (Hope & Fraser, 2003, p. 19). They conclude that companies applying the beyond budgeting concept regularly outperform their peers: "[...] it is already apparent that companies can gain substantial benefits from managing without budgets. But this means not only abandoning budgets but also reinforcing these changes by adopting the most appropriate management structure and style and this is determined by business needs and organizational complexity" (Hope & Fraser, 1999, p. 21).

2.1.1.4 Strategy and Risk

Strategy and Risk encompasses those support activities within the ICAEW (2011) framework that the finance function contributes to implementing corporate strategy and to managing risks.

- Strategy is supported by finance via the provision of financial resources, the establishment of a success measure and by supporting cross-organizational visibility.
- **Risk Management** is supported by a broad range of activities, including risk identification and monitoring of risk mitigation measures.

According to ICAEW (2011), a major challenge for the finance function in this dimension is the problem of involvement versus objectivity: "[...] there is the potential for those responsible for finance activities to be implicated more directly in decision making – from making recommendations through to actually making decisions and being accountable for them. There is a trade-off between the loss of objectivity that may result against the benefits to decision making that deep financial knowledge and insight can bring" (ICAEW, 2011, p. 40).

Financial Management and Strategy

A study from the "CFO Research Service" (2005) indicates that CFOs are increasingly strategy-focused. They do so by supporting the business with information and analyses, and by ensuring that the entire enterprise delivers on its commitments. Kuehn (2008) argues that the CFO should be deeply involved in the process of strategy formulation; however, as he highlights, this involvement should be "not necessarily as a proponent of any one strategy but as an arbiter of various strategic options."(Kuehn, 2008, p. 28) Kuehn demands that the CFO should be a regular part of meetings where corporate strategy decisions are made. He states: "the CFO plays several key roles: bringing the perspective of investors into strategy discussions; evaluating the financial implications, capital requirements, and expected returns of various strategic options; and helping drive scenario planning" (Kuehn, 2008, p. 28).

Risk Management: COSO Framework

In practice, risk management is frequently associated with the so-called COSO framework. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a joint initiative of five private sector organizations: the American Accounting Association (AAA), American Institute of Chartered Accountants (AICPA), Financial Executives International (FEI), the Association of Accountants and Financial Professionals in Business / Institute of Management Accountants (IMA) and the Institute of Internal Auditors (IIA). It was established in 1985 to sponsor the National Commission on Fraudulent Financial Reporting. COSO's mission is "to provide thought leadership through the development of comprehensive frameworks and guidance on enterprise risk management, internal control and fraud deterrence designed to improve organizational performance and governance and to reduce the extent of fraud in organizations." (COSO, 2004, p.1)

COSO is mostly recognised for its standard for internal controls that can be used to document, analyse and design a company's internal control system. It gained considerable importance after the implementation of SOX in 2002, since the COSO standard is an accepted reference model for compliance with the prescriptions of Section 404 of the act. Going a step further, the COSO integrated framework for enterprise risk management should support those responsible in a company "to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value" (COSO, 2004, p.1).

Enterprise risk management is defined as: "[...] a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (COSO, 2004, p. 2). Enterprise risk management thus supports four core objectives (COSO, 2004): alignment of high-level goals (strategy), effective and efficient use of resources (operations), reliability of reporting (reporting) and compliance with applicable laws and regulations (compliance).

According to the COSO framework, enterprise risk management consists of eight components. The first component is the internal environment, which reflects factors such as "tone in the organization", "risk management philosophy and risk appetite" or "integrity and ethical values". The second component is "objective setting", which should ensure that objectives are in line with the risk appetite of the organisation. The third component is the identification of internal and external events that could affect organisational objectives. Components four and five are risk assessment and risk response, where risks are analysed and risk responses selected. Control activities constitute the sixth component. The seventh component is information and communicated" (COSO, 2004, p. 3). The eighth and final component is monitoring of the entire enterprise risk management system. COSO states that a direct relationship exists between objectives and these components. Therefore, enterprise risk management can be represented in a three-dimensional matrix or cube (see Figure 6).

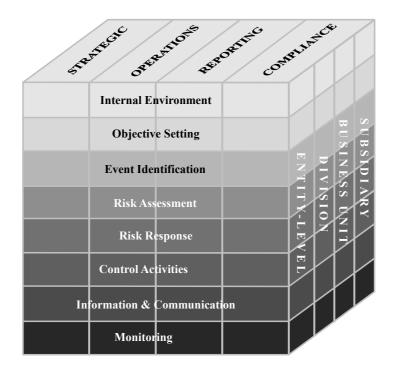


Fig. 6: COSO Framework for Integrated Enterprise Risk Management (COSO, 2004, p. 5)

2.1.1.5 Funding

The activities associated with funding aim to establish a relationship with current and potential investors or funders of the corporation (ICAEW, 2011). Engagement with the investors or funders is established via communication, relationship-building activities and negotiations. Specifically, it consists of:

- Investor Relations: providing equity investors with guidance and financial prospects, information on the progress of strategy implementation and any associated risk
- **Debt financing**: negotiation of terms and conditions (e.g. covenants) with commercial lenders and corresponding information flows (e.g. covenant results).

From a functional perspective, the provision of capital, thus securing liquidity, is frequently seen as the key responsibility of financial management (Volkert & Vettiger, 2009). Furthermore, firms with strong operative cash flow are required to reinvest these funds to generate risk-adequate return or pay it out to their shareholders. Two basic corporate finance principles should guide these decisions:

- The Investment Principle: "Invest in assets and projects that yield a return greater than the minimum acceptable hurdle rate. The hurdle rate should be higher for riskier projects and should reflect the financing mix used - owners' funds (equity) or borrowed money (debt)." (Damodaran, 1997)
- **The Financing Principle**: "Choose a financing mix (debt and equity) that maximizes the value of the investments made and match the financing to nature of the assets being financed." (Damodaran, 1997)

Within this set of activities, the finance function has to cope with the challenge of the consistency and coherence of information and the pressure of uncertainty: "The validity of prospective information is dependent on the accuracy of the assumptions made about the future and may be subject to significant uncertainty. However, in order to obtain financial resources and meet investor and funder expectations there may be pressure to downplay such uncertainties and commit to a greater level of certainty on the achievability of future cash flows than is warranted" (ICAEW, 2011, p. 41).

Furthermore, there might be conflicting interests between investors, funders and managers. Investors will focus on shareholder-value creation while lenders are interested in a secure return on their financial commitments and managers might be focused on growing the firm in size: "These different interests can result in conflict in relation to strategy, dividend policy, borrowing levels, approaches to winding up etc. Such conflicts will place additional pressure on finance activities." (ICAEW, 2011, p. 41)

There are several theories to explain optimal leverage, e.g. the "trade-off theory", the "pecking-order theory" and the "free cash flow theory". With respect to dividend payments, existing theory provides two major explanations (La Porta et al., 1999): the "outcome model" and the "substitution model". The theories are described under section 2.3.2.2 in this study.

2.1.1.6 Organisational Activities

In order to perform the core finance function activities, the finance function itself has to engage in organizational or supportive activities. Therefore, the ICAEW framework includes three categories reflecting these support activities: (1) Finance Systems, (2) Finance Staff and (3) Outsourcing/Shared Services.

Finance Systems

Finance Systems need to be developed, implemented, run, managed and maintained to support the primary finance activities.

Information technology has become an essential element of the finance function: "Information technology plays a critical role in modern business, especially regarding the accounting function" (Efendi et al, 2006, p. 117). Similary, the Economist Intelligence Unit reports: "In many organizations, company-wide automation of routine functions and transparency of operating and financial data throughout the firm are clearly goals to be attained, but are not yet entirely in the hand." (Economist Intelligence Unit, 2008, p. 17)

For finance, or more specifically for management accounting, integrated ERP systems are of high value. These systems allow access to and linking of various operational data (personnel, material, financial) and information sources in the organization. Furthermore, Granlund and Malmi (2002) see ERP systems as potential change agents in the organisation that have direct and indirect effects on management accounting practice (see Figure 7).

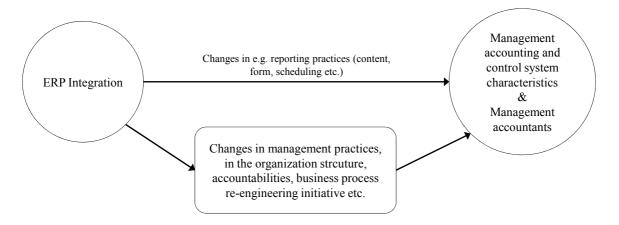


Fig. 7: ERP Systems as Change Agents (Granlund & Malmi, 2002, p. 305)

According to Granlund and Malmi (2002), ERP systems directly affect management accounting practice, e.g. due to changes in reporting practices (content, form and scheduling). Indirect effects may occur when the implementation of the ERP systems leads to changes in organisational structure or practice.

Finance Staff

The finance staff needs to be managed and developed in order to be able to carry out their respective duties within the finance activities (Economist Intelligence Unit, 2008).

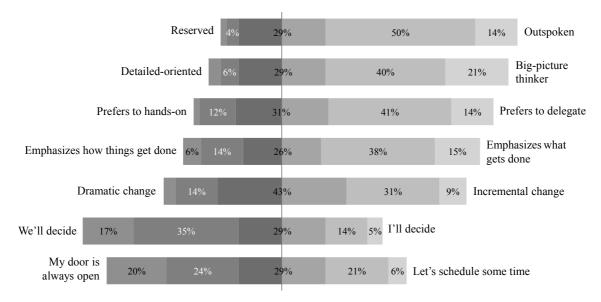
A broad skill set and various competencies are required from the finance staff. For example, the Association of Chartered Certified Accountants (ACCA) states: "We [...] recognise that this new environment requires finance professionals to bring a much broader range of finance skills to the table. The challenges faced by finance functions in supporting businesses are not constrained to a particular accounting or finance discipline. To strive to become world class, finance functions must excel in a broad range of capabilities, from supporting businesses to manage risk, developing effective strategies for growth, driving financial insight, continuing to maintain appropriate levels of control across the organisation as well as ensuring its statutory and regulatory responsibilities are met" (ACCA, 2013, p. 4). A summary of the competencies finance professionals have to demonstrate is presented in Table 1 below.

Finance Professional Competence Matrix			
Competency	Description		
Corporate reporting	Preparing high quality business reports to support stakeholder understanding and decision making.		
Leadership and management	Managing resources and leading organisations effectively and ethically, understanding stakeholder needs and priorities		
Strategy and innovation	Assessing and evaluating strategic position and identifying imaginative options to improve performance and position; implementing strategies to ensure cost effective and innovative business process improvement and change management		
Financial management	Implementing effective investment and financing decisions within the business environment in areas such as investment appraisal, business re-organisations, tax and risk management, treasury and working capital management, to ensure value creation.		
Sustainable management accounting	Assessing, evaluating and implementing management accounting and performance management systems for planning, measuring, controlling and monitoring business performance to ensure sustainable value creation.		
Law and taxation	Understanding laws and regulation relating to business; understanding taxation, regulation and systems, to establish tax liabilities for individuals and companies, and minimising these liabilities using tax planning.		
Audit and assurance	Providing high quality external audits; evaluating information systems and internal controls, and gathering evidence and performing procedures to meet the objectives of audit and assurance engagements.		
Governance, risk and control	Ensuring effective and appropriate governance; evaluating, monitoring and implementing appropriate risk identification procedures; designing and implementing appropriate and effective internal audit and control systems.		
Stakeholder relationship management	Managing stakeholder expectations and needs; aligning the organisation to their requirements; engaging stakeholders effectively and communicating relevant information.		
Professionalism and ethics	Understanding and behaving in accordance with fundamental principles of ethical behaviour and personal ethics; ensuring implementation of appropriate corporate ethical frameworks		

Tab. 1: ACCA Finance Professional Competence Matrix (ACCA, 2012, p. 5)

The role of CFOs is also changing. For example, Tuck School of Business professor Robert A. Howell says: "The current view - which gets pushed by business schools and carried into the executive suite - sees finance officers as little more than number crunchers. They settle the books and look after regulatory compliance, without taking any bigger role in steering company strategy. CFOs analyse the financial impact of a company's moves after they're made—not when they're still being planned" (Howell, 2012, para. 1). Howell argues that CFOs have to engage in strategic thinking: "Not only should they crunch the numbers on potential moves like mergers, but they should also generate strategies themselves, by analysing the likely financial impact of industry trends and other big issues. Strategy and finance should be like two sides of a coin inseparable" (Howell, 2012, para. 1). This also requires the CFO to build up the necessary leadership skills. A survey conducted by KPMG and CFO Publishing (CFO Publishing, 2008) suggests that future CFOs should be outspoken, big-picture thinkers who like to delegate and emphasise what is done over how things are done, while striving for incremental change (see Figure 8).

The study concludes: "In general, the future CFO is seen as most effective as a collaborative leader rather than as one who charges ahead in command-and-control mode. Specifically, he or she should be a big-picture thinker rather than detail-oriented, a delegator rather than hands-on, emphasize what gets done rather than how things are done, strive for incremental change rather than dramatic change, make decisions with others rather than on his or her own, and being approachable rather than distant, for example, by leaving his or her door always open instead of insisting on scheduled appointments." (CFO Publishing, 2008, p. 15)



What are the leadership attributes of the ideal CFO of the future?

Fig. 8: CFO Leadership Styles (CFO Publishing, 2008, p. 15)

Outsourcing and Shared Services

Outsourcing and Shared Services are specialised ways for the finance function to procure services to perform primary finance activities.

Recent advances in information and communication technology provide new ways for a company to organise its operations (The Economist Intelligence Unit, 2008). In combination with ever-increasing pressures to operate more efficiently and the subsequent concentration on core competencies, companies have been increasingly engaged in restructuring their operations through concepts such as outsourcing or shared service centres (ACCA, 2012). Outsourcing has become popular as a method of operational restructuring. More than 70% of Fortune 500 companies use outsourcing or shared services for their finance and accounting operations (ACCA, 2012). However, cost reductions are not the sole motive for employing finance accounting outsourcing (FAO) or shared services: "Beyond cost reduction process improvement, standardization and scalability/flexibility drove FAO adoption, emphasizing a cost+ value proposition" (Everest, 2013, p. 3). Furthermore, restructuring is not only confined to the transactional level – firms are also increasingly engaged in multiprocess outsourcing that also includes "judgement-intensive" finance function processes (Everest, 2012).

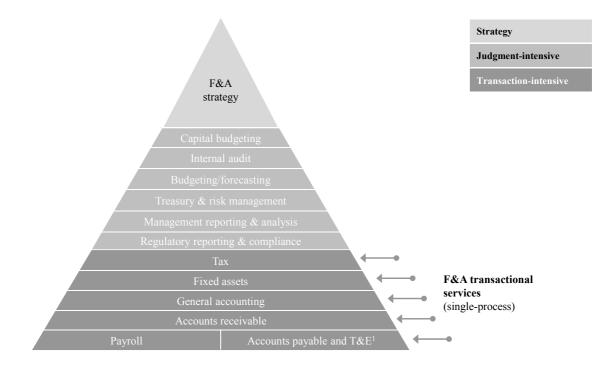


Fig. 9: Finance and Accounting Outsourcing (Everest, 2012, p. 8)

2.1.2 Drivers of Change in Financial Management

ICAEW reports three groups of environmental drivers that shape financial management activities: (1) Environmental Drivers, (2) Accounting Drivers and (3) Organisational Drivers.

2.1.2.1 Environmental Drivers

ICAEW describes five partly interrelated environmental drivers for the finance function.

Political and Social Drivers

Political and social drivers represent regulatory or legal constraints on the running of the business (tax-, company-, property- and employment-law), as well as social constraints due to prevailing societal attitudes (e.g. ethical standards).

An example to illustrate these dynamics is the international taxation of multinationals. While it is generally agreed that international taxation is becoming more and more complicated, some corporations are reported to be very effective in capturing the advantages from the international tax system: "The international tax system in effect provides vast subsidies for multinationals, helping them outcompete local rivals on a factor – tax – that has nothing to do with economic productivity" (Picciotto & Shaxson, 2012, para. 3) As a consequence, new regulation is being advocated based on unitary taxation: "Instead of taxing multinationals according to the legal forms that their tax advisers conjure up, they are taxed according to the genuine economic substance of what they do and where they do it" (Picciotto & Shaxson, 2012, para. 6). The unitary taxation approach would require each company to submit a combined tax report for the consolidated group to the tax authorities of each country where it operates. Based on these reports the overall profits are divided up among the tax authorities using formulae based on the specific physical assets, workforce and sales of the company (Picciotto & Shaxson, 2012).

It can be assumed that the unitary approach would pose significant challenges for the finance function of large multinationals.

Market

The market, or the economic and financial environment, forces the finance function to respond via management control systems as well as via strategy and risk management: "Financial crises mean finance activities are placed center stage with significant management focus. Finance departments are used to both identify what needs to be done (e.g. cost reduction, retrenchment, asset management and/or capacity utilization) and provide institutional sanction for it being done." (ICAEW, 2011, p. 48)

Similarly, according to a report by McKinsey & Company, CFO's knowledge of financials and liquidity and their understanding of how volatile prices and demand will affect the performance of the company are key to successfully steering a company through an economic crisis (Dobbs et al., 2009). On the operational level, finance will be required to rethink some of its control techniques: "Most CFOs will need to replace traditional approaches to budgeting and planning with a more aggressive one underpinned by a reexamination of earlier assumptions about earnings and growth and about how deep the downturn will be." (Dobbs et al., 2009, p.3)

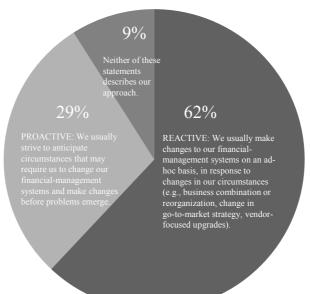
Location

Location increases complexity for globally established firms with respect to compliance (e.g. coping with national rules) and the design and implementation of harmonised management and control systems. As Daniel (2010) highlights, multinational financial planning and control requires special consideration of the gains and losses from currency fluctuations, as well as the increased risk exposure due to multiple locations.

Information Technology

Information Technology drives efficiency in the handling of transaction-based processes and improves data gathering and dissemination capabilities. However, implementing new systems or IT shortcomings may cause problems. "Information sources can become fragmented where new systems are introduced alongside existing systems. This can arise for a number of reasons including the obsolescence of earlier systems, mergers and acquisitions and the introduction of new products and services. The difficulties in combining and reconciling the various sources of information may lead to significant errors and misunderstandings. In many organizations finance staff spend large amounts of time trying to address the root causes and symptoms of such issues." (ICAEW, 2011, p. 49)

A recent report reveals that CFOs identify lack of flexibility as the primary shortcoming of finance IT systems: "Forty-six percent of finance executives say that it takes too long to adapt their financial-management systems to changes in business priorities or processes, compared with only 5% who say that their systems can be easily adapted to such changes" (Surka, 2012, p. 3). A significant number of finance executives have also expressed concern over the finance function's ability to fulfil its role due to systems inflexibility. Accordingly, finance executives emphasize the importance of developing rigorous processes for evaluating, planning and implementing changes to on-premises systems. Furthermore, the study reveals that finance executives show a rather passive approach towards managing change with respect to finance IT systems: "Only 29% strive to anticipate and preempt changing circumstances" (Surka, 2012, p. 3) (see Figure 10).



Which of the following best describes your company's approach to changing its financial-management systems?

Fig. 10: Approaches to Finance IT Change Management (Surka, 2012, p. 3)

(Industry) Sector

The (Industry) Sector drives the uncertainty that the finance function has to cope with, especially with respect to activities related to management, control, strategy and risk. The specific industry in which a company operates also requires different CFO profiles. According to a survey conducted by McKinsey & Company, profiles of CFOs in specific industries frequently share commonalities. For example, they find that CFOs of companies in capital-intensive industries such as basic materials, oil and gas, and telecommunications, are often strongly engaged in business operations and strategy and often have a strong industry-specific background. (Agrawal et al., 2013) Conversely, CFOs in technology and R&D-intensive industries frequently show strong experience in strategy and transactions. Companies in these sectors tend to hire CFOs more frequently from outside the company or the sector. (Agrawal et al., 2013)

2.1.2.2 Accounting Environment

According to the ICAEW framework, the accounting environment consists of four drivers: (1) Accounting Representation, (2) Management Control Techniques, (3) Regulation and (4) Professionalism in Accounting.

Accounting Representation

Accounting representation relates to the dynamics which arise because accounting only provides a partial representation of reality: "Accounting representations are based on interpretations of those who produce them and in turn have to be interpreted by their users" (ICAEW, 2011, p. 49). The objectivity principle is a major ethical issue in accounting. ICAEW recently developed a framework describing the fundamental principles of professional ethics for professional accountants. The relevant sections (120.1 and 120.2) of the ICAEW Code of Ethics are summarized in Table 2 below.

120.1	The principle of objectivity imposes an obligation on all professional accountants not to compromise their professional or business judgment because of bias, conflict of interest or the undue influence of others. Objectivity is the state of mind which has regard to all considerations relevant to the task in hand but no other.
120.2	A professional accountant may be exposed to situations that may impair objectivity. It is impracticable to define and prescribe all such situations. A professional accountant shall not perform a professional service if a circumstance or relationship biases or unduly influences the accountant's professional judgment with respect to that service.

Tab. 2: ACCA Code of Ethics – Objectivity (ACCA, 2013, p. 4)

Management Control Techniques

Management and control techniques impact how management and control activities are actually performed: "A wide array of management accounting techniques have been developed over time, generally in response to specific historic, organizational and/or environmental contexts. Despite a wide range of research on their use, no coherent patterns have been identified to help guide the choice of the technique that is most appropriate in a given situation. Rather, the evidence suggests that the techniques in use are determined by such factors as subjective appraisal, historical usage or pressure from managers or advisors to use the latest technique (or fad)." (ICAEW, 2011, p. 50)

In a recent survey by the Chartered Institute of Management Accountants (CIMA) on the diffusion of management accounting techniques, 41.5% of the respondents indicated that their current cost and management accounting practices required improvement and 14% indicated that their cost and management accounting practices needed a fundamental change in order to fulfil their organisational needs. (Yazdifar & Askaray, 2010)

The main motivation behind implementing cost and management accounting innovations was found to be the perceived capability of the technique to improve quality and overall effectiveness. The study revealed that top management support and commitment are essential preconditions for the success of adoption and implementation. Furthermore, they found that parent companies play an important role in the adoption and implementation of new techniques in subsidiary companies. However, they did not find significant support for the notion that other cultural and institutional pressures drive the diffusion of cost and management accounting techniques, a view frequently expressed by accounting scholars. (Yazdifar & Askaray, 2010)

Adoption of New Management Accounting Techniques						
	ABC ¹	ABM ²	BSC ³	BM^4	SMA ⁵	TC ⁶
Discussions have not taken place	39,9	54,0	34,1	24,7	41,9	57,0
A decision has been taken not to introduce this practice	14,8	9,3	8,6	2,1	6,2	5,8
Cumulative %	54,7	63,3	42,7	26,8	48,1	62,8
Some consideration is being given to the introduction of this	17,5	16,5	19,4	20,7	21,6	13,8
This practice has been introduced on a trial basis	6,5	5,8	10,3	11,3	6,9	5,7
This practice has been implemented and accepted	21,3	14,4	27,6	41,2	23,4	17,7
Cumulative %	27,8	20,2	37,9	52,5	30,3	23,4
Total	100	100	100	100	100	99,9

Tab. 3: Adoption of New Management Accounting Techniques (Yazdifar & Askaray, 2010, p. 7)

Regulation

Regulation governs the scope of necessary compliance activities. The ICAEW reports: "There is some pressure for finance professionals to work on broader regulatory issues, including sustainability. The prominence of natural environment, ethical and governance issues is leading to the finance function extending its scope beyond the narrow financial." (ICAEW, 2011, p. 50)

A survey by Ernst & Young reveals that regulation and compliance risks are rated persistently as the most significant risk faced by CFOs (E&Y, 2011). Regulation and compliance risk was perceived as highly significant across all industries, regardless of sector. Furthermore, the respondents to the survey of Ernst & Young indicated that they saw the risks with respect to regulation and compliance continuing to rise in the years ahead (Figure 11).

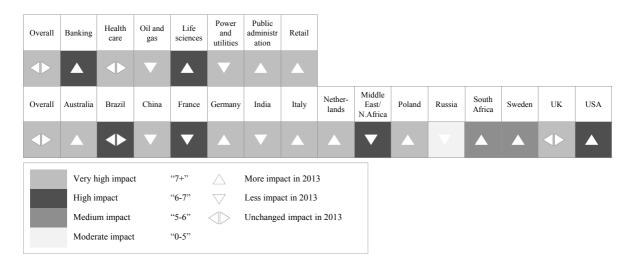


Fig. 11: Regulation and Compliance (E&Y, 2011, p. 5)

Accordingly, companies are actively responding to regulation and compliance risk. The strengthening of risk management and government relations functions was reported as the favoured approach by a majority of respondents (see Table 4) (EY, 2011).

Rank	Mitigation factor
1	Management of risk via CRO function
2	Investment in government relation capacity
3	Continuous updating of compliance function
4	Investment in IT to support compliance
5	Capability for rapid implementation of new requirements
6	Narrowing of compliance focus to key issues
7	Expansion of compliance focus to external partners/suppliers/ customers

Tab. 4: Mitigation Measures Regulation and Compliance Risks (E&Y, 2011, p. 6)

Professionalism in Accounting

Professionalism in accounting can drive finance function activities through the provision of training standards and ethics. However, as the ICAEW reports, "In recent years regulatory requirements have increasingly been prescribed by governmental and global institutions, reducing the impact of the professions. In addition there is an intrinsic tension between professional and employer allegiances." (ICAEW, 2011, p. 51)

Furthermore, accountants are perceived to have played a significant role in the recent economic crisis, and thus regulatory and societal pressures on the accounting profession can be expected from various sides. Research by the Association of Chartered Certified Accountants (ACCA) reveals that public perception of trustworthiness of accountants has eroded in recent years: "A chain of high profile scandals linked to the profession over a number of years (such as Enron and the events of the financial crisis) mean that the industry is facing a legacy of mistrust, a sentiment that is likely linked to old-fashioned stereotypes of who accountants are and what role they play." (ACCA, 2012, p. 2)

The ACCA report concludes that the accounting profession urgently needs to take steps to rebuild trust and asks for increased engagement in stakeholder discussions.

2.1.2.3 Organisational Drivers

Organisational drivers relate to the organizational set-up in which the finance function operates. According to ICAEW, seven factors play a significant role in this context:

Ownership

Ownership may impact finance function activities if the owners put pressure on the finance function to meet and manage financial expectations (a behaviour which is frequently reported from private equity firms). Furthermore, a change in ownership (merger and acquisition / takeover) may also trigger significant changes in the finance function.

Lutz et al. (2010) investigated the role of CFOs in family-owned businesses. They found that the CFO position is frequently the first management position assigned to non-family members. However, they report that tensions may exist between an externally hired CFO and the family firm owners. Specifically, they find that family-owners who strive for a high degree of control are frequently reluctant to hire an external CFO. Furthermore, they report that a non-family CFO may decrease financial risk as non-family CFOs are associated with a more strategic approach to financial planning and increased and stronger relationships with banks.

Size

Size drives the finance function since larger organizations frequently have more sophisticated and formalised management and control systems implemented and employ more specialised staff. On the other hand: "In smaller organizations finance staff may have broader responsibilities and finance activities will tend to be less complex. Such broader activities result from limited management resources. Management and control processes are likely to be simpler and gaps may become apparent when new circumstances develop" (ICAEW, 2011, p. 52).

A benchmark study conducted by Deloitte (2006) reveals that an inverse relationship exists between firm size and finance costs. This can be attributed to economies of scale achieved by larger firms. The study shows that listed companies have more finance staff on average (Table 5) and the median span of control is 15% management versus 85% staff in finance functions (Table 6).

Finance FTE/Total FTE	Top Quartile	Median	Bottom Quartile
Listed companies	4.0%	5.2%	8.8%
Non-listed companies	1.6%	2.9%	3.9%

Tab. 5: Finance FTE/Total FTE (Deloitte, 2006, p. 4)

Finance FTE/Total FTE	Top Quartile	Median	Bottom Quartile
Management	12%	15%	25%
to 🔻	\checkmark	$\mathbf{ abla}$	\checkmark
Staff	88%	85%	75%

Tab. 6: Span of Control (Deloitte, 2006, p. 4)

Strategy

Strategy drives finance function since "the compatibility of strategy with management and control practices is generally believed to be beneficial to organizational performance. As a consequence, effective implementation of new strategies may require changes to management and control activities." (ICAEW, 2011, p. 52)

Furthermore, companies must consider what type of CFO profile best supports the company's strategy. (Agrawal et al., 2013) It is argued that firms following inorganic growth strategies require CFOs with a high degree of market insight and strategic orientation. By contrast, companies following organic growth strategies will require CFOs with stronger organisational leadership skills (Agrawal et al., 2013). It can be concluded that CFOs require some threshold finance expertise; however, depending on the strategic orientation of the firm, different CFO profiles will be required for strategic success.

Organisational Structure

Organisational structure impacts finance since it determines how and which information is produced, where it is produced and to whom it is disseminated. Furthermore, structure will impact collaboration (or potential conflicts) between finance and other functions.

A survey published by McKinsey & Company in 2009 shows that while CFOs were required to exercise tighter control over key issues such as financial planning and analysis or financial-risk management during the financial crisis, this has actually not been accompanied by structural changes. In particular, the majority of respondents reported no increase in centralisation of any finance function, as depicted in Figure 12.

	To what extent is each fir centralized in a corporate center?		How has your company changed or planned to change centralization by the first half of 2009 as a result of the global economic turmoil?			
	Fully centralizedNot centralized	Partly centralizedDon't know	Increased centralizationNo changeDecreased centralizationDon't know			
Treasury	70	17 7 6	11 80 2 8			
Internal Audit	65	15 9 12	6 84 1 9			
Tax	62	22 10 7	6 86 1 8			
Accounts payable	48	29 17 5	15 77 1 7			
Financial planning and analysis	44	29 22 5	13 78 2 7			
General accounting	44	34 17 5	12 80 1 7			
Accounts receivable	43	27 24 6	17 75 1 7			

Fig. 12: Centralization of Finance Function (McKinsey & Company, 2009, p. 3)

People, Culture and Routines

Finance staff shape the finance function through their knowledge, skills, interests and attitudes: "Finance department staff can influence which activities they take responsibility for, how tasks are prioritized and the resources and processes used to carry out the tasks. In addition, commentators have argued that finance departments who want to take on broader business roles will need to proactively pursue this goal rather than wait for the organization to give them such opportunities." (ICAEW, 2011, p. 53)

While this business partnering approach is frequently stated as an objective by finance organisations, the reality in many finance organisations is different. Benchmark data by PWC show that the relationship between data-gathering and analysis is 60:40 for the median company and 50:50 for the top quartile. (PWC, 2009) Furthermore, PWC reports that only 10% of finance FTEs in the median company and 17% in the top quartile are associated with business partnering roles.

According to PWC, the basis for implementing the business partnering approach is that the right people with the right skills create a culture of business partnering (Figure 13).

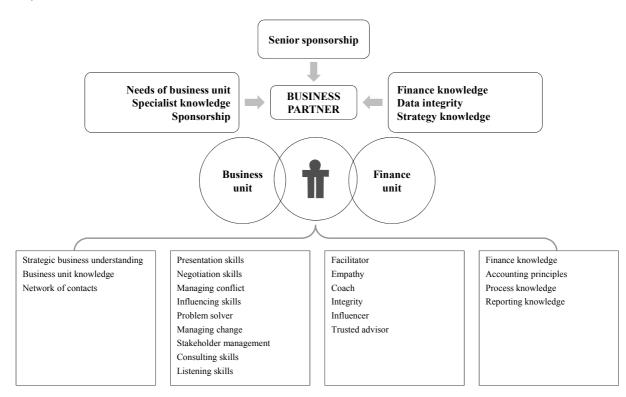


Fig. 13: Business Partnering (PWC, 2009, p. 7)

Culture in general has a major impact on finance: "Organisational culture, power relationships and politics will have a significant impact on how finance activities are implemented and how information is interpreted and used. In addition, changes to finance activities and the introduction of new accounting techniques will impact on the culture of an organization and may change the distribution of power. As a result such changes are likely to face resistance and be difficult to implement." (ICAEW, 2011, p. 53)

The business partnering concept also challenges corporate culture, since finance must balance its controllership role, which consists of enforcing rules and controls in the organization, with its business partnering role, which consists of working together with other members of the organization to drive corporate success. (KPMG, 2006)

Business partnering challenges existing organisational routines as finance shifts focus from traditional, transaction-based finance routines to more broadly defined business partnering work routines.

2.2 Corporate Governance

The discussion on Corporate Governance is largely rooted in Berle and Means' (1932) observation of the "agency" problem which results from the separation of ownership and control in the modern corporation. The agency problem describes the tensions that potentially exist between managers ("agents") and providers of capital ("principals"). When ownership and control are separated, managers are put in a privileged position and could potentially be tempted to exploit this position at the expense of the providers of capital, or as Tirole (2006, p.15) puts it, "the best managers may not be selected, and those managers, once selected, are not accountable." Governance issues seem especially prevalent in companies with strong managers and dispersed shareholders as well as in companies with a controlling shareholder and minority shareholders (Tirole, 2006). Sinha (2006) explains: "The relationship between shareholders and managers is one of strategic interdependence. The separation of ownership from control and the firm-specific nature of managerial human capital implies that neither shareholders nor managers can hope to pursue rational behaviour alone. Co-operation between the two parties, characterised by the pursuit of selfish interest, is the only way to maximize the total surplus available for distribution. Strategic co-operation between shareholders and managers will require the drawing of contracts between the two parties. These contracts could be either complete or incomplete." (Sinha, 2006, p. 4)

With the understanding that the objective of the firm is to maximize value for the owners of the firm, the term "corporate governance" refers to the mechanisms to overcome the potential tensions that are rooted in the separation of ownership and control: "The incomplete contracts between managers and shareholders require the use of corporate governance mechanisms to bridge the gaps." (Sinha, 2006, p. 5) Specifically, corporate governance includes all processes of management and control, which ultimately should secure the providers of capital to a firm with a respective return on their investments (Schleifer & Vishny, 1997; Becht et al., 2002). According to Tirole (2006), this definition is a narrow definition of corporate governance since it puts the investor at the centre: "[...] stakeholders, such as employees, suppliers, or

customers, also have a vested interest in how the firm is run, and these stakeholders' concerns should somehow internalized as well" (Tirole, 2006, p. 16). The OECD defines corporate governance as being "[...] the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance" (OECD, 1999). Dorner and Orth (2005) argue that corporate governance shapes the interdependencies that exist between all relevant actors in corporate decision-making. It is driven by the institutional and regulatory setting and impacts the constituencies at the nexus between shareholders, board-members, and managers. Corporate governance should ultimately raise competitiveness in order to support the primary objective of generating long-term company value (Dorner & Orth, 2005).

That the objective of long-term value creation is frequently in danger was shown through numerous corporate scandals, e.g. Enron, Worldcom etc., which have undermined the trust in corporations, corporate management and capital markets. These scandals led to stricter regulation (e.g. the Sarbanes-Oxley Act) and paved the way for the on-going debate on the implementation of better corporate governance structures and regulation. Tirole (2006) describes four categories or "moral hazards" of managerial behaviour that are not in the best interests of firm owners. The first category is "insufficient effort", which represents a mis-allocation of work time by managers on activities that they prefer, rather than those they should perform. The second category is moral hazards related to "empire building", which describes investments in prestigious projects where the return for the shareholders is questionable. So-called "entrenchment strategies" make up the third category. These are activities managers perform to make themselves appear indispensable (e.g. "managing" the performance measures to "look good", insufficient risk taking or trying to cut shareholder voting rights). Lastly, the fourth category consists of "selfdealing behaviour", which range from permissible but potentially dubious

consumption of benefits at the expense of the firm to illegal activities like insidertrading.

However, these moral hazards or observable managerial misbehaviour represent, according to Tirole (2006), only the "tip of the iceberg": "[...] the submerged part of the iceberg is the institutional response in terms of corporate governance, finance and managerial incentive contracts" (Tirole, 2006, p. 17). Specifically, Tirole identifies "dysfunctional governance" in the form of opacity, especially related to manager compensation (stock options, perks, performance links, "golden parachutes" etc.) and accounting manipulations (e.g. off-balance sheet deals, earnings management).

It seems natural that incidents and behaviour such as these provoke calls for stricter regulation and enforcement. However, Sinha (2006) argues that this is counter-productive: "Apprehension has been expressed that the Sarbanes Oxley Act and similar copycat legislation in other countries will in effect impose a set of legislated checklists for corporate governance. This has the danger of creating a corporate governance ethos that is not desirable, so that there would be no impetus to go beyond the minimum requirements of the rules. A significant amount of time and acumen of lawyers, accountants and advisers would be spent searching for loopholes. There is a real danger that this will encourage a value system that if there is no rule prohibiting an action then it is not illegal and hence acceptable as corporate governance practice." (Sinha, 2006, p. 2)

Furthermore, empirical evidence suggests that better-governed firms actually perform better. According to Gompers, Ishii, and Metrick (2003), the stock return of wellgoverned companies was greater than those of less well-governed firms. They find a reduced risk in better-governed firms that corporate resources are expropriated by managers. Consequently lenders and investors are more willing to provide funds, leading to lower capital costs.

2.2.1 Corporate Governance Mechanisms

Corporate Governance can be broadly divided into internal and external mechanisms. Gillan (2006) summarizes Corporate Governance using the framework depicted in Figure 14.

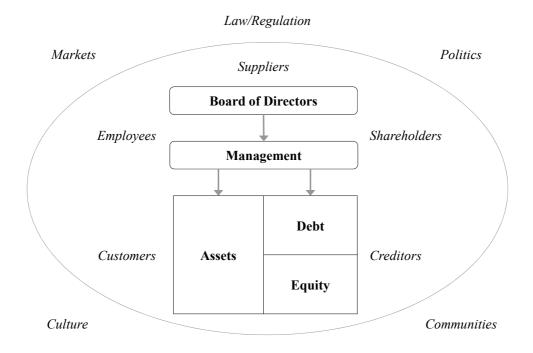


Fig. 14: Corporate Governance Framework (Gillan, 2006, p. 384)

Gillan (2006) puts a balance sheet model at the centre of the framework. The management, as agents of the shareholders, decide on the assets to invest in and how these investments should be financed (debt/equity). The Board of Directors is seen as the "apex of internal control" that oversees the management (Gillan, 2006, p. 382). External governance mechanisms arise from the company's need to raise capital from shareholders and creditors. Both the legal/regulatory setting and the market act as corporate governance mechanisms. Gillan also includes other stakeholders that are usually not seen as actual governance mechanisms. It is argued that their influence on the functioning of the mechanisms should not be underestimated.

From this framework, Gillan (2006) summarizes the corporate governance mechanisms as depicted in Figure 15.

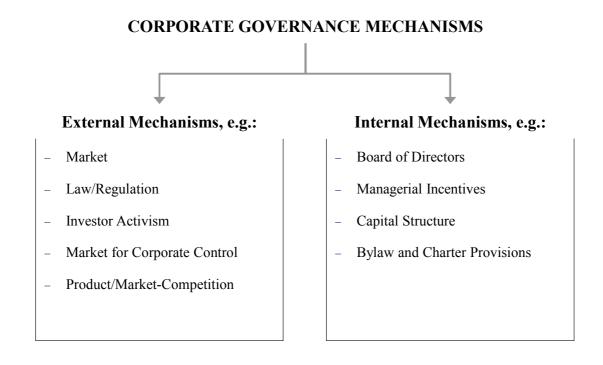


Fig. 15: Corporate Governance Mechanisms (Gillan, 2006, p. 384)

Board of Directors

"Many view boards of directors as the lynchpin of corporate governance" (Gillan, 2006, p. 385) However, as Tirole (2006) reports, boards frequently come under criticism due to their "indolent" behaviour. This behaviour, according to Tirole, is due to a lack of board member independence, overcommitment, insufficient attention and incentives.

Research into board management tends to focus on board size, board characteristics, board independence, the work of sub-committees and CEO duality. Hermanlin and Weisbach (2001) state: "The major conflict within the boardroom is between the CEO and the directors. The CEO has incentives to "capture" the board, so as to ensure that he can keep his job and increase the benefits he derives from being CEO. Directors have incentives to maintain their independence, monitor the CEO, and to replace him if his performance is poor." (Hermanlin & Weisbach, 2001, p. 1)

Hermanlin and Weisbach (2001) find that board size is negatively correlated to firm performance and that firms with small boards and a higher proportion of outsiders tend to make better decisions. Further guidelines for setting up the board of directors can be derived from several best-practice codes (e.g. the Cadbury report) and criteria published by other institutions (e.g. the public pension fund CapPERS) (Tirole, 2006).

Compensation / Managerial Incentives

The issue of managerial incentives is one of the core topics in the corporate governance discussion, which is also frequently discussed by the general public. "[...] corporate governance and remuneration policies are highly interrelated: bad governance can easily lead to value-destroying pay practices, and many notorious excesses in pay can be traced to poor governance." (Jensen et. al., 2004, S. 22)

The objective of managerial incentives should, according to Jensen et al. (2004), be to find and retain the right managers at the lowest cost possible and to motivate them to generate sustainable value. This is achieved on the absolute level and through incentive structuring. Compensation packages frequently consist of a base salary, a bonus and stock-based incentives, either company shares or options, the latter representing the incentive component of the compensation package. As Jensen reports, equity-based compensation was seen as an efficient way to align manager and shareholder interests. Gillan (2006) reports that while equity-based compensation increased, the outcomes of this practice were mixed: "Despite the increased use of option-based compensation during the 1990s, concerns regarding its efficacy abound. In particular, perceptions of a disconnect between pay and performance, the creation of perverse incentives, or managerial excess continue to attract headlines in the press and calls for compensation reform" (Gillan, 2006, p. 387).

Tirole (2006) addresses the drawbacks of equity-based compensation. As Tirole explains, granting managers straight shares provides them with a rent, even in the case of poor performance. Stock-options, on the other hand, will only be valuable when the share price is above the exercise price, thus increasing the incentive for the manager to improve performance. However, as Tirole explains, in a situation where a manager sees it as critical whether he will be able to achieve the exercise price (i.e. the option is

"out of the money"), the manager might be tempted to take excessive risk in order to achieve the exercise price. On the other hand, when the option is "in the money", it might result in the same motivational flaws as arise from using straight shares. Denis et al. (2006) summarise: "Proponents [of equity-based compensation] argue that because options link the compensation of CEOs with changes in shareholder wealth, options increase shareholder wealth by reducing agency problems. Detractors argue, however, that (1) the convexity of options gives managers the incentive to take excessive risk, (2) the usefulness of stock options as incentive devices is mitigated by their limited downside risk and the tendency of companies to "reprice" underwater options, and (3) they give managers the incentive to fraudulently manipulate the company's stock price in order to enhance the value of the options." (Denis et al., 2006, p. 2)

The issues surrounding managerial incentives are far from being resolved. As Core et al. put it: "As is commonly the case in academic work, decades of research have perhaps produced more questions than answers" (Core et al., 2003, p. 44). Furthermore, they emphasise: "One of the key results from our survey is that simple normative prescriptions, such as 'repricings are an indication of poor governance' or 'more equity ownership by executives is always better than less ownership,' are inappropriate. It is almost always necessary to understand the objectives of shareholders, the characteristics of managers, and other elements of the decision-making setting before drawing any conclusions about the desirability of observed equity-based incentive plans or the level of equity ownership by managers." (Core et al., 2003, p. 44)

Capital Structure / Financing

The capital structure of a firm can have a disciplining effect upon the management: "Over two decades of research suggests that debt can act as a self-enforcing governance mechanism; that is, issuing debt holds managers' feet to the fire by forcing them to generate cash to meet interest and principle obligations. Thus, debt mitigates the potential agency costs of free cash flow," (Gillan, 2006, p. 388). Jensen (1989) argues along the same lines: "Debt is a substitute for dividends. It forces managers to disgorge cash rather than waste it" (Jensen, 1989, p. 68).

Similarly, Tirole (2006) argues that "[...] by taking cash out of the firm, it prevents manager from consuming it" (Tirole, 2006, p.51). Furthermore, "[...] Managers must contemplate their future obligation to repay creditors on time, and therefore must pay attention to generate cash flows beyond the future debt repayments ore else enhance their firm's prospect so as to facilitate future issues of claim" (Tirole, 2006, p.51).

Empirical evidence suggests that higher-leveraged firms tend to be higher-valued than lower-leveraged firms (Berger et al., 1997). However, the disciplining force of debt does come at a cost. The firms have to pay interest on the debt and high leverage increases the risk of bankruptcy (Perridon & Steiner, 2007, p. 255).

Bylaw and Charter Provisions

Bylaw and charter provision refer, according to Gillan (2006), to "[...] governance features that serve as potential barriers to the market for corporate control" (Gillan, 2006, p. 388). As Gillian (2006) reports, empirical evidence suggests that anti-takeover measures are associated with poor firm performance.

Such anti-takeover provisions could be so-called "poison pills". Gillan explains: "[a shareholder rights plan] allow[s] firms to issue additional shares to all shareholders other than a hostile blockholder seeking control of the company after a pre-determined ownership threshold has been reached. The pill, if triggered, dilutes both the potential acquirer's voting power and the economic value of their investment in the target firm. Thus, if they swallow the pill, they are poisoned economically." (Gillian, 2006, p. 388)

Legal Mechanisms

Legal mechanisms are the extent to which investors are legally protected from expropriation by managers (La Porta et al., 1998, 2000). As Vishny and Shleifer (1997) argue, "[t]he principal reason that investors provide external financing to firms is that they receive control rights in exchange" (Vishny & Shleifer, 1997, p. 750). The argument is that the contracts between managers and financiers can be legally enforced. As Vishny and Shleifer report: "Much of the difference in corporate governance systems around the world stems from the differences in the nature of legal obligations that managers have to the financiers, as well as in the differences in how courts interpret and enforce these obligations" (Vishny & Shleifer, 1997, p. 750).

Vishny and Shleifer (1997) also report an affirmative duty of loyalty of the managers to the shareholders: "Perhaps the most commonly accepted element of the duty of loyalty are the legal restrictions on managerial self-dealing, such as outright theft from the firm, excessive compensation, or issues of additional securities (such as equity) to the management and its relatives" (Vishny & Shleifer, 1997, p. 750).

With respect to creditors, Vishny and Shleifer (1997) argue: "Like shareholders, creditors have a variety of legal protections, which also vary across countries. [...] These may include the right to grab assets that serve as collateral for the loans, the right to liquidate the company when it does not pay its debts, the right to vote in the decision to reorganize the company, and the right to remove managers in reorganization. Legal protection of creditors is often more effective than that of the shareholders, since default is a reasonably straightforward violation of a debt contract that a court can verify" (Vishny & Shleifer, 1997, p. 750).

Investor Activism

Investor activism means interventions from shareholders over issues such as strategy, investments/divestments, compensation, mergers and acquisitions, etc. As Tirole (2006) reports, in order to exercise activism, formal or informal control is required. Formal control means explicit control through legal channels, whereas informal control describes the extent to which a minority shareholder can convince others to put pressure on the management of the firm.

Closely related to investor activism are proxy fights: "In a proxy contest, a stockholder or a group of stockholders unhappy with managerial policies seeks either election to the board of directors with the ultimate goal of removing management, or support by a majority of shareholders for a resolution on a specific corporate policy" (Tirole, 2006, p. 37). As Tirole argues, frequently even the threat of a proxy contest is sufficient to implement changes. However, in order to be effective, the costs and feasibility of proxy contests must be given: "The competition between management (who can use corporate resources) and dissidents must be fair. And shareholders must be able to communicate among themselves" (Tirole, 2006, p. 37).

The Market for Corporate Control

As Tirole (2006) argues, "[...] takeovers may be needed to keep managers on their toes, if the board and general assembly are ineffective monitors and thus traditional corporate governance fails" (Tirole, 2006, p. 43). The idea of a market for corporate control goes back to Manne in 1965. In his seminal article, he stated: "The lower the stock price, relative to what it could be with more efficient management, the more attractive the takeover becomes to those who believe that they can manage the company more efficiently" (Manne, 1965, p. 113).

However, in practice limitations to the market for corporate control are frequently present. Tirole (2006), for example, gives reports of takeover defences such as staggered boards, supermajority rules, fair price clauses, differential voting rights, poison pills etc.

Product-Market Competition

As Tirole (2006) states: "It is widely agreed that the quality of a firm's management is not solely determined by its design of corporate governance, but also depends on the firm's competitive environment" (Tirole, 2006, p. 28). Product market competition, according to Tirole, will actually improve performance measurement since it "[...] tends to filter out or attenuate exogenous shocks [...]", thus allowing for a relative assessment of the firm's performance. Similarly, Jensen (1986) argues that product market competition may induce managers to perform better in order to keep their jobs. Increased competition thus reduces conflicts between managers and shareholders and may act as a substitute for governance structures. Finally, Bettignies and Baggs (2005) find that product market competition directly and unambiguously lowers the shareholders' marginal cost of exerting managerial effort.

2.2.2 Corporate Governance in Switzerland

The corporate governance discussion spilled over from the Anglo-Saxon economic world to Switzerland in the 1990s. Discussion reached a peak in the years following the economic crisis of the early 2000s. "Enron or other CG scandals did not take place in Switzerland. Yet, the bankruptcy or 'grounding', respectively, of Swissair in 2001 was partly explained by failures and a breakdown in the company's [corporate governance]; and several parliamentarians were thus motivated to formally ask for an improvement of [corporate governance] in the corporation law. Remunerations at ABB – and at other listed companies – were also considered by many observers as a [corporate governance] scandal" (Kunz, p. 105). In an article titled "Swiss corporate governance – Rotten apples" published in *The Economist* in 2002, the author harshly criticises the deadlock of Swiss companies over better corporate governance:

"[...] all this after a row earlier in February about the cavalier use of shareholders' funds by ABB, a Swiss-Swedish engineering firm, which gave its outgoing chairman, Percy Barnevik, a \notin 100m (\$86m) pension; and after shenanigans last year surrounding the bankruptcy and rescue of Swissair, the national airline. Marcel Ospel, the supposedly non-executive chairman of UBS, Switzerland's biggest bank, was roasted by regulators for committing the bank's funds to a Swissair rescue before consulting his executive board." [...]

"It adds up to a country whose creaky structure of corporate governance can hardly accommodate its big companies, under pressure to run along more Anglo-Saxon lines. A real problem in Switzerland is the dearth of high-calibre people to choose as possible non-executive directors. Weak boards get steam-rollered by domineering chief executives—or even by non-executive chairmen."

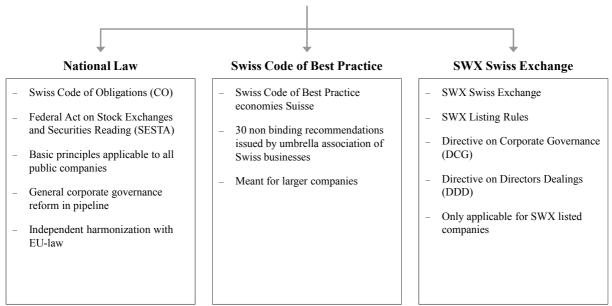
(Economist, 2002, para. 3)

In a similar vein, Speck and Tanega (2005) argue: "[...] Switzerland usually limps along at least one step behind the leading nations' standards" (Speck & Tanega, 2005, p. 473).

In 2001, the Swiss business federation "Économiesuisse" launched an expert commission to evaluate the current practice of corporate governance in Switzerland and to elaborate "best-practices". The Swiss Code of Best Practice for Corporate Governance (Swiss Code) was published in 2002. The Swiss Code, while not legally binding, does provide guidelines mainly with respect to the structure and responsibilities of the board of directors and management (Müller, 2008). In parallel to the Swiss Code, the Swiss stock exchange (SIX) published its own directive, "Information relating to Corporate Governance" (Directive Corporate Governance, DCG), which became effective from July 1st 2002.

The Swiss Code and the DCG are only supplements to the existing legal framework in which firms operate. In particular, the Swiss Code of Obligations contains highly relevant regulation with respect to corporate governance.

In the following paragraphs the foundations of corporate governance in Switzerland (see Figure 16) are discussed. First, the main legal prescriptions with respect to corporate governance of the Swiss Code of Obligation will be highlighted. Then an overview of the DCG and the Swiss Code will be given.



SOURCES OF CORPORATE GOVERNANCE REGULATIONS

Fig. 16: Sources of Corporate Governance in Switzerland (Schmid & Nufer, 2004, p. 89)

2.2.2.1 Legal Sources

The Swiss Code of obligations (CO) and the Federal Act on Stock Exchanges and Securities Trading constitute the major legal framework for Corporate Governance based on the securities law in Switzerland.

Board of Directors – Rights and Duties

The general meeting of shareholders and the board of directors are the two highest decision-making bodies within the corporation and thus highly relevant to corporate governance: "The board of directors may take decisions on all matters which, by law or by the articles of incorporation, are not allocated to the general meeting of shareholders" (Kunz, 2010, p. 108). The general meeting of shareholders is responsible for decisions regarding incorporation and liquidation of the company, the election and deselection of the board of directors as well as the auditor, and the approval of the annual report (Henz, 2011, p. 7).

Paragraph 716a of the CO specifies the non-transferable responsibilities of the board of directors. These include "[...] the ultimate management of the company (i.e. strategy) and giving the necessary directives, the establishment of the organization, the structuring of the accounting system and of the financial controls, the appointment and the removal of the highest management and their supervision, the preparation of the business report and of the general meeting, and finally, the notification of the judge in case of over-indebtedness" (Kunz, 2010, p. 109). Furthermore, as Kunz reports, the execution of a formal risk assessment represents non-transferable duty for the board of directors which became effective in 2008. Thus: "The operation and management of a corporation is by statutory law with the management body (board and senior management), and such power may not be withdrawn by way of a shareholders' resolution [...]. Accordingly, under Swiss law, shareholders have no direct rights or powers in the operation and management of a Swiss company. However, shareholders are to vote on the appointment and the removal of the members of the board whenever a shareholder meeting is held and its agenda provides for the appointment or removal of the members of the board. Thus, shareholders may indirectly influence the course of action taken by the board by threatening or bringing removal motions." (Schleiffer & von Planta, 2010, p. 120)

The board of directors is primarily concerned with safeguarding the interests of the corporation. Kunz concludes: "Not all interests involved (e.g. shareholders, creditors) are necessarily in sync. Hence, the legal, economic and political discussions between proponents of the shareholder value concept and the stakeholder value concept are ongoing in Switzerland – and still not resolved as of today" (Kunz, 2010, p. 108).

As Kunz (2010) argues, Swiss corporation law is flexible with respect to the structure and functioning of the board of directors. Similarly, Müller (2008) describes three organizational structures for the board of directors (see Figure 17). Schleiffer and von Planta specify: "In principle, Swiss corporate law provides for a one-tier board structure. However, the board is granted considerable organisational discretion. Save for non-transferable core competences, such as strategic management, appointment and removal of the members of the management, the supervision of the management and the set-up of a sufficient internal controlling and reporting system, the board may delegate the management to an individual or to a senior management. In listed companies, the day-to-day management is typically delegated to the chief executive officer or the senior management resulting in a two-tier board structure" (Schleiffer & von Planta, 2010, p. 121).

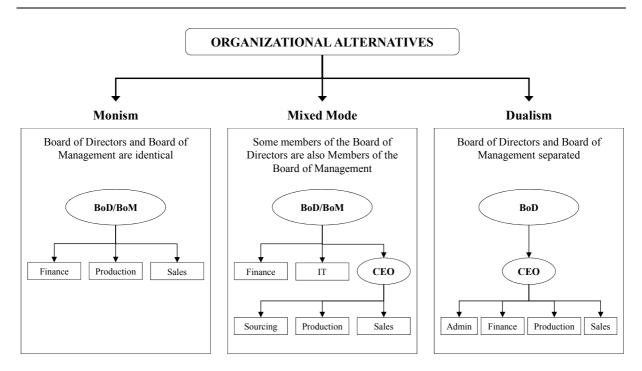


Fig. 17: Organization of the Board of Directors (Müller, 2008, p. 11)

Kunz (2010) points out that committees (e.g. Audit Committee, Compensation Committee, Nomination Committee) of the board of directors are actually not required according to corporate regulation. The establishment of such committees only reflects efforts to establish compliance with non-legal corporate governance guidelines (e.g. the Swiss Code): "Neither Swiss corporate law, nor the Listing Rules or any other rules of the SIX Swiss Exchange provide for mandatory board committees" (Schleiffer & von Planta, 2010, p. 121).

Furthermore, as reported by Kunz (2010), no formal requirements are required in order to be able to be elected to the board of directors "with the exception of being a person instead of a legal entity" (Kunz, 2010, p. 108). There are also no regulations regarding board size, characteristics of members such as age, gender, etc. Swiss law also allows CEO duality: "[...] the corporation law allows the personal union, a highly-contested CG issue in Switzerland, i.e. the joint function of direction and control" (Kunz, 2010, p. 110).

In practice, the board of directors delegates various responsibilities to the management. In turn, the managers are obliged to provide the board of directors with relevant information: "Any board member may request information on all matters

concerning the company [...]. Yet, this is true only at the meetings of the board [...]; apart from the meetings, authorization of the chairman may be needed [...] – should the chairman decline the request, the board will decide [...]. The board members have to apply to the chairman to be shown the books and the files of the corporation [...]" (Kunz, 2010, p. 111).

Shareholders – Rights and Duties

Shareholders have three basic obligations under Swiss corporate law. First, they have "to contribute for a share the amount fixed at the time of issue ("Liberierungspflicht")" (Kunz, 2010, p. 115), and more recently, for shareholders of listed companies, disclosure obligations and mandatory takeover offers to the other shareholders (Kunz, 2010).

In exchange for their financial contribution, the shareholder receives financial rewards (e.g. dividends), non-financial rights (e.g. voting rights in the general meeting) and information rights (Kunz, 2010). Furthermore, "[e]very shareholder may ask the board for information on business matters, exercise its rights in the general meeting and propose motions on items on the agenda. Shareholders can request a special audit for an in-depth analysis of specific issues and make board members and other officers liable for mismanagement" (Schmid & Jufer, 2004, p. 91). The information and control rights of shareholders are mainly given by articles 696 and 697 of the CO.

The main mechanism through which shareholders can execute their rights is the general meeting of the corporation. Schmid and Nufer (2004) report: "As the owners of the company, shareholders have the final decision within the company. Private and public companies are required to hold an annual general meeting of shareholders within six months of the close of the business year. Shareholders representing 10% of the share capital or shares with a nominal value of SFr1m can request the convening of a general meeting and ask for items to be added to the agenda. To facilitate shareholders' participation, lower thresholds can be specified in the articles of association" (Schmid & Jufer, 2004, p. 91).

Takeover Regulation

Takeover regulation in Switzerland is based on the Federal Act on Stock Exchanges and Securities Trading (SESTA or "Börsen- und Effektenhandelsgesetz, BEHG") which was put into effect in 1997/8.

A central article of SESTA is Article 32, which prescribes a mandatory takeover offer whenever an acquirer exceeds a certain threshold of voting rights: "Anyone acquiring more than 33 1/3% of the voting rights of a listed company is obligated to make an offer to acquire all listed equity securities of said company (target company) that are admitted for trading." (Article 32, SESTA)

SESTA Article 29 regulates the defensive measures that an offeree company may take: "From the moment an offer is published until the result is announced, the board of directors of the offeree company shall not enter into any legal transactions which would have the effect of altering significantly the assets or liabilities of the company[...]" (Art. 29/2 SESTA).

Furthermore, in the context of takeover regulation the Swiss Takeover Board (TOB) needs to be considered: "The Swiss Takeover Board (TOB) is a Federal Commission established under the Federal Act on Stock Exchanges and Securities Trading of March 24, 1995. It has jurisdiction to issue general rules and ensure compliance with the provisions applicable to public takeover offers." (TOB, 2013)

Disclosure

Accounting and disclosure in Switzerland is based on a three-level concept (Achleitner et al., 2009). The first level is the accounting and disclosure requirements as prescribed by the Swiss Code of Obligations. The second level is international accounting standards, which are frequently adopted by larger Swiss corporations. The third level represents the Swiss GAAP (Swiss GAAP FER). (Achleitner et al., 2009)

Accounting law in Switzerland is currently in a transition phase. The Swiss Federal Parliament decided on a revision of the Swiss Code of Obligations with respect to accounting and auditing regulation in December 2011, which was set into effect by the Federal Council as of January 1st 2013.

Under the new law, accounting will shift from being dependent on a company's legal form to its financial size (PWC, 2012). The threshold value is CHF 500,000 and applies to all legal entities including registered associations and foundations (with exceptions) and individual undertakings and partnerships (Deloitte, 2012). New threshold levels are also introduced regarding the requirement for ordinary audits and the preparation of consolidated financial statements. Large companies in this instance are companies which qualify in two consecutive years under at least two of the following three criteria: aggregate revenues of CHF 40 million (formerly CHF 20 million); total assets of CHF 20 million (formerly CHF 10 million); and 250 full-time employees (formerly 50). (Deloitte, 2012)

Interestingly, from a corporate governance perspective, the new law requires additional disclosures for minority shareholders. A "qualified minority" in this respect is given when the shareholders represent at least 10% of the capital stock, or when the shareholders are liable for the company or obliged to make capital contribution under certain circumstances (PWC, 2012). Such qualified minorities can request the respective company to prepare a financial statement based on a qualified international standard in addition to the disclosure requirements laid out by the Swiss Code of Obligations.

The revised law's underlying principle of "reliable judgment" is a Swiss peculiarity: "Unlike other accounting standards which require a "true and fair view", the new law merely stipulates a minimum standard of "reliable judgment". A third party looking at accounts need only be able to gain a reliable impression of a business's economic situation. The principle of prudence, which is inadmissible under many foreign standards, remains an important guideline in Switzerland. As a consequence, for example, so-called 'hidden reserves' (created by intentional undervaluations) are still permitted" (Doerig & Wibmer, 2012, para. 2).

The revision of accounting law has led to significant changes in the content and presentation of disclosures. An overview of the key changes of the new accounting law is provided in Appendix 1.

2.2.2.2 Corporate Governance Codes

Besides the legally-binding prescriptions from Swiss corporate law and security-law on matters relating to corporate governance, non-legally binding guidelines exist that describe corporate governance best-practice. While not legally grounded, these guidelines, e.g. the directive on corporate governance, are binding for all companies listed on the Swiss stock market.

Directive Corporate Governance

Companies listed on the Swiss stock exchange are required to disclose relevant corporate governance information as part of their annual report. The "Directive Corporate Governance" (DCG) specifies this requirement, which was put into effect on July 1st 2002 and was to be implemented for annual reports for reporting periods starting from January 1st 2002. The Directive is based on SESTA as well as on the listing-requirements of the Swiss stock exchange. It is part of the self-regulation of the Swiss capital market. The Directive consists of nine chapters (see Table 7).

Purpose	The directive is intended to encourage issuers to make certain key information relating to corporate governance available to investors in an appropriate form.
Scope of applicability	The directive applies to all issuers whose equity securities are listed on the SIX Swiss Exchange Ltd ("SIX Swiss Exchange") and whose registered offices are in Switzerland. It also applies to issuers whose registered offices are not in Switzerland but whose equity securities are listed on the SIX Swiss Exchange and not in their home country.
Content	Group structure and shareholders Capital structure Board of directors Executive committee Compensations, shareholdings and loans Shareholders' participation Changes of control and defence measures Auditing body Information policy
Entry into force	The directive shall enter into force on 1 July 2009 and replaces the Directive on Information relating to Corporate Governance of 1 January 2007.

Tab. 7: Directive Corporate Governance Summary

A mandatory disclosure obligation only obtains for chapter five (compensation). For the other chapters the principle "comply or explain" is applied: "If the issuer opts not to disclose certain information, then the annual report must contain an individual, substantiated justification for each instance of such non-disclosure" (Article 7, DCG).

Swiss Code of Best Practice for Corporate Governance

The Swiss Code was formulated by a panel of experts under the lead of Prof. Dr. Peter Böckli and was published by the Swiss business federation Économiesuisse in 2002. Its main focus is the structure, composition and functioning of the board of directors and the executive management. The Swiss Code has similarities with pre-existing models from Great Britain ("Cadbury Report", "Hampel Report" and the "Combined Code"), France ("Rapport Viénot") and Germany ("Baum Commission", "German Corporate Governance Code"). However, the authors stress the adaptation of the guidelines with respect to Swiss requirements: "The 'Swiss Code' addresses the situation in Switzerland with its characteristic mixture of large, medium and small companies" (Swiss Code, 2008). Furthermore: "The purpose of the "Swiss Code" is to set out guidelines and recommendations, but not force Swiss companies into a straightjacket. Each company should retain the possibility of putting its own ideas on structuring and organization into practice" (Swiss Code, 2008). The target audience for the Swiss Code is Swiss listed companies: "The 'Swiss Code' is intended as recommendations for Swiss public limited companies. Non-listed economically significant companies or organizations (also in other legal forms) should be able to develop appropriate guidelines from the 'Swiss Code'" (Swiss Code, 2008).

The Swiss Code consists of four main chapters, which are briefly summarized in Table 8 below.

Shareholders	Rights of shareholders, facilitation of exercising these rights, general shareholder meeting, shareholder information rights
Board of Directors and Executive Management	Functions of the board of directors, composition, procedures and chairmanship of the board of directors, dealing with conflicts of interest and advance information, chairman of the board of directors and president of the executive management: joint or separate function, internal control system dealing with risk and compliance, committees of the board of directors (audit committee, compensation committee, nomination committee), particular circumstances
Auditing	Discharge, independence
Disclosure	Corporate governance as part of the annual report

Tab. 8: Swiss Code of Best Practice for Corporate Governance Summary

2.2.3 Corporate Governance – Managerial (CFO) Perspective

The board of directors is seen as the apex of "internal control" (Gillan, 2006), and thus is the primary addressee of most corporate governance initiatives inside a firm. However, corporate governance has implications for the entire management, including the executive management team. As Segal (2002) points out, directors and members of the executive team are held accountable to several duties which have legal ramifications in many countries. In particular:

- **Duties of care and loyalty**, which require directors and executive team members to act with diligence and in the interests of the company (Watter & Pellanda, 2010).
- Duty to refrain from improper use of their position or information to gain an advantage for themselves or others or cause detriment to the company (Segal, 2002). This means that directors, executive management team members and persons related to them must conduct company business at arm's length (Watter & Pellanda, 2010).

Wang (2005) reports that recent corporate governance initiatives have added a series of management mandates to these duties. These mandates increase the criminal and civil penalties in case of misconduct. In the case of Switzerland, Pellanda and Watter (2010) specify: "Although no legal changes have as yet been introduced, the global focus on corporate governance has resulted in a more rigorous standard for directors (through rules enacted by the SIX Swiss Exchange and by soft law, such as the Swiss Code of Best Practice for Corporate Governance, SCBP), which increases the risk of claims against them" (Watter & Pellanda, 2010, para. 1). As Wang argues, while some duties and subsequently imposed mandates due to corporate governance reforms affect directors and executive team members equally (e.g. trading restrictions), the obligations on CFOs have increased exponentially. According to Lindsay (2003), this is likely due to the high standards of credibility, reliability, objectivity and integrity expected from CFOs: "CFOs, as functional head of finance, have a unique perspective on the organization and its relationship to the capital markets and business

environment. They have established credibility by being competent and reliable in their financial role. They are also respected for their values of objectivity and integrity" (Lindsay, 2003, p. 1).

These attributes will be required in several areas relevant to corporate governance. In the case of Switzerland, for instance, it is the responsibility of the board of directors, among others, to develop a corporate strategy which aims to increase long-term company value while simultaneously satisfying shareholders' interests (Watter & Pellanda, 2010). This also includes determining how the strategy should be implemented. A typical contribution from the CFO would be the provision of a long-term and medium-term business plan (Watter & Pellanda, 2010).

Under Swiss law, the structuring of the accounting system, financial control and planning is another inalienable duty for the board of directors. This process is also relevant to corporate governance, and substantial contribution from the CFO is required: "This duty covers not only financial accounting and the preparation of financial statements, where the board retains the ultimate responsibility [...] but also the necessity to establish a financial control system, including the monitoring of the liquidity of the company" (Watter & Pellanda, 2010, para. 3).

Furthermore, the CFO and financial management will be the board of directors' primary source of information. Non-executive directors will be particularly dependent on the quantity and quality of information provided. The CFO is also the primary source of information to shareholders. It is frequently the duty of the CFO to communicate with shareholders under the obligation of maintaining confidentiality of non-public information.

The CFO will also be an essential contributor to a functioning system comprising management and the audit committee: "The audit committee and CFOs must identify all of the critical risks, and the finance team has the best view regarding cash, going concern, liquidity, and other balance sheet concerns. In order to successfully mitigate the most critical risks, there needs to be effective communication and openness between the two" (Clyburn, n.d., para. 3). The CFO is also frequently responsible for carrying out the relevant risk assessments and risk management. Finally, CFOs are charged with duties of compliance with stock exchange listing requirements (i.e. rules

on *ad hoc* publicity, disclosure of management transactions, corporate governance) and other legal requirements (e.g. Merger Act).

These are all examples of how the CFO and financial management can directly facilitate good corporate governance. Corporate governance has put increasing obligations on directors, the executive management team and particularly the CFO. In this regard, Segal (2002) argues that "good corporate governance also involves an understanding of, and commitment to, the outcomes of corporate practices rather than simply a focus on the process of compliance. It requires the development of more than a checklist mentality approach. In essence, it is a philosophical approach to doing business in that it recognises that corporate practice does not simply involve conformance but also performance." (Segal, 2002, p. 6)

In the following section, the financial governance framework proposed by Leibfried (2008) is used to elaborate the contributions of the CFO to corporate governance.

2.3 Financial Governance

2.3.1 Terminology

The term "financial governance" is used in various contexts as described in the following paragraphs.

In economics the term is used to describe the financial system, i.e. the financial market actors and how these are regulated by public authorities (Baker, 2010). Germain (2001) defines financial governance as "[...] the rules and procedures by which internationally active institutions are governed, [and] the public mechanisms by which authoritative decisions about these rules and procedures are made" (Germain, 2001, p. 411). For example, the World Economic Forum (WEF) launched an initiative on financial governance that "[...] consists of an ongoing dialogue between key stakeholders in the global financial sector, policy arena and academia concerning an emerging regulatory framework designed to enhance the global economic recovery and provide a sound basis for long-term stability" (WEF, 2013).

The term financial governance is also frequently used in the context of public finance. For example: "Financial governance describes the way a Council manages its financial affairs in pursuing its strategic and corporate objectives and ensuring appropriate high levels of accountability. It comprises the policies and practices by which a Council meets its responsibility to the community to achieve long-term financial sustainability" (LGA, 2012, p. 3). Financial governance in this context aims at "supporting sound financial decision making", "ensuring affordable services", "guiding funding and financing" and "facilitating performance monitoring and review" (LGA, 2012).

Besides economics and public finance, the term financial governance is also used by consultants, management-trainers and software-providers to label their services. For example, the management consultancy Deloitte published an article called *The 'Last Mile' of finance: Strategically transforming financial governance* that highlights the importance of streamlined processes in the finance function, especially for the month-end closing, so as to have sufficient resources and time available to perform its actual

role of contributing to the success of the organisation. They describe financial governance as "a holistic approach that understands how people, processes, and systems contribute—both individually and collectively—may help organizations improve efficiency, governance, and the quality of their reporting" (Deloitte, 2010).

Furthermore, seminars can be found under the label "Financial Governance" that aim to improve managers and directors' financial literacy and providing them with knowledge on the link between finance and strategy.

Finally, providers of software for finance function also use the term "financial governance". The US-based software firm Oracle Corp. describes its financial governance solution as follows: "[...] Financial Governance can support CFOs in their efforts to build controls along the close cycle, achieve risk-adjusted insight with unified financial reporting and compliance analytics, and enhance the timeliness and quality of financial reporting" (www.oracle.com).

Leibfried (2008) uses the term "Financial Governance" to describe a conceptual framework which reconciles the basic ideas of good corporate governance with the multiple dimensions of financial management (Leibfried, 2008, p. 82). The framework is operationalised through four dimensions: defining, managing, reporting and assuring governance.

In the following paragraphs, the financial governance dimension as defined by Leibfried (2008) will be introduced and selected issues in each dimension highlighted.

2.3.2 Selected Issues of Financial Governance

2.3.2.1 Defining Governance

Defining the Corporate Objective Function

The starting point for the first dimension of Financial Governance, "defining governance", is to define the firm's objectives (Leibfried, 2008). Jensen (2002) argues: "Every organization attempting to accomplish something has to ask and answer the following question: What are we trying to accomplish? Or, put even more simply, when all is said and done, how do we measure better versus worse? Even simpler, how do we keep score?" (Jensen, 2002, S. 236)

The definition of the objective function for the company frequently reduces to the debate of "shareholder value" versus "stakeholder value". Proponents of stakeholder theory argue: "Economic value is created by people who voluntarily come together and cooperate to improve everyone's circumstance. Managers must develop relationships, inspire their stakeholders, and create communities where everyone strives to give their best to deliver the value the firm promises. Certainly shareholders are an important constituent and profits are a critical feature of this activity, but concern for profits is the result rather than the driver in the process of value creation" (Freeman et al., 2004). Accordingly, the proponents of stakeholder theory argue in favour of a stakeholder approach to strategic management. According to Freeman and McVea (2001), managers are required under this stakeholder view to formulate and implement strategies which "satisfy all and only those groups who have a stake in the business" (Freeman & McVea, 2001, p. 7). This requires the management and integration of the relationships with stakeholders such as shareholders, employees, customers, suppliers and communities (Freeman & McVea, 2001).

Opposing the stakeholder approach to strategic management, Sundaran and Inkpen state: "Shareholder value maximization should be the preferred corporate goal not because it is law, not because it may be, as some argue, the ethical thing to do, nor because it is expedient because it is based on an observable and measurable metric. Our argument is that it should be the goal because it is the best among all available alternatives, and thus the preferred goal for managers formulating and implementing strategy" (Sundaram & Inkpen, 2006, p. 350). They provide five arguments for their statement.

Their first argument is that the goal of maximising shareholder value is favourable to stakeholders. Sundaram and Inkpen (2006) argue that shareholder claims are pure residual claims and therefore will be due only after all other claims have been met. This would imply that only shareholders have a real incentive to maximise the value of the firm, since all other claimants will be focused solely on the fulfilment of their own claims: "Claimants to committed cash flows have no incentive to increase the value of the firm beyond the point at which their commitments are assured" (Sundaram & Inkpen, 2006, p. 353).

Their second argument is that maximising shareholder value creates the appropriate incentives for managers to take on entrepreneurial risks. They argue that managers will only strive for above average performance under pressure from stakeholders. Other stakeholders, it is argued, do not have an incentive for entrepreneurial risk-taking on the side of management: "Fixed claimants do no better whether the firm performs 'spectacularly well' or just 'well'" (Sundaram & Inkpen, 2006, p. 354).

Third, Sundaram and Inkpen argue that having more than one objective function will make governing difficult, if not impossible: "To suggest that managers must juggle multiple goals in a complex hierarchy is wishful thinking. Even if managers could decide on a single stakeholder, there is differentiation within stakeholding groups—e.g., different classes of employees, seniority levels for bondholders, tiers for suppliers, community groups whose objectives might be in conflict with those of other community groups, and so forth" (Sundaram & Inkpen, 2006, p. 354).

The fourth argument states that it is easier to make shareholders out of stakeholders than vice versa. A stakeholder (e.g. employees, supplier, customers) can, the argument goes, always demand or choose to become a shareholder. On the other hand, "[...] making the reverse happen is not easy: It is difficult, if not impossible, for a shareholder to become a stakeholder. It is fairly obvious that even if (s)he wants to, a shareholder cannot just become, or demand to become, an employee, a supplier, or the member of a local community of a firm in which (s)he owns shares." Thus, under the

stakeholder management approach shareholders would forgo the opportunity to participate in the governance process (Sundaram & Inkpen, 2006).

Finally, Sundaram and Inkpen argue that, in the event of a breach of contract or trust, stakeholders, rather than shareholders, are better protected by contracts and the legal system (Sundaram & Inkpen, 2006).

Moreover, the inventor of the shareholder-value concept, Alfred Rappaport, states: "It has become fashionable to blame the pursuit of shareholder value for the ills besetting corporate America: managers and investors obsessed with next quarter's results, failure to invest in long-term growth, and even the accounting scandals that have grabbed headlines. When executives destroy the value they are supposed to be creating, they almost always claim that stock market pressure made them do it. The reality is that the shareholder value principle has not failed management; rather, it is management that has betrayed the principle" (Rappaport, 2006, p. 2).

Rappaport (2006) reports that managers frequently state that they are forced by institutional investors to take on a short-term orientation due to the shortened holding periods of stocks, and that it makes no sense to manage in the interest of long-term oriented shareholders when there are none. However, Rappaport states that what should ultimately matter is not investor holding periods but the market valuation of the firm based on cash flows. Rappaport concludes: "Management's responsibility, therefore, is to deliver those flows - that is, to pursue long-term value maximization regardless of the mix of high- and low-turnover shareholders. And no one could reasonably argue that an absence of long-term shareholders gives management the license to maximize short-term performance and risk endangering the company's future. The competitive landscape, not the shareholder list, should shape business strategies" (Rappaport, 2006, p. 3).

Jensen considers this discussion of stakeholder vs. shareholders as wrongly framed: "The real issue to be considered here is what firm behavior will result in the least social waste or equivalently, what behavior will get the most out of society's limited resources and not whether one group is or should be more privileged than another" (Jensen, 2002, S. 239). In a similar vein, Gomez and Meynhardt (2009) describe the concept of "public value" as a pyramid of value creation for the promotion of the common good from which the objective function for the company (see Figure 18) can be derived. On the lower levels of the pyramid it is important to neither promote nor tolerate behaviour that is detrimental to the creation of public value. Based on this, it is the responsibility of the company to create long-term value and to build up economic resources. The concept of public value thus involves a clear commitment to creating value. According to Gomez and Meynhardt (2009), this value creation or realisation of profits is a central element of the public value concept and a rejection of the idea that value could be created sustainably without striving for profits. At the top of the public value pyramid is the need for decency in grey areas, which should prevent making profits "at all costs".

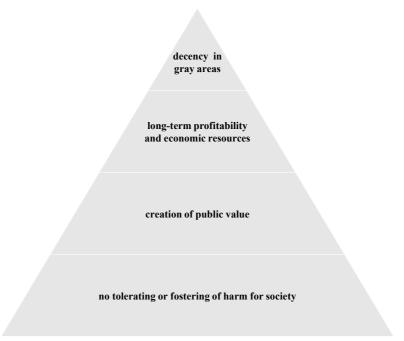


Fig. 18: Public Value Pyramid according to Gomez and Meynhardt (2009, p. 155)

This raises some important questions from a governance perspective: specifically, questions of shareholder value orientation or more simply, the question of what and who matters to the managers, so-called "stakeholder salience".

Stakeholder Salience as source of Shareholder Supremacy

The concept of stakeholder salience goes back to Agle, Mitchell and Wood (1997). They argue that cumulative perception of power, legitimacy and urgency expresses the importance of a specific stakeholder group from the perspective of an individual (Agle et al., 1999). Claire defines salience as "[...] the extent to which managers in organization give priority to stakeholder claims." (Claire, 2008, p. 144) The theoretical foundation of stakeholder salience can be found in social cognition and organisation theory (Agle et al., 1999).

The operationalisation of stakeholder salience goes back to Agle, Mitchell and Sonnenfeld (1999). They define power, urgency and legitimacy as follows:

- **Power**: "the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.] and/or coercive or physical force [gun, lock, sabotage, etc., including access to legal processes that can invoke the use of physical force] and/or positive or negative social influence [on reputation, prestige, etc., through media, etc.] to obtain its will" (Agle et al., 1999, S. 525).

Claire (2008) argues that while power is easy to recognise, it can be difficult to define. According to Claire, the power of managers can stem from hierarchy or their access to resources. These two constituencies allow managers to impose their will on the desired outcomes against the desires of other members of the organisation. (Claire, 2008)

- Urgency refers, according to Agle et al. (1999), to the capability of a stakeholder group to seek attention from the management team.
 According to Claire, urgency can be understood as "immediate" or "pressing" attention that essentially shapes the dynamics between stakeholders and management.
- Legitimacy is a characteristic of claims, namely the level to which they are perceived by a particular stakeholder group as proper or appropriate (Agle et al. 1999).

Claire (2008) specifies: "Legitimacy is used to describe stakeholder behavior which is right, proper and conforms to expected and acceptable standards, in the view of the organization" (Claire, 2008, p. 144).

Туре	Salience	Attribute(s)	Name
Latent	Low	Power	Dormant
Latent	Low	Legitimacy	Discretionary
Latent	Low	Urgency	Demanding
Expectant	Medium	Power and legitimacy	Dominant
Expectant	Medium	Power and urgency	Dangerous
Expectant	Medium	Legitimacy and urgency	Dependent
Definitive	High	Power, legitimacy and urgency	Definitive

Based on these attributes, stakeholders can be categorised accordingly (see Table 9).

Tab. 9: Stakeholder Typology (Claire, 2008, p. 144)

The stakeholder groups are based on Freeman's (1984) original definition: "Any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46). According to Freeman, these groups or individuals have to be taken into consideration in order to develop successful strategies. Employees, customers, suppliers, shareholders, governments and the general public are widely accepted groups of stakeholders.

Agle, Mitchell and Sonnenfeld (1999) find in their survey of 80 U.S. firms that the attributes of power, legitimacy and urgency are appropriate to measure stakeholder salience. Furthermore, they find evidence that the salience of stakeholders who are part of the traditional production function view of the firm – shareholders, employees, and customers – is higher than that of stakeholders who are part of the expanded stakeholder view of the firm: governments and communities (see Table 10). Thus they conclude: "The traditional production view appears to remain dominant in the mind of large corporations' CEOs" (Agle, et al. 1999, p. 520).

Variable	Mean	<i>S</i> . <i>D</i> .
Shareholder power	6.1	0.9
Shareholder legitimacy	6.2	1.1
Shareholder urgency	5.2	1.8
Shareholder salience	6.3	0.8
Employee power	5.6	1.0
Employee legitimacy	6.1	0.9
Employee urgency	5.1	1.4
Employee salience	6.4	0.6
Customer power	6.3	0.9
Customer legitimacy	6.3	1.1
Customer urgency	5.5	1.5
Customer salience	6.6	0.5
Government power	5.9	1.1
Government legitimacy	4.1	1.7
Government urgency	3.9	1.8
Government salience	5.1	1.6
Community power	3.0	1.6
Community legitimacy	4.4	1.4
Community urgency	4.1	1.7
Community salience	4.0	1.6

Tab. 10: Stakeholder Salience (Agle et al., 1999, p. 516)

Similarly, Parent and Deephouse (2007) find, on the basis of several case studies, a positive relation between the three stakeholder attributes and stakeholder salience. According to them, power is the most significant attribute, followed by urgency and legitimacy. Furthermore, they report that salience differs across management levels.

Top managers in general identify stakeholders as more relevant than lower level managers do.

Interestingly, according to the survey results of Alge et al. (1999), shareholders are only moderately salient to CEOs. Shareholders receive a salience score of 6.3, whereas employees are rated 6.4, customers 6.6 (see Table 10 above). This contradicts traditional notions of shareholders as being the dominant stakeholder group in the view of executives.

Legal foundations of Shareholder Supremacy

Duties of loyalty and care, as stated frequently in legal company codes, are seen as the legal foundations for shareholder supremacy. However, as Smith (2003) argues, the duty of care only implies that decision making must be based on solid grounds and that duty of loyalty means the appropriate behaviour in situations where conflict of interest may exist (Smith, 2003). As Smith reports, U.S. courts actually do not challenge corporate decisions, as long as they are in line with the duties of duty and loyalty "even if they are made according to stakeholder theory" (Smith, 2013). Thus, Smith rejects the view that directors or managers are liable for decisions that go against interests of shareholders, an argument that is frequently put forward based on perceptions of shareholder supremacy under U.S. law. Smith concludes: "[...] in at least 38 states, there are now 'stakeholder' laws, which permit (or even require) directors to consider the impact of their actions on constituencies other than shareholders" (Smith, 2003).

Firms outside the U.S. are also bound by the principles of care and loyalty (Schmidt & Jufer, 2004). For example, Swiss stock-listed ABB Group states in its key principles and rules on corporate governance: "The directors and officers of a Swiss corporation are bound, as specified in the Swiss Code of Obligations, to perform their duties with all due care, to safeguard the interests of the corporation in good faith and to extend equal treatment to shareholders in like circumstances" (ABB, 2013). Thus, while the equal treatment of shareholders in similar situations is legally grounded, the primary stated objective is solely the safeguarding of company interests. While this rejects the

notion of shareholder supremacy, it also rejects the supremacy of other any other stakeholder group, e.g. that of the managers (Smith, 2002).

Defining Strategy

Having stated the corporate objective function, strategies need to be developed and implemented accordingly. The involvement of finance and the role of the CFO in the strategy process are reported to be undergoing changes of late.

As Zorn (2001) explains, the CFO function first became important to corporate management when large conglomerates in the second half of the twentieth century needed to handle the financing challenges that emerged from acquisitions in pursuit of diversification. The next rise of the function came with the shareholder value discussion: "[...] the role kept expanding in the following years to focus on managing shareholders and stock prices" (Zorn, 2001, p. 354). As shareholder value began to be criticised as the primary objective of a firm, commentators from various sides observed a changing role of the CFO. For example, Favaro (2001) states: "In the traditional executive suite, the chief financial officer's (CFO's) role was to keep tabs on the money and then make sense of that information for the board of directors, top management, and the investment community. And while the CFO's freedom was large, few ventured beyond these purely financial domains. But times have changed" (Favaro, 2001, p. 5). Similar contributions have accumulated in recent years. These statements often originate from practitioners or management consultants. However, a number of academics have also engaged in the discussion. Frequently, the essence of these contributions is that the finance functions, specifically the roles and responsibilities of finance executives, are changing and that the finance function is taking on a more strategic role within the company.

The conclusion from the above discussion is that involving the finance function will benefit the strategy process. However, in academic research, manager involvement in the strategy process is associated with both positive and negative effects. As Collier et al. (2004) explain, while involvement may lead to a stronger shared vision, increase rationality and improve adaptiveness, it could also lead to political behaviour and inertia. Nevertheless, in their study of over 6000 managers Collier et al. (2004) find

evidence of positive aspects of strategy involvement. They conclude: "[...] managers who are more involved in strategy not only see the process in a more favourable light but also act in ways that make the process more effective. The main implication of these findings is that for most organisations increasing involvement improves the strategy process" (Collier et al., 2004).

Defining Financial Targets

Which financial target best operationalises the corporate objective function? Which strategy based on that target is best suited to safeguarding the interests of the corporation? Recently, various commentators have suggested that long-term value creation is the answer (e.g. Jensen, 2002).

According to Leibfried (2008), the operationalisation of such financial targets is traditionally the domain of financial management, disclosure requirements and the The operationalisation of objectives beyond accompanying regulations. the profitability objective is considered by Leibfried to be far more difficult. Even if the operationalization is successful, the problem of comparability – due to the lack of appropriate standards - will still exist. Jensen (2002) also draws attention to the problems that inevitably result from multiple target dimensions: "The lack of a single dimension by which an organization or department or person will score their performance means these units or people cannot make purposeful decisions. They cannot do so because if they do not know the trade-off between the multiple measures, they cannot know whether they are becoming better off (except in those rare cases when all measures are increasing in the same direction)" (Jensen, 2002, p 249). For this reason, Jensen proposes a single target dimension, namely that of "value creation", or the creation of long-term firm value.

In order to operationalize the target dimension "value creation", Jensen argues in favour of the concept of "Economic Value Added" (EVA). However, it is important to recognize that EVA is not suited to all levels of a company as measured variables. As Jensen makes clear, "[t]he proper measure for any person or business unit in a multidivisional company will be determined mainly by two factors: the company's

strategy and the actions that the person or division being evaluated can take to contribute to the success of the strategy" (Jensen, 2010, p 41).

In order to measure the contribution to strategy implementation, Jensen proposes a decentralised approach, whereby the company's headquarters determines the values to be achieved and the decentralised business units determine the appropriate value drivers. For Jensen, this decentralised approach is suitable for most large, multidivisional companies, since knowledge of the relevant drivers is usually decentralised while being absent at headquarters: "Therefore in the end it is the accountable party, not headquarters, who will generally have the relevant specific knowledge and therefore must determine the drivers, their changing relation to results, and how to manage them" (Jensen, 2010, p 41).

2.3.2.2 Managing Governance

The second dimension of financial governance, managing governance, is concerned with structures, policies and processes which are used for goal achievement (Leibfried, 2008).

Decision Powers

Goal achievement requires first and foremost that managerial decisions are taken. Managerial decisions are frequently influenced by power relations among the managers. For example, to determine who makes corporate policy decisions, Graham and Harvey (2000) interviewed CEOs and CFOs of large U.S. firms on how they perceived the decision-making in their firms. In general, Graham and Harvey found that CEOs see themselves as the sole decision makers more often than CFOs. CEOs exercise the most influence in M&A decisions, followed by capital structure decisions, payout, capital allocation and investment decisions. The decision that CFOs think they influence most is capital structure. This might be a source of conflict between the CEO and CFO, considering the high influence CEOs think they exercise on this same issue as reported by Graham and Harvey. Table 11 shows a summary of Graham and Harvey's results.

Туре	Ranked by CEO	Ranked by CFO
Mergers & Acquisitions	1	5
Capital Structure	2	1
Payout	3	3
Capital Allocation	4	2
Investment	5	4

Tab. 11: Decision Making Powers (Graham & Harvey, 2007, p. 32)

Important questions in the managing governance dimension of financial governance are questions regarding strategic finance decisions such as capital structure, dividend payments and corporate investments.

Strategic Financing Decisions

Strategic finance decisions are central to the "managing governance" dimension. The structuring of funds (in the form of financing and funding partners) and their return to shareholders are key. (Leibfried, 2008)

Capital Structure

Smith and Watts (1992) show that firms with more growth potential (higher number of projects with positive NPV) usually have lower levels of debt and lower dividend payouts. Barclay and Smith (1995) also note that firms with lower growth potential have higher proportions of long-term debt in their capital structure. Opler et al. (1999) show that companies with higher growth potential and riskier cashflows maintain higher liquidity buffers. Companies with good access to the capital markets or good ratings maintain lower liquidity buffers. Furthermore, they find that management generally tends to hoard liquidity when able to do so.

Dividends

La Porta et al. (1999) describe two theoretical explanations of dividend payments. The first is the "outcome model", which assumes that dividends are paid due to the pressure exercised by shareholders: "Dividends (a bird in hand) are better than retained earnings (a bird in the bush) because the latter might never materialize as future dividends (can fly away)."(La Porta et al., 1999, p 7) On the other hand, the "substitution model" states that companies with poor corporate governance pay higher dividends to improve their reputation among shareholders. Besides these two models, the growth prospects of a company are another crucial factor in explaining the level of dividends paid. Businesses with lower growth prospects usually pay higher dividends than firms with higher growth prospects. In their study, La Porta et al. find support for the "outcome model". "Despite the possible relevance of alternative theories, firms appear to pay out cash to investors because the opportunities to steal or misinvest it are

in part limited by law, and because minority shareholders have enough power to extract it. In this respect, the quality of legal protection of investors is as important for dividend policies as it is for other key corporate decisions" (La Porta et al., 1999, p 28).

Corporate Investments

Corporate takeovers and mergers are examples of observable investments. In many cases the conflict between management and ownership becomes apparent through these transactions (Berle & Means, 1933; Jensen & Meckling, 1976). M&A are often done for the sake of managers' personal interests, especially in firms with low growth prospects (Jensen, 1976). Harford (1999) and Harford, Mansi and Maxwell (2005) show that firms are more likely to engage in M&A when they have higher cash reserves than comparable companies and that these transactions often do not create value in the absence of effective corporate governance mechanisms.

The finance function and CFOs are often strongly involved in the specific stages of the M&A process. In the pre-merger phase, finance is frequently involved in valuation and due-diligence activities. At the execution stage, the primary responsibilities of finance, and thus CFOs, are deal-related accounting, structuring of the contractual framework and financing issues (BAH, 2005). Finance also plays an important role in the post-merger integration phase. Accounting processes must be aligned and the control (and compliance) environment updated accordingly (BAH, 2005).

Management Control Systems

Besides strategic finance decisions, the finance function is responsible at the operational level for implementing and running management control systems to align the company towards goal achievement. Such management control systems include operational planning, budgeting and compensation systems.

There is a broad consensus that management control is an important part of implementing corporate strategies (e.g. Simons, 1994). Merchant and Otley (2007) specify: "A management control system is designed to help an organization adapt to

the environment in which it is set and to deliver the key results desired by stakeholder groups, most frequently concentrating upon shareholders in commercial enterprises" (Merchant & Otley 2007 p. 785). Kober (2007) reports that traditional research saw the relationship between management control systems and strategy as unidirectional, meaning that the management control systems were only influenced by strategy. However, it is reasonable to assume that management control systems could also influence strategy. Kober (2007) claims that "through interactions with the organisation and with its environment, the information generated by an accounting system could help facilitate strategic change in a proactive way". The link between strategy and management control systems is also described by Simons' (1995) "levers of control" framework (Figure 19).

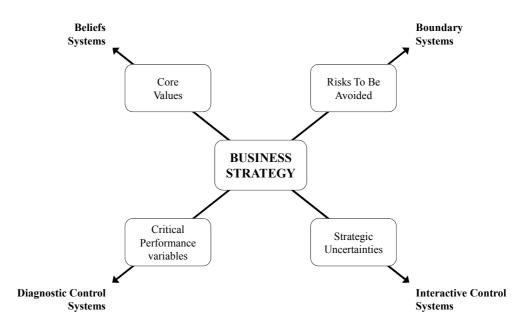


Fig. 19: Levers of Control Framework (Simons, 1995, p. 7)

Simons (1995) defines four levers ("belief systems", "boundary systems", "diagnostic control systems" and "interactive control systems") that control the key strategy implementation variables ("core values", "risks to be avoided", "critical performance variables" and "strategic performance variables"). The first lever, "belief systems" is, according to Simons, "[...] used to inspire and direct the search for new opportunities"

(Simons, 1995, p. 7). "Boundary systems" are required to "[...] set limits [...]" on this search for new opportunities. "Diagnostic control systems" are "[...] used to motivate, monitor, and reward achievement of specified goals" (Simons, 1995, p. 7). Finally, "interactive control systems" are "[...] used to stimulate organizational learning and the emergence of new ideas and strategies" (Simons, 1995, p.7).

Two important management control systems, the planning and budgeting process, are described below, along with the compensation system. Internal and external reporting, another important management control system, is described in a separate dimension of financial governance, namely reporting governance (section 2.3.2.3 below).

Planning and Budgeting

The planning and budgeting process is a key instrument in ensuring the achievement of objectives. Using plans and budgets, corporate objectives are coordinated and those responsible for achieving goals are motivated (Jensen, 2003). In practice, however, the budgeting process is flawed. Many companies complain about the cost associated with budgeting, resulting in inflexibility (see Hope & Fraser, 2003, p.1) and dysfunctional effects ("gaming") (see Jensen, 2003). Budgeting becomes a corporate governance problem because this gaming doesn't only occur within the company. As Jensen reports: "The budget game inevitably gets extended to the firm's relationship with the capital markets as the CEO and CFO become enmeshed in a game with financial analysts over meeting financial targets. "Managing the numbers" as it is often called, is commonly considered part of every top managers job – along with denying that this dishonest behavior is going on"(Jensen, 2003, p.386).

The link between planning and budgeting to corporate governance is a direct one. For example, Swiss corporate law defines financial planning, among others, as an inalienable and non-transferable duty of the Board of Directors. Furthermore, the Swiss Code requires that the Board of Directors is responsible for setting up planning in such a way that it ensures "the fundamental harmonization of strategy and finances" (Swiss Code, II a9).

While ultimately the Board of Directors is responsible for fulfilling these obligations, it can be assumed that, without substantial involvement from the finance function, the

alignment between strategy and finance cannot be satisfactorily assured. The requirement for harmonisation between strategy and finance thus implies that, at least for stock-listed firms in Switzerland, an active role for finance executives in the corporate strategy domain is obligatory rather than optional.

Compensation

The topic of compensation is one of the key issues in the corporate governance debate and is extensively discussed. "[...] Corporate governance and remuneration policies are highly inter-related: bad governance can lead to value-destroying pay practices, and many notorious excesses in pay can be traced to poor governance" (Jensen et al., 2004, p 22). The objective of the remuneration system should be, according to Jensen et al. (2004), to acquire and retain executives at the lowest cost and motivate executives to create long-term value. This is determined by the expected absolute level and structure of remuneration. However, Jensen et al. highlight that, especially with respect to stock options, compensation committees often (wrongly) assume that they represent a form of compensation that is available at low costs for the company. According to Jensen et al., problems often arise with bonus schemes, especially when managers have opportunities to influence the timing of the realisation of their eligible bonuses.

From a corporate governance perspective, the compensation of the CFO is a special case, due to the proximity of the CFOs to the underlying performance measures. Jiang, Petroni, and Wang (2010) investigated the relationship between the CFO compensation structure and the likelihood of earnings management. They came to the conclusion that a positive correlation exists between equity-based compensation for the CFO and the likelihood of earnings management. Furthermore, Wang (2005) notes that the level of CFO compensation has generally risen in the course of corporate governance reforms in recent years and that the proportion of equity-based compensation has increased in CFO compensation structures. Chava and Purnanandam (2010) show that the incentives set by remuneration structures have a significant impact on the choice of the financial strategy, such as leverage and liquidity reserves.

The finance function's contribution to the compensation issue can be illustrated by a speech given by John W. White, Director of the SEC, to the CFO Executive Board in

October 2006 (SEC, 2006). White highlights three ways in which CFOs are involved. First, it is the responsibility of CFOs to compile all necessary information and to prepare it for disclosure as "Compensation Discussion & Analysis (CD&A)". Second, CFOs will need to refine and adjust their company's disclosure controls and procedures: "You may need to set up new processes and circuits for gathering, compiling and analyzing information even before making disclosure determinations. Remember that the universe of people at the company for whom disclosures may be required has been expanded in many cases" (SEC, 2006). Third, CFOs will be involved in the board's compensation committee more actively, since corresponding certifications are required.

2.3.2.3 Reporting Governance

According to Leibfried (2008), reporting governance is primarily concerned with questions of how the company gives accounts to its owners. This primarily involves providing accurate and comprehensive information on the achievement of objectives, as well as accurate information for internal decisions. Similarly, Bushman and Smith (2001) argue: "Financial accounting information is the product of corporate accounting and external reporting systems that measure and publicly disclose audited, quantitative data concerning the financial position and performance of publicly held firms. Financial accounting systems provide direct input to corporate control mechanisms, as well as providing indirect input to corporate control mechanisms by contributing to the information contained in stock prices" (Bushman & Smith 2001, 239). According to Bushman and Smith (2001), financial accounting information impacts economic performance through three channels (see Figure 20 below): the first channel involves the use of financial accounting information to identify good versus bad projects (project identification); the second channel is the use of financial accounting information in corporate control mechanisms that discipline managers to direct resources away from projects identified as bad towards projects identified as good (governance channel); the third channel is the use of financial accounting information to reduce information asymmetries among investors (adverse selection).

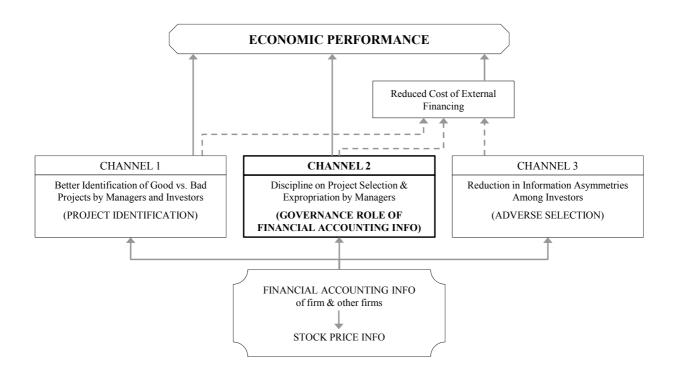


Fig. 20: Accounting Information and Economic Performance (Bushman & Smith 2001, p. 239)

According to Lowenstein (1996), corporate disclosure is an essential lever for corporate governance: "Our disclosure policies were adopted in order to make Wall Street fair and efficient. They also give substance to shareholder rights by providing the information essential to their exercise. But quite apart from these intended benefits, good disclosure has been a most efficient and effective mechanism for inducing manager to manage better" (Lowenstein, 1996, p. 1335). Similarly, Jensen (2004) emphasizes the importance of communication with investors and markets. In particular, Jensen sees it as a way to counteract overvaluation. Jensen advocates far greater transparency for companies: "Management and the board should not be in the business of telling the markets what value is. That is for the markets on the firm's strategy and its progress (or lack of it) on executing it. Managers must work to make their organizations far more transparent to investors and the markets" (Jensen, 2004, p 47).

Similarly, Sinha (2006) highlights the importance of higher transparency for firms: "Firms will find it increasingly necessary to provide greater amounts of information on their strategy and internal decisions" (Sinha, 2006, p. 13). Sinha argues that increased transparency facilitates the formation of expectations between owners and managers, improves the effectiveness of governance mechanisms and will minimise the scope for opportunistic behaviour. However, Sinha remains sceptical with regard to current transparency practices and identifies a gap between information demand and supply, especially for "soft" financial information (Sinha, 2006).

Reporting Content

Regarding the question of what kinds of content are perceived as important, Graham, Harvey and Rajgopal (2004) find that many CFOs still consider earnings to be the most important financial metric to external constituencies. According to them, the question is whether this focus on earnings reflects superior informational content or a myopic managerial perception. They find the fixation on earnings noteworthy, since the mainstream theoretical consensus is that cashflows provide higher informational content than earnings (Graham et al., 2004).

The EPS KPI is directly derived from earnings. Graham et al. find that EPS is perceived by most CFOs as a key capital markets metric. Graham et al. report that EPS has become popular because it is a simple, easy to understand measure which has also gained popularity in the business media. Furthermore, it reduces complexity for analysts and allows for the assessment of analysts' performance (Graham et al., 2004).

Measure	#1 Rankings	#2 Rankings	#3 Rankings	Total Points	Average Points
Earnings	159	67	31	642	2.10
Revenues	36	97	75	377	1.24
Cash flows from operations	36	72	93	345	1.13
Free cash flows	30	41	42	214	0.70
Pro forma earnings	38	10	24	158	0.52
Other	7	13	28	75	0.25
EVA	2	4	5	19	0.06

Tab. 12: Most important Performance Measures (Graham et al., 2004, p. 32)

However, Graham et al. (2004) also report certain exceptions. For example, for unprofitable and younger firms they find that cash flow is higher ranked than earnings. Also for firms "...where translation of economic events into earnings is slow", Graham et al. find that leading indicators are perceived as more important than earnings. Interestingly, from a governance perspective their findings indicate that private firms put more emphasis on cash flow than public firms. They also find that firms with high sales growth tend to rank revenues higher. On the other hand, they conclude that "Unprofitable firms, firms with young CEOs, and firms with high earnings guidance and analyst coverage emphasize pro-forma earnings. These patterns are consistent with firms responding to capital market pressure to use pro-forma earnings to make weak GAAP earnings more palatable" (Graham, 2004). The results of Graham et al. (2004) are summarized in Table 13 below.

Measure Av	Average	Size		P/E		Growth		D/A		Rating		Industry		Insider		Exchange	
meusure	Points	Small	Large	Low	High	Low	High	Low	High	Low	High	Other	Tech	Low	High	NASDAQ	NYSE
Earnings	2.10	2.06	2.13	2.38	2.10	2.14	2.11	2.20	2.01	2.12	2.16	2.14	1.88	2.17	2.06	2.05	2.15
Revenues	1.24	1.37	1.10	1.09	1.37	1.17	1.39	1.34	1.11	0.96	1.27	1.21	1.46	1.12	1.34	1.43	1.10
oCF	1.13	1.18	1.08	1.08	1.07	1.14	1.09	1.11	1.12	1.23	1.02	1.14	1.05	1.08	1.17	1.21	1.07
Free CF	0.70	0.64	0.75	0.71	0.75	0.76	0.63	0.67	0.80	0.89	0.62	0.69	0.73	0.66	0.74	0.62	0.76
Other	0.25	0.23	0.28	0.26	0.16	0.24	0.20	0.26	0.26	0.35	0.26	0.27	0.07	0.29	0.22	0.26	0.24
EVA	0.06	0.05	0.08	0.06	0.04	0.07	0.04	0.01	0.09	0.03	0.11	0.06	0.07	0.08	0.04	0.02	0.09

Measure	Average	CEO Age		Ownership		Profitable		Firm age		Guidance		Analysts		CEO Educ.	
meusure	Points	Yount	Mature	Private	Public	No	Yes	Young	Old	Little	Much	Few	Many	MBA	Other
Earnings	2.10	2.01	2.47	1.84	2.10	1.66	2.26	1.96	2.25	2.20	2.03	2.15	20.5	2.10	2.11
Revenues	1.24	1.23	1.24	1.02	1.24	1.29	1.22	1.30	1.19	1.14	1.26	1.31	1.17	1.18	1.27
oCF	1.13	1.19	0.93	1.71	1.13	1.16	1.11	1.25	0.99	1.35	1.00	1.21	1.03	1.08	1.15
Free CF	0.70	0.68	0.81	0.80	0.70	0.71	0.70	0.71	0.73	0.80	0.67	0.72	0.71	0.75	0.71
Other	0.25	0.60	0.23	0.20	0.52	0.82	0.42	0.49	0.55	0.23	0.70	0.36	0.66	0.58	0.48
EVA	0.06	0.24	0.23	0.22	0.25	0.32	0.22	0.25	0.22	0.21	0.27	0.25	0.25	0.25	0.23

Tab. 13: Conditional Averages relating to Performance Measures (Graham et al., 2004, p. 32)

Graham et al. (2004) also examine voluntary disclosure practice. They consider that press releases, investor and analyst meetings, conference calls, monthly newsletters, field visits with existing and potential institutional investors, and disclosure beyond that mandated in regulatory filings can all be subsumed under the term "voluntary disclosure". The objective of voluntary disclosure is to enhance the investment community's insight into a company, thereby shaping perceptions and improving transactions with that company.

In their analysis, Healy and Palepu (2001) examine motivations and constraints that drive voluntary disclosure decisions. According to them, common drivers for voluntary disclosure include information asymmetry, increased analyst coverage, corporate control contests, stock compensation and management talent. Common constraints to voluntary disclosure include litigation risk, proprietary costs, political costs, and agency costs. Table 14 below summarises this analysis.

Voluntarily communicating information	% agree or strongly agree	% disagree or strongly disagree	Average Rating
Promotes a reputation for transparent/accurate reporting	92.1%	2.0%	1.39
Reduces the "information risk" that investors assign to our stock	81.5%	4.3%	1.03
Provides important information to investors that is not included in mandatory financial disclosures	72.1%	8.9%	0.86
Increases the predictability of our company's future prospects	56.2%	14.4%	0.53
Attracts more financial analysts to follow our stock	50.8%	17.0%	0.43
Corrects an under-valued stock price	48.4%	16.4%	0.37
Increases the overall liquidity of our stock	44.3%	17.4%	0.31
Increases our P:E ratio	42.0%	18.0%	0.27
Reveals to outsiders the skill level of our managers	41.3%	26.2%	0.16
Reduces our cost of capital	39.3%	22.0%	0.17

Tab. 14: Voluntary Disclosure (Healy & Palepu, 2001, p. 412)

Quality of Reporting

The quality of reporting is a key issue within the dimension of reporting governance. Lobo and Zhou (2006), for example, found that the introduction of the Sarbanes-Oxley Act (SOX) led to a higher degree of conservatism in financial reporting. Cohen, Dey and Lys (2007), consistent with Graham, Harvey, and Rajgopal (2005) and Cohen and Zarowin (2009), find that earnings management in the period after the adoption of SOX shifted from accruals-based earnings management practices to real earnings management practices, such as cutting spending in research and development, or cancellation of investments. Furthermore, Baldwin and Yoo (2005), Grothe et al. (2006) and Wang and Yu (2008) found that the quality of financial reporting, measured by the number of restatements, has declined since the introduction of SOX, indicating that the number of restatements increased significantly. However, Bartov and Cohen (2008) show that the practice of "numbers gaming" of meeting or exceeding analysts' expectations decreased significantly in the same period. However,

Hogan, Rezaee, Riley and Velury (2008) note that false accounting actually did not decrease after the introduction of SOX.

Doyle, Ge and McVay (2007) find that in addition to firm-specific factors, structurally weaker companies, especially smaller, younger, financially weaker, complex, fast-growing or restructuring companies have are more likely to have material weaknesses than structurally stronger companies.

Thus it can be concluded that corporate disclosure, as a major responsibility of financial management (see ICAEW framework), is an essential governance mechanism. In particular, it is important to provide stakeholders with relevant information to ensure a fair valuation of the company; this includes transparency about strategy and the progress made in implementing the strategy. To maintain the credibility of the information provided, it is a necessity to ensure quality reporting.

2.3.2.4 Assuring Governance

The fourth dimension of financial governance, assuring governance, is concerned with systems of internal control and risk management as well with the functioning of external audit (Leibfried, 2008).

Jensen (1993) criticizes internal control systems, claiming that they usually react too late and take too long to trigger appropriate measures. In contrast, Jensen notes that changes motivated by capital markets would be accomplished significantly faster (Jensen, 1993). Jensen concludes that "[...] it appears that the infrequency with which large corporations restructure or redirect themselves solely on the basis of the internal control mechanisms in the absence of crisis in the product, factor, or capital markets or the regulatory sector is strong testimony to the inadequacy of these control mechanisms" (Jensen, 1993, p 32). Jensen sees several reasons why internal control systems and supervisory bodies often fail. These include, among others, a culture that is too focused on politeness, lack of information and lack of financial literacy. "[...] the board requires expertise to provide input in the financial aspects of planning, especially in forming the corporate objective and determining the factors which affect corporate value. Yet such financial expertise is generally lacking on today's boards" (Jensen, 1993, p 45).

The internal controls for financial reporting are a central element of the internal control system, and represent a core responsibility of financial management (see ICAEW framework). The Sarbanes-Oxley Act of 2002 (SOX) prescribed additional rules and procedures that need to be adopted in this respect (Ge & McVay, 2005). Ge and McVay (2005) find that deficiencies in the control system are often due to insufficient resources available at the responsible departments. They claim that most violations of SOX requirements can be found in the recognition of revenue, the lack of separation of responsibilities and deficits in the annual account closing-process and in a lack of coordination in closing-accounts.

According to Fan and Wong, the quality of reporting and the selection of the auditor constitute a major corporate governance signal: "The appointment of quality auditors serves as an assurance to the investors that the company's financial disclosures would be accurate and truthful. The assurance is credible because the auditors, with their

reputation at stake, will closely scrutinize their client's books and truthfully disclose their findings" (Fan & Wong, 2001, p. 2).

Side-effects of Internal Control

Prevention of earnings management is frequently seen as a major objective of the internal control system. Since regulatory pressures in this area have increased substantially, managers are concerned not to be associated with earnings management. However, these concerns may also have economic impacts. Graham et al. (2004) find strong evidence that managers tend to consider real economic measures in order to achieve stipulated targets, because they do not want to interfere with accounting rules. They find that 80% of survey participants would decrease discretionary spending on R&D, advertising and maintenance and more than half would delay starting a new project even if this project would add some future value. Graham et al. find this evidence dramatic since "[...] managers appear to be willing to burn 'real' cash flows for the sake of reporting desired accounting numbers" (Graham et al., 2004). They find that managers denied using accounting measures like drawing down reserves previously set aside, postponing an accounting charge, or altering accounting assumptions in pension calculations (see Table 15 below). They conclude that: "We find that the average rating for real actions is statistically greater than the average rating for accounting actions, implying that managers choose real actions over accounting actions to meet earnings benchmarks" (Graham et al., 2004). Finally, they add: "We acknowledge that the aftermath of accounting scandals at Enron and WorldCom and the certification requirements imposed by the Sarbanes-Oxley Act may have changed managers' preferences for the mix between taking accounting versus real actions to manage earnings. Alternatively, it could simply be that managers are more willing to admit to taking real decisions than to accounting decisions." (Graham et al., 2004, p. 29)

Questions	% agree or strongly agree	% disagree or strongly disagree	Average Rating
1. Decrease discretionary spending (e.g. R&D advertising maintenance etc.)	79.9%	11.2%	1.00
2. Delay starting a new project even if this entails a small sacrifice in value	55.3%	23.5%	0.33
3. Book revenues now rather than next quarter (if justified in either quarter)	40.4%	38.1%	-0.12
4. Provide incentives for customers to buy more product this quarter	39.1%	40.8%	-0.11
5. Draw down on reserves previously set aside	27.9%	50.5%	-0.45
6. Postpone taking an accounting charge	21.3%	62.7%	-0.72
7. Sell investments or assets to recognize gains this quarter	20.2%	61.3%	-0.77
8. Repurchase common shares	12.4%	68.5%	-1.02
9. Alter accounting assumptions (e.g. allowances pensions etc.)	7.9%	78.2%	-1.22

Tab. 15: Earnings Management (Graham et. al, 2004, p. 12)

Control Environment

Pfister (2009) categorises control failures by explanation and subsequently identifies drivers for an effective control environment (Table 16).

Category	Driver of Effectiveness
	1. Lead by example
	2. Ingrain Sustainability
1. Failures of commitment	3. Deal with reality
	4. Define process ownership
	5. Ensure accountability
	1. Select appropriate qualification
	2. Consider social skills
2. Failures of competence	3. Offer continuous training
	4. Make specialists available
	5. Establish an attractive work environment
	1. Set clear and continous messages
	2. Promote effective communication
3. Failures of communication	3. Explain benefits
	4. Encourage constructive debate
	5. Annournce actions
	1. Keep a holistic view
	2. Focus on risks
4. Failurs of complexity	3. Measure processes
	4. Establish consistency
	5. Embed controls
	1. Monitor continously
	2. Capture change
5. Failures of change	3. Standardize change
	4. Take appropriate time
	5. Enhance a positive attitude

Tab. 16: Control Failures (Pfister, 2009, p. 39)

According to Pfister (2009), the control failure categories "commitment" and "competence" relate to inadequate personnel and resources that lead to untimely identification of control issues. Commitment failures occur because people do not make enough effort with respect to their control responsibilities. Pfister identifies four drivers that could potentially mitigate failures of commitment. The first driver, "lead

by example", emphasises the importance of leaders as role models in the organisation. This includes the so-called "tone at the top". Second, Pfister argues that sustainable thinking should be promoted throughout the company. The third driver relates to the timeliness of reactions to control failures. According to Pfister, a disciplined approach to immediate action to control failures is necessary in order to keep the issues small. Furthermore, Pfister suggests process ownership and accountability in order to raise commitment to internal controls.

In order to prevent failures of competence, Pfister (2009) suggests that these issues must be considered in staff selection, where the focus should be placed alongside competence and expertise on soft skills and the cultural fit with the organisation. On-going training and the provision of sufficient specialist knowledge for complex control issues are perceived as very important factors for the effectiveness of internal controls. Furthermore, an attractive work environment ensures that the company has a sufficiently large pool of potential employees to choose from.

Communication is also a strong facilitator of internal controls. According to Pfister (2009), it is important to set clear and continuous messages and to promote effective, regular communications among departments, teams and employees. The benefits of control should be communicated on an on-going basis and a constructive debate encouraged.

Failures due to complexity can be avoided when companies pursue a holistic approach that is focused on risk and which consists of consistent, measurable risk processes (Pfister, 2009).

Finally, failures of change can be caused by new people, structures, systems or processes in the organization. These failures can be avoided when change is captured and monitored closely and managed in a standardised process within an appropriate time span and with a positive attitude (Pfister, 2009).

2.3.3 Financial Governance - Managerial Perspective

The bulk of research and literature concerning finance and corporate governance is based, explicitly or implicitly, on agency-theoretic assumptions. On the other hand, a growing number of contributions reflect behavioural theory aspects. In the remaining chapters, financial governance will be discussed from a behavioural perspective in order to explore the practice and actual behaviour of finance managers. The theoretical foundations of this perspective are given in the following sections.

2.3.3.1 Behavioural Theory

Behavioural organisation theory goes back to the work of Herbert Simon ("Administrative Behavior", 1947) and his central proposition that organisations are defined by decision processes: "The modern business firm is an organization for making and implementing decisions within a market economy" (March, 1962, p. 662). The focus of Simon's work is the limitations to rationality: "The need for an administrative theory resides in the fact that there are practical limits to human rationality and that these limits are not static, but depend upon the organizational environment in which the individual's decisions take place. The task of administration is to design this environment so that the individual will approach as close as practicable to rationality (judged in terms of the organization's goals) in his decisions" (Simon, 1976, p. 240). Accordingly, real decision-making behaviour in corporations cannot be explained by the assumption of fully rational behaviour. Simon also argues that in practice corporations do not strive for optimal solutions, instead preferring satisfactory solutions which have a better chance of being implemented. It is argued that the decision process itself has much more to say about an organisation than the actual solution. Behavioural theory assumes that, for decision-making routines, heuristics and gut-feeling plays a stronger role in practice than a precise calculation of alternatives.

A further milestone in behavioural organisation theory is Cyert and March's 1963 work *A Behavioral Theory of the Firm*. According to Cyert and March, decisions in corporations are the results of political coalitions. When political coalitions change,

corporate decision-making also changes: "Basically, we assume that a business firm is a political coalition and that the executive in the firm is a political broker. The composition of the firm is not given; it is negotiated. The goals of the firm are not given; they are bargained" (March, 1962, p. 662). Traditional stakeholders are seen as participants in these political coalitions. Thus, decisions are made in a bargaining process reflecting expectations and objectives of the actors. The bargaining process is then influenced by behavioural phenomena such as "uncertainty avoidance" (Carter, 1971, p. 413).

2.3.3.2 Upper Echelons Theory

The so-called "upper echelons theory" goes back to Hambrick and Mason (1984). Their central proposition is that organisational outcomes are essentially shaped by the top management: "Organizational outcomes – both strategies and effectiveness – are viewed as reflections of the values and cognitive bases of powerful actors in the organization" (Hambrick & Mason, 1984, p. 193). Hambrick and Mason explicitly refer to the propositions of bounded rationality made by Cyert and March (1963) and by March and Simon (1958). "If strategic choices have a large behavioral component, then to some extent they reflect the idiosyncrasies of decision makers" (Hambrick & Mason, 1984, p. 195). According to Hambrick and Mason, the cognitive disposition of decision makers is influenced by their knowledge and assumptions regarding future events, the knowledge of alternatives and their consequences. Furthermore, personal values play an important role in the valuation and prioritisation of alternatives.

According to Hambrick and Mason (1984), the beginning of the decision-making process is marked by complexity and manifold options, which surmount the cognitive capacity of the decision-makers. This leads the decision maker to filter the option based on his cognitive biases (Figure 21).

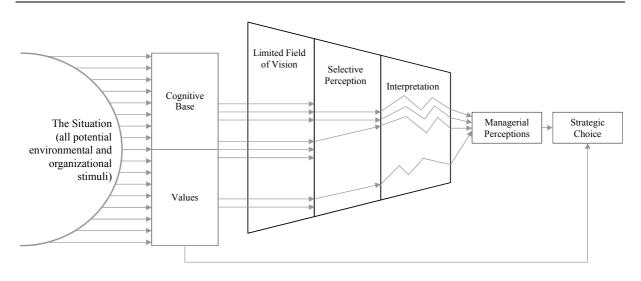


Fig. 21: Generic Decision Making Process (Hambrick & Mason, 1984, p. 195)

Thus, personal characteristics of decision makers like age, tenure, functional background, education, socio-economic background or financial position, as well as psychological factors (e.g. "locus of control", "ambiguity intolerance") play a significant role in corporate decision making. Carpenter et al. (2004) have further developed the model, including antecedents and demographic variables (see Figure 22 below).

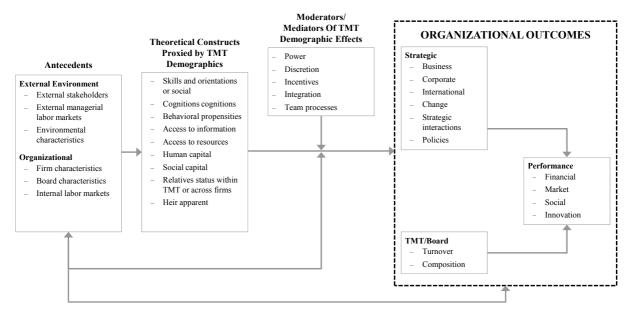


Fig. 22: Upper Echelon Model (2. Generation), Carpenter et al. (2004), p. 760

Carpenter et al. (2004) define internal and external contextual factors as antecedents of corporate decision making. These could be the strategic direction or the growth rate of the organisation. The characteristics or demographics of the top management team (TMT) are at the centre of the upper echelons theory. Capabilities, behaviour, access to resources and social status are perceived as major influencing factors for the decision making of top management teams. Through moderation and mediation of variables, the organisational outcomes are supported or inhibited. Organisation outcomes could be strategy, performance or the top management team itself. A feedback loop indicates a potentially recursive relationship between organisational outcomes and antecedents.

3 Research Question, General Methodology, and Contribution

3.1 Research Gap and Research Questions

From Shleifer and Vishny's (1997) perspective that corporate governance is the way in which suppliers of finance to corporations assure themselves of getting a return on their investment, it becomes obvious that finance is key to achieving "good" corporate governance (Gleich & Oehler, 2006).

The relationship between corporate governance and finance can be seen from two perspectives. In the first perspective, corporate governance shapes the practice of financial management to facilitate corporate governance mechanisms (e.g. the impact of SOX regulation on quality of earnings, thereby reducing information asymmetries).

From another perspective, finance itself can be seen as a governance mechanism within the firm. In this view finance is the "economic conscience" of the firm, committed to increasing firm-value and to detecting potential harmful developments.

Academic research on the intersection of finance and corporate governance is predominantly concerned with the first view (e.g. quality of the financial reporting systems in relation to the nature and extent of other governance mechanisms; e.g. La Porta et al., 1998; Bushman et al., 2000) Far less is known about the mechanisms and practices that support good governance from inside the firm, e.g. the facilitating role of financial management to corporate governance.

Financial management is essentially involved in reducing information asymmetries between the firm and its environment by means of disclosure, and internally by providing relevant information to the managers: "Financial [management] provides financiers with the primary source of independently verified information about the performance of managers" (Sloan, 2001, p. 335).

Furthermore, financial management is concerned with the efficient use of resources within the firm and the identification of harmful developments internally and externally (Jacob & Berner, 2005; Gleich & Oehler, 2006; Chung & Shen, 2007) Financial management is responsible for or at least provides the required inputs to "[...] corporate control mechanisms designed to discipline managers to guide resources toward projects identified as good and away from projects identified as bad, and to prevent managers from expropriating the wealth of investors" (Bushman & Smith, 2001, p. 295).

Despite this prominent position of financial management in the context of corporate governance, it is insufficiently differentiated in the current discussion. The focus of more than 70 years of research in the field of corporate governance was put on internal corporate governance mechanisms, such as the structuring of corporate governance, remuneration and incentive mechanisms and the effects of concentrated ownership, as well as external corporate governance mechanisms such as the market for corporate control (Daily et al., 2003). A differentiated or more detailed view of the company's internal corporate governance mechanisms and the corresponding responsibilities of the management, for example in the context of financial management by the Chief Financial Officer (CFO), was given far less attention by researchers. For example: "There is a dearth of influential research published in accounting journals that contains a substantive analysis of the role of financial accounting in corporate governance" (Sloan, 2001, p. 340).

An example of this is the discussion surrounding management remuneration, which was debated fiercely by both researchers and the general public. It is usually the remuneration of the CEO or Chief Executive Officer (CEO) which is at the centre of the discussions. The remuneration of the remaining members of management, as well as that of the Chief Financial Officer (CFO) is of far less interest (Jiang et al 2010).

However, the need for action on the part of social science research seems to be at least recognised: "While an extensive body of research considers CEO compensation, little is known about factors influencing CFO compensation" (Hoitash et al., 2007, S. 1).

The importance of the CFO in the context of creating value for the owners can be further illustrated also by the role they are assigned to in LBO portfolio companies. For example, Acharya, Hahn and Kehoe (2010) found that in 36% of LBO transactions they studied, the CFO was exchanged within 100 days on the initiative of the investment company to accelerate the value creation plan. Similarly, Becker reports that changes in executive positions ("CXO") are carried out very quickly and that this frequently involves the CFO position (Becker, 2010, p 312). In addition, Becker reports: "Surprisingly often CXO positions need to be newly established in order to be able to distribute responsibilities clearly [...] this also implies that tasks of internal control and of risk management are frequently assigned under the responsibility of the CFO" (Becker, 2010, p 312).

The undifferentiated discussion concerning the responsibilities of the management in general and in particular those of the financial management in the context of corporate governance, neglects the importance of operational management. The issue of corporate governance cannot be reduced to meeting regulatory requirements (e.g. Sarbanes-Oxley Act), especially when it comes to financial management.

In addition, the increased importance of the CFO in today's business is not adequately addressed. "(...) CFOs gained critical say in key strategic and operational decisions, from evaluating business unit performance, inventing new ways to leverage capital, managing acquisitions and divestitures, and fending off hostile takeover attempts, to serving as the company's primary ambassadors to investors and financial analysts" (Zorn, 2004, p. 347).

Against this background action needs to be taken to examine the role financial management and the CFO in particular play in good corporate governance. In order to structure this complex question, the framework of financial governance from the previous chapter is used. For the financial governance dimensions, specific sub-questions are derived in order to explore the current practice of financial governance at Swiss stock-listed companies.

The first research question is grounded in the "managing governance" dimension of financial governance. It deals with the strategy and governance role of finance. In order to fully address the first research question, it is broken down in three sub-questions.

- **RQ(1)** What is the role of financial management in strategy and governance of the firm?
- (1a) What contribution does finance make to corporate strategic decisionmaking (involvement and decision-powers)?
- (1b) How strongly does finance advocate the interests of shareholders (salience)?

The second research question reflects financial governance issues specifically related to management control systems and their implementation:

- RQ(2) How do management control systems contribute to strategy and financial governance?
- (2a) What drives the effectiveness of management control systems from a financial management perspective? How effective are they?
- (2b) What kind of business-critical information disseminated by financial management? To what extent?
- (2c) How do finance managers respond to business-critical information? What are the consequences?

The third research question relates to the factors that impact financial governance outcomes. Two managerial traits are investigated, taking into account the importance of managerial traits to organisational outcomes. Furthermore, a special facet of financial governance, the determinants of financial conservatism, is addressed in this context.

- RQ(3) What firm- and manager-fixed effects drive strategy and financial governance?
- (3a) To what degree do finance executives show aversion to sure losses?
- (3b) To what degree do finance executives show overconfidence?
- (3c) Do size, firm-performance and manager-fixed effects drive financial governance? If so, how?

Research question (3c) provides an extended analysis to the underlying factors relating to issues surrounding the phenomenon of financial conservatism. Anecdotal evidence suggests that Swiss companies are especially prone to being financially conservative (Mijuk, 2003; Drobetz & Grüninger, 2007; Lapointe-Antunesa et al., 2006).

3.2 General Methodology

In order to provide evidence on research questions 1 to 3, personal questionnaire-based interviews with 37 finance executives from Swiss public-listed companies were conducted (the questionnaire is provided in the appendices). The interview questions are largely based on existing surveys used in academic research (e.g. by Graham and Harvey, 2002). However, to account for the Swiss context, the interview questionnaire was slightly adapted (e.g. with respect to regulatory specifics). The resulting questionnaire was pre-tested and finalized by integrating minor changes to account for better comprehension based on feedback from a finance practitioner. The target audience for the interviews were finance executives from Swiss public-listed companies. In order to construct the sample, the finance executives from the member-companies of the Swiss Performance Index (SPI), excluding finance executives from financial services firms, were invited via e-mail to participate in the survey. After a round of follow-ups via telephone, 37 finance executives were willing to participate. The first interview was conducted in October 2012 and the last interview was conducted in February 2013.

To provide evidence for research question (3c), a structural equation modelling (SEM) approach was chosen: "SEM is a statistical technique that allows the simultaneous analysis of a series of structural equations" (Smith & Langfield-Smith, 2004, p. 49).

Within recent years, SEM has become well-established as a multivariate research method for analysing complex cause-and-effect relationships as evidenced by a growing body of literature and scientific publications (Homburg & Baumgartner 1995). SEM has also become popular in non-academic circles, especially in the field of marketing and market research. A major driver of this development is the availability of user-friendly SEM software packages.

3.3 Contribution

The outcomes of the present analysis are relevant to practitioners and applied research at the intersection between the practice of financial management and the corporate governance system. It contributes to the general understanding of the basic aims and operations of contemporary organisations. This is especially the current practice of financial management, since a number of fundamental organisational questions, while not unique to corporate governance, reveal themselves particularly well in the governance context (Hambrick et al., 2008).

Based on the financial governance framework, the present analysis makes three main contributions to the existing literature. First, it sheds light on the strategic role of financial management in firms. This can be linked to the on-going debate on the appropriate objective function for a firm, which is frequently reduced to the "shareholder". vs. "stakeholder"-value debate. Second, the study contributes to the understanding of management control systems, in particular explorative insights into the practice of reporting and voluntary disclosure. This also includes insights into the issue of real vs. accounting earnings management. Third, as a response to recent calls for more behavioural-oriented research, evidence on finance manager personality is presented.

Finally, a contribution is made to the highly controversial discussion on finance conservatism, a phenomenon which is especially present at Swiss firms, at least as far as initial anecdotal evidence and indications from the present survey suggest.

4 Practice of Financial Governance

4.1 Insights from Finance Executives

4.1.1 Empirical Methodology

The appropriate empirical methodology generally depends on the research question and the peculiarities of the research topic. Primary data sources are of great value in providing better understanding of corporate and executive practices. However, empirical research, especially that focusing on firm executives, has become increasingly difficult since considerable there is considerable reluctance to participate in such research.

4.1.1.1 Qualitative vs. Quantitative Approach

In order to explore the practice of financial governance, quantitative interviews were conducted. In contrast with a qualitative interview, a quantitative interview is a structured interview based on a questionnaire which includes mainly closed-types of questions. Quantitative interviews are frequently called standardised interviews, since the questions, answer possibilities and the sequence of questions are predetermined. This interview format provides the same conditions for all participants, facilitating neutrality (Prüfer & Stiegler, 2002).

In contrast, qualitative interviews are frequently used in exploratory research settings where "different levels of meaning need to be explored" (King, 2004, p. 21).

In the present analysis, however, the majority of questions were drawn from existing surveys, albeit ones conducted in different settings. Thus, the focus of interest was put on the peculiarities of the specific context, rather than on generally exploring participant associations with finance and corporate governance.

4.1.1.2 Face-to-Face Interviews

Face-to-face interviews are flexible and allow for more complex questions. Furthermore, face-to-face interviews show on average better response rates – especially for hard-to-reach populations. The target population of the present analysis, namely finance executives of Swiss stock-listed companies, certainly falls into that category. Finally, face-to-face interviews provide certain assurance that instructions are followed – e.g. in the case of the present analysis, that the finance executive himself answers the questions, and does not delegate it to lower levels of the hierarchy (Rea & Parker, 2005). However, according to Rea and Parker face-to-face interviews also have disadvantages such as high costs, interviewer-induced bias, greater stress and risk of fatigue and less anonymity.

4.1.1.3 Description of the Research Process

Step 1: Preparation

Based on an extensive review of existing literature and empirical research in the field of finance and governance, a draft questionnaire was established. The questionnaire was structured along the dimensions of the financial governance framework as proposed by Leibfried (2008). Most of the questions were derived from existing surveys (e.g. the CFO Survey by Duke Fuqua Business School) with results published in peer-reviewed journals. The questions were, however, slightly adapted to meet the specific context of the present analysis (e.g. notations). Using existing survey instruments and measures was expected to facilitate measure development and to support measure validity and reliability. The questionnaire and original sources of the questions are presented in Appendix 2.

Step 2: Pre-Testing

The first draft of the questionnaire was pre-tested. Pre-testing should determine whether respondents are able to clearly understand and answer the questions (Singleton & Straits, 2012). The first round of pre-testing was performed, as suggested by Singleton and Straits, by conducting a "think-aloud" interview. In a think-aloud interview the interviewee is asked "to think out loud, reporting everything that comes to mind while arriving at answers to the questions" (Singleton & Straits, 2012, p. 81). After this first round of pre-testing and the initial revisions of the questionnaire, a field pre-test was conducted, to test the questionnaire under more realistic interviewing conditions. For this purpose, an interview was arranged with the CFO of a large Swissstock listed company. As suggested by Singleton and Straits (2012), follow-up questions were asked during the course of the interview to probe the basis of the respondent's answers. The field-testing lead to slight adaptations of the questionnaire's wording. Two questions that were found to be redundant were dropped.

Step 3: Target Population and Sampling

The target population for the present survey was the finance executives from Swiss stock-listed companies. Specifically, the companies from the Swiss Performance Index (SPI) were defined as the target population. "The Swiss Performance Index (SPI) is considered Switzerland's overall stock market index. It comprises practically all of the SIX Swiss Exchange-traded equity securities of companies that are domiciled in Switzerland or the Principality of Liechtenstein." (SIX Group, 2013)

However, finance executives of financial services firms (e.g. banks, insurers, finance intermediaries) were excluded from the survey. The finance function in financial services firms was defined as out of scope, since underlying business models and accompanying regulations were found to be industry-specific. This led to concerns about the comparability and subsequent generalisability of results.

Since the contact data of stock-listed company's executives are publicly available, a contact database for finance executives was established based on executive data provided by Bloomberg and research on the respective corporate websites.

The finance executives were sent an e-mail that introduced them to the survey and notified them that they would be contacted. After 3-5 working days, the finance executives were contacted via phone to arrange an interview date.

Step 4: Interview Phase

The bulk of interviews were conducted face-to-face in the last quarter of 2012. Due to time constraints or unprecedented circumstances, four interviews had to be conducted via telephone. After a short introduction to the interviewer and the purpose of the survey, the questionnaire was filled out in dialogue with the interviewee. The time required for answering the questionnaire varied somewhat from interviewee to interviewee, however most interviews were finished after approximately 45 minutes. Following the guidelines of Singleton and Straits (2012), the questions were posed exactly as written, and if a respondent did not answer the question fully, nondirective follow-up probes were conducted. In order to maintain neutrality, requests for feedback or opinions on the subject matter were postponed until after finishing the questionnaire.

Step 5: Analysis

After the interviews, the questionnaires were immediately scanned to electronic format and the results manually typed into the results database. After each new entry in the database, the data were double-checked against the original questionnaire. The descriptive statistics are provided in the following section.

4.1.1.4 Descriptive Statistics

The final sample consisted of senior finance executives from 37 Swiss stock-listed companies. A list of the participating companies is provided in Appendix 3. Of the 37 participating companies, 18 belong to the Swiss Market Index (SMI) which consists of 30 companies in total; resulting in a 60% coverage of SMI listed companies. The Swiss Performance Index (SPI), which comprises almost all Swiss stock-listed corporations, consists of 215 companies. The overall coverage of the survey is therefore 17% of all Swiss-stock listed corporations.

Of the 37 participants, 31 hold a title of chief financial officer (CFO) and 6 participants were of senior finance staff (e.g. head of corporate finance). The vast majority of executives have a career history in finance; only 6 participants were in a non-finance position before their appointment to their current position (see Tables 18a & 18b).

Position	Curr	ent	Previous		
1 05111011	%	N	%	N	
CFO	83,8%	31	83,8%	31	
Senior Finance Executive	16,2%	6	2,7%	1	
Management			13,5%	5	
Total	100,0%	37	100,0%	37	

Education	%	Ν
University Degree	54,1%	20
Specialist Training	21,6%	8
Dr/PhD	13,5%	5
MBA	10,8%	4
Gesamt	100,0%	37

Tab. 17: Study Demographics

54% of participants hold a university degree as their highest education, 8 participants have an educational background based on specialist training, while 9 participants hold a doctoral or MBA degree as their highest education (see Table 17).

The majority of the participants were of Swiss nationality (70%). The average age of the participants was 48 and the average tenure 4.5 years (see Table 17 cont.).

Nationality	%	N	
Switzerland	70,3%	26	
Germany	8,1%	3	
U.S.	5,4%	2	
Other	16,2%	6	
Total	100,0%	37	

	Tenure & Age							
	Mean	S.D.	N	Min	PCT25	<i>PCT50</i>	<i>PCT75</i>	Max
Tenure	54,3	38,3	37	3,0	24,0	7,0	72,0	174,0
Age	47,8	7,1	37	32,0	43,0	35,0	53,0	59,0

 Tab. 17:
 Study Demographics (cont.)

4.1.1.5 Results

The survey (see Appendix 2 for original questionnaire) consists of four parts. The first part deals with questions on the importance of finance in the strategy process, stakeholder salience and company valuation. The second comprises questions on management instruments and financial management. The third and fourth parts of the questionnaire concern reporting and internal control.

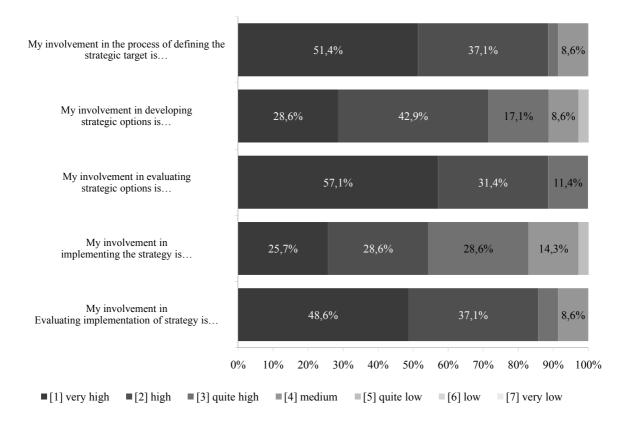
For the purpose of the present analysis the results are summarized in three parts. The first part deals with strategic finance including strategy participation, decision-making powers, stakeholder salience and shareholder structure preferences. The second part summarizes the questions on management control systems including disclosure and voluntary reporting, control environment and earnings management. The final part deals with questions on manager personality, backgrounds and personal traits.

Strategy, Governance and Stakeholder-Salience

Strategy Participation

According to Woodridge and Floyd (2006), the strategy process consists of five consecutive steps. The first step is identifying "problems and proposing objectives". This is followed by the steps to generate and evaluate options. The final step is the implementation of the necessary action.

Based on the definition of Woodridge and Floyd (2006), the strategy process is described in the present survey as follows: "The strategy process includes generating and weighing up strategic options, defining targets and strategic initiatives to implement the strategy." In this survey, the focus was on the finance executive's involvement in the steps of this generic strategy making process. The results are presented in Figure 23.



The strategy process includes generating and weighing up strategic options, defining targets and strategic initiatives to implement the strategy. What is the level of your involvement in the steps below in your company's strategy process?

Fig. 23: Involvement Strategy Process

Finance executives are most involved in defining strategic targets and evaluating strategic options. Almost 90% of the participants responded accordingly. The evaluation of strategy implementation is the third most frequent process step, where 85.7% of participants are highly or very highly involved. 71.4% of participants indicated high or very high involvement in the development of strategic options. Strategy implementation was the step which showed the lowest degree of involvement. However, even for this step, over 50% of respondents indicated a high or very high involvement. To explain the slightly lower involvement, the finance executives argued that the role of the business functions is more prominent in this step. Overall, it can be concluded that the finance executives seem to be indeed highly involved in the strategy-making process.

As with Graham and Harvey (2007), the finance executives participating in the present survey were asked to indicate their ability to influence decisions on the capital structure, dividend policy, investments in property, plant and equipment and M&As. The results are displayed in Figure 24.

According to the Swiss corporation law (OR Sect. 716a), the Board of Directors is overall responsible for issues including structuring the accounting system, financial control and financial planning., **To what extent are you, as a financial executive, nevertheless involved** in the following decision making processes or to what extent can you co-design or impact the decision-making process?

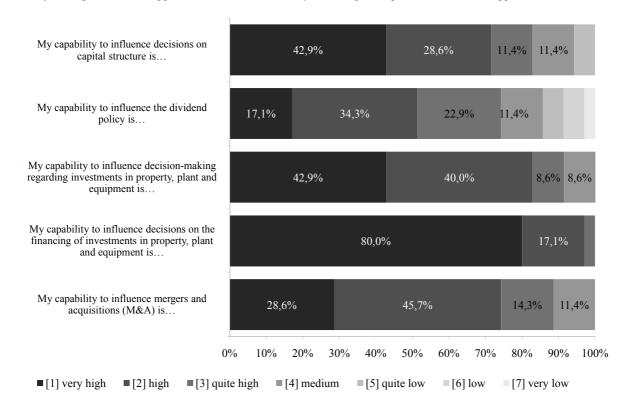


Fig. 24: Allocation of Decision Powers

The highest ability to influence decisions was reported for decisions to finance investments in property, plant and equipment, with 97% of the respondents indicating a high or very high degree of influence. The ability to influence investments in property, plant and equipment in general seem to be quite high – over 80% of respondents indicate a high or very high influence. Thus, it can be concluded that capital expenditure is one of the key responsibilities of finance executives. They decide on investments and determine the financing of these investments, indicating a high degree of discretion in this issue. This finding is contrary to the results of Graham and Harvey (2007) as discussed above, since in their survey investments was ranked 4 out of 5.

43% of respondents indicated a very high influence over capital structure decisions. This result is similar to the findings of Graham and Harvey (2007). Thus, there could also be a potential source of conflict within Swiss firms over capital structure decisions, assuming that, like their U.S. peers, Swiss CEOs perceive capital structure as very high on their agendas. Some participants indicated that, due to the ownership structure with a strong founding-family stake, capital structure decisions are more or less predetermined and not very frequently found on the agenda.

Interestingly, after combining the proportion of high and very high influencing capabilities, the executives in the present survey state higher influence in mergers and acquisitions (74.3%) than in capital structure (71.4%).

The domain where the finance executives indicated they have the least ability to influence decision-making is dividend policy. Every second finance executive is able to exercise high or very high influence on dividend policy. Remarks by the respondents on this question suggest that dividend policy is, much like capital structure decisions, frequently taken as a given, since large shareholders or family owners express quite precisely their expectations with respect to this issue.

Stakeholder Salience

In the present analysis the finance executives were asked to rate stakeholder groups on a 7-point Likert scale with respect to the three dimensions proposed by Agle, Mitchell and Sonnenfeld (1999).

The power attribute was labelled "influence" and defined as follows: "the extent to which these stakeholder groups could potentially influence strategic decisions (strategic and financial targets, as well as strategic initiatives) made by top management". Urgency was defined as "the extent to which the stakeholder group currently has to be taken into account when top management takes strategic decisions". Legitimacy was described as "the extent to which you believe that the desires, needs or requirements of these stakeholder groups are legitimate with regard to your company".

The results are shown in Fig. 25a - c.

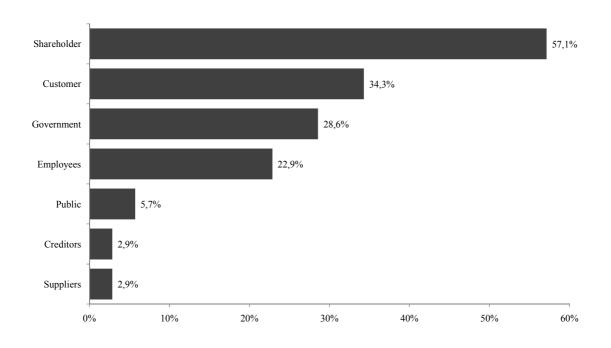


Fig. 25a: Stakeholder Salience - Influencer/Power

The power attribute is most widely recognised for the firm's shareholders with almost 60% of respondents indicating a high or very high influence. The shareholders are followed by customers, government and employees. The high perceived power of the government is surprising considering that the Swiss state in general is known to be rather business-friendly. However, as some participants explained, there are some industries, e.g. pharmaceutical, where the government plays an important role in the guise of regulatory or supervisory bodies. At the lower end it is remarkable that creditors (e.g. banks) were on average given relatively low scores. This may indicate that Swiss firms on average are in a quite comfortable financial position.

For the urgency attribute, finance executives ranked the customers first, followed by shareholders. In this dimension, employees were ranked third, in front of the government, which is again ranked relatively highly. As with the power attribute, the urgency of the stakeholder group of creditors was ranked rather low. Lowest scores were given to suppliers and the general public (5.7%). Figure 25b summarizes the results.

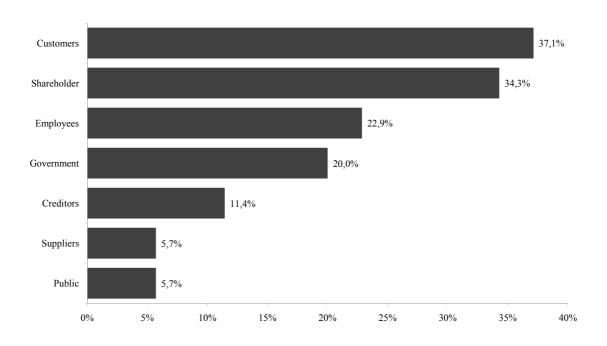


Fig. 25b: Stakeholder Salience - Urgency

The results for legitimacy (see Figure 25c) were similar to the power attribute. Thus, while the customers are most urgent to the companies, the shareholders are ranked top in the power and legitimacy dimensions. Interestingly, the legitimacy of the government and that of employees were ranked as high or very high with almost the same frequency.

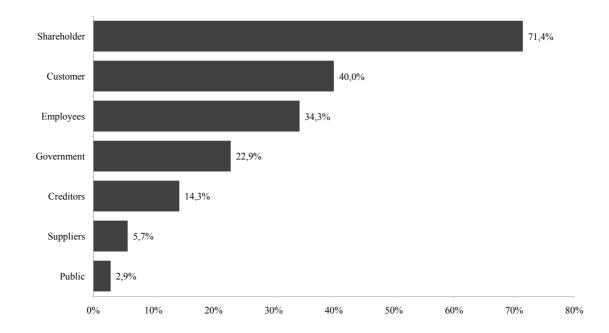
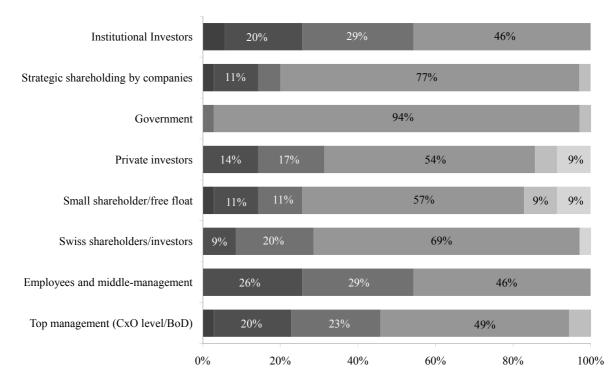


Fig. 25c: Stakeholder Salience – Legitimacy

Ownership Structure

Overall, the results from the stakeholder salience survey indicate that the shareholders are considered by finance executives to be an important stakeholder group. In theory, there is much debate as to which ownership structure supports best firm performance. On the one hand, it is argued that widely dispersed ownership is associated with low monitoring of management while concentrated ownership results in close monitoring and better manager performance. However, concentrated ownership could have potentially detrimental effects, as a dominant shareholder may expropriate firm resources at the expense of minority shareholders (Kim & Park, 2011).

Figure 26 displays the structure of the shareholders and the preferences of finance executives in this regard.



Shareholder structure defines the composition of the investors in a company who hold equity interests and voting rights. Assuming you could change your company's shareholder structure - which group would you give a stronger weighting?

■[1] strong increase ■[2] increase ■[3] slight increase ■[4] neutral ■[5] slight decrease ■[6] decrease ■[7] strong decrease



The finance executives would most strongly prefer to increase institutional ownership with more than half of the survey participants indicating this preference. Similarly, an increase of shareholdings of employees, middle- and top-management would be preferred by a majority of the study participants. The strongest desire for a decrease was expressed for the small shareholders / free-float.

The findings indicate that the finance executives in the present survey express a desire for more concentration of "outside" ownership while at the same time hoping for a stronger employee participation, or dispersion of "inside" ownership. The second part of the survey deals with questions regarding management control systems.

Participants were asked to indicate the effectiveness of the management control systems implemented in their companies. Figure 27 displays the results.

The information-based methods and processes to implement, control and secure forecast figures are often referred to as

management instruments. How do you assess the effectiveness of your management instruments? The effectiveness of our management instruments with 25,7% 37.1% respect to the identification of key performance indicators is... The effectiveness of our management instruments when 14,3% 48,6% identifying operating (short-term, concrete) risks is... The effectiveness of our management instruments when 8,6% 14,30% 22,9% 28,6% identifying strategic (long-term, potential) risks is... The effectiveness of our management instruments when 8,6% 20,0% informing our employees of our 34,3% 8,60% strategy, targets and priorities is... 20% 40% 60% 80% 100% 0% ■[1] very high ■[2] high ■[3] quite high ■[4] medium [5] quite low [6] low [7] very low

Fig. 27: Management Control Systems

The majority of participants ranked the effectiveness of management instruments for identifying critical performance variables and short-term operating risks as high or very high. With respect to the identification of long-term, strategic risks 40% or respondents indicated a medium or quite low effectiveness. Similarly, 40% of participants ranked the effectiveness of management instruments for communicating

critical information to employees as medium or quite low. These results agree with Jensen's (1997) argument, i.e. that internal control systems are inadequate with respect to strategic renewal (see 2.3.2.4).

In the present study the participants were asked to rank five key performance indicators (KPIs) (profit, revenues, free cash flow, earnings per share, value-add) according to their importance to outside stakeholders, as perceived by executives. (Figure 28)

As part of your company's reporting, third parties are provided with information on the company's financial success. Please rank the following KPIs in terms of their importance for third parties (investors, analysts, shareholders)

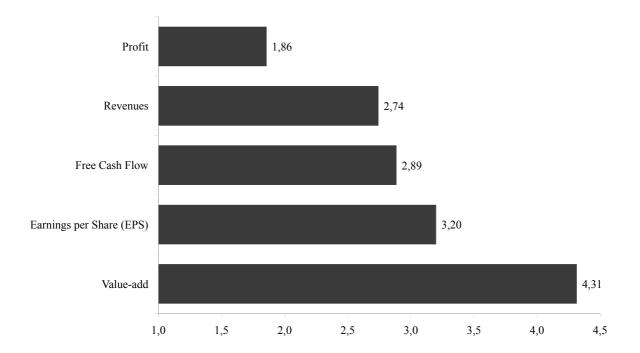


Fig. 28: KPIs for 3rd Parties

The most important KPI with an average ranking of 1.86 was profit, followed by revenues and free cash flow. According to the participating finance executives, value-based KPIs (e.g. EVA) seem to be of lesser importance to third parties.

Participants were next asked to indicate their opinion on the degree of voluntary disclosure at their company. Figure 29 displays the results.

Voluntary reporting includes information on strategy and performance, corporate figures not included in the financial statements, as well as information related to the capital markets that go over and above the mandatory information to be provided based on the accounting standards. How high do you rate the degree of voluntary reporting in your company?

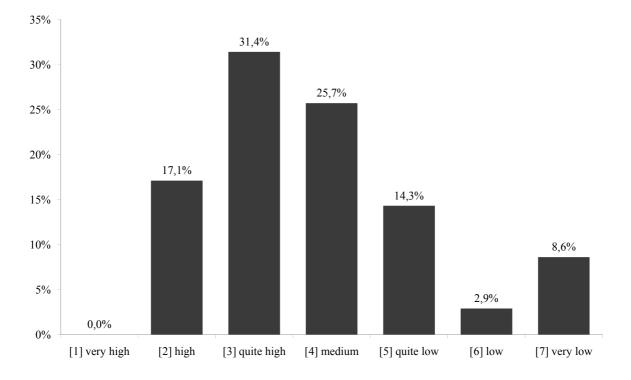


Fig. 29: Degree of Voluntary Disclosure

While none of the participants indicated a "very high" level of voluntary disclosure, almost 50% declared that the degree of voluntary disclosure at their company is either "high" or "quite high". A quarter of all respondents indicated that their level of disclosure is "quite low" or "low". For small companies, the opposite seems to be true. A personal communication with a finance executive gave an interesting insight into this: due to their relatively small size, they are "involuntarily" more transparent than their peers. What might be reported as a single line-item at multinational companies must be disclosed in more detail in the context of a small, but public-listed company. Taking into consideration the findings of Francis et al. (2007), who find that "[f]irms with better (worse) earnings quality have more (fewer) voluntary disclosures", the results from this survey indicate a positive development in the context of corporate governance.

Control Environment

While having effective management instruments is an important factor for implementing strategy, it is also important to have a certain control environment present that guides strategy implementation. Certain factors are reported to influence the control environment. Participants of the present study were asked to rate four factors that contribute to the control environment with respect to their effectiveness (Figure 30). The factors were based on Pfister's (2009) drivers of effectiveness (see 2.3.2.4).

The control environment includes supervision and management functions performed by the company's management, as well as their opinions of, awareness of and activities regarding the internal control system and its importance within the company. The control environment characterizes a company's basic stance, by influencing the employees' awareness of control. It forms the foundations for effective internal control. Please rate the following factors according to their effectiveness with regard to the internal control environment.

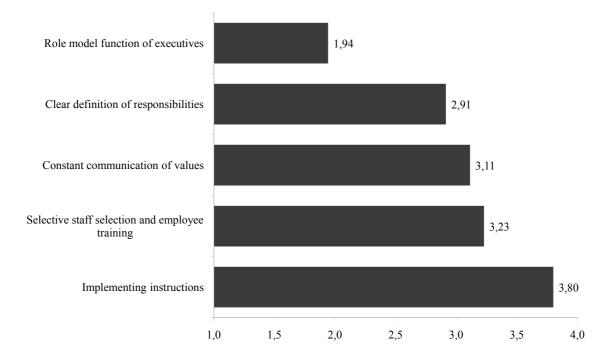


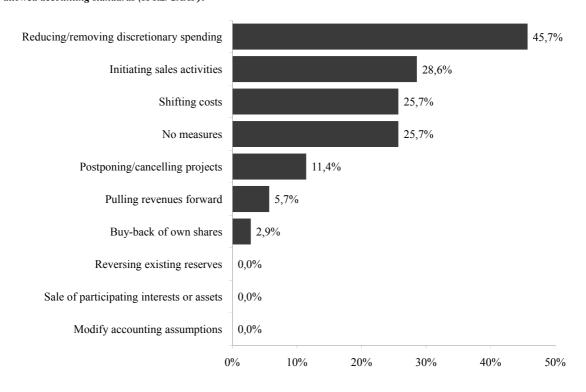
Fig. 30: Factors of Control Environment

The highest ranked factor, with an average score of 1.94, was the managers' symbolic leadership functions. The second most important factor was clear responsibilities. Relatively low scores were assigned to the selective staff selection. The lowest effectiveness was attributed to formalised instructions.

Securing Earnings Target

Focusing on the financial dimension, the study participants were also asked to indicate which measures they would implement in order to achieve their revenue target. From a theoretical standpoint, different approaches are viable. Both pure accounting measures (e.g. accruals) and real economic measures (e.g. reducing R&D spending) are possible. A mix of accounting and real economic measures is a feasible third option. Graham et al. (2004) find strong evidence for the proposition that managers tend to consider real economic measures in order to achieve stipulated targets (see 2.3.2.4 for details)

The survey questions used by Graham et al. (2004) were repeated in the present survey with finance executives. The results are shown in Figure 31.



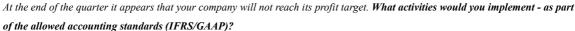


Fig. 31: Earnings Management

Results from the present survey show some similarities to the findings of Graham et al. (2004), namely that real economic measures are favoured over accounting measures in order to secure a profit target. Almost half of the survey participants would be willing to reduce or remove discretionary spending e.g. on R&D or advertising and around 10% of the surveyed managers would postpone or cancel projects, even if some value could not be realized then. 28.6% of the respondents find it likely or very likely that they would initiate activities to generate some extra sales and 25.7% would shift costs if possible. However, a quarter of all respondents (25.7%) indicated that they would not take any measures at all to secure the profit target, since quarterly profits are not relevant for steering measures to them. None of the survey participants considered changing accounting assumptions.

Manager Personality

"Our results show that manager fixed effects are empirically important determinants of a wide range of corporate variables. [...] Manager fixed effects appear to be especially important in acquisition or diversification decisions, dividend policy, interest coverage and cost cutting policy" (Bertrand & Schoar, p. 4). Bertrand and Schoar tie managerstyles back to managerial characteristics like birth cohort or education (e.g. MBA graduation). They find that older managers are on average more conservative than younger managers and that an MBA as an educational background may lead to more aggressive strategies.

Psychological factors may also play a significant role in managers' decision-making. Two such psychological factors are "aversion to sure losses" and "overconfidence".

Graham et al. (2010) explain aversion to sure losses with the behaviour "throwing good money after bad" in the hope of turning around a situation that appears to be a sure loss. To test for sure loss aversion, they pose the following question to managers:

"Last year your company invested \$5 million US in a project that was expected to generate cash flows of \$10 million US after one year. A year has passed and the project yielded nothing. Now you have the opportunity to invest an additional sum in this same project. There is a 20% chance that the project will generate a \$10 million US cash flow in a year's time and nothing thereafter. There is an 80% chance that the new investment will generate nothing at all. How much would you be willing to invest today?" (Graham et al., 2012, p. 11)

An investment of \$2 million or more was then considered as a behaviour that indicates aversion to sure losses: "If the respondent replies \$2 million or more we classify her/him as averse to sure losses because this action indicates a willingness to overpay to continue the project in order to avoid the "sure loss" of terminating the project today." (Graham et al., 2012, p. 11)

Graham et al. also analysed aversion to sure losses in combination with biographic data such as nationality (U.S. vs. non-U.S.), education, and age. They find that CFOs more often have an MBA degree than CEOs, that CEOs are likely to be older than CFOs and that CEOs are less averse to sure losses than CFOs. Furthermore, they find: "[...] non-U.S. CEOs and CFOs tend to be less patient, as indicated by their higher rate of time preference, relative to their U.S. counterparts. Foreign CEOs also have a

	U.S. CEOs	U.S. CFOs	Non U.S. CEOs	Non U.S. CFOs
Personal risk Aversion (%)	9.9	8.4	16.6	14.0
MBA Degree (%)	35.1	51.8	47.9	33.5
Male (%)	92.3	90.3	94.4	87.6
Male Height (inches)	71.1	71.0	69.3	69.1
Female Height inches)	65.7	65.2	56.9	63.4
Optimism (Overall) (%)	80.2	65.8	54.4	48.2
Sure Loss Aversion (%)	8.4	12.8	20.3	14.2
Time Preference for Gains (%)	32.9	26.2	41.8	38.2
Focused in Fin. & Acc. (%)	16.0	87.0	26.1	86.3
Age	54.1	48.7	50.2	43.3
Tenure	10.4	6.8	9.1	5.9
University SAT Score	1159.7	1113.9	1208.7	1118.8

higher aversion to sure losses than U.S. CEOs." (Graham et al., 2012, p. 11) The results are summarized in Table 19.

Tab. 18: Executive Characteristics

In the present survey, biographic data for the survey participants were collected with respect to current and previous job positions, educational background, age and nationality. For a summary, see the descriptive statistics in the previous chapter.

To test for aversion to sure losses, the finance executives in the present survey were asked the same case as in Graham et al., 2012. However, after pre-testing the questionnaire, it was decided to change the probabilities in order to make the case study more realistic. The results are displayed in Figure 32.

Last year your company put financing of CHF 5 million into a project which was forecast to bring a cash flow of CHF 10 in the first year. After the first year, you ascertain that the project has not generated a cash flow. Now the next round of financing is due. There is a 35% probability that the project will generate CHF 10 million by the end of the year. There is also a probability of 65% that the project will not bring any cash flow this year. **How much would you be prepared to invest in the project?**

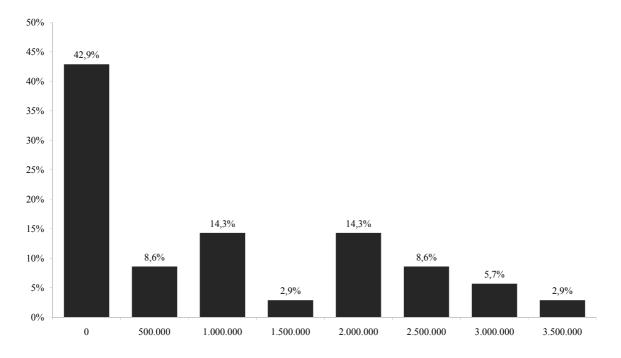


Fig. 32: Aversion to Sure Losses

From the results displayed in Figure 32 it can be seen that more than the half of the study participants were willing to invest further in the project. 30% of participants were even willing to invest more than 2 million Swiss francs in the project. Thus, it could be interpreted that almost a third of the study participants show aversion to sure loss behaviour. Some commentary by the participants also shed some light on the motivation for such behaviour. One participant, for example, indicated that due to the availability of financial resources they would certainly further invest in the project. This statement is in line with Jensen who states: "[...] the acceptance of negative-value projects tends to be common in organizations with substantial amounts of free cash flow (cash flow in excess of that required to fund all value-increasing investment projects)" (Jensen, 1997, p. 54). Another participant highlighted that there might also be industries where they are very used to uncertainty, losses and probabilities, thus a situation as described in the case study would be daily business. Another participant

also stated that the case study is quite hypothetical and that some important ancillary information is missing, and thus he would probably not invest in this hypothetical situation. However, the participant admitted that in real-life such situations do frequently occur and that "at the end of the day" they would probably more often invest in such situations than abandon them.

Overconfidence was investigated by Ben-David et al. (2007). They asked their survey participants to give an indication on the return of the S&P 500. The results are displayed in Table 20.

	Lower bound	Expected Returns	Upper bound	Individual volatility
12-months future S&P return	-0.64	-1.38	-3.96**	-1.25
	(1.27)	(0.90)	(1.94)	(1.06)
12-months past S&P return	11.36***	4.44***	0.52	-4.09***
	(1.49)	(1.01)	(2.05)	(1.12)
Intercept	-1.54***	6.37***	12.12***	5.16***
	(0.13)	(0.29)	(0.46)	(0.19)
Observations	22	23	22	22

Tab. 19: S&P Returns (Ben-David, 2007, p. 12)

In the present survey a similar question to that of Ben-David et al. (2007) was posed to the finance executives. The participants were asked to give their opinion on the development of the Swiss Performance Index (SPI) until 2015. Results are displayed in Figure 33.

Where do you see the SPI in three years (2015)?

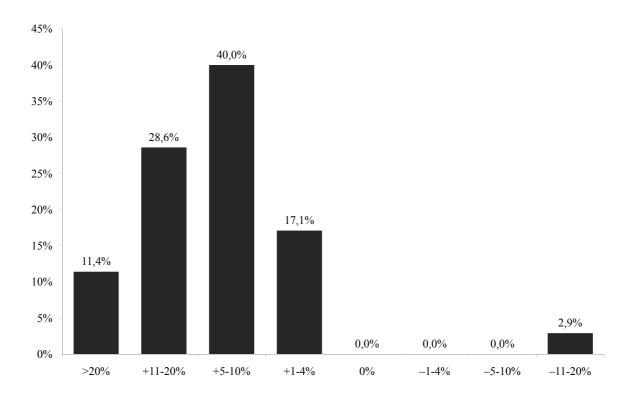


Fig. 33: SPI Returns

While one study participant showed strong pessimism with respect to the future development of the SPI, the majority of participants foresaw a positive development. Most of the study participants indicated that in 2015 the SPI will gain between 5% and 10% in value and nearly 30% expect a gain between 11% and 20%. High optimism, with an expected uptake of the SPI of over 20% by 2015 was indicated by 11.4% of the study participants.

In addition to their general expectations on the SPI development, the study participants were also asked their perception of the valuation of their own companies. Specifically, they were asked whether they believe that the instruments (e.g. valuation models) the analysts use to value companies reflect the true value of the company. The survey yielded the results displayed in the Figure 34.

Outsiders (e.g. Analysts) use specific instruments, methods and models to assess the value of companies. Based on the specifics of these tools (e.g. assumptions) different valuation levels may occur among outsiders and the internal view of the company. The instruments, methods and models used by outsiders (e.g. analysts) have a tendency to assess our company value...

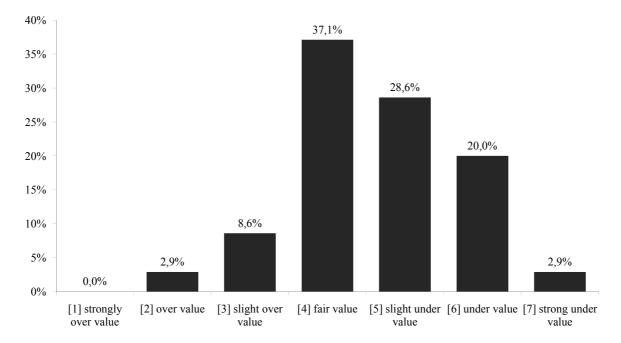


Fig. 34: Company Valuation

A majority of the study participants perceived the value of their company as fairly represented in the models and instruments used by outsiders. Expressing significant upward potential, half of the study participants thought that outsiders undervalued their companies. However, more surprisingly over 10% of the participants indicated that instruments used by outsiders may tend to overvalue the firm.

4.1.1.6 Discussion of Results

The survey results for research question (RQ1) show that finance executives generally have a great stake in the strategy process. Taking into consideration previous research findings that increased manager participation is generally associated with positive effects on the quality of strategies (Collier et al., 2004), this survey indicates a high degree of maturity of strategy-making at the participating companies.

With respect to sub-question (1a), the survey findings also suggest that the finance contribution is greatest in the strategy process step of evaluating strategic options. This finding is in line with the portfolio management or resource-based view (Bower & Noda, 1996) of the finance function. In this view the CFO is responsible for allocating resources to the projects and business units that best support the corporate objectives. As a recent study (Hall et al., 2012) showed that many companies frequently struggle in aligning resources with strategic priorities, this responsibility is of utmost importance to strategic success and thus to securing the long-term value creation that is the objective of corporate governance. Furthermore, the findings show that the involvement in defining strategic targets is perceived higher than the involvement in the evaluation of strategic outcomes, which represents a classical domain of financial management. This indicates that CFOs indeed take on a more active role in the strategy discussion, and underlines the importance of the CFO role for the overall management of the corporation.

With respect to the decision powers sub-question, the survey results suggest that CFOs experience a relatively high degree of discretion over a wide range of strategic and financial decisions (Ge et al., 2011; Durfee, 2006). This is an important finding when one adopts the view that the CFO should be the economic conscience of the corporation. CFOs are not only in a central position to detect value destroying behaviour in the firm, they also have the discretion to counteract such tendencies as they occur.

For sub-question (1b), the study results suggest the CFOs are indeed guided by a strong commitment to shareholders. However, the participating CFOs also express a strong commitment to customers, as indicated by them allocating customers first place in the urgency dimension ranking. In sum, this suggests that CFOs, while clearly

committed to shareholders, show a strong customer orientation in strategic decisionmaking which is the basis for long-term value creation.

Regarding the second research question, it can be concluded that management control systems in fact play an important role in financial governance. With specific respect to sub-question (2a), it appears that the maturity of management control systems is highest for the identification of critical performance indicators and operational risks. Room for improvement can be found for management control systems to capture long-term strategic risks. This supports the frequently expressed view that the business environment for most companies has become increasingly dynamic and difficult to predict. Thus, while companies are urged to manage with a long-term and forward-looking perspective, current management control systems frequently do not provide sufficient capabilities to do so.

Regarding the question of what drives the effectiveness of management control systems, the survey results suggest that the 'tone at the top' can indeed be a strong facilitator. Executives appear to play a key role in the organisation, not only through their actual managerial decisions, but also with respect to what they give priority to. If executives put strong focus on long-term and forward-looking orientation, organisation members will be likely to adopt this view and subsequently align the organisation on the operational level with the strategic perspective of the executives. This could explain why the role model function of executives was rated as by far the strongest contributor to the effectiveness of the control environment.

With respect to sub-question (2b) the survey reveals, in line with previous research, that earnings are perceived as the most important performance variable for outside constituencies. However, the frequently expressed criticism regarding fixation on earnings per share (EPS), and thus a strong short-term focus of management, cannot be supported by the actual survey findings, since EPS was rated on average as less important than free cash flow, which recent evidence suggests is very important to outside analysts. The relatively low importance of EPS is also in line with the salience finding for shareholders, which implies that, while shareholders are perceived by a vast majority of executives as the number one legitimate claimants on the firm, their actual claims are not the ultimate decision dimension from the executive point of view.

However, the perceived low importance of value-based key performance indicators can be seen as worrisome, since concepts like economic value added (EVA) were actually intended to align firms with the objective of value creation, which is at odds with short-term shareholder value maximisation. From a corporate governance point of view, the question left open is whether this perception is based on the impracticalities of these concepts or if it is indeed a signal for reduced value-orientation. The findings on stakeholder salience and remarks from survey participants suggest the former, indicating the need for a more practical value-based performance measurement.

Furthermore, the results from questions regarding the measures to secure profit targets also indicate that real economic measures, with potentially value-decreasing effects, are more likely to be chosen than pure accounting measures. This illustrates clearly the tensions that CFOs face in financial governance between advocating an overall objective or vision of long-term value creation and being held legally liable on practical grounds for their day-to-day decisions.

However, CFOs not only face legal constraints in financial governance but also constraints from the perspective of product/market competition, as illustrated by the discussion on voluntary disclosure. While finance executives express a general will to contribute to minimising information asymmetries via voluntary disclosure, they also show reluctance in doing so, mainly because of fears of potentially losing competitive advantage.

Finally, with respect to research questions (3a) and (3b), the survey results indicate that personal characteristics might indeed have an impact on financial governance in line with previous findings (e.g. Kroll, 2011). A surprisingly high number of finance executives were found to show quite low levels of aversion to sure losses, thus indicating that finance executives are not generally rejecting risk-taking. Furthermore, the finance executives on average were cautiously optimistic about future economic development. This finding opposes conventional wisdom that usually attributes finance executives a rather risk averse and pessimistic mind set. While underestimating risk probabilities and over-confidence certainly needs to be avoided, a moderate managerial trait of risk-seeking and optimism can also be beneficial to financial and corporate governance, since long-term value creation, as an ultimate

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objective function for financial governance, will require entrepreneurial decisionmaking, which also requires risk-taking and confidence in the future.

4.2 Extended Analysis

The survey results presented in the previous section point to two striking insights. First, the participating companies are quite deliberate when it comes to the question of giving accountability to whom, to what extent and in which frequency.

With regard to the point of *to whom* finance executives give accountability the results indicate that full transparency takes place only within a narrow scope of stakeholders. Even to the stakeholder group of employees the survey indicates that communication of strategy, targets, strategic priorities etc. is relatively ineffective - almost 40% of participating companies responded accordingly in the present survey (see Figure 27). The reluctance to give accountability to a wider stakeholder community also can be exemplified at the low salience score to the general public. While 5.7% of participating companies gave the public high or quite high potential influencing capabilities, this stakeholder group ranked lowest in the other two categories of stakeholder salience urgency and legitimacy. Furthermore, many participants formulated the desire to concentrate ownership with institutional investors and limiting dispersed ownership – a further indication for the desire to reduce the scope of accountability.

With respect to *the extent* of transparency, the degree of voluntary disclosure was ranked by a substantial proportion of survey participants as low or very low (Figure 29) – and this even from a subjective point of view. A further striking result was the low value-orientation with respect to the content of what is reported. Extending the transparency to value-oriented KPIs seems to play only a minor role for the participating companies.

Finally, with respect to *frequency*, a striking result of the survey is that 25.7% of all companies do not give account on a quarterly basis or indicated that quarterly results are not communicated and not considered as relevant.

These results indicate that transparency and thus accountability towards a wider definition of stakeholder seems rather limited at the participating companies.

The second striking insight can be found in financing issues, where the participating companies expressed a remarkably laid-back attitude. This can be exemplified by the salience score of creditors, which was relatively low in all three dimensions (power, urgency and legitimacy). Furthermore, an unexpectedly high number of finance executives were willing to invest in negative NPV projects (Figure 32), some justifying their decision explicitly with abundance of funding possibilities. This point is aggravated by the instance that finance executives seem to experience a quite high degree of discretion with respect to financing decisions: 71.5% of respondents expressed high or very high influence capabilities over capital structure decisions and 97.1% of respondents expressed high or very high influence.

The results indicated that there might be issues of financial governance surrounding accountability and transparency as well as financing decisions. The purpose of the extended analysis is to investigate these potential issues in order to identify potential factors that have some explanatory power with respect to these issues.

The remainder of this section is structured as follows. First, it will be discussed whether the issues identified in the survey match with the phenomenon of financial conservatism. Next, potential explanatory factors for the issues observed are discussed from a theoretical perspective. This will lead to the propositions that are derived on the basis of the reviewed literature. To test these propositions, the methodology of structural equation modelling will be introduced and the model set-up according to that methodology. Finally, the model will be empirically tested based on a sample of 122 Swiss stock-listed companies. The section closes with a discussion of the results.

4.2.1 Financial Conservatism

"A persistent and puzzling empirical regularity is the fact that many firms adopt conservative financial policies" (Minton & Wruck, 2001, p. 1). Financial conservatism in finance is commonly associated with capital structure theory. Within this context, financially conservative firms are firms that are "under leveraged" as opposed to the predictions of traditional capital structure theory or which build up liquidity buffers for contingency reasons (Minton & Wruck, 2001). In the context of accounting, conservatism is frequently associated with firms exhibiting different behaviour in the recognition of gains and losses, specifically firms that recognise adverse economic events more promptly or delay the recognition of positive economic events (Watts, 2002; Srivastava & Senyo, 2010), with firms where timeliness and frequency of disclosures is relatively low (e.g. Basu, 1997; Ball & Shivakumar; 2005; Givoly & Hayn, 1997) or with firms that convey relatively low information content in their disclosures (e.g. Schipper & Vincent, 2003).

Finance and accounting conservatism may also be interrelated (Myers, 1977; Schipper, 1981; Chow & Wong-Boren, 1987; Wallace et al., 1994). For example, Jensen and Meckling (1976) state that higher leveraged firms incur higher monitoring costs, thus more information is disclosed by these firms in order to reduce these costs. Similarly, Almazan et al. (2004) argue that higher leveraged firms are forced to be more transparent than less leveraged firms, since they have to engage in interaction with outside stakeholders more frequently due to the greater market scrutiny they face. Finally, Khurana concludes "[...] disclosure policy is a curative mechanism through which a firm can lower its cost of external financing and improve its ability to fund growth opportunities" (Khurana, 2006, p. 357).

Empirical evidence supports the argument that disclosure decisions of highly leveraged firms reflect attempts to manage capital structure (Healy & Palepu, 2001; Palepu, 1987; Healy & Palepu, 1990; DeAngelo et al., 1996).

However, Ahmed and Courtis (1999) report that while a positive association between leverage, as measured by book value of debt to shareholders' equity or book value of debt to total assets, and disclosure level has been hypothesised, the empirical evidence relating to this hypothesis is inconclusive. Some studies have found a significant relationship (Courtis, 1979; Malone et al., 1993; Hossain et al., 1994), while others have found none (Chow & Wong-Boren, 1987; Ahmed & Nicholls, 1994; Wallace et al., 1994; Wallace & Naser, 1995; Hossain et al., 1995; Raffournier, 1995).

From a corporate governance perspective, financial conservatism is frequently seen as a critical issue. Mikkelson and Partch (2003), for example, report: "Activist stockholders and corporate governance specialists express concern that large cash holdings reduce disciplinary pressure on managers and tempt them to spend cash even if profitable investment opportunities are unavailable." Similarly, Drobetz and Grüninger say: "Managers can have incentives to hold large cash reserves in order to pursue their own objectives at the expense of shareholders (e.g. consumption of perquisites and/or inefficient investments)." (Drobetz & Grüninger, 2007, p. 294) However, "[...] on the other hand, managers of cash-rich firms cite the benefits of having cash on hand as a reserve to fund large capital expenditures. These benefits arise because internal financing costs less than external financing." (Mikkelson & Partch, 2003, p. 275)

Financial Conservatism – a Swiss phenomenon?

Anecdotal evidence suggests that Swiss companies are especially prone to being financially conservative: "Swiss firms have a reputation for conservative practices and rock-solid stability" (Mijuk, 2003). Furthermore, Drobetz and Grüninger (2007) report: "Swiss firms, on average, hold much larger cash reserves than firms in most other countries" (Drobetz & Grüninger, 2007, p. 294). As for disclosure – the second aspect of financial conservatism – it is reported that the accounting and disclosure practice of Swiss companies is historically known to be rather conservative. "Swiss firms have considerable reporting discretion and the mandated level of disclosure is low" (Hail, 2002, p. 1). Or, more recently: "We focus on Swiss firms because Switzerland's financial reporting system provides managers with extensive discretion in corporate disclosure, and there are important variations in the level of information provided in their annual reports" (Lapointe-Antunesa et al., 2006, p. 1).

4.2.2 Influencing Factors

The influencing factors of financial conservatism are derived in the majority of the literature from agency-theoretic standpoints, e.g. imperfections of the capital market and resulting costs of raising funds. Away from this traditional economic standpoint, a second argumentation-line evolved around the influence of the individual manager on corporate policies. For example, Bamber et al. report: "Financial economics has posited a limited role for idiosyncratic noneconomic manager-specific influences, but the strategic management literature suggests such individual influences can affect corporate outcomes" (Bamber et al., 2010, p. 1131). Furthermore, Bamber et al. (2010) state: "[...] idiosyncratic differences in managers' experiences are associated with differences in important personal values and cognitive styles such as honesty and tolerance of ambiguity, which can lead managers to make different choices, particularly in complex situations lacking clear and calculable solutions" (Bamber et al., 2010, p. 131).

Accordingly, in the following section the determinants of financial conservatism are separated into firm-fixed and manager-fixed effects.

4.2.2.1 Firm-fixed Effects

The literature suggests that the main determinants at the firm level are size and performance.

Size

Considerable empirical evidence suggests that there is a positive relationship between firm size and both leverage and disclosure. In the case of leverage, it is argued that smaller firms exhibit more severe asymmetric information problems when they require external funding. This results in higher funding costs (Iona et al., 2006). On the other hand, larger firms find it easier to raise external funding, thus "[...] larger firms are less likely to be leverage-conservative" (Iona et al., 2006, p. 25). In a very recent study, Korteweg, concludes: "[...] small firms face higher issuance costs and therefore

wait longer between refinancings, resulting in lower average leverage than big firms, even though in theory they may have higher optimal-debt ratios" (Korteweg, A., 2010, p. 238). Firm size was also found to have a positive influence on the extent of disclosure: "Corporate size, as measured by total book value of assets, total market value of the firm, total revenue, or total number of shareholders, has persistently been found to be significantly and positively associated with disclosure levels in several studies [...]" (Ahmed & Courtis, 1999, p. 37). Grüning (2007) summarizes widely accepted lines of argumentation which underpin this observation. First, larger firms face more public scrutiny than small firms. Thus, larger firms face higher "political sensitivity" (Healy & Palepu, 2001) and thus are required to manage these "political costs" by disclosing more information (Watts & Zimmerman, 1986). In general, larger firms are more closely observed by their stakeholders, and are thus confronted with a generally higher information demand than smaller firms (Grüning, 2007). Second, referring to the work of Singhvi and Desai (1971), Grüning argues that the threat of a competitive disadvantage from disclosing more openly might be smaller for larger firms. Third, based on Cook (1989), Grüning states that large firms have more resources available to produce information. "Large firms possess sufficient resources for collecting, analysing, and presenting extensive amount of data at minimal cost" (Ahmed & Courtis, 1999, p. 37). Fourth, referring to the work of Meek et al. (1995), Grüning explains that large firms frequently have a dispersed ownership structure, thus a greater extent of disclosure reduces agency costs due to information asymmetries for these firms.

Performance

The performance-related determinants of financial conservatism are the growth perspectives of a firm and its profitability. With respect to growth opportunities, Iona et al. (2006) discovered that "conservative firms seem to have superior growth opportunities than the control firms, evidenced by the significantly higher value of the market-to-book ratio for conservative firms" (Iona et al., 2006, p. 25). Furthermore, with respect to disclosure, Khurana et al. (2005) find a positive relation between a firm's externally financed growth rate and its level of disclosure.

Iona et al. (2006) report that leverage conservatism is positively related to a firm's profitability, which they find "[...] is in line with the prediction of the pecking order theory [...]" (Iona et al., 2006, p. 27). However, Korteweg (2010) reports an automatism between profitability and leverage: "Highly profitable firms tend to have performed well in the past, which mechanically lowers observed leverage ratios" (Korteweg, A., 2010, p. 2155).

It is also argued that profitability is positively associated with disclosure level. The management of profitable firms are more prone to communicate more extensively in order to increase awareness for their superior performance among outsiders (Cooke, 1989a, 1989b; Wallace et al., 1994; Wallace & Naser, 1995) which could in turn, according to Singhvi and Desai (1971), result in increased compensation.

However, empirical evidence regarding the relationship between performance and financial conservatism is weak. While Singhvi, 1968; Singhvi & Desai, 1971; Wallace et al., 1994 found a positive relationship, others found none (McNally et al., 1982; Lau, 1992; Raffournier, 1995) or even a negative relationship (Belkaoui & Kahl, 1978; Wallace & Naser, 1995; Ahmed & Courtis, 1999, p. 37) More recently, Camfferman and Cooke (2002) found a significantly negative relationship between both firm profit margin and return on equity and the extent of disclosure. This is congruent to the findings of Wallace et al. (1994), who observed no significant relationship between the comprehensiveness of disclosure and the profit margin and return on equity.

4.2.2.2 Manager-fixed Effects / Managerial Discretion

From a traditionalist economic standpoint the influence of managers on corporate outcomes is rather limited. However, recent evidence suggests that managers do in fact play a significant role and exhibit their own styles (Bertrand & Schoar, 2003; Malmendier & Tate, 2005; Baker et al., 2007). In defiance of common economic theory, managers do not in fact seem to be effectively interchangeable (Bamber et al., 2010). This is a key argument of the so-called "upper echelons theory" which originates from the work of Hambrick and Mason (1984). Bamber (2010) points out that manager-fixed effects or styles will be especially present when situations are complex and solutions cannot be clearly calculated. Thus managers do have a degree of discretion, which is defined by Finkelstein (2009) "[...] as the latitude of options top managers have in making strategic choices" (Finkelstein, 2009, S. 44).

Personal Characteristics

Bamber et al. (2010) investigate whether top executives exert influence on disclosure. They focus on observable demographic characteristics like personal backgrounds, career tracks or birth-cohort. Bamber et al. find significant manager-fixed effects present in disclosure behaviour. For example, managers with legal backgrounds were found to tend to guide expectations down, which according to the authors, reflects greater sensitivity to litigation risks. However, MBA graduates were tended to guide expectations upward. Finally, Bamber et al. conclude: "Coupled with our evidence on the magnitude and pervasiveness of the manager-specific fixed effects, finding that managers' unique disclosure styles exhibit plausible associations with their distinctive permanent personal demographic characteristics confirms that we are capturing systematic long-lived differences in managers' unique styles and not just random noise" (Bamber et al., 2010, p. 1133).

With respect to leverage conservatism, Frank and Goyal (2007) find that "...a variety of characteristics, such as having an MBA, length of job tenure, and educational background, do have statistically significant impacts." However, Frank and Goyal report that the observed manager-fixed effects only explain a small amount of the variation in leverage. The strongest manager-fixed effects were attributed to tenure,

where long tenure leads to lower leverage. Education (MBA) and having worked for more companies previously was found to lead to greater leverage. Furthermore, they discovered that the CFO plays an at least as important a role as the CEO when it comes to determining corporate leverage.

Personal Incentives

Another important behavioural impact can be attributed to personal incentives, specifically management shareholdings. Iona et al. (2004) find that shareholding by management positively contributes to the probability of a conservative cash policy and state: "Executive directors in financially-conservative firms have greater shareholdings than those in the control firms. [...] These results possibly provide support for the risk-averse managers who tend to have low leverage, and the free cash flow hypothesis which predicts that managers have incentives to increase the amount of liquid funds under their control" (Iona et al., 2006, p. 26). They further explain that "[...] greater shareholdings by executive managers make the monitoring of managers' actions by outside shareholders difficult as a result of greater direct control over the firm. This would, in turn, increase the ability of insiders (executive directors) to resist outside pressures and, consequently, entrenched managers who are relatively free of external discipline would choose to accumulate more cash to pursue their own interests without risking replacement." (Iona et al., 2006, p. 28)

4.2.3 Propositions

As the discussion in the previous section shows, financial conservatism is a controversial phenomenon when looked at from a financial governance perspective. The objective of the extended analysis is to investigate, in line with research question (3c), if and how firm- and manager-fixed effects relate to financial conservatism, respectively issues of accountability and transparency as well as financing as indicated by the findings of the executive survey.

For the purpose of analysis, financial conservatism is disassembled into two latent constructs. Latent constructs are hypothesised and unobservable concepts that can only be approximated by other variables (Hair, 1995). The latent constructs used for the purpose of the present analysis are transparency (EXTR) and hoarding of liquidity (HOARD), which are in turn supposed to relate to financial conservatism expressed through issues surrounding accountability and financing as indicated in by the findings of the executive survey.

The analysis specifically addresses the relationship between these latent constructs and firm-fixed constructs of firm-size (SIZE) and firm-performance (PERFORM) as well as manager-fixed effects that express the status the manager enjoys within a firm because of his tenure, age and personal shareholdings (MFIX). Based on the empirical findings discussed in the previous section, the following relationships will be analysed:

- (P1) The relationship of firm-fixed effects on financial conservatism, proxied by the structural paths between: SIZE \rightarrow EXTR, PERFORM \rightarrow EXTR and PERFORM \rightarrow HOARD
- (P2) The relationship between manager-fixed effects and financial conservatism, proxied by a structural path: MFIX \rightarrow HOARD

In order to test these assumed structural paths, a structural equation modelling (SEM) approach is chosen. The SEM methodology is briefly introduced in the following section.

4.2.4 Empirical Methodology

4.2.4.1 Structural Equation Modelling

Structural equation models (SEMs) are tools of empirical analysis, which became indispensable statistical tools for a variety of scientific disciplines especially in psychometrics, biometrics, econometrics and socio-metrics.

Structural equation modelling (SEM) dates back to the 1920s. The geneticist Sewell Wright made the first attempt to calculate the effects of larger variable systems using linear equations (Wright, 1921). His goal was to examine the effect size of the independent variables (causes) on the dependent variables (effects) and to demonstrate their mutual relationships. This procedure is now referred to as path analysis (Schumacker & Lomax, 1996).

In the past few decades, SEMs have become established as a multivariate method used to analyse complex cause-effect relationships. The steady increase in the number of publications in scientific journals is evidence of this (Baumgartner & Homburg, 1995). However, its area of application is not purely limited to science. Causally analytical validation results are also required in marketing and market research practice. The diffusion of SEM into a range of different social areas of application is, to a large extent, also associated with its availability as statistical computer software. This has made it effective on a wider scale, with increased user-friendliness. An example of this is the LISREL program (LInear Structural RELations; Jöreskog & Sörbom, 1993), which set new standards in the 1980s. The LISREL model concept is often regarded as being synonymous with those of the SEMs. The 1990s brought a further rise in alternative computer programs, which continually improved SEM in terms of usability and user-friendliness. EQS 5.6 (Bentler, 1995) and AMOS 3.6 (Arbuckle, 1997) are programs in competition with LISREL 8 (Jöreskog & Sörbom, 1993). These systems allow users to produce complex SEMs without in-depth knowledge of the methods.

Advances in SEM are not limited to the field of software development. Elementary advancements have also been made within the methodology itself. SEM is now seen as

a special type of causal modelling. Regression analysis, path analysis and factor analysis are in turn considered to be special cases of SEMs.

Advantages of SEM

Structural equation analysis is regarded as a methodical process that permits, according to Homburg and Hildebrand (1998), insights into the interdependencies that exist between underlying latent variables on the basis of empirically measured variances and co-variances of indicator variables. This forms the basis of SEM methodology. The causal models that are the basis for SEM methodology can be used to illustrate complicated dependency structures and causal chains, which can then be tested within a linear equation system.

The main advantage of structural equation modelling is that it allows a separation between manifest and latent variables, and in contrast to other analytical methods, SEM is capable of analysing these latent variables (Backhaus et al., 2006). Latent variables are defined as "[...] a hypothesized and unobserved concept that can only approximated by observed or measurable variables." (Hair et al., 1995, p. 585) In the context of financial management, this could be constructs such as "budgetary participation" or "budget goal commitment" (Smith & Lanfield-Smith, 2004). Such constructs cannot be observed directly and must therefore be measured indirectly using observable indicator variables, so-called "items".

4.2.4.2 Methodological Basics

SEM is a multivariate analysis technique which is to be understood as a combination of regression and factor-analytic methods (Hildebrandt 1995, Ullmann 1996). In contrast to univariate analysis, multivariate analysis always works with several statistical variables at the same time. It studies unobservable (latent) and observable (manifest) variables in models and analyses different relationship structures.

Causal Modelling

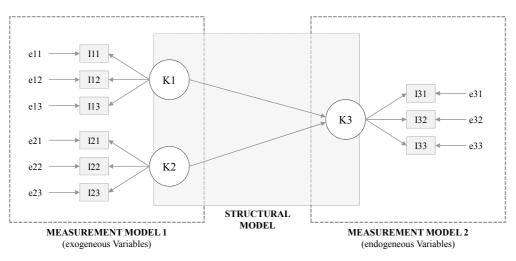
Causal models consist of two parts, the structural and measurement model. They represent the relevant variables of the underlying hypotheses originating from theory construction.

In measurement models, latent variables are represented using the manifest variables allocated to them. The structural model represents the relationships between the latent variables based on a path diagram (Bollen, 1989). The estimation method used for the structural model is similar to the statistical method of regression analysis.

Structural Model

The structural model represents the effect relationships between multiple latent variables and the constructed hypotheses in the form of causal relationships (paths). By using the path analysis developed by Wright (1921), the influence of a construct on other variables can be more accurately determined (Wright, 1921). The graphic representation takes the form of arrows between the variables that define the respective causal direction. In addition to their causal alignment, their strength can also be represented graphically (see Figure 34).

In addition to these direct effect relationships, it is also possible to represent so-called indirect or total effects (Mueller 1996 p. 141), which comprehensively determine the effects of latent variables on each other.



Kx - construct x (latent variable) | lxy - indicator y for construct x (manifest variable) | exy - measurement error for indicator xy

Fig. 35: Elements of a Structural Model (Jahn, 2007, p. 7)

Latent variables are either exogenous or endogenous. Exogenous variables represent the cause of a relationship between variables. Endogenous variables, however, are those latent variables that are influenced by the exogenous variables.

Measurement Model

Latent variables and their respective indicators are represented by the measurement model. The reliability of the measurement usually increases in line with the number of indicators. However, "as the number of indicators increases, the risk of artefacts and therefore the risk of producing a negative factor also increases, as a result of which the construct is steered in a different direction" (Hair et al., 2006). The number of indicators also determines the required sample size to be included in the SEM. For research efficiency reasons, a limit should be placed on indicators, since too many can make the measurement model too complex.

In general, three or four manifest variables per construct is considered to be userfriendly (Hair et al. 2006). In normal cases, indicators should be internally consistent, i.e. they should be similar and correlate to each other (Anderson, Gerbing & Hunter, 1987). In addition to the number of indicators, it is important to take potential differences between the collected values and reality into account, so as not to distort the interpretation result. A fundamental distinction is made between two types of measurement models: reflective and formative (Edwards & Bagozzi, 2000). An indicator is reflective when it is determined by the construct specification. An indicator is formative when it is not determined by the construct specification, but in fact determines the corresponding

determined by the construct specification, but in fact determines the corresponding construct itself: "When a latent variable is defined as a linear sum of a set of measurements [...], the measures are termed formative indicators: the measures produce the construct, so to speak" (Bagozzi 1994, p. 332).

Estimation Methods and associated Software Programs

Estimation methods are approaches to determine and test the values (parameters) of a structural equation model. Two different approaches can be used for estimating causal models with latent variables.

- Covariance analysis, which is mainly carried out using the statistical software programs LISREL (Linear Structural Relationships) and AMOS (Analysis of Moment Structures).
- Variance analysis, where the statistical software programs LVPLS (Latent Variables Path Analysis with Partial-Least-Squares Estimation) and PLS-Graph (Partial Least Squares-Graph) are often used to answer questions relating to business issues.

The most common method used to calculate SEMs is covariance analysis. It is used to determine the structure of observable variables (Jöreskog & Wold, 1982) and examine the linear relationship between variables. Relationships between different latent variables can be indirectly measured by looking at the results of the measurable manifest variables and drawing conclusions from this data. Such calculations and their results form the basis for the use of software programs such as LISREL, AMOS and EQS (Byrne, 2001). They also form the basis for the quality assessment of each model. For further representations regarding the covariance functions and formulas, see Mueller (1996).

Variance analysis examines the effects of independent variables on other dependent variables and the connections between them. The latent variables should have as many indicators as possible (Herrmann, Huber & Kressman 2006). Its use in scientific studies has been steadily increasing in recent years (Scholderer & Balderjahn, 2006). Computer programs such as PLSGraph (Henseler, 2005) and SmartPLS LVPLp are leading the way. Formative measurement models can be very easily implemented in these programs. The minimal sample size requirement is another advantage of PLS (Chin, 1998). Furthermore, models can also be tested with PLS when the corresponding data is multivariate and normally distributed.

SEM Application in Management Accounting Research

Smith and Langfield-Smith (2004) report that structural equation modelling methodology has recently gained significant popularity in management accounting research. According to them, two reasons account for this development. The first is that SEM allows not only recursive relations, meaning unidirectional relations between variables, but also non-recursive relations, which means that a specific path is not unidirectional but instead might include a feedback loop. This allows the research to take a more holistic approach to model building. The second reason is that SEM allows researchers to specify measurement errors of latent variable constructs, which is especially relevant in management accounting research where composite measures are frequently used to measure constructs. Smith and Langfield-Smith (2004) provide an overview of current uses of SEM in management accounting research. Their review is presented in the Appendix 4.

4.2.5 Analysis of Influencing Factors

The application of the SEM technique requires running through several methodological steps, as suggested by Jahn (2007). The first step, the review of literature relevant to the model, was already done in chapter 4.2.2. The next steps are the specification, estimation, modification and finally the interpretation of the model, which are described in the following section.

4.2.5.1 Model Development

Based on the assumed structural paths presented in the previous chapter, the structural model can be derived. This structural model or inner model specifies the relationships between unobserved or latent constructs (Ringle et al., 2009).

Constructs and Items

For the purpose of the analysis, three latent exogenous constructs are defined. The first two represent firm-fixed effects, whereas the third construct represents manager-fixed effects.

Size

The construct size (SIZE) reflects the awareness that the company creates among stakeholders due to its size. Size is proxied by the number of employees (x_1) , sales revenue (x_2) and total assets (x_3) . The latter two are common proxies used in finance and accounting research (for a review on its application in this field, see for example Al-Khazali and Zoubi, 2005). However, as Becker-Blease et al. (2010) argue, sales and assets are not sufficient to describe organisational complexities, especially from a transaction-cost perspective. Especially when it comes to arguments of "political sensitivity" (as argued above), the number of employees is assumed to play an important role. Thus, the total number of employee is included in the analysis.

Performance

The construct performance (PERFORM) reflects the financial success of the company based on return and capital efficiency. As Tangen (2003) reports, the most common financial performance measures are profit margins and return on equity and assets. For the purpose of this analysis, profit margin/RoS (x_4) is proxied by the revenue-margin (EBITDA to sales revenues). To measure the effectiveness in asset and capital utilisation, two measures are introduced: return on common equity, RoE (x_5) and return on assets, RoA (x_6). In order to be able to link the company's operating performance to its stock market performance, two value-based measures are integrated into the model: EVA (x_7) and return on invested capital, ROIC (x_8).

Manager Effects

With the construct MFIX, manager-fixed effects are integrated into the model, following the examples of Bertrand and Schoar, (2003) or Malmendier and Tate (2005). The construct is represented by the age/birth-cohort (x_8) and tenure (x_9) of the respective finance manager in the firm and his personal shareholdings within the firm (x_{10}). Due to lack of data-availability and comparability, the analysis was not extended to further demographic data e.g. educational background.

These exogenous constructs (SIZE, PERFORM, MFIX) are assumed to influence the endogenous constructs presented below.

Extroversion

Extroversion (EXTR) is a proxy to the extent that a company presents itself as transparent to its stakeholders. It is assumed to be marked by stakeholder interaction and the levels of valuable information provided by the financial reporting. The numbers of dates of the financial agenda (y_1) is used here as a proxy to measure how frequently a firm engages with its stakeholders from the finance community. Closely related to this measure is the number of analysts (y_2) that are following the company. It is assumed that the more valuable the information a company provides, the higher the analyst coverage of the firm (see, for example, Bhushan (1989) or Lang and Lundholm (1993)). Finally, the quality of the financial reporting is measured by an available ranking of firm's disclosure, the "Geschäftsberichte"-Ranking 2012 (y_3) from the

University of Zurich, published by Swiss business-magazine "Bilanz" (see Appendix 8 for details). This approach is similar to that chosen by Khurana (2006), who used rankings of overall firm disclosure as reported in the Association of Investment Management and Research's Annual Reviews of Corporate Reporting Practices (AIMR reports). They argue: "The benefit of using the scores assigned by the analysts is that they provide a ready off-the-shelf measure that has been widely used in prior research as a comprehensive measure of corporate disclosure practices" (Khurana, 2006, p. 358).

Hoarding

The term hoarding (HOARD) is used here to describe the behaviour of building up cash cushions and financial slack. Firm-liquidity is assumed to be marked by relative cash levels compared to total assets (y_4). This so-called cash ratio (y_4) is frequently used in analysis concerning cash holdings (see for example Kim, Mauer, and Sherman (1998), Opler, Pinkowitz, Stulz, and Williamson (1999), Faulkender and Wang (2004) or Pinkowitz and Williamson (2004)). Additionally, two common liquidity measures are introduced: the quick (y_5) and current (y_5) ratios. Finally, financial slack, proxied by the working capital to sales ratio (y_6), is built into the model. This measure for financial slack goes back to Hambrick and Finkelstein (1990), who propose working capital divided by sales as a measure that captures the issue of immediate resource availability (see also Bourgeois, 1981; Singh, 1986) that augments managerial discretion and reflects a conservative practice.

4.2.5.2 Graphical Representation of the Structural Model

Based on assumed structural paths presented in section 4.2.3, the structural model as depicted in Figure 36 can be derived.

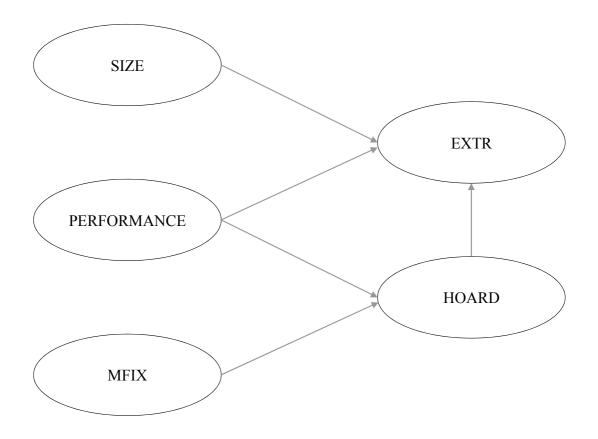


Fig. 36: A Structural Model of Financial Governance

4.2.5.3 Data Collection

All financials related to factors x_1 to x_{10} as well as the non-financial information for $y_{2,}$ y_4 , y_5 and y_6 were extracted from Bloomberg from the latest available data for all public listed companies from the Swiss Performance Index (SPI). The data for y_1 ("agenda") was extracted from the respective firm's investor relations website. The data for y_3 was taken from the yearly ranking of annual reports published by Swiss business magazine "Bilanz". To avoid problems associated with "missing data", firms for which not all data-fields could be filled were excluded. This led to a sample of 122 firms in total. Descriptive statistics are provided in Appendix 9.

4.2.5.4 Estimation Results

In order to analyse the structural model, the software-solution "SmartPLS" was applied. In SmartPLS structural models such as the one depicted in Figure 36 can be conveniently analysed using a graphical interface.

As a first step, the path-coefficients between the constructs are analysed. Pathcoefficients can have strengths between +1.0 and -1.0. A strength of -1.0 indicates that an increase of the independent variable of 1 results into a decrease of the depended variable to the same amount via the respective path (Jahn, 2007). Path-coefficients should have at least strength of +/-0.2. The regression results for the present structural model showed that the path-coefficient were all above this threshold with the exception of the path between the manager-fixed effects and disclosure (-0.143).

As a second step, the validity and reliability of the constructs (SIZE, PERFORMANCE, MFIX, EXTR, HOARD) was analysed. Construct reliability in SEM is commonly assumed to be given when the loadings of the corresponding factors/items is greater than 0.7 (this reflects so-called "composite reliability", which is a measure similar to Cronbach's α). A factor loading greater 0.7 indicates that half of the variance of the indicator can be explained by the construct (Jahn, 2007). As next step, Jahn (2007) suggests testing for convergent and discriminant validity. Convergent validity is assessed using the AVE (Average Variance Extracted) score

that can be directly obtained from the quality reports provided by SmartPLS. According to Jahn (2007) a threshold of ≥ 0.5 for AVE is required. For assessing discriminant validity, a so-called Fornell/Larcker-test (Fornell & Larcker, 1981) was conducted. The Fornell/Larcker-test requires that the AVE is higher than the squared correlations between the latent constructs. Finally, Jahn (2007) suggest that formative constructs should be further tested for multicollinearity. In the present model, the only formative construct is EXTR, the corresponding variance inflation factors (VIF) were all below the threshold suggested by Nitzl (2010) of <3 (PERFORM: 1.056 SIZE: 1.053 HOARD: 1.077). The detailed results for the tests on reliability and validity are displayed in Appendix 10. The tests showed that reliability and validity of the constructs was given, with the exception of the manager-fixed effects which were therefore not any further considered in the model.

Estimation Results modified Model

Excluding manager-fixed effects from the structural model yielded the regression results as depicted in Figure 37.

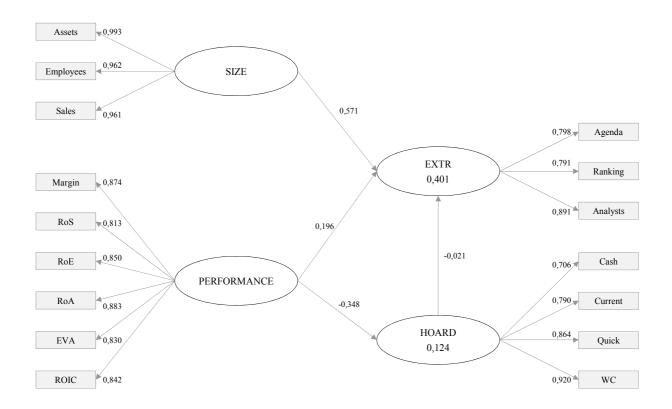


Fig. 37: Alternative Model Regression Results

In this modified model the required strengths of all path coefficients as well as the validity of all constructs were given. Furthermore, the disclosure construct EXTR showed a regression coefficient of 0.401, indicating that size and performance were causing 40% of the variance of the disclosure construct. With respect to the cash construct (HOARD), 12% of its variance is explained by the model.

When sufficient strength of path coefficients and construct validity is given, the significance of the structural paths can be assessed. For this purpose SmartPLS offers a specific procedure to test for significance. The so-called "Bootstrapping" procedure integrated into SmartPLS yields *t*-values that can be used to assess significance.

Bootstrapping revealed the following *t*-values (Figure 38):

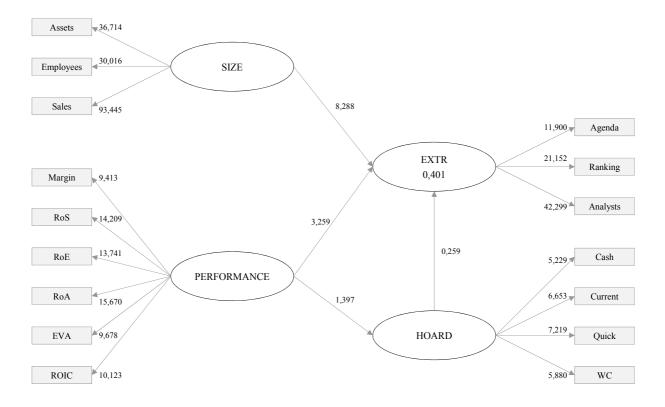


Fig. 38: Bootstrapping Results/t-Values for the Alternative Model

For significance on a 0.05 (95%) level a *t*-value of 1.960 is required (Jahn, 2007). Accordingly, the path-coefficients for SIZE to EXTR (8.288) and for PERFORM to the EXTR (3.259) can be considered as significant. The path from PERFORM to HOARD shows a *t*-value of 1.397 which indicates significance at a 0.2 level (80%).

Group Analysis

To further analyse the type of observed relationships, a group analysis was performed. The objective of the group analysis is to investigate whether the observed relationships (path coefficients) for the total sample vary significantly from sub-samples. Specifically, the objective was to investigate whether the path coefficients in the model change when the structural model is run for incremental sub-samples of performance and size variables.

The first group analysis was performed with respect to the size construct. The objective of the group analysis "size" was to investigate how the path coefficients of the overall structural model change in relation to incremental sub-groups of the size construct. For this purpose, the total sample was divided into sub-groups of the size construct and the structural model was run for each sub-group, holding everything else equal. The resulting path coefficients for the path between SIZE and EXTR were then plotted in a diagram, where the x-axis indicates the size categories and the y-axis the strength of the path coefficient (see Figure 39).

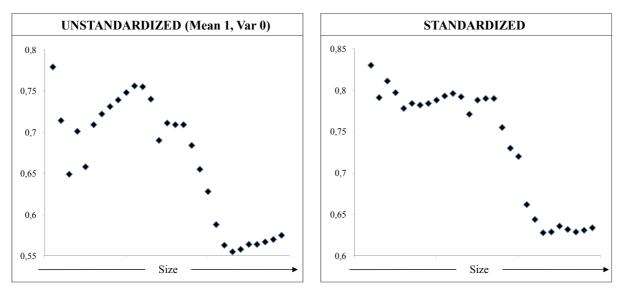


Fig. 39: Development of Path Coefficients with increasing Firm Size

The results, as displayed in Figure 39, give a first indication of the nature of the relationship between size and firm transparency. While the overall model predicts a

positive relation between size and firm transparency, the group analysis suggests that the relationship gets weaker with increasing firm size.

However, this conclusion can only be upheld as long as if it can be assumed that the investigated sub-samples are indeed differing from each other, or expressed in statistical terms, when variance-inequality exists between sub-groups and the null hypothesis can be subsequently rejected for each sub-group. To test for this a so-called Levene test was performed. The Levene test yields so-called P-values that should be greater .095 or lower than .05. The P-values for firm size groups above the median was found to be within these limits. Below the median the P-values were outside the required range, suggesting that the null hypothesis could not be rejected for these size-groups (see Appendix 11). These results suggest some interesting conclusions. First, it implies that the size disclosure relationship is only significant for firms above the median size. Second, results show that while in general larger size relates to more disclosure, the strength of this relationship gets weaker as firm size increases.

A second group analysis was conducted for the performance construct following the same steps as described above. Path coefficients between performance and liquidity construct showed a negative sign in the overall model, suggesting that higher performance leads to lower values of the liquidity-construct.

The group analysis further explores this relationship. It reveals that the corresponding strengths of path coefficients actually get weaker with increasing performance groups as depicted in Figure 40. Thus, the better the performance, the less liquidity is hoarded. However this effect gets weaker with increasing firm performance.

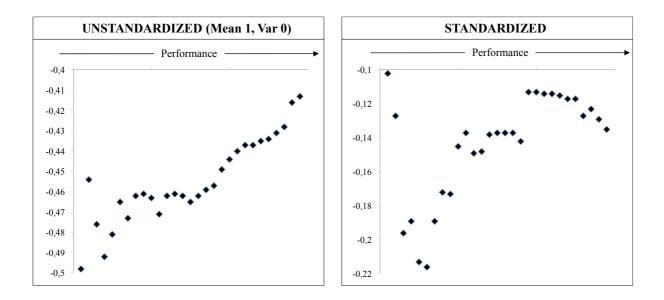


Fig. 40: Development of Path Coefficients with increasing Performance

A Levene test was also performed with respect to the performance groups. Similar to the results of the size group analysis, the resulting P-values for performance groups below the median were found to be outside the required range. Thus, again, the null hypothesis could not be rejected for groups below the median.

Applying SEM-technique to the topic of financial conservatism yielded some interesting results with respect to research question (3c) and shed some light on the factors that drive financial conservatism in terms of firm transparency and financing issues, as indicated by the finance executive survey. First of all, the proposition that manager-fixed effects may have an effect on transparency and liquidity had to be rejected in the current model setting. While this could be attributable to the specific modelling of the constructs and relationships in this setting, it might also indicate that personal characteristics either do not account for much of the variation in finance practice, or that existing control mechanisms restrain executives in their discretion, leaving little room for personal styles in financial governance. While manager-fixed effects had to be rejected, firm-fixed effects were indeed found to be significant predictors for specific finance policy outcomes. The SEM model presented here suggests, in line with previous empirical research, that a significant relationship exists between size and firm transparency. However group analysis revealed that this relationship is only significant for firms which belong to larger size groups (upper quartiles). Most importantly, the model suggests that the relationship gets weaker as firm size increases. This indicates that transparency does increase with firm size but not proportionally. This finding is intuitively compelling, taking into consideration that larger firms might find it easier than smaller firms to dedicate specialized resources (e.g. investor relations departments) to facilitate frequency and quality of disclosure; however, this will only make economic sense up to a certain peer standard level. Furthermore, the model showed that economically successful companies were found to be operating with lower liquidity buffers than less successful companies. This finding is in line with previous empirical evidence. However, the present model could also reinforce that the relationship between economic success and liquidity buffers gets weaker as firm performance increases. Thus, it could be concluded that highly successful firms, while operating with generally lower liquidity buffers than less successful firms, do indeed grow marginally less aggressive in managing liquidity levels the more successful they become.

5 Conclusion

Did finance lose sight of the aims of good governance? (Leibfried, 2008) This question was the starting point for this dissertation.

To frame this question, the scope of financial management was discussed against a theoretical background and current issues were highlighted from a practitioner perspective. This review, while certainly not comprehensive, clearly illustrated the broad scope of financial management in modern corporations. Financial management has moved well beyond its traditional roles and must cope with partly inconsistent requirements. Furthermore, the review suggests that its scope and requirements are not in a steady state. In particular, an increasingly rigorous regulatory environment disproportionately binds financial management capacity, leaving other business-critical engagement at risk of being under-prioritised. Critical engagement with financial management is necessary to align management control systems with the requirements of complex value chains and global competition.

Corporate governance was then introduced, focusing on the current state of discussion of corporate governance measures and the corresponding legal foundations and codified best practices. While there is an abundance of contributions to this discussion from various academic disciplines, key issues, such as compensation or the capital structure puzzle, remain unsolved: "As is commonly the case in academic work, decades of research have perhaps produced more questions than answers" (Core et al., 2003, p. 44).

The corporate governance debate in Switzerland recently gained intensity, with recent initiatives against excessive pay, concentration of powers and revisions of relevant judicature (e.g. new accounting law). The recent culmination of these issues might be grounded in a legacy of corporate governance deficits, which frequently leave Switzerland a step behind international standards. Recent changes in dynamics will eventually close these historical gaps.

The reviews of the current state of financial management and corporate governance set the stage for the synthesis of the two topics under the financial governance framework (Leibfried, 2008). Finance and financial management mainly influence corporate governance by providing relevant inputs into corporate governance mechanisms. However, finance and financial management can themselves be seen as governance mechanisms. In this view finance is the "economic conscience" of the firm, committed to increasing firm value and detecting potential harmful developments. Such a mandate requires a clearly stated objective function. The opposing arguments put forward by proponents of shareholder- and stakeholder-management illustrates the deceptive complexity of the issue of a firm's purpose and calls into doubt the notion of shareholder supremacy.

Long-term value creation is the lowest common denominator in the discussion. Instead of debating the best indicator for realising long-term value creation, the review suggests that more emphasis should be placed on implementing value-orientation within the company, irrespective of the specific value-indicator chosen.

In order to achieve a specified objective, decisions must ultimately be taken. Important decisions, e.g. corporate financing, are taken by financial management itself. But financial management also supports other functions in the decision-making process. Management Control Systems (MCS) play a crucial role here, drawing attention to what needs to be done and generating commitment by creating transparency about the results of company activities. It is therefore essential to embed MCS within an appropriate control environment.

Key aspects of the financial governance frameworks have been empirically challenged. The finance function plays a demonstrably crucial role in corporate governance. In exercising this role, those responsible take a pragmatic view by legitimising shareholder demands while simultaneously prioritising the demands of customers. MCS have been shown to be particularly important when implementing financial governance, but there remains potential for improvement, especially in terms of forward-looking and value-directed approaches. In light of the surprisingly excessive risk-taking of some CFOs, further development of the MCS should be prioritised.

One particular aspect of financial governance was explored. Although financial conservatism is frequently encountered, it should be viewed critically when it comes to corporate governance. The results from the SEM-model indicate that financial conservatism is more attributable to firm-fixed effects than manager-fixed effects. It is tempting to conclude that, because larger companies have better specialists/experts at their disposal, they communicate more with stakeholders, produce more informative financial publications and, therefore, tend to be followed by more analysts. However, the model also showed that this relationship grows weaker the larger the company becomes. It was also demonstrated that larger companies work with lower liquidity buffers than smaller ones. Model data indicate that this relationship becomes weaker as performance increases.

The study demonstrates that financial governance is linked to corporate governance in a variety of ways. Corporate governance need not involve creating additional tasks and responsibilities for CFOs; however, a return to the proper tools of financial management would revitalise its inherent governance function.

The limitations of the present study are those typical of empirical research. The sample sizes of the executive survey (n=37) and the SEM model (n=122) may appear small, but in light of the survey's specific background, it may be assumed that the results are fairly representative. The survey covered over 50% of Switzerland's blue-chip index. For the SEM model, data was gathered for almost 50% of the companies that make up Switzerland's overall share index, the SPI.

The chosen methodology has some limitations. Face-to-face interviews pose major challenges, particularly given the quantitative nature of the survey. In this case, the validity of the results largely depends on the interview setting. The use of a single interviewer improved the conditions of the present survey.

Certain limitations in SEM methodology can also be observed. As well as the issue of sample size, challenges arose during theory formation and implementation. There were also issues of data quality, especially with respect to potential outliers.

Theory formation was extremely complex and multi-faceted, as existing theories provide different and even contradictory findings. In turn, implementing the constructs was largely contingent on the available indicators and their quality. In order to mitigate these problems, data records with missing or apparently inconsistent data were removed.

Due to the broad scope of the present study, several in-depth questions can be addressed by future research. For example, does the finance function's participation in strategy processes actually lead to better strategies? How do power relations between the CFO and other members influence this process? What strategies emerge under different stakeholder salience? Furthermore, CFO pay and incentives provide a promising direction for research into management control systems, since the CFO has a close proximity to the numbers upon which he will be evaluated. Dysfunctional effects of management control systems can also be investigated from a strategy and governance perspective. Finally, alternative constructs should be developed for manager-fixed effects in order to better understand the behavioural aspects of strategy, finance and governance.

References

ABB / ABB Group (2013) *Key Principles Corporate Governance* [www] ABB. Available from http://www.abb.com/investorcenter [accessed 05/05/2012].

ACCA / Association of Chartered Certified Accountants (2013) *The Complete Finance Professional* [www] ACCA. Available from http://www.accaglobal.com [accessed 05/05/2012].

ACCA / Association of Chartered Certified Accountants (2012) *Finance transformation: expert insights on shared services and outsourcing* [www] ACCA. Available from http://www.accaglobal.com [accessed 05/05/2012].

Acharya, V. V., Hahn, M., Kehoe, C. (2010) Corporate Governance and Value Creation: Evidence from Private Equity. *Working paper*.

Achleitner, A.-K., Behr, G., Schäfer, D. (2009) *Internationale Rechnungslegung*. 4th Edition, Munich: Verlag Franz Vahlen.

ADB / Asian Development Bank (2012) *Guidelines for the Financial Governance and Management of Investment Projects Financed by ADB* [www] ADB Available from http://www.adb.org/ [accessed 05/05/2012].

Agrawal, A., Goldie, J., Huyett, B. (2013) Today's CFO: Which profile best suits your company? *McKinsey Quarterly*, January 2013, p. 1-6.

Agle, B. R., Mitchell, R. K., Sonnenfeld, J. A. (1999) Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values. *Academy of Management Journal*, 42, p. 507-525.

Agle, B. R., Mitchell, R. K., Wood, D. J., (1997) Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts", *Academy of Management Review*, 22(4), p. 853-886.

Ahmed, K., Courtis, J. (1999) Associations between corporate characteristics and disclosure levels in annual reports: A meta-analysis. *British Accounting Review*, 31, p. 35–61.

Ahmed, K., Nicholls, D. (1994) The impact of non-financial company characteristics on mandatory compliance in developing countries: the case of Bangladesh. The *International Journal of Accounting*, 29 (1), p. 60-77.

Aier, J. K., Comprix, J., Gunlock, M.T., Lee, D. (2005) The financial expertise of CFOs and accounting restatements. *Accounting Horizons*, 19, p. 123-135.

Al-Khazali, S. M., Zoubi, T. A. (2005) Empirical Testing Of Different Alternative Proxy Measures For Firm Size. *The Journal of Applied Business Research*, 21(3), p. 79-90.

Almazan, A., Molina, C. A. (2004) Intra-Industry Capital Structure Dispersion. *Working Paper.*

Anctil, R. (1996) Capital Budgeting Using Residual Income Maximization, *Review of Accounting Studies*, 1(1), p. 9-34.

Anderson, J., Hunter E. (1987) On the Assessment of Unidimensional Measurement: Internal and External Consistency, and Overall Consistency Criteria. *Journal of Marketing Research*, 24 (11), p. 432-437.

Andersen, T. J. (2004) Integrating Decentralized Strategy Making and Strategic Planning Processes in Dynamic Environments. *Journal of Management Studies*, 41, p. 1271–1299.

Arbuckle, J. (1997) AMOS User's Guide, Version 3.6, SmallWaters Corporation.

Ashbaugh-Skaife, H., Collins, D.W., Kinney, W.R., LaFond, R. (2006) The Effect of Internal Control Deficiencies on Firm Risk and Cost of Equity Capital. *Working Paper*.

Askarany, D. and Yazdifar, H. (2010) *A Comparative Investigation into the Diffusion of Management Accounting Innovations in the UK, Australia and New Zealand* [www]. Available from http://www.cima.org [accessed 05/05/2012].

Backhaus, K., Erichson, B., Wulff, P., Weiber, R. (2006) *Multivariate Analysemethoden – Eine anwendungsorientierte Einführung*, 11. Ed., Berlin: Springer.

Baggs, J., de Bettignies, J.-E. (2005) Product Market Competition and Agency Costs. *Working Paper*.

BAH / Booz Allen Hamilton (2005) Making Mergers Work - The Critical Role of the CFO [www] BAH. Avaiable from www.booz.com [accessed 04/09/2012].

Bagozzi (1994) *Structural Equation Models in Marketing Research: Basic Principles*. In: Principles of Marketing Research, Bagozzi, R. P. (Ed.). Cambridge, MA: Blackwell, p. 317-386.

Baker, A. (2010) Restraining regulatory capture? Anglo- America, crisis politics and trajectories of change in global financial governance. *International Affairs*, 86(3), p. 647–663.

Baker, M., and Wurgler, J., (2007) Investor sentiment in the stock market. *Journal of Economic Perspectives*, 21(2), p. 129-151.

Ball, R, Shivakumar, L. (2005) The Role of Accruals in Asymmetrically Timely Gain and Loss Recognition. *Working Paper*.

Bamber, L., Jiang, J., Wang, I. Y, (2010) What's My Style? The Influence of Top Managers on Voluntary Corporate Financial Disclosure. *The Accounting Review*, 85(4), p. 1131–1162.

Barclay, M. J., Smith, C. W., Watts, R. L. (1995) The Determinants of Corporate Leverage and Dividend Policies. *Journal of Applied Corporate Finance*, 7, p. 4-19.

Bartov, E., Cohen, D. (2008) Mechanisms to meet/beat analyst earnings expectations in the pre- and post-Sarbanes Oxley eras. *Working paper*.

Basu, S. (1997) The conservatism principle and the asymmetric timeliness of earnings, *Journal of Accounting & Economics*, 24, p. 3-37.

Baumgartner, H., Homburg, Ch. (1996) *Applications of structural equation modeling in marketing and consumer research - a review*. In: International Journal of Research in Marketing, 13, p. 139-161.

Beasley, M. S., Clune, R., Hermanson, D. R. (2005) Enterprise risk management: An empirical analysis of factors associated with the extent of implementation. *Journal of Accounting and Public Policy*, 20(6), p. 521-531.

Beasley, M. S., Clune, R., Hermanson, D. R. (2006) The Impact of Enterprise Risk Management on the Internal Audit Function. *Working Paper*.

Becht, M., Bolton, P., Roell, A. (2002) Corporate Governance and Control. *Working Paper*.

Becker, A. (2004) Beyond Organization? Anmerkungen zum Konzept des Beyond Budgeting. *Zeitschrift für Organisation (zfo)*, 73(2), p. 82-87.

Becker, A. (2009) *Private Equity Buyout Fonds - Value Creation in Portfoliounternehmen.* Dissertation, University of St. Gallen.

Becker-Blease, J., Kaen, F., Etebari, A., Baumann, H. (2010) Employees, Firm Size, and Profitability in U.S. Manufacturing Industries. *Investment Management and Financial Innovations*, 7(2), p. 7-23.

Belkaui, A., Kahl, A. (1978) *Corporate Financial Disclosure in Canada*. Research Monograph of the Canadian Certified General Accountants Association, Vancouver. Ben-David, I., Graham, J., Harvey, C. (2007) Managerial Overconfidence and Corporate Policies. *Working Paper*.

Beneish, M. D, Billings, M. B., Hodder, L. D. (2007) Internal control weaknesses and information uncertainty. *Working Paper*.

Bentler, P. (1995) *EQS Structural Equations Program Manual*, Multivariate Software Inc.

Berger, P., Ofek, E., Yermack, D. (1997) Managerial entrenchment and capital structure decisions. *The Journal of Finance*, 52, p. 1411-1438.

Berkstresser, Z. L. (2012), The Costs and Consequences of the Sarbanes-Oxley Act of 2002. *Working Paper*.

Berle, A., Means, G. C. (1932) *The Modern Corporation and Private Property*. New York: Harcourt, Brace & World.

Bertrand, M., Schoar, A. (2003) Managing with Style: The Effect of Managers on Firm Policies. *Working Paper*.

Bettignies, J.-E., Baggs, J. (2005) Product Market Competition and Agency Costs. *Working Paper*.

Betzin, J., Henseler, J. (2005) *Einführung in die Funktionsweise des PLS-Algorithmus*.In: Bliemel, F., Eggert, A., Fassot, G., Henseler, J. (Eds.) Handbuch PLS-Pfadmodellierung, Stuttgart: Schäffer-Poeschel, pp. 49-69

Bollen, K. (1989) Structural Equations with Latent Variables, Wiley & Sons.

Brealey, R. A. Meyers., S. C., Allen, F. (2011) *Principles of corporate finance*, 10th Edition. New York, NY: McGraw-Hill.

Brigham, E. F. (2013) *Fundamentals of financial management*, 13th Edition, Mason OH: South-Western.

Brignall, S., Ballantine, J. (2004) Strategic Enterprise Management Systems: new directions for research. *Management Accounting Research*, 15(2), p. 225-240.

Broer, F., Kiefer R., Melwani, A. (2009) How finance departments are changing: McKinsey Global Survey Results. *McKinsey Quarterly*, April 2009, p. 1-8.

Brown, W., & Nasuti, F. (2005). What ERP systems can tell us about Sarbanes-Oxley. *Information Management & Computer Security*, 13(4), p. 311-327.

Bushman, R. M, Smith, A. J. (2001) Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32, p.237–333.

Burkart, M., Gromb, D., Panunzi, F. (1997) Large Shareholders, Monitoring, and the Value of the Firm. *The Quarterly Journal of Economics*, 112 (3), p. 693-728

Byrne, B. M. (2001) *Structural equation modeling with AMOS: Basic concepts, applications and programming*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Camfferman, K. and T. E. Cooke. 2002. An analysis of disclosure in the annual reports of U.K. and Dutch companies. *Journal of International Accounting Research*(1), p. 3-30.

Capon, C. (2008) Understanding Strategic Management. London: Pearson.

Carpenter, M. A., Geletkanycz, M. A., Sanders, G. (2004) Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition, *Journal of Management*, 30(6), p. 749–778.

Carter, E. E. (1971) The Behavioral Theory of the Firm and Top-Level Corporate Decisions. *Administrative Science Quarterly*, 16(4), p. 413-429.

CAQ / Center for Audit Quality (2010) *Guide to Internal Control Over Financial Reporting* [www] CAQ. Available from http://www.theCAQ.com [accessed 05/05/2012]. CFO Publishing (2008) *Future Perfect: The CFO of Tomorrow is published by CFO Publishing Corp* [www] KPMG. Available from http://www.kpmg.com [accessed 07/08/2012].

CFO Research Service / Booz Allen Hamilton (2005) *The Activist CFO - Alignment With Strategy, Not Just With the Business* [www] CFO Research Service. Available from www.boozallen.com/ [accessed 10/09/2012].

Chavaa, S., Purnanandam, A. (2010) CEOs versus CFOs: Incentives and corporate policies. *Journal of Financial Economics*, 97(2), p. 263-278.

Chen, L., Sun, L., Ettredge, M. (2010) Financial executive qualifications, financial executive turnover, and adverse SOX 404 opinions. *Journal of Accounting and Economics*, 50(1), p. 93-110.

Chin, Wynne W. (1998) Issues and Opinions on Structural Equation Modeling. *MIS Quarterly*, 22 (1), p. 7-16.

Chow, C. W., Wong-Boren, A. (1987) Voluntary Financial Disclosure by Mexican Corporations, *The Accounting Review*, 62(3), p. 533-541.

Clyburn (n.d.) *The CFOs Relationship with the Audit Committee for Effective Risk Management* [www]. Available from http://www.poole.ncsu.edu/erm/index.php/articles/entry/CFO-audit-committee/ [Accessed 03/02/2013]

Cohen, D. A., Dey, A., Lys, T. Z. (2006) Real and Accrual-Based Earnings Management in the Pre- and Post-Sarbanes Oxley Periods. *Working Paper*.

Cohen, D. A., Zarowin, P. (2009) Accrual-Based and Real Earnings Management Activities Around Seasoned Equity Offerings. *Working paper*.

Collier, N., Fishwick, F., Floyd, S. W., (2004) Managerial Involvement and Perceptions of Strategy Process. *Long Range Planning*, 37(1), p. 67-83.

Cooke, T.E., 1989, Voluntary corporate disclosure by Swedish companies, *Journal of International Financial Management & Accounting*, 1(2), p. 171-195.

Copeland, T. E., Weston, J. F., Shastri, K. (2005) *Financial theory and corporate policy: student solutions manual*, 4th Edition, Boston, MA: Pearson Addison Wesley.

Core, J. E., Guay, W. R. and Larcker, D. F. (2003) Executive Equity Compensation and Incentives: A Survey. *Economic Policy Review*, 9(1), p. 27-44.

COSO (2004) *Integrated Enterprise Risk Management* [www] COSO. Avaiable from http://www.coso.org [accessed 05/05/2012].

COSO (2013) *About us* [www] COSO. Avaiable from http://www.coso.org/aboutus [accessed 05/05/2012].

Coates, J. C. (2007) The Goals and Promise of the Sarbanes-Oxley Act, *The Journal of Economic Perspectives*, 21(1), p. 91-116.

Courtis, J. K., (1979) *Annual Report Disclosure in New Zealand: Analysis of Selected Corporate Attributes*. Research Study, University of New England, Armidale, Australia.

Cyert, R. M., March, J. G. (1963) *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.

Daily, C. M., Dalton, D. R., Rajagopalan, N. (2003) Governance through Ownership: Centuries of Practice, Decades of Research. *The Academy of Management Journal*, 46(2), p. 151-158.

Damodaran, A. (1997) *Corporate Finance: Theory and Practice*, New York: John Wiley.

Daniel, A. (2010) Goals of a Multinational Corporation and the Role of a Financial Manager. *Working Paper*.

DCG (2008) Directive Corporate Governance. [www] SIX Group. Available from http://www.six-exchange-regulation.com/ [accessed 05/05/2013].

DeAngelo, H., DeAngelo, L., Skinner, D.J. (1996) Reversal of fortune: dividend signaling and the disappearance of sustained earnings growth. *Journal of Financial Economics*, 40 (3), p. 341–372.

De Franco, G., Guan, Y., Lu H. (2005). The Wealth Change and Redistribution Effects of Sarbanes-Oxley Internal Control Disclosures. *Working Paper*.

Deloitte (2004) *Sarbanes-Oxley Section 404: 10 Threats to Compliance* [www]. Available from http://www.deloitte.com [accessed 05/05/2013].

Deloitte (2006) *The Finance Fuction under Review 2006* [www]. Available from http://www.deloitte.com [accessed 05/05/2013].

Deloitte (2010) *The "Last Mile" of finance: Strategically transforming financial governance* [www]. Available from http://www.deloitte.com [accessed 05/05/2013].

Deloitte (2012) *New Accounting Rules: Get Ready for the new Accounting Requirements* [www]. Available from http://www.deloitte.com [accessed 05/05/2013].

Denis, D. J., Hanouna, P., Sarin A (2006) Is there a dark side to incentive compensation? *Journal of Corporate Finance*, 12(3), p. 467-488.

Dittmar, A., Mahrt-Smith, J. (2007) Corporate governance and the value of cash holdings. *Journal of Financial Economics*, 83(3), p. 599-634.

Dittmar, A., Mahrt-Smith, J., Servaes, H. (2003) International Corporate Governance and Corporate Cash Holdings. *Journal of Financial and Quantitative Analysis*, 38, p. 111-133.

Dobbs, R., Giordano, M., Wenger, F. (2009) The CFO's role in navigating the downturn. *McKinsey Quarterly*, February 2009, p. 2-7.

Drobetz, W., Grüninger, M. (2007) Corporate Cash Holdings: Evidence from Switzerland. *Financial Markets and Portfolio Management*, 21(3), p. 293-324.

Doerig, M., Wibmer, J. (2012) Preparing for the new accounting law [www] ILO. Available from http://www.internationallawoffice.com [accessed 05/05/2013]

Dorner, D., Orth, Ch. (2005) Bedeutung der Corporate Governance für Unternehmen und Kapitalmärkte. In: Pfizer et. Al (eds.). *Deutscher Corporate Governance Kodex*. 2nd ed., Stuttgart: Schäffer-Poeschel, p. 3-13.

Doyle, J. T., Ge, W., McVay, S. E. (2007) Accruals Quality and Internal Control Over Financial Reporting. *The Accounting Review*, 82, p. 1141-1170.

Durfee, D. (2006) Management or Manipulation? *CFO Magazine*, December 1st, retrieved from http://www.cfo.com.

Economist Intelligence Unit / EIU (2008) *The empowered CFO: The emerging role of the finance office in large corporations* [www]. Available from http://www.cfoinnovation.com [accessed 04/05/2013].

Economist, The (2002) Swiss corporate governance - Rotten apples, The Economis, February 28th, retrieved from http://www.economist.com.

Edwards, J. R., Bagozzi, R. P. (2000) On the Nature and Direction of Relationships Between Constructs and Measures. *Psychological Methods*, 5(2), p. 155-174.

Efendi J., Mulig E. & Smith L. (2006) Information Technology and Systems Research Published in Major accounting Academic and Professional Journals. *Journal of Emerging Technologies in Accounting*, 3, p. 117-128.

Ettredge, M., C.Li, and L. Sun (2006), The Impact of Internal Control Quality on Audit Delay in the SOX Era. *Working paper*.

Everest (2012) *Finance and Accounting Outsourcing (FAO) - Annual Report 2013* [www] Everst Global Inc.. Available from https://research.everestgrp.com on [accessed 05/05/2013]. EY / Ernst & Young (2010) *Conceptual Framework: Objectives and Qualitative Characteristics* [www] Ernst & Young. Available from http://www.ey.com/IFRS [accessed 01/05/2013].

EY / Ernst & Young (2011) Turn risks and opportunities into results [www] Ernst & Young. Available from http://www.ey.com [accessed 05/05/2013].

EY / Ernst & Young (2012) The Sarbanes-Oxley Act at 10 - Enhancing the reliability of financial reporting and audit quality [www] Ernst & Young. Available from http://www.ey.com [accessed 01/05/2013].

Fan, J. P. H., Wong, T. J. (2001) Do External Auditors Perform a Corporate Governance Role in Emerging Markets? Evidence from East Asia. *Working Paper*.

Fang, Y., Yu, H.-C. (2008) Do Restatements Really Increase Substantially after the Sox? How Does the Stock Market React to Them? *Working Paper*.

Favaro, P. (2001) Beyond Bean Counting: The CFO's Expanding Role. *Strategy & Leadership*, 29(5), p. 4-8.

Fornell, C, Larcker, D. F. (1981) Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), p. 39-50.

Francis, J, Lafond, R., Olsson, P., Schipper, K. (2004) Costs of equity and earnings attributes. *The Accounting Review* 79(4), p. 967–1010.

Frank, M. Z., Goyal, V. K. (2007) Capital Structure Decisions: Which Factors are Reliably Important? *Financial Management*, 38, p. 1–37.

Freeman, E. R., Wicks, C. A., Parmar, B. (2004) Stakeholder Theory and The Corporate Objective Revisited. *Organization Science*, 15, p. 364-369

Freeman, E. R., McVea, J. (2001) Stakeholder Approach to Strategic Management. *Working Paper*.

Ge, W., McVay, S. (2005) The Disclosure of Material Weaknesses in Internal Control after the Sarbanes-Oxley Act. *Accounting Horizons*, 19, p. 137-158.

Ge, W. Matsumoto, D., Zhang Li, J. (2011) Do CFOs Have Style? An Empirical Investigation of the Effect of Individual CFOs on Accounting Practices. *Contemporary Accounting Research*, 28(4), p. 1141–1179.

Germain, R. D. (2001) 426 Global Financial Governance and the Problem of Inclusion. *Global Governance*, 7(4), p. 411-426.

Gillan, S. L. (2006) Recent Developments in Corporate Governance: An Overview, *Journal of Corporate Finance*, 12, p. 381-402.

Givoly, D., Hayn, C. Natarajan, A. (2005) Measuring Reporting Conservatism. *Working Paper*.

Gleich, R., Oehler, K. (2006) *Corporate Governance umsetzen*. Stuttgart: Schäffer-Poeschel.

Gnirke, K. (2013) Aktionärsdemokratie: Brüchige Bollwerke. *Bilanz*, April 16th, retrieved from http://www.bilanz.ch/unternehmen/aktionaersrechte-revolte-des-kapitals

Gomez, P., Meynhardt, T. (2009) *Public Value: Gesellschaftliche Wertschöpfung im Fokus der Führung*. In: Seiler, S. (ed.) Führung neu denken - im Spannungsfeld zwischen Erfolg, Moral und Komplexität. Zürich: Orell Füssli, p.127-184.

Gompers, P., Ishii, J., Metrick, A. (2003) Corporate Governance and equity prices, *Quarterly Journal of Economics*, 118, p. 107-155.

Graham, J. R., Harvey, C. R. (2002), How do CFOs make capital budgeting and capital structure decisions? *Journal of Applied Corporate Finance*, 15, p. 8-23.

Graham, J. R., Harvey, C. R., Puri, M. (2009) Managerial Attitudes and Corporate Actions. *Working Paper*.

Graham, J. R., Harvey, C. R., Rajgopal, S. (2004) The Economic Implications of Corporate Financial Reporting. *Working Paper*.

Granlund, M., Malmi, T. (2002) Moderate impact of ERPS on management accounting: a lag or permanent outcome? *Management Accounting Research*, 13, p. 299-321.

Grüning, M (2007) Drivers of corporate disclosure: a structural equation analysis in a Central European setting. *Management Research News*, 30(9), p. 646 – 660.

Grothe, M., Pham, A., Saban, J. (2006) Getting it wrong the first time. *Yellow Card Trend Alert*. Glass Lewis & Co., LLC.

Harford, J. (1999) Corporate Cash Reserves and Acquisitions. *The Journal of Finance*, 54, p. 1969–1997.

Harford, J., Mansi, S. A., Maxwell, W. F. (2006) Corporate Governance and Firm Cash Holdings. *Working Paper*.

Hail, S. (2002) The impact of voluntary corporate disclosures on the ex-ante cost of capital for Swiss firms. *Working Paper*.

Hair, J. F., Black W. C., Babin, B. J., Anderson, R. E., Tatham, R. L. (2006) *Multivariate Data Analysis*, 6th ed., Upper Saddle River, N.J.: Prentice-Hall.

Hall, J. A. (2008) Accounting Information Systems, 6th Ed., Mason OH: Cengage.

Hall, S., Lovallo, D., Musters, R. (2012) How to put your money where your strategy. *McKinsey Quarterly*, March 2012, p. 1-11.

Hambrick D. C., Finkelstein, S. (1987) Managerial Discretion: A Bridge Between Polar Views of Organizations. *Research in Organizational Behavior*, 9, p. 369-406.

Hambrick, D. C., Mason, P. A. (1984) Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2), p. 193-206.

Hambrick, D. C., Abrahamson, E. (1995) Assessing Managerial Discretion across Industries: A Multimethod Approach. *Academy of Management Journal*, 38(5), p. 1427-1441

Hambrick, D. C., Werder, A. V., Zajac, E. J. (2008) New directions in corporate governance research. *Organization Science*, 19(3), p. 381-385.

Hammersely, J. S., Myers, L. A, and Shakespeare, C. (2007) Market Reactions to the Disclosure of Internal Control Weaknesses and to the Characteristics of Those Weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. *Working Paper*.

Hoitash, R., Markelevich, A., Barragato C. A. (2007) Auditor fees and audit quality. *Managerial Auditing Journal*, 22 (8), p. 761-786.

Hoitash, U., Hoitash, R., Johnstone, K. M. (2007) The Effects of Internal Control Quality, CFO Characteristics, and Board of Director Strength on CFO Annual Compensation. *Working Paper*.

Homburg, C., Hildebrandt, L. (1998) *Die Kausalanalyse: Bestandsaufnahme, Entwicklungsrichtungen, Problemfelder.* In: Hildebrandt, L., Homburg, C. (Eds.), Die Kausalanalyse : ein Instrument der betriebswirtschaftlichen Forschung, Stuttgart, p. 15 - 43.

Hossain, M., Perera, H. B., Arman, A. R. (1995) Voluntary disclosure in the annual reports of the New Zealand companies. *Journal of International Financial Management and Accounting*, 6, p. 69-87.

Hossain, M., Tan, L., Adams, M. (1994) Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur stock exchange. *International Journal of Accounting*, 29(4), p. 334-351.

Harford, J (1999) Corporate cash reserves and acquisitions. *Journal of Finance*, 54: 1969-1997.

Healy, P. M., Palepu, K. G. (2001) Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31, p. 405–440.

Henz T. G. (2011) *Corporate-Governance-Regulierung in der Schweiz –eine Übersicht* [www]. Available from www.kmu.admin.ch [accessed 05/10/2013].

Herrmann, A., Huber, F. Kressmann, F. (2006) Varianz- und kovarianzbasierte Strukturgleichungsmodelle – Ein Leitfaden zu deren Spezifikation, Schätzung und Beurteilung. *Zeitschrift für betriebswirtschaftliche Forschung*, 58(2), p. 34-66.

Hermalin, B. E. & Weisbach, M. S. (2003) Boards of directors as an endogenously determined institution: a survey of the economic literature. *Economic Policy Review*, *Federal Reserve Bank of New York*, 4, p. 7-26.

Hildebrandt, L. (1995) *Kausalanalyse*. In: Tietz, B., Köhler, R., Zentes, J. (Eds.), Handwörterbuch des Marketing, 2nd ed., Stuttgart: Schäffer-Poeschel, p. 1126-1135.

Hogan, C. E., Zabihollah, R., Riley, R. A. Jr., Velury, U. K. (2008) Financial Statement Fraud: Insights from the Academic Literature, *Auditing: A Journal of Practice & Theory*, 27(2), p. 231-253.

Hoitash, R., Hoitash, U., Johnstone, K. M. (2007) The Effects of Internal Control Quality, CFO Characteristics, and Board of Director Strength on CFO Annual Compensation. *Working paper*.

Hoitash, U., Hoitash, R., Johnstone, K. M. (2009) Internal Control Material Weaknesses, CFO Compensation, and the Moderating Effects of Corporate Governance, External Monitoring, and Firm Risk. *Working Paper*.

Homburg, C., Baumgartner, H. (1995) Die Kausalanalyse als Instrument der Marketingforschung. *Zeitschrift für Betriebswirtschaft*, 65, p. 1091-1108.

Homburger (2013) New Compensation Rules for Swiss Public Companies: Action Required in 2013 [www]. Available from http://www.homburger.ch [Accessed 05/05/2013].

Hope, J. (2006) Reinventing the CFO. Boston: Harvard Business School Press.

Hope, J., Fraser, R. (2003) *Beyond Budgeting: How managers can break free from the annual performance trap*, Boston MA: Harvard Business School Press.

Howell, R. A. (2002) CFOs: Not Just for Finance Anymore. *The Wall Street Journal*, Feb. 27th, retrieved from: http://www.wsj.com.

Hualun, Z., Tao, G. (2006) An Empirical Research on the Status and Role of Listed Companies' CFO in Corporate Governance. *Canadian Social Science*, 2(4), p. 93-98.

IASB (2012) The Conceptual Framework for Financial Reporting 2011, Technical Summary [www]. IASB. Available from www.ifrs.com. [accessed 05/05/2013].

ICAEW / Istitute of Chartered Accountants England and Wales (2011) The Finance Function: A Framework for Analysis [www]. ICAEW. Available from http://www.icaew.com/fmfac [accessed 05/05/2013].

Indjejikian, R., Matějka, M. (2009) CFO fiduciary responsibilities and annual bonus incentives, *Journal of Accounting Research*, 47 (7), p. 1061-1094.

Iona, A., Leonida, L., Ozkan, A. (2004) Determinants of Financial Conservatism: Evidence form Low-Leverage and Cash-Rich UK Firms. *Working Paper*.

Ittner, C. D., Lambert, R. A., Larcker, D. F. (2003) The structure and performance consequences of equity grants to employees of new economy firms, *Journal of Accounting and Economics*, 34, p. 89–127.

Ittner, C. D., Larcker, D. F. (2001) Assessing Empirical Research in Managerial Accounting: A Value-based Management Perspective. *Journal of Accounting Economics*, 32, p. 349-410.

Ittner C. D., Larcker, D. F., Randall, T. (2003) Performance implications of strategic performance measurement in financial services firms, *Accounting, Organizations and Society*, 28, p. 715–741.

Jacob, H.-J., Berner, Ch. (2005) Auswirkungen von Corporate Governance auf die Rechnungslegung. In: Brecht, U., *Neue Entwicklungen im Rechnungswesen*, 1st Ed., Wiesbaden: Gabler, p. 176-194.

Jahn, S. (2007) *Strukturgleichungsmodellierung mit LISREL, AMOS und SmartPLS* [www] TU Chemnitz. Available from http://www-user.tu-chemnitz.de [accessed 05/05/2013]

Jensen, M C. (1986) Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *American Economic Review*, 76(2), p. 323–329.

Jensen, Michael (1989) Eclipse of the Public Corporation. Harvard Business Review, 67(5), p. 61–74.

Jensen, M. C. (1993) *Theory of the Firm: Governance, Residual Claims and Organizational Forms*. Harvard University Press.

Jensen, M. C. (2002) Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, p. 235-256.

Jensen, M. C. (2003) Paying People to Lie: the Truth about the Budgeting Process. *European Financial Management*, 9, p. 379-406.

Jensen, M. C. (2004) The Agency Costs of Overvalued Equity and the Current State of Corporate Finance. *European Financial Management*, 10, p. 549-565.

Jensen, M. C. (2010) Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Applied Corporate Finance*, 22(1), p. 43–58.

Jensen, M. C. (2010) Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*, 22(1), p. 32-42.

Jensen, M. C., Meckling, W. H. (1976) Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), p. 305-360.

Jensen, M. C., Murphy, K. J. (1990) Performance Pay and Top Management Incentives. *Journal of Political Economy*, 98(2), p. 225–64.

Jensen, M. C., Murphy, K. J., Wruck, E. G. (2004) Remuneration: Where We've Been, How We Got to Here, What are the Problems, and How to Fix Them. *Working Paper*.

Jiang, X., Petroni, K. R., Wang, Y. I. (2010) CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics*, 96(3), p. 513-526.

Jöreskog, K. G. (1982) *The LISREL Approach to Causal Model-Building in the Social Sciences*. In Jörsekog, K. G., Wold, H. (Eds.) Systems Under Direct Observations: Causality, Structure, Prediction, Amsterdam: North-Holland.

Jöreskog, K., Sörbom, D. (1993) *LISREL 8: User's Reference Guide*. Scientific Software International Inc.

Kaplan, R. S., Norton, D.P. (1996) The Balanced Scorecard. Boston, MA: Harvard Business School Press.

Khurana, I. K., Pereira, R., Martin, X. (2006) Firm Growth and Disclosure: An Empirical Analysis. *Journal of Financial and Quantitative Analysis*, 41(2), p. 357-380.

Kim, C.-S., Mauer, D. C., Sherman, A. E. (1998) The Determinants of Corporate Liquidity: Theory and Evidence. The Journal of Financial and Quantitative Analysis, 33(3), p. 335-359

Kim, S., Park, D. (2011) Ownership Structure and Export Performance: Firm-Level Evidence from the Republic of Korea. *Working Paper*.

King, N. (2004) Using Interviews in Qualitative Research. In: Cassell, C., Symon, G.: *Essential Guide to Qualitative Research Methods in Organizational Research*. Sage, London/Thousand Oaks/New Dehli, p. 11-22.

Kober, R., Ng, J., Paul, B. J. (2007) The interrelationship between management control mechanisms and strategy. *Management Accounting Research*, 18, p. 425-452.

Korteweg, A. (2010) The Net Benefits to Leverage. *The Journal of Finance*, 65, p. 2137–2170

KPMG (2006) Being the Best: Insights from Finance Functions [www]. Available from http://www.kpmg.com [accessed 05/05/2013].

Kroll, K. M. (2011) *CFO Style Still Makes a Difference* [www]. Available from http://www.cfoworld.com/accounting/6186/cfo-style-still-makes-difference [Accessed 05/05/2013].

Kuehn, K. (2008) Seven Habits of Strategic CFOs. Strategic Finance, p. 27-30.

Kunz, P. V. (2010) Swiss Corporate Governance – an Overview. In: Rapports suisses Swiss Reports Presented at the XVIIIth International Congress of Comparative Law (Bern 2010), pp. 99-134.

Kutscher, R. (2013) Corporate Governance – Aktionäre werden kitischer. *Neue Zürcher Zeitung / NZZ*, May 24th, retrieved from: www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten

La Porta, F., Lopez-de-Silanes, F., Shleifer, A. (1998) Corporate Ownership around the World. *Working Paper*.

La Porta, R. Lopez-de-Silanes, F., Shleifer, A., Vishny, R. W. (1999) Agency, Problems and Dividend Policies Around the World, January. *Working Paper*.

La Porta R., Lopez-de-Silanes, F. Shleifer, A., Vishny, R. (2000) Investor protection and Corporate Governance, *Journal of Financial Economics*, 58, p. 3-27.

Lapointe-Antunesa, P., Cormier, D., Magnanc, M., Gay-Angersd, S. (2006) On the Relationship between Voluntary Disclosure, Earnings Smoothing and the Value-Relevance of Earnings: The Case of Switzerland. *European Accounting Review*, 15(4), p. 465-505. Lau, A. (1992) Voluntary Financial Disclosure by Hong Kong Listed Companies. *Journal of Hong Kong Manager*, p. 10-19.

Leibfried, P. (2008) Financial Governance - Rahmenkonzept für eine integrierte finanzielle Führung. In: *Max Boemle Festschrift zum 80. Geburtstag*, Zürich: SKV, p. 81-92.

LGA (2012) *Information Paper 23 - Financial Governance* [www] LGA. Available from http://www.lga.sa.gov.au/ [Accessed 05/05/2013]

Li, C., Sun, L., Ettredge, M. L. (2010) Financial Executive Qualifications, Financial Executive Turnover, and Adverse SOX 404 Opinions. *Journal of Accounting & Economics*, 50(1), p. 93-110.

Li, H., Pincus, M. P. K., Rego, S. O. (2008) Market Reaction to Events Surrounding the Sarbanes-Oxley Act of 2002 and Earnings Management, *Journal of Law & Economics*, 51, p. 111–134.

Lindsay, H. (2003) *Strategic Planning – What Board Should Expect from CFOs* [www]. Available from www.cica.ca/governance/cfo/item12318.pdf [accessed 05/04/2013].

Lingnau, V., Mayr, A., Schönbohm, A. (2004) *Beyond Budgeting – Notwendige Kulturrevolution für Unternehmen und Controller?* Kaiserslautern: Lehrstuhl für Unternehmensrechnung und Controlling TU Kaiserslautern.

Lobo, G. J., Zhou, J. (2006) Did Conservatism in Financial Reporting Increase after the Sarbanes-Oxley Act? Initial Evidence. *Accounting Horizons*, 20(1), p. 57-73.

Lowenstein, L. (1996) Financial Transparency and Corporate Governance: You Manage What You Measure. *Columbia Law Review*, 96(5), p. 1335-1362.

Luthans, F., Peterson, S. J. (2002) Employee engagement and manager self-efficacy. *Journal of Management Development*, 21(5), p. 376 -387.

Lutz, E., Schraml, S., Achleitner, A.-K., (2010) Loss of Control vs. Risk Reduction - Decision Factors for Hiring Non-Family CFOs in Family Firms. *Working Paper*.

Lüscher, S. (2012) Aktionärsrechte: Revolte des Kapitals. *Bilanz*, June 18th, retrieved from http://www.bilanz.ch/unternehmen/aktionaersrechte-revolte-des-kapitals

Malmendier, U., Tate, G. A., Yan, J. (2010) Overconfidence and Early-Life Experiences: The Impact of Managerial Traits on Corporate Financial Policies *Working Paper*.

Malone, D., Fries, C., Jonses, T (1993): An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *Journal of Accounting Auditing and Finance*, 8(3), p. 249-273.

Manne, Henry G. (1965) Mergers and the Market for Corporate Control. *The Journal of Political Economy*, 73(2), p. 110-120.

March, J. G. (1962) The business firm as political coalition. *Journal of Politics*, 24, p. 662-678.

March, J. G., Simon, H. A. (1958) Organizations, New York: Wiley.

McKinsey & Company, Inc. (2009) *How finance departments are changing: McKinsey Global Survey Results* [www]. Available from http://www.mckinsey.com [accessed on 05/03/2013].

McNally, G. M., Eng, L. H. and Hasseldine, C. R. (1982) Corporate financial reporting in New Zealand: An analysis of user preferences, corporate characteristics and disclosure practices for discretionary information. *Accounting and Business Research*, 13, p. 11-20.

Meek, G. K., Roberts, C. B., Gray, S. J. (1995) Factors influencing voluntary annual report disclosures in U.S., U.K. and continental European multinational corporations. *Journal of International Business Studies*, 26(3), p. 555-572.

Merchant, K. A., & Otley, D. T. (2007). *A review of the literature on control and accountability*. In: Chapman, C. S., Hopwood, A. G., Shields, M. D. (Eds) Handbook of Management Accounting Research, Amsterdam: Elsevier Press, p. 785-804.

Mijuk, G. (2003) *Money Talks a Little*. The Wallstreet Journal, Feb. 24th, retrieved from http://online.wsj.com/article/.

Mikkelson, W. H., Partch, M. M. (2003) Do Persistent Large Cash Reserves Hinder Performance? *The Journal of Financial and Quantitative Analysis*, 38(2), p. 275-294.

Minton, B. A., Wruck, K. H. (2001) Financial Conservatism: Evidence on Capital Structure from Low Leverage Firms. *Working Paper*.

Mueller, R. (2008) Entwicklung und Bedeutung der Corporate Governance. *Working Paper*.

Mueller, R. O. (1996) *Basic Principles of Structural Equation Modeling. An Introduction to LISREL and EQS.* New York.

Myers, S. C. (2001) Capital Structure. *The Journal of Economic Perspectives*, 15(2), p. 81-102.

Myers, S. C. (1977) Determinants of corporate borrowing . *Journal of Financial Economics*, 5(2), p. 147–175.

Nitzl, C. (201) *Eine anwenderorientierte Einführung in die Partial Least Square (PLS) Meth*ode [www] Available from www.unihamburg.de/onTEAM/grafik/1319531056/ap21.pdf [Accessed 06/01/2013].

Noda, T., Bower, J. L., (1996) Strategy Making as Iterated Processes of Resource Allocation, *Strategic Management Journal*, 17, p. 159-192.

OECD (2012) *Thin Capitalization Legislation A Background Paper For Country Tax Administration* [www]. OECD. Available from http://www.oecd.org [accessed 05/05/2013].

Opler, T. C., Pinkowitz, L. F., Stulz, R. M., Williamson, R. G. (1997) The Determinants and Implications of Corporate Cash Holdings. *Working Paper*.

O'Regan, P. O'Donnell, D., Kennedy, T., Bontis, N., Cleary, P. (2005) Board composition, non-executive directors and governance cultures in Irish ICT firms: a CFO perspective. *Corporate Governance*, 5(4), p. 56 – 63.

Otley, D. (1999) Performance management: a framework for management control systems research. *Management Accounting Research*, 10, p. 363-382.

Otte, M. (2012) Medieninformation: Marschhalt bei der Corporate Governance [www]. zCapital. Available from http://www.zcapital.ch/zRating [accessed 05/09/2013].

Parent, M. M., Deephouse, D. L. (2007) A Case study of stakeholder identification. *Journal of Business Ethics*, 75, p. 1-23.

Palepu, K. (1987) *An anatomy of accounting change*. In: Bruns, W. Jr., Kaplan, R. (Eds.) Accounting and Management: Field Study Perspectives. Boston MA: HBS Press.

Perino, M. A. (2002) Enron's Legislative Aftermath: Some Reflections on the Deterrence Aspects of the Sarbanes-Oxley Act of 2002. *Working Paper*.

Perridon, L., Steiner, M. (2007) *Finanzwirtschaft der Unternehmung*, 14. Ed., München: Vahlen.

Peterson, R. A.; Kim, Y. (2013) On the relationship between coefficient alpha and composite reliability. *Journal of Applied Psychology*, 98(1), p. 194-198.

Pfläging, N. (2003) Beyond Budgeting Better Budgeting, Freiburg: Haufe.

Pfister, J. A. (2009) *Managing Organizational Culture for Effective Internal Control*, Berlin/Heidelberg: Physica.

Picciotto, S., Shaxson, N. (2012) Make corporate tax rules fair for all. *Financial Times*, November 19th 2012, retrieved from http://www.ft.com.

Pinsker, R. E. (2006) Has Firms' Form 8-K Filing Behavior Changed Since Section 409 of the Sarbanes-Oxley Act Became Effective? *Working Paper*.

Prüfer, P., Stiegler, A. (2002) *Die Durchführung standardisierter Interviews: Ein Leitfaden* [www]. Available from www.gesis.org [accessed 05/05/2013]

PWC / PricewaterhouseCoopers (2004) *Sarbanes-Oxley Act: Section 404* [www]. Available from www.pwc.fr/fr/pwc_pdf/pwc_soa_guide.pdf [accessed 05/05/2013].

PWC / PricewaterhouseCoopers (2009) *Adding up or adding value? Making business partnering work* [www]. Available from http://www.pwc.ch [accessed 05/05/2013].

PWC / PricewaterhouseCoopers (2012) *Das neue Rechnungslegungsrecht* [www]. Available from http://www.pwc.ch [accessed 05/05/2013].

Raffournier, B. (1995) The determinants of voluntary financial disclosure by Swiss listed companies. *European Account Review*, 4(2), p. 261-280.

Raghunandan, K., Rama, D. (2006) SOX Section 404 material weakness disclosures and audit fees. *Auditing:A Journal of Practice & Theory*, 5, p. 99–114.

Rappaport, A (2006) Ten Ways to Create Shareholder Value, *Harvard Business Review*, p. 1-16

Rea, L. M., Parker, R. A. (2005) *Designing and Conducting Survey Research: A Comprehensive Guide*. 3nd Edition. San Francisco: Jossey-Bass Publishers.

Reichelstein, S. (1997) Investment Decisions and Managerial Performance Evaluation. *Review of Accounting Studies*, 2, p. 157-180.

Ribstein (Deceased), L. E. (2003) International Implications of Sarbanes-Oxley: Raising the Rent on U.S. Law. *Working Paper*. Ringle, C. M., Wende, S., Will, S., (2005) *SmartPLS 2.0 (M3) Beta*, Hamburg. [Available from http://www.smartpls.de].

Romano, R. (2008) Sarbanes-Oxley Act at Crossroads. Working Paper.

Romano, R.(2004) The Sarbanes-Oxley Act and the Making of Quack Corporate Governance. *Working Paper*.

Rötheli, A., Ledermann, D. (2011) *Shareholders' Rights – Switzerland*. In: European Lawyer Reference Series, 1st Ed., London, p. 443-462.

Rüegg-Stürm, J. (2005) *The New St. Gallen Management Model*, Palgrave McMillan, New York.

Rogerson, W.P. (1997) Intertemporal Cost Allocation and Managerial Investment Incentives: A Theory Explaining the Use of Economic Value Added as a Performance Measure. *Journal of Political Economy*, 105(4), p. 770-795.

Scheier, M. F., Carver, C. S., Bridges, M. W. (1994) Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, p. 1063-1078.

Schipper K. (1981) Discussion of voluntary corporate disclosure : the case of interim reporting. *Journal of Accounting Research*, 19, p. 85-88.

Schipper, K., Vincent, L. (2003) Earnings Quality. *Accounting Horizons*, 17, p. 97-110.

Schleiffer P., von Planta, A. (2012): Corporate Governance 2012, In: International Comparative Legal Studies , ICLG, 5th Edition, p. 192-197.

Schmid, P. J., Nufer, M. (2004) Corporate Governance in Switzerland: comply or explain! In: International Corporate Governance Review, *Euromoney Publications*, p. 89-94.

Schmid, S. (2013) Eine aktionärsdemokratische Premiere, *Tagesanzeiger*, April 11th, retrieved from http://www.tagesanzeiger.ch/wirtschaft/unternehmen-und-konjunktur/Eine-aktionaersdemokratische-Premiere/story/14010471.

Scholderer, J., Balderjahn, I. (2006) Was unterscheidet harte und weiche Strukturgleichungsmodelle nun wirklich? Ein Klärungsversuch zur LISREL-PLS-Frage. *Marketing ZFP*, 28(1), p. 57-70.

Schuhmacker, R. E., Lomax, R. G. (1996) A Beginner's Guide to Structural Equation Modelling. Mahwah.

SEC (2006) *Executive Compensation Disclosure and the Important Role of CFOs* [www]. SEC. Available from http://www.sec.gov [accessed on 05/05/2013].

SEC (2007a) Commission Guidance Regarding Management's Report on Internal Control Over Financial Reporting Under Section 13(a) or 15(d) of the Securities Exchange Act of 1934 [www]. Available from http://www.sec.gov/rules [accessed on 05/01/2013].

SEC (2007b) *Definition of the Term Significant Deficiency* [www]. Available from http://www.sec.gov [accessed 05/05/2013].

Segal, J. (2002) *The role of the CFO in corporate governance* [www]. Available from www.asic.gov.au/asic/.../FEI_speech_130502 [Accessed 03/04/2013].

Shen, C.-H., Chih, H.-L. (2007) Earnings Management and Corporate Governance in Asia's Emerging Markets. *Corporate Governance: An International Review*, 15, p. 999–1021.

Shleifer, A., Vishny, R. W. 1997. A Survey of Corporate Governance. *The Journal of Finance*, 52(2), p. 737-783.

Simon, H. A. (1976) Administrative Behavior: A study of Decision -making Processes in Administrative Organization, 3rd ed., New York: The Free Press.

Simons, R. (1995) Levers of control: how managers use innovative control systems to drive strategic renewal. Boston MA: Harvard Business Press.

Singhvi, S. S. (1968) Characteristics and Implications of Inadequate Disclosure: A Case Study of India. *International Journal of Accounting Education and Research*, 3(2), p. 29-43.

Singhvi, S. S. and Desai, H. B. (1971). An Empirical Analysis of the Quality of Corporate Financial Disclosure. *The Journal of Accounting Review*, 46(1), p. 120-138.

Singleton, R. A., Straits, B. C. (2012) *Survey interviewing*. In: The SAGE handbook of Interview Research: the Complexity of the Craft, Gubrium J. F. (Ed.), 2nd Edition, SAGE Publications, 2012, p. 77-99.

Sinha, R. (2006a) Corporate Governance and Shareholder Value Analysis, *Global Business Review*, 7, p. 1-16.

Sinha, R. (2006b) The market for corporate control and corporate governance. *Global Finance Journal*, 16, p. 264-282.

Sloan, R. G. (2001) Financial accounting and corporate governance: a discussion. *Journal of Accounting and Economics*, 32, p. 335–347.

Smith, J. (2003) *The Shareholders vs. Stakeholders Debate* [www] MIT Sloan Management Review. Avaiable from http://sloanreview.mit.edu/article/the-shareholders-vs-stakeholders-debate/ [accessed 05/05/2013].

Smith, D., Langfield-Smith, K. (2004) Structural Equation Modeling in Management Accounting Research. *Journal of Accounting Literature*, 23, p. 49-86.

Smith, C. W. Jr., Watts, R. L., (1992) The investment opportunity set and corporate financing, dividend and compensation policies. *Journal of Financial Economics*, 32, p. 263-292.

SOX (2002) Sarbanes-Oxley Act of 2002 [www]. Available from www.sec.gov/about/laws/soa2002.pdf [accessed 05/05/2013].

Speck, B., Tanega, J. A. (2005) UK and Swiss Corporate Governance: Comparing the Role of Independent Non-Executive Directors. *International Company and Commercial Law Review*, 11, p. 468- 478.

Srivastava, A., Tse, S. Y. (2010) The Contribution of Delayed Gain Recognition to Trends in Conservatism: A Re-Examination Using a New Approach to Measuring Accounting Conservatism. *Working Paper*.

Stajkovic, A. D., Luthans, F. (1998) Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26(4), p. 62-74.

Sterlin, T. (2012) KPN's CFO quitting over corporate governance, *Associated Press,* January 3rd, retrieved from http://finance.yahoo.com/news/KPN-CFO-quitting-corporate-apf-440310462.html.

Stewart, J. B. (2013) When Shareholder Democracy Is Sham, *The New York Times*, April 12th, retrieved from http://www.nytimes.com/2013/04/13/business/sham-shareholder-democracy.html?pagewanted=all&_r=0.

Surka, M. (2012) *CFOs on Managing Finance Technology: Systems-Related Challenges (and How Companies Address Them)* [www]. Available from http://www.cfo.com/research [accessed 05/05/2012].

Sundaram, A. K., Inkpen, A. C. (2004) The Corporate Objective Revisited. *Organization Science*, 15, p. 350-363.

Swiss Code (2008) *Swiss Code of Best Practice for Corporate Governance* [www]. Available from www.economiesuisse.ch [accessed 05/05/2013]

Tangen, S. (2003) An overview of frequently used performance measures. *Work Study*, 52(7), p. 347-354.

Tirole, J. (2006) The theory of corporate finance. Princeton, NJ : Princeton University Press.

Turner M. (2007) Setting Shareholder Focused Performance Targets, *Finance Executive*, 9, p. 1-3.

Ullmann J. (1996) *Structural Equation Modeling*. In: Tabachnik, B., Fidell, L. (Eds.), Using Multivariate Statistics (3 ed.), Harper Collins College Publishers, p. 709-811.

Volkart, R., Vettiger, T. (2009) Neue Aufmerksamkeit für die Liquidität als Geschäftsgrundlage. *NZZ Neue Zürcher Zeitung*, February 3rd 2009, retrieved from http://www.nzz.ch.

Wagner, S., & Dittmar, L. (2006) The unexpected benefits of Sarbanes-Oxley. Harvard business review, 84(4), p. 1-10.

Wallace, R.S.O., Naser, K., Mora, A. (1994) The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research*, 25(97), p. 41-53.

Wallace, R. S. O. & Naser, K. (1995) Firm Specific Determinants of Comprehensiveness of Mandatory Disclosure in the Corporate Annual Reports of Firms on the Stock Exchange of Hong Kong, *Journal of Accounting and Public Policy*, 14, p. 311-368.

Watter, R., Pellanda, K. (2010) *Executive Risks: A Boardroom Guide 2010/11 Legal Developments for Directors and Officers in Switzerland* [www]. Available from http://www.amcham.ch/members_interests/p_business_ch.asp?s=2&c=22 [accessed 03/02/2013].

Watts, R. L. (2002) Conservatism in Accounting. Working Paper.

Watts, R. L., Zimmerman, J. L. (1986). Positive Accounting Theory. Prentice-Hall Inc.

WEF / World Economic Forum (2013) *Financial Governance* [www]. Available from http://www.weforum.org/issues/financial-governance [accessed 05/05/2013].

Wilson, J., Ervin, M. (1996) The CFO's Role in Corporate Governance. *CMA - the Management Accounting Magazine*, 70(3), p. 24-27.

Woodridge, B., Floyd S. W. (2006) The strategy process, middle management involvement, and organizational performance, *Strategic Management Journal*, 11(3), p. 231-241.

Wright, Sewall (1921) Correlation and Causation. *Journal of Agricultural Research*, 20, p. 557-585.

Yazdifar, H., Akarany, D. (2010) *A comparative investigation into the diffusion of management accounting innovations in the UK, Australia and New Zealand* [www]. Available from http://www.cimaglobal.com/ [accessed 04/05/2013].

Zeng, A. (2011) Financial Conservatism and Firms' Financing and Investment Behaviors during the Global Financial crisis - Evidence from Listed Chinese Companies. *Working Paper*.

Zorn, D. M. (2004) Here a Chief, There a Chief: The Rise of the CFO in the American Firm, *American Sociological Review*, 69, p. 345-364.

Appendices

1. Overview of New Accounting Regulation (Deloitte, 2012)

and Notes to Financial	Additional Requirements for	Consolidated Financial
Statements	Large Companies	Statements
 Assets are recognized if a cash flow inflow is probable and their value can be reliably estimated Modifications to the presentation of equity New possibilities for valuation and the introduction of the principle of impairment New categories for expenses and revenues Significant changes to the notes with more detailed requirements for large companies. Disclosure of the risk assessment is to be included in the directors report 	 Obligation to prepare a cash flow statement and directors' report with additional information to be disclosed Obligation to prepare financial statements in accordance with recognized standards for publicly listed companies, large cooperatives with at least 2,000 members and foundations subject to ordinary audit 	 "Legal control principle" replaces "effective management" principle Obligation to prepare consolidated financial statements in accordance with recognized standards for some legal entities

- The entities will have two accounting years after the entry into force of the new law to adopt their bookkeep financial records, i.e. until 2015
- A transition period of three years (i.e. until 2016) is granted for consolidated financial statements

2. Survey-Questions

Question 1:

What is the level of your involvement in the steps below in your company's strategy process?									
	very high	high	quite high	med- ium	quite low	low	very low		
My involvement in the process of defining the strategic targets is									
My involvement in developing strategic options is									
My involvement in evaluating strategic options is									
My involvement in implementing the strategy is									
My involvement in evaluating implementation of the strategy is									

Question 2:

To what extent are you, as a financial executive, involved in the following decision-making processes or to what extent can you co-design or impact the decision-making process?

	very high	high	quite high	med- ium	quite low	low	very low
My capability to influence decisions on capital structure is							
My capability to influence dividend policy is							
My capability to influence decisions regarding investments in property, plant and equipment is							
My capability to influence decisions on the financing of investments is							
My capability to influence mergers and acquisitions (M&A) is							

Question 3:

Please assess the following stakeholder groups, in each case with regard to:

- a) "Influence", i.e., the extent to which these stakeholder groups could potentially influence strategic decisions (strategic and financial targets, as well as strategic initiatives) made by top management
- *b)* "Urgency", i.e., the extent to which the stakeholder group currently has to be taken into account when top management takes strategic decisions
- *c)* "Legitimacy", i.e., the extent to which you believe that the desires, needs or requirements of these stakeholder groups are legitimate with regard to your company

		hish				1	
	very high	high	quite high	med- ium	quite low	low	low
Shareholder – Influence							
Shareholder – Urgency							
Shareholder – Legitimacy							
Creditor – Influence							
Creditor – Urgency							
Creditor – Legitimacy							
Supplier – Influence							
Supplier – Urgency							
Supplier – Legitimacy							
Customer – Influence							
Customer – Urgency							
Customer – Legitimacy							
Government – Influence							
Government – Urgency							
Government – Legitimacy							
Gen. Public – Influence							
Gen. Public – Urgency							
Gen. Public – Legitimacy							

Question 4:

Assuming you could change your company's shareholder structure, to which group would you give a stronger weighting?

21 01801 100811181							
	strongly increase	increase	slightly increase	no change	slightly reduce	reduce	strongly reduce
Institutional investors							
Strategic shareholding by companies							
Government							
Large family offices or private investors							
Small shareholders/free float							
Swiss shareholders/investors							
Employees and middle-management							
Top management							

Question 5:

How do you assess the effectiveness of your management instruments?									
	very high	high	quite high	med- ium	quite low	low	very low		
The effectiveness of our management instruments with respect to the identification of key performance indicators is									
The effectiveness of our management instruments when identifying operating (short-term, concrete) risks is									
The effectiveness of our management instruments when identifying strategic (long-term, potential) risks is									
The effectiveness of our management instruments when informing our employees of our strategy, targets and priorities is									

Question 6:

Last year your company put financing of CHF 5 million into a project which was forecast to bring a cash flow of CHF 10 in the first year. After the first year, you ascertain that the project has not generated a cash flow. Now the next round of financing is due. There is a 35% probability that the project will generate CHF 10 million by the end of the year. There is also a probability of 65% that the project will not bring any cash flow this year.

How much would you be prepared to invest in the project?

Question 7:

Please rank the following KPIs in terms of their importance for third parties										
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5					
Profit (EBITDA/EBIT)										
Revenues										
Earnings per Share (EPS)										
Free Cash Flow										
Value-added										

Question 8:

	very probable	probable	quite probable	Neutral	quite unlikely	unlikely	very unlikely
Reducing/removing discretionary spending e.g., R&D, maintenance, etc.							
Postponing/cancelling new projects, even if this means some value will not be realized							
Pulling revenues forward, if this is possible							
Initiating sales activities, in order to be able to sell more products in this quarter							
Reversing existing reserves							
Shifting costs, if this is possible							
Sale of participating interests or assets							
Support purchases of own shares							
Modify accounting assumptions (e.g. threshold values)							
None of the above activities as quarterly results are not a relevant control figure for us							

Question 8:

How high do you rate the degree of voluntary reporting in your company?								
	very high	high	quite high	med- ium	quite low	low	very low	
How high do you rate the degree of voluntary reporting in your company?								

Question 9:

Please rate the following factors according to their effectiveness with regard to the internal control environment.

	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Selective staff selection and employee training					
Role model function of executives (symbolic leadership)					
Constant communication of values					
Clear definition of responsibilities					
Implementing instructions (policies) and establishing instruments (tools)					

Question 10:

	more than +20%	+11% to +20%	+5% to +10	+1% to +4%	0%	-1% to -4%	-5% to -10%	-11% to -20%	more than -20%
Where do you see the SPI in three years (2015)?									

Question 11:

	strongly over its true value	over its true value	slightly over its true value	Fair	slightly under its true value	under its true value	strongly under its true value
The instruments, methods and models used by outsiders (e.g. analysts) have a tendency to assess our company value							

3. List of Participating Companies

Company	Index	Ticker
ABB Ltd	SMI	ABBN
ALSO-Actebis Holding AG	SPI	ALSN
Barry Callebaut	SMI	BARN
Burckhardt Compression Holding AG	SPI	BCHN
BELIMO Holding AG	SPI	BEAN
BKW	SPI	BKWB
Burkhalter Holding AG	SPI	BRKN
Clariant AG	SMI	CLN
CPH Chemie + Papier Holding AG	SPI	CPHN
Datacolor AG	SPI	DCN
Georg Fischer AG	SMI	FIN
Galenica AG	SMI	GALN
Goldbach Group AG	SPI	GBMN
Geberit AG	SMI	GEBN
Givaudan SA	SMI	GIVN
HOCHDORF Holding AG	SPI	HOCN
Kühne + Nagel International AG	SMI	KNIN
Komax Holding AG	SPI	KOMN
Looser Holding AG	SPI	LOHN
Mikron Holding AG	SPI	MIKN
Mobilezone	SPI	MOB
Nobel Biocare Holding AG	SMI	NOBN
Novartis AG	SMI	NOVN
OC Oerlikon Corporation AG	SMI	OERL
PSP Swiss Property AG	SMI	PSPN
Rieter Holding AG	SPI	RIEN
Roche Holding AG	SMI	ROG
Schaffner Holding AG	SPI	SAHN
Schindler Holding AG	SMI	SCHN
Swisscom AG	SMI	SCMN
Siegfried Holding AG	SPI	SFZN
Sika AG	SMI	SIK
Sunstar-Holding AG	SPI	SSTE
Sulzer AG	SMI	SUN
Syngenta AG	SMI	SYNN
Walter Meier AG	SPI	WMN
Züblin Immobilien Holding AG	SPI	ZUBN

4. SEM in Management Accounting Research (Smith & Langfield-Smith, 2004)

	Review of SEM papers in Management Accounting								
Authors	Journal	Topic Area	Data Type	SEM Strategy	Estimation Method	Normality Assessed	Useable Sample	Path Diagram	Fit Indices Reported
Lambert & Larcker (1987)	JAR	Executive compensation and performance measures	TS	SC	MLE, ED, ULS, ADF	Y	370	Ν	Chi-square, NFI
Hughes & Kwon (1990)	AOS	Budget participation, importance of meeting budget, and propensity to create budget slack	CS	MG	Ns	N	170	Y	Chi-square
Lanen & Larcker (1992)	JAR	Executive compensation and corporate strategy	TS	SC	MLE	Y	441	N	Chi-square, CFI
Gregson (1992)	BRIA	Job satisfaction and organization commitment	CS	AM	Ns	N	150/232	Y	Chi-square, GFI, AGFI, NFI, PFI, TLI
Jaworski & Young (1992)	AOS	Dysfunctional behavior and management control	CS	MG	Ns	N	348	Y	Chi-square, GFI, AGFI, RMSR, NFI
Smith et al. (1993)	CAR	Stress arousal and stressor-to-illness process	CS	MG	MLE	N	1618	Y	Chi-square, CFI, NFI
Collins et al. (1995)	BRIA	Budgetary style and organizational commitment	CS	SC	Ns	N	172	Y	Chi-square, GFI, AGFI, NFI

	Review of SEM papers in Management Accounting (Continued)								
Authors	Journal	Topic Area	Data Type	SEM Strategy	Estimation Method	Normality Assessed	Useable Sample	Path Diagram	Fit Indices Reported
Magner et al. (1996)	ABR	Cognitive aspects of budgetary participation	CS	SC	MLE	N	95	Y	Chi-square, CFI
Choo & Tan (1997)	BRIA	Budgetary information and supervisory style	CS	AM	Ns	N	110	Y	Chi-square, AGFI, GFI
Collins et al. (1997)	AOS	Budget usage and strategy	CS	MG	Ns	N	128	Y	Chi-square, AGFI, GFI
Poznanski & Bline (1997)	BRIA	Job satisfaction and organizational commitment	CS	AM	MLE	N	281	Y	Chi-square, RMSR, NFI, NNFI, GFI, AGFI
Anderson & Young (1999)	AOS	Evaluation of ABC systems	CS	AM	MLE, ULS	Y	265	Y	Chi-square, RMSEA, CFI
Shields et al. (2000)	AOS	Design and effect of control systems	CS	AM	MLE	N	358	Y	CFI, IFI
Van der Stede (2000)	AOS	Budgetary slack creation and short-term orientation	CS	SC	MLE	Y	153	Y	Chi-square, RMSEA, CFI
Hunton et al. (2000)	AOS	The effect of knowledge, ability and experience on MA success	CS	АМ	MLE	Y	2941	Y	Chi-square, NFI, NNFI, CFI, AASR

								1	
Authors	Journal	Topic Area	Data Type	SEM Strategy	Estimation Method	Normality Assessed	Useable Sample	Path Diagram	Fit Indices Reported
Chalos & Poon (2000)	BRIA	Participation and performance in capital budgeting teams	CS	SC	MLE	Y	55	Y	Choi-square, RFI,NFI
Fogarty et al. (2000)	BRIA	Antecedents and consequences of burnout in accounting	CS	AM	Ns	N	188	Y	Chi-square, RMSEA, AOSR, RMSR, GFI, NFI, NNFI, CFI
Abernethy and Lillis (2001)	JMAR	Interdependencies in organizational design	CS	MG	Ns	N	56	Y	Chi-square, NFI, GFI
Viator (2001)	AOS	Mentoring, role stress, and job related out- comes	CS	AM	Ns	Y	794	Y	Chi-square, CFI
Van der Stede (2001)	AAAJ	Effect of corporate diversification and strategy on budgetary slack	CS	SC	MLE	Y	153	Y	Chi-square, CFI, RMSEA

- **KEY:** Ns = Not Specified
- CS = Cross Sectional
- TS = Time Series

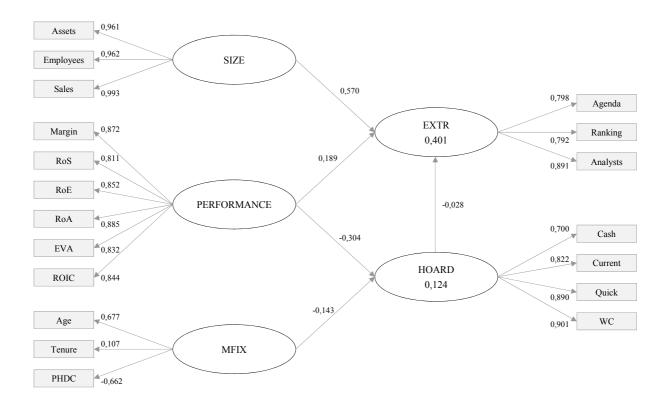
SC = Strictly Confirmatory MG = Model Generating AM = Alternative Models

ULS = Unweighted Least Squares Estimation ADF = Arbitrary Distribution Function Estimation

RMSEA = Root Mean Square Error of Approximation AASR = Average Absolute Standard Residual AOSR = Average Off Diagonal Square Residual

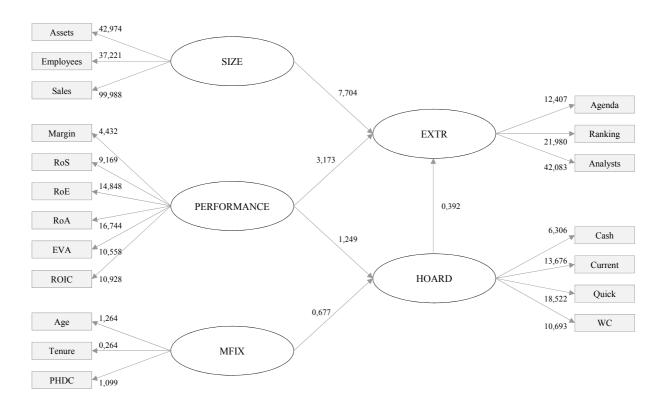
GWLS = Generally Weighted Least Squares Estimation ED = Elliptical Distribution Estimates

IFI = Incremental Fit Index



5. Initial Model Regression Results

6. Initial Bootstrapping Results



7. Bloomberg Datafields

Assets	Total Assets: The total of all short- and long-term assets as reported on the Balance Sheet.
Employee	Current number of employees. Field includes the number of full time equivalents. If unavailable, then number of full time employees is used, excluding part time employees.
Sales	Sales/Revenue/Turnover: Total of operating revenues less various adjustments to Gross Sales. Adjustments: Returns, discounts, allowances, excise taxes, insurance charges, sales taxes, and value added taxes (VAT). Includes revenues from financial subsidiaries in industrial companies if the consolidation includes those subsidiaries throughout the report. Excludes inter-company revenue. Excludes revenues from discontinued operations. Includes subsidies from federal or local government in certain industries (i.e. transportation or utilities).
Margin	Calculated as (Net Income/Net Sales)*100
RoS	Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA) Margin Ratio calculated by dividing the EBITDA by Revenue. Calculated as: 100 x (EBITDA / Revenue) where EBITDA is RR009, EBITDA Revenue is IS010, SALES_REV_TURN
RoE	Return on Equity (ROE, in percentage) measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. Calculated as: (T12 Net Income Available for Common Shareholders / Average Total Common Equity) * 100 Where: T12 Net Income Available for Common Shareholders is T0089, TRAIL_12M_NET_INC_AVAI_COM_SHARE Average Total Common Equity is the average of the beginning balance and ending balance of RR010, TOT_COMMON_EQY
RoA	Return on Assets (ROA, in percentage) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated as: (Trailing 12M Net Income / Average Total Assets) * 100 Where: Trailing 12M Net Income is RR813, TRAIL_12M_NET_INC Average Total Assets is the average of the beginning balance and ending balance of BS035, BS_TOT_ASSET
EVA	The after-tax profits generated in excess of the cost of capital deployed to generate those profits.
ROIC	Returned on Invested Capital is calculated by Net Operating Profit After Taxes (VM027, WACC_NOPAT) divided by Total Invested Capital (VM031, WACC_TOTAL_INV_CAPITAL).
Analysts	Total number of analysts making recommendations for the security
Current Ratio	Current ratio is calculated using the following formula: Current Assets / Current Liabilities
Quick Ratio	Quick ratio is calculated using the following formula: Liquid Assets / Current Liabilities Liquid Assets = Cash and Near Cash Items + Marketable Securities and ST Investments + Accounts Receivable and Notes Receivable
Working Capital	Average working capital (current assets reported minus current liabilities) as a percentage of the trailing 12 month (T12M) sales reported by the company. Calculated as: [(Working Capital + Working Capital one year ago) / 2] / T12M Sales Where: Working Capital is RR150, WORKING_CAPITAL T12M Sales is RR800, TRAIL_12M_NET_SALES

8. Ranking of Swiss Annual Reports

Methodology

Grade	Commentary
6	available, very good information content
5	available, good information content
4	available, useful information content
3	available, quite useful information content
2	indirectly available, low information content
1	not available, no information content
<i>a m</i>	

Source: Wagner & Eugster / University of Zurich (2012)

Weights	Criteria
5	general impression
20	background information
20	important non-financials
5	trend analysis
10	risk-information
10	value-based management
10	management discussion and analysis
10	objectives and credibility
10	sustainability

Source: Wagner & Eugster / University of Zurich (2012)

Value-Reporting Ranking 2012

Rank	Company	Grade
1	STRAUMANN N	5.143
2	SWISSCOM N	5.103
3	LIECHT LANDBK I	4.934
4	SULZER N	4.911
5	Xstrata (Schweiz) AG	4.893
6	GEBERIT N	4.871
7	NOVARTIS N	4.865
8	CS GROUP N	4.864
9	Schweizerische Mobiliar	4.790
10	SIKA I	4.760
11	GALENICA N	4.746
12	SWISS RE N	4.717
13	ROCHE GS	4.695
14	BARRY CALLEBAUT N	4.691
15	FISCHER N	4.685
16	CLARIANT N	4.681
17	Alstom (Schweiz) AG	4.671
18	SYNGENTA N	4.636

Rank	Company	Grade
117	SNB N	3.294
118	HUBER+SUHNER N	3.284
119	ASCOM N 10	3.283
120	KARDEX N	3.274
121	BKW N	3.270
122	ARYZTA N	3.268
123	MIKRON N	3.240
124	WALLISER KB	3.235
125	CYTOS N	3.233
126	BK LINTH N	3.230
127	JULIUS BAER N	3.219
128	ZUEBLIN IMM N	3.217
129	GOLDBACH GROUP AG N	3.203
130	WALTER MEIER N	3.198
131	ACINO HLDG N	3.190
132	TAMEDIA N	3.186
133	CICOR TECH N	3.170
134	ALSO N	3.167

19	Die Schweizerische Post	4.619
20	SARASIN N-B-	4.555
21	OC OERLIKON N	4.542
22	ST GALLER KB N	4.529
23	KUEHNE+NAGEL INT N	4.503
24	PANALPINA N	4.485
25	GIVAUDAN N	4.473
26	SBB	4.467
27	DAETWYLER I	4.464
28	KOMAX N	4.447
29	NESTLE N	4.393
30	UBS N	4.361
31	LUZERNER KB N	4.350
32	RAIFFEISEN	4.323
33	HOLCIM N	4.300
34	FLUGHAFEN ZUERICH N	4.294
35	ORIOR N	4.288
36	KUONI N	4.273
37	Zürcher Kantonalbank	4.265
38	BOBST GRP N	4.265
39	ADECCO N	4.258
40	BURCKHARDT N	4.255
41	SONOVA N	4.242
42	ARBONIA N	4.241
43	SCHMOLZ+BICKENBACH AG N	4.239
44	SWISS LIFE HOLDING AG N	4.237
45	SGS N	4.208
46	BASLER KB PS	4.205
47	MEYER BURGER N	4.202
48	VALORA N	4.178
49	CALIDA N	4.167
50	Looser Holding AG	4.145
51	RIETER N	4.112
52	BALOISE N	4.110
53	VPB VADUZ I	4.068
54	EMMI N	4.063
55	Migros	4.061
56	VONTOBEL N	4.058
57	NATIONALV N	4.008
58	FORBO N	4.006
59	IMPLENIA N	4.001
60	Thurgauer Kantonalbank	3.989
61	Aargauische Kantonalbank	3.981
62	BOSSARD I	3.981
63	TECAN GROUP AG N	3.980
00		2.500

135	AUTONEUM N	3.152
136	BEKB / BCBE N	3.145
137	Conzzeta AG	3.132
138	COLTENE N	3.129
139	SWISS PRIME SITE N	3.127
140	SCHLATTER N	3.125
141	EFG INTERNATIONAL N	3.121
142	SWISSLOG N	3.116
143	ALLREAL N	3.112
144	WARTECK N	3.110
145	GURIT I	3.101
146	ORIDION N	3.098
147	PSP N	3.097
148	PARTNERS GROUP N	3.083
149	ROMANDE ENERGIE N	3.072
150	DUFRY N	3.061
151	CSS Kranken-Vers. AG	3.058
152	INFRANOR I	3.054
153	ELMA ELECTRONIC N	3.046
154	EVOLVA N	3.031
155	LOGITECH N	3.030
156	IVF HARTMANN N	3.020
157	BC GENEVE P	3.012
158	VON ROLL I	3.007
159	PARGESA I	3.002
160	AUSTRIAMICROSYS	3.001
161	VAUDOISE ASSU N	2.958
162	VALARTIS GROUP I	2.954
163	PUBLIGROUPE N	2.937
164	ADVAL TECH N	2.922
165	KUDELSKI I	2.902
166	Peach Property N	2.887
167	O FUESSLI N	2.877
168	INTERSHOP I	2.867
169	AIRESIS N	2.857
170	TORNOS N	2.849
171	HYPO LENZB N	2.820
172	ADDEX N	2.813
173	CHAM PAPER GROUP N	2.809
174	GOTTEX FUND N	2.800
175	SCHWEITER I	2.797
176	INFICON N	2.777
177	TITL BN BERG N	2.756
178	BFW LIEGENSCHAFTEN N	2.737
179	MCH GROUP N	2.735

66 RICHEMONT 3.922 67 BELIMO N 3.917 68 BUCHER N 3.905 69 HUEGLI I 3.903 70 STARRAGHECKERT N 3.903 71 INTERROLL N 3.840 72 GRAUB KB PS 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.737 84 BC VAUD N 3.737 85 Coop 3.736 84 BC VAUD N 3.727 85 Coop 3.736 84 DOZAM N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3			
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69 HUEGLI I 3.905 70 STARRAGHECKERT N 3.903 71 INTERROLL N 3.880 72 GRAUB KB PS 3.849 73 YPSOMED HLDG 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.726 84 BC VAUD N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.643 99 ZUGER KB I 3.643 92 Weatherford International N 3.628 93 <	67	BELIMO N	3.917
70 STARRAGHECKERT N 3.903 71 INTERROLL N 3.880 72 GRAUB KB PS 3.849 73 YPSOMED HLDG 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.736 84 BC VAUD N 3.737 85 Coop 3.736 84 BC VAUD N 3.726 85 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHA	68	BUCHER N	3.905
71 INTERROLL N 3.880 72 GRAUB KB PS 3.849 73 YPSOMED HLDG 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.622 94 <	69	HUEGLI I	3.905
72 GRAUB KB PS 3.849 73 YPSOMED HLDG 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.622 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARL	70	STARRAGHECKERT N	3.903
73 YPSOMED HLDG 3.847 74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.726 84 BC VAUD N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.643 99 ZUGER KB I 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.622 94 gategroup N 3.622 95 SIEGFRIED N 3.522 96 CHARLES VOEGELE I 3.605 97 <td>71</td> <td>INTERROLL N</td> <td>3.880</td>	71	INTERROLL N	3.880
74 VALIANT N 3.844 75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.726 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.582 94 gategroup N 3.622 95 SIEGFRIED N 3.582 </td <td>72</td> <td>GRAUB KB PS</td> <td>3.849</td>	72	GRAUB KB PS	3.849
75 HELVETIA HOLDING N 3.831 76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.627 95 SIEGFRIED N 3.628 97	73	YPSOMED HLDG	3.847
76 KABA N 3.824 77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.726 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.628 92 Weatherford International N 3.622 94 gategroup N 3.622 95 SIEGFRIED N 3.622 94 gategroup N 3.622 95 SIEGFRIED N 3.542 98 LINDT N 3.570 99 Hilti AG </td <td>74</td> <td>VALIANT N</td> <td>3.844</td>	74	VALIANT N	3.844
77 NOBEL BIOCARE N 3.823 78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.726 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.628 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.534 100	75	HELVETIA HOLDING N	3.831
78 PHOENIX I 3.815 79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.530 100 <td< td=""><td>76</td><td>KABA N</td><td>3.824</td></td<>	76	KABA N	3.824
79 BK COOP 3.812 80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.550 101 MOBIMO N 3.534 102 EMS-CHEMIE N 3.511 104 <	77	NOBEL BIOCARE N	3.823
80 BACHEM N -B- 3.808 81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.737 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.622 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.530 101 MOBIMO N 3.534 102 EMS-CHEMIE N 3.511 104	78	PHOENIX I	3.815
81 CPH N 3.808 82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.570 99 Hilti AG 3.500 100 Alpiq Holding AG 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 <td>79</td> <td>ВК СООР</td> <td>3.812</td>	79	ВК СООР	3.812
82 ZURICH FINANCIAL N 3.796 83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 <td>80</td> <td>BACHEM N -B-</td> <td>3.808</td>	80	BACHEM N -B-	3.808
83 ZEHNDER 3.787 84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.509 106 BASELLAND KB PS 3.504	81	CPH N	3.808
84 BC VAUD N 3.737 85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.627 95 SIEGFRIED N 3.627 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.550 101 MOBIMO N 3.534 102 EMS-CHEMIE N 3.534 103 LEM N 3.510 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106	82	ZURICH FINANCIAL N	3.796
85 Coop 3.736 86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.627 95 SIEGFRIED N 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.627 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.510 104 REPOWER PS 3.510 105 <td>83</td> <td>ZEHNDER</td> <td>3.787</td>	83	ZEHNDER	3.787
86 COMET N 3.727 87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.622 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	84	BC VAUD N	3.737
87 PRECIOUS WOODS N 3.726 88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	85	Соор	3.736
88 LONZA N 3.691 89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	86	COMET N	3.727
89 ZUGER KB I 3.677 90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	87	PRECIOUS WOODS N	3.726
90 SCHAFFNER N 3.659 91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	88	LONZA N	3.691
91 TRANSOCEAN N 3.643 92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	89	ZUGER KB I	3.677
92 Weatherford International N 3.628 93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	90	SCHAFFNER N	3.659
93 ORASCOM DEVELOPMENT 3.628 94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	91	TRANSOCEAN N	3.643
94 gategroup N 3.627 95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.539 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	92	Weatherford International N	3.628
95 SIEGFRIED N 3.622 96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	93	ORASCOM DEVELOPMENT	3.628
96 CHARLES VOEGELE I 3.605 97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.511 103 LEM N 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	94	gategroup N	3.627
97 BELL AG N 3.582 98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	95	SIEGFRIED N	3.622
98 LINDT N 3.570 99 Hilti AG 3.560 100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	96	CHARLES VOEGELE I	3.605
99 Hilti AG 3.560 100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	97	BELL AG N	3.582
100 Alpiq Holding AG 3.550 101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	98	LINDT N	3.570
101 MOBIMO N 3.539 102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	99	Hilti AG	3.560
102 EMS-CHEMIE N 3.534 103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	100	Alpiq Holding AG	3.550
103 LEM N 3.511 104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	101	MOBIMO N	3.539
104 REPOWER PS 3.510 105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	102	EMS-CHEMIE N	3.534
105 DOTTIKON ES N 3.509 106 BASELLAND KB PS 3.504	103	LEM N	3.511
106 BASELLAND KB PS 3.504	104	REPOWER PS	3.510
	105	DOTTIKON ES N	3.509
107 U-BLOX N 3.503	106	BASELLAND KB PS	3.504
	107	U-BLOX N	3.503
108 TEMENOS N 3.490			3.490

180	EDISUN POWER EUROPE N	2.730
181	BASILEA N	2.691
182	ADVANCED DIGITAL N	2.688
183	VICTORIA JUNGFRAU N	2.687
184	PERROT DUVAL I	2.675
185	SWISSQUOTE N	2.668
186	LIFEWATCH N	2.663
187	VETROPACK I	2.653
188	BELLEVUE GROUP N	2.642
189	BVZ HOL N	2.640
190	GAM N	2.625
191	BC JURA I	2.583
192	ESCOR I N10	2.578
193	CIE FIN TR I	2.573
194	Suva	2.571
195	HOCHDORF N	2.563
196	SANTHERA N	2.551
197	GMSA N	2.547
198	ROTHSCHILD I	2.539
199	MYRIAD GROUP N	2.537
200	MICRONAS N	2.520
201	VZ HOLDING N	2.511
202	LECLANCHE N	2.501
203	LOEB PS	2.497
204	AFFICHAGE N	2.496
205	SUNSTAR	2.447
206	GAVAZZI I	2.447
207	DATACOLOR N	2.432
208	CREALOGIX N	2.412
209	mondoBIOTECH N	2.393
210	MOBILEZONE I	2.372
211	SWISSMETAL I	2.365
212	USI GROUP N	2.275
213	BURKHALTER N	2.273
214	VILLARS N	2.237
215	SHL TELEMEDICINE N	2.192
216	BANQUE PROFIL DE GESTION I	2.192
217	PAX N	2.178
218	MINDSET I	2.156
219	fenaco Genossenschaft	2.153
220	UBP SA	2.125
221	NEWRON PHARMA N	2.087
222	SOPRACENERIN N	2.075
223	NORINVEST HOLDING N	2.061
224	ZWAHLEN I	2.010
22 f		2.010

109	Glencore International	3.448	225	Migros Bank AG	1.936
110	COSMO N	3.447	226	IPS	1.923
111	SWATCH GROUP N	3.420	227	ACCU N	1.858
112	Neue Aargauer Bank AG	3.408	228	BONDPARTNERS I	1.843
113	USTER TECHNOLOGIES N	3.377	229	Helsana Rechtsschutz AG	1.743
114	JUNGFRAUBAHN HLD N	3.369	230	PERFECT N	1.711
115	METALL ZUG AG	3.360	231	INTL MINERALS N	1.640
116	ACTELION N	3.306	232	CI COM SA	1.135

Source: http://www.bf.uzh.ch//cms/publikationen/geschaeftsberichte-rating

2010_168_1269.html?cid=1269&cid=168&id=1269

9. Descriptive Statistics SEM Sample

Size

Variable	Name	Mean	Average	Min	Max
x ₁	number of employees	2,530	12,808	116	328,000
x ₂	sales revenue [mn]	585	4,177	34	92,324
x ₃	total assets [mn]	743	5,576	31	124,216

Performance

Variable	Name	Mean	Average	Min	Max
x4	RoS	12.5	13.5	-6.0	42.1
X5	RoE	11.1	10.5	-37.5	71.8
x ₆	RoA	4.8	4.6	-28.5	24.9
X7	EVA	0.5	0.2	-45.8	28.3
x ₈	ROIC	7.6	6.3	-59.4	35.7

Manager-fixed

Variable	Name	Mean	Average	Min	Max
x ₈	age/birth-cohort	49.2	49	35	63
X9	tenure (x ₉)	4.3	5.5	1	31
x ₁₀	PHDC	44.993	975.250	0	28.304.796

Extroversion

Variable	Name	Mean	Average	Min	Max
y1	agenda	4	6	1	42
y ₂	analysts	4	9	1	44
y ₃	ranking	3.651	3.620	2.087	5.143

Hoarding

Variable	Name	Mean	Average	Min	Max
y 4	cash ratio	13.2	14.9	1.3	42.3
y 5	quick ratio	1.2	1.4	0.3	7.6
y ₆	current ratio	1.8	2.2	0.7	8.8
y ₇	working capital to sales	0.2	0.3	0.0	1.0

10. Quality Parameters

			Cronbachs	a	
	AVE	R Square	Alpha	Communality	Redundancy
PERFORM	0.7210	0.0000	0.9269	0.7210	0.0000
SIZE	0.9444	0.0000	0.9705	0.9444	0.0000
HOARD	0.6788	0.1214	0.8628	0.6788	0.0355
EXTR	0.6858	0.4010	0.7788	0.6858	0.0488

a. Quality Criteria provided by SmartPLS

b. Discriminant Validity / Fornell / Larckner-Test

Latent Variables Correlations (R)

	PERFORM	SIZE	HOARD	EXTR
PERFORM	1.0000	0.0000	0.0000	0.0000
SIZE	0.1430	1.0000	0.0000	0.0000
HOARD	-0.3484	-0.1846	1.0000	0.0000
EXTR	0.2791	0.6022	-0.1927	1.0000

Squared Correlations (R²)

	PERFORM	SIZE	HOARD	EXTR
PERFORM	1.0000	0.0000	0.0000	0.0000
SIZE	0.0204	1.0000	0.0000	0.0000
HOARD	0.1214	0.0341	1.0000	0.0000
EXTR	0.0779	0.3626	0.0371	1.0000

Fornell / Larckner-Criteria (AVE > R²)

AVE	0.7210	0.9444	0.6858
$AVE > R^2$	o.k.	o.k.	o.k.

c. Test on Multicollinearity / Variance Inflation Factor (VIF) using SPSS

Description of Regression

Variables	Туре
HOARD, SIZE, PERFORM	independet
EXTR	dependent
R	0.610
\mathbb{R}^2	0.373
corr. R ²	0.357
Stand. Err.	1.2573602

Coefficients

	Non-standardiz	ed Coefficients	Standardized Coefficients	Т	Sig.	
	Regression coefficent	Standard Error	Beta			
(constant)	4.002	0.224		17.891	0.000	
PERFORM	0.022	0.009	0.188	2.505	0.014	
SIZE	4.977E-005	0.000	0.532	7.113	0.000	
HOARD	-0.135	0.143	-0.071	-0.943	0.348	

Collinearity

	Collinearity				
	tolerance	VIF			
(constant)	0.947				
PERFORM	0.950	1.056			
SIZE	0.928	1.053			
HOARD	0.947	1.077			

Collinearity Diagnosis

			Contribution	to Variance		
Dimension	Eigenvalue	Condition Index	(constant)	PERFORM	SIZE	HOARD
1	2.080	1.000	.05	.04	.05	.05
2	1.001	1.442	.01	.40	.24	.06
3	0.771	1.643	.00	.48	.62	.00
4	0.147	3.758	.94	.08	.09	.89

11. Group Analysis & Levene's Test

$SIZE \rightarrow EXTR$

					Т			1			2			3	
	Path	t-	S.E.	p1	p2	V									
Т	0.634	10.75	0.059												
1	0.202	1.065	0.190	0.016	0.017	1.000									
2	0.363	4.748	0.076	0.003	0.003	0.915	0.214	0.214	0.000						
3	0.185	1.147	0.161	0.005	0.006	1.000	0.472	0.472	0.185	0.157	0.158	1.000			
4	0.536	9.764	0.055	0.111	0.111	0.353	0.046	0.048	0.000	0.033	0.033	0.041	0.020	0.022	0.000

Group	P-Value	Variance Inequality
1	0.019	0.003
2	0.000	0.000
3	0.260	0.248
4 (T)	0.209	0.100

$PERFORM \rightarrow HOARD$

					Т			1			2			3	
	Path	t-	S.E.	p1	p2	V	p1	p2	V	p1	p2	V	p1	p2	V
Т	-0.135	0.930	-0.145	-0.135	0.930	-0.145									
1	-0.214	2.261	-0.095	0.322	0.323	0.012									
2	0.354	4.412	0.080	0.002	0.002	0.001	0.000	0.000	0.176						
3	0.100	1.103	0.099	0.089	0.090	0.020	0.012	0.012	0.589	0.023	0.024	0.876			
4	0.077	0.670	0.115	0.124	0.125	0.105	0.026	0.026	0.850	0.024	0.025	0.974	0.439	0.439	0.792

Group	P-Value	Variance Inequality
1	0.023	0.012
2	0.002	0.001
3	0.090	0.020
4	0.125	0.105

Curriculum Vitae

Christian Layr, born January 5, 1981, in Bregenz, Austria

Education

2009 - 2013	University of St. Gallen (HSG), St. Gallen, Switzerland
	Doctoral Student
2004	University of Maastricht, Maastricht, The Netherlands
	Exchange Student in International Economics
2000 - 2005	Leopold-Franzens-University Innsbruck, Innsbruck, Austria
	Student in International Economics

Professional Experience

2009 - today	University of St. Gallen (HSG), St. Gallen, Switzerland
	Research Associate
2005 - today	Detecon Consulting, Zurich, Switzerland
	Management Consultant