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Master thesis:

**Management control in professional service firms:
A control package in audit companies**

Authors:

Henrik Huber (860401-R372)

Alexander Kästle (861028-T514)

Supervisors:

Johan Dergård

Gert Paulsson

Examiner:

Per-Magnus Andersson



Summary

- Title:** Management control in professional service firms: A control package in audit companies
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- Key words:** Management control package, professional service firm, audit firm, cybernetic control, cultural control
- Purpose:** The aim of this master thesis is a detailed analysis of the management control package in audit firms. The analysis shows which control tools big audit firms in Sweden apply and how they are used.
- Methodology:** A case study approach has been chosen in order to derive information about the management control package. A two-step approach was performed, which comprised questionnaires and interviews in the region of Skåne in Southern Sweden.
- Theoretical perspectives:** A general 'management control system package' provided by recent research is applied to the environment of professional service firms and audit companies. Literature about control tools which fit particularly into professional organizations and studies about management control in audit firms are compared to the findings of this thesis.
- Empirical foundation:** The questionnaire was completed by six participants, while four personal and one phone interview were accomplished. The participants were senior auditors or office managers who were supplemented by a former CEO of a big4 firm.
- Conclusions:** The main tools within the control package are 'organizational structure and procedures', 'budgeting', 'performance evaluation', and 'cultural control' in general. These are the controls which are strongly connected within the package. The budget seems to have the highest importance, while cultural control is supplementary.

Abstract

Management control in professional service organizations is fundamentally different from the control in classical industrial and producing corporations. This is mainly due to the special context a professional service firm has to face, as the value creation is knowledge intensive, demands a high level of education, and the professional employees have different expectations concerning their work. Hence, customized control tools have to be applied in professional service firms. Malmi and Brown (2008) provide a general management control package, which shall be applied to the context of professional service firms and auditing in particular.

The aim of this master thesis is a detailed analysis of the management control package in audit firms. The data collection was done via a two-step approach, which comprised a questionnaire as one part, while interviews were also accomplished. The final sample consists of five office managers or senior auditors within large audit firms in the region of Skåne in Southern Sweden. Additionally, a former CEO of a big4 company is contacted in order to gain detailed information about auditing from a top-management point of view.

Concerning the findings, it can be stated that the most important tools within the control package in audit firms are ‘organizational structure and procedures’, ‘budgeting’, ‘performance evaluation’, and ‘cultural control’. In contrast to previous literature which argued for an increasing use of ‘cultural control’, this study reports the maintained importance of ‘cybernetic controls’. This includes budgeting as a main tool for the management control package in audit firms, while ‘cultural tools’ are important but still of a supportive function.

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Henrik Huber

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Alexander Kästle

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1. Introduction

1.1. Problem statement

Management control in professional service organizations is fundamentally different from the control in classical industrial and producing corporations. This is mainly due to the constrained context a professional service firm (further PSF) is faced with, as the value creation is knowledge intensive and demands a high level of education. The highly customized services are to a large extent based on professional diagnosis and high professional judgments, whereas individuals can only be explicitly trained in standardized knowledge (Løwendahl et al. 2001, pp. 912-913; Løwendahl 2005, p. 22). Furthermore, professional firms deliver services in relatively constrained contexts. This starts with the fact that professionals underlie norms of conducts, such as codes of ethics for professional accountants. It continues with the perception that the satisfaction of the client's needs is more important than profit and ends with the (sometimes) sobering realization that limits for professional expertise exist (Løwendahl et al. 2001, p. 913). Hence, management control techniques in professional organizations have to take these facts and circumstances into account.

In addition, the quality of professional services is in general difficult to measure, wherefore classical control tools like market or bureaucratic concepts that target at output and behavioral control (Ouchi 1979, pp. 836-840) are not sufficient to scrutinize professionals. Rather, such quantitative measurements can even be seen as a threat for the independence of a profession, while informal instruments such as clan control are of high importance (Freidson 1984, pp. 4-5). In this regard, Malmi and Brown (2008) as well as Nilsson et al. (2011) discuss the necessity for a combined management control system, but stay relatively general and industry unspecific in their elaborations. In fact, it is even stated that the literature does not know much about the connections between different management control tools (Malmi & Brown 2008, p. 297). For professional service firms the challenge remains to identify and establish management control systems that ensure an appropriate control package for their business, take the professional context into account, and develop an interconnected system.

1.2. Purpose and motivation

Due to the mentioned problems for professional organizations, the authors have chosen to apply this field of research to their personal interest in PSFs and audit firms in particular. As accounting firms represent a famous and relevant profession (Løwendahl 2005, p. 22), they

can be seen as a methodological choice of this work, in order to learn more about management control systems in PSFs. So far, insights and studies are available about several aspects of management control in audit firms, without providing an overall picture or accentuating the interconnections. Thus, no approach takes all tools and mechanisms collectively into account within the context of auditing. Rather, studies have been solely focused on particular aspects such as cybernetic controls like budgeting or performance evaluation (McGarry & Sweeney 2007; Sweeney & Pierce 2011), as well as several informal mechanisms, such as partner intuition, informal communication, image management, and the recruiting process in the audit environment (Pierce & Sweeney 2005, pp. 349-360).

This study about the management control package provides a basis for further research about the combination of control tools in PSFs or audit firms. Currently, the creation of new professions such as controllers, analysts, financial advisors, or bankers takes place in the business environment, whereas this trend is expected to be maintained or even to be intensified in the near future, due to the improving education in modern society (Freidson 1984, pp. 4-5, 7). In fact, this will increase the relevance of control mechanisms in more companies than those that are perceived as PSFs nowadays.

The personal interest by the authors in the topic is based on the combination of accounting and management control according to the program 'Accounting & Management Control'. As students of business administration the authors will likely be a part of a profession ourselves, wherefore the research findings can have implications on future work as auditors or controllers. Hence, this will increase personal awareness for the mechanisms which influence and control professional loyalty and a company's interests simultaneously.

1.3. Aim

The aim of this master thesis is a detailed analysis of the management control package in audit firms. The analysis shows which control tools big audit firms in Sweden apply and how they are used. In order to do so, the analysis is accomplished along the dimensions of the management control package by Malmi and Brown (2008, p. 291). Therefore, management control in this thesis is defined as the combination of tools which are used to influence the behavior of employees as well as to achieve goal congruence (Malmi & Brown 2008, p. 290). This comprises both the consideration of common and classical control tools that are broadly used among corporations within various industrial sectors, as well as a further analysis of a special control approach which is necessary to adopt in the environment of professional

service firms and the audit ambience in particular. This analysis finally ends up in a picture of how big audit firms design their management control systems.

1.4. Methodology

The research of this master thesis is based upon a comparative case study approach (Yin 2009, pp. 26-35) and is applied in a Swedish context, as a focus is set on the large audit companies in the region of Skåne. Hence, the ‘big four’ (further referred to as ‘big4’) audit firms as well as two further entities of comparable office size have been contacted. The participants are approved auditors with a leading position in their respective offices, thus residing on a middle management level, while the research itself rests upon a ‘two-step-approach’. As a first stage, questionnaires have been designed and sent to the companies. After collecting and analyzing the results, interviews have been carried out in a second step, whereas the interview questions and discussion emphasis were partly dependent on the participants’ answers in the questionnaire. Combined, both the localization of Sweden as well as the adoption of the case study approach including the implementation of the two-step-approach allow a more detailed analysis and in-depth understanding of each company and the procedures (Yin 2009, pp. 160-161). A more elaborate description and justification of the methodology is further given in section five, whereas the focus at first is set upon theoretical considerations and explanations in the following chapter.

1.5. Disposition

As a first step for this work, a theoretical framework shall be provided in order to point out the most important aspects about management control in the context of audit firms. Therefore, the second chapter about management control discusses management control systems in general and provides a consideration of the most important control tools, which can be applied in PSFs or audit firms within the control package.

Based on that, professional service firms are considered in detail within chapter three. Professions are defined, key characteristics are presented, and constraints are described. Furthermore, an outlook on professions including auditing is provided.

In the following chapter four, the preceding theories are combined to outline management control in professional service firms. Previous studies and challenges for control mechanisms in PSFs are presented, while the importance of management control and challenges for audit firms are pointed out explicitly.

Chapter five deals with the methodology and elaborates the chosen way of how the study was accomplished in more detail. This introduction also contains a brief and general description of the methodology in order to show the reader the chosen study approach before the theory is developed. However, audit companies are chosen to establish research about PSFs, why the theoretical part about audit firms is placed before the illustrative methodology section. Additionally, to describe the methodology right before the actual study allows a more detailed understanding and connection between the research approach and the findings.

Within the subsequent chapter six, the questionnaire and the interview are described and analyzed parallel. The content is subdivided along the tools for the control package provided by Malmi and Brown (2008).

An overall interpretation of the findings about management control as a package in audit firms and a comparison to previous literature and a generalization to all PSFs, if possible, is provided in chapter seven. Additionally, the correlations between the tools are analyzed, what allows the authors to create an individual control package customized to big audit firms.

The final chapter 8 summarizes this thesis, the work in general, as well as the opinions and experiences of the authors gained by research about management control in professional service and audit firms.

2. Management control

2.1. Management control systems

Economies, companies, and their management control systems are faced with an environment which is much more unstable than previously and where changes take place with a higher frequency. One factor which impacts on control tools are modern technologies. They are extensively used in many firms and enable a control system to use much more data, analyze them more quickly, and implement corporate strategy effectively via detailed measurements (Anthony & Govindarajan 2007, pp. 6-14; Dechow et al. 2007, p. 45).

Additionally, globalization changed the complexity of many business relationships, either between independent customers and suppliers, or between subsidiaries and the reporting to their headquarters. This causes a much stronger integration of business units into a whole corporate group and their controlling departments have access to the latest as well as most relevant data at any time (Busco et al. 2007, p. 65-67).

Hence, it can be stated that modern management control systems are less isolated and have close linkages to business units, departments, or even individual employees (Malmi & Brown 2008, p. 287). This offers the possibility for the control system to regain relevance and to improve the decisions made by managers in various companies and industries. Johnson and Kaplan (1987) discussed the wrong appearance of management control in their eminent publication 'Relevance lost: the rise and fall of management accounting', which criticized the narrow focus and intrinsic orientation of controlling.

A more strategic approach of management control is necessary to deal with the present complexity, insecurity, and contingency, while adaptations to the current plans or budgets have to be incorporated by a more flexible approach. Historical, pure financial, inwards oriented, narrow, and reactive tools have to be replaced by forward-/outward-looking, broad, and proactive measures which guarantee the future success of an entity (Wilson 1995; Lord 2007, p. 135, 137, Table 7.1.).

Furthermore, the individual control tools are not separated from each other, but shall be molded into an integrated system, which enables a company to react to any circumstances which might appear. This classification and combination of management control can be described as a 'management control package' (Malmi & Brown 2008, p. 291; Nilsson et al. 2011, p. 70).

2.2. Management control package

In order to choose the appropriate mechanisms and evaluation methods, an entity has to define its control means into one of the following categories, while approaches from all sections should be chosen within a firm to make the management accounting system complete. As illustrated in Figure 1, Malmi and Brown (2008) present five different dimensions which are useful to implement in the controlling department. Additionally, three levels of the control package are shaped to structure the systematic.

Figure 1: Management control as a package

Cultural Controls						
Clans		Values			Symbols	
Planning		Cybernetic Controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non Financial Measurement Systems	Hybrid Measurement Systems	
Administrative Controls						
Governance Structure		Organisation Structure			Policies and Procedures	

Source: Retrieved from Malmi & Brown 2008, p. 291, Figure 1.

2.2.1. Administrative controls

Within the hierarchy of the management package, the first level is constituted by 'administrative controls' which are the basis for all other controls. They are the procedures and hierarchies within a company which define how tasks are performed. Accountability to managers, group responsibilities, or the functional structure of a firm has an eminent impact on the behavior of employees and can reinforce the other control tools. Further, it can even be the source of their actual success, by using company specific economies of scale or the expected dissemination of knowledge (Løwendahl et al. 2001; Malmi & Brown 2008, pp. 292-294, Table 1; Nilsson et al. 2011, p. 74).

2.2.2. Planning

The second level covers three different control approaches, which are more connected to the actual business and the outcome comparison, than just to define reporting procedures.

'Planning' comprises standard-setting, overall objective definitions, and communicates the expected behavior or commitment with the employees. This can be done by strategy determination with the managers of the individual business unit (Anthony & Govindarajan 2007, pp. 56-57, 105, exhibit 3.1; Malmi & Brown 2008, pp. 291-292, Table 1).

2.2.3. Cybernetic controls

Also in the second category, 'cybernetic controls' allow a precise assessment of actual performance in comparison to peers, previous times, or other internal units. This could be achieved by financial as well as non-financial measures which are conducted by budgets or forecasts (Malmi & Brown 2008, p. 293; Nilsson et al. 2011, p. 73).

As an important control tool which can be used to check individuals and the outcome of a certain business unit, budgeting shall be considered. It is used to derive the profitability of a business unit, which can constitute of single clients or a group of customers which are managed by a partner or senior auditor. Budgets can be either set for each audit engagement, or a more overall budget can be granted in order to offer the responsible auditor more freedom. Audits are annually reoccurring services which are performed for a client and the information of previous years or the particular knowledge from the last audit job can easily be used to update the current budget (Anthony & Govindarajan 2007, pp. 380-382). Additionally, a budget with its clear statement regarding monetary expectations can be used to communicate responsibilities to the auditors (Anthony & Govindarajan 2007, pp. 380-382). Even though a budget is mainly financial based, quality can also be checked indirectly simply by demanding more internal reports parallel to the actual budget.

Another important aspect of budgeting is its usefulness for evaluating monetary performance. The commitment to achieve financial targets can be easily measure by comparing the preplanned expenses of the budget with the actual outcome and rewards can be partly based on the achieved level of profitability (Anthony & Govindarajan 2007, pp. 380-383).

In general, a budget can be set up in two ways: top-down or bottom-up. The latter takes the auditors who perform the services also into account, what can increase the likelihood of a higher commitment for the budgeted targets. Regarding how a budget shall impact on the company, it can be stated that the set expectations should not be too demanding or even impossible to reach in order to secure optimal commitment to the corporate goals (Anthony & Govindarajan 2007, pp. 391-392). Additionally, the risk of gaming between the budget setters

and reviewers can consume resources which could be better used elsewhere (Anthony & Govindarajan 2007, p. 391; Nilsson et al. 2011, pp. 28, 256).

Additionally, forecasts can be used to adapt the preplanned budget according to altered circumstances, which is necessary in a highly uncertain and changing economy. It can be a highly eminent tool to change the expectations and level of goal congruence with the responsible unit managers. Previously communicated and too rigid budgets might be updated with the latest information (Anthony & Govindarajan 2007, p. 381). Forecasting within audit firms can only be less effectively applied, because the service fees can be fixed, wherefore the budget adaptation is merely of internal use. Even though, the responsible managers can keep track of the changes of each engagement and can move management control towards a more proactive and forward-looking approach (Nilsson et al. 2011, pp. 28, 256).

A hybrid measurement tool within the control package is the balanced scorecard (Malmi & Brown 2008, p. 291, Figure 1). According to Kaplan and Norton (1992; 1996), companies have to combine financial and non-financial measures in order to be able to draw a complete picture of their business and environment. Not only narrow monetary terms of the budget can be used to define success, rewards, or goals, but a proactive and foresighted approach which takes several dimensions and stakeholders into account is more appropriate for audit firms. Financial, customer related, internal processes, or learning and growth can be taken as basic perspectives of a scorecard in a PSF (Kaplan & Norton 1996, p. 4; Otley 1999, p. 374-375). Additionally, it is not necessary to define a single scorecard for the whole company, but each hierarchical level can have its own measures and communicated dimensions (Nørreklit & Mitchell 2007, p. 178).

2.2.4. Reward systems

Also within the second level of the control package, goals of the employees have to be in line with those of the company, why a separate section has to be pointed out. Another facet of the presented structure is the 'reward system' for the achieved results and actual performance. It is often linked to the cybernetic or planning tools, because they define the expectation for the individual manager and employee (Malmi & Brown 2008, pp. 291, Figure 1, 293).

Due to the assumption of human self-interest, incentives and rewards have to be granted in order to achieve goal congruence and the optimal outcome for both participants (Deegan & Unerman 2006, p. 215; Anthony & Govindarajan 2007, p. 513). In general, a reward system should focus on the positive aspects such as achieving predetermined goals, while

punishments should be avoided to secure commitment by the employee (Anthony & Govindarajan 2007, p. 513). This commitment can be controlled in two main ways, either by monitoring the person closely or by incentive contracting. Monitoring can be opposed by the employee, due to the desire of working independently, what especially holds true for professionals, while personalized contracts like a share in the achieved profits are more easy to implement and consume fewer resources (Abernethy & Stoelwinder 1995, p. 2; Anthony & Govindarajan 2007, pp. 531-533).

2.2.5. Cultural controls

Finally, every company has an underlying value system and depends on social conditions which define how the individuals work together, if personal goals are aligned with those of others or the organization. The control means which are placed on the highest and most specialized level in the control package are 'cultural controls'. They are highly relevant in less controllable and unsecure circumstances, wherefore the general importance of this non-financial and rather informal control tool is about to increase in PSFs (Ouchi 1979; Chenhall 2003, p. 129; Malmi & Brown 2008, pp. 291, Figure 1, 294-295).

Ouchi (1979) described 'clan control' mechanisms as an efficient tool to monitor individuals. Shared values, professional standards, and a socialization process can be used to secure goal alignment and teamwork, if other organizational means do not work due to the circumstances. If the loose form of a market relationship is not effective enough, bureaucratic controls and hierarchies can be implemented as a substitute. In case the legitimacy of formal controls within a corporate structure cannot secure an appropriate level of monitoring due to the sophistication and uniqueness of the tasks, clan mechanisms can be used (Ouchi 1980, p. 137, Table 2; Ouchi & Price 1993, p. 64). This form of management control can reduce the actual costs for checking the employee, because professional affiliation creates personal incentives for the members to perform their tasks according to standards and rules for the sake of the profession and the corporation (Ouchi & Price 1993, pp. 64-65).

Additionally, recruiting has to be pointed out as a control mechanism which is highly interconnected with clan control. If graduates from universities are introduced to the values, standards, and expectations from companies and their profession, high rates of turnover can be avoided. This reduces further educational costs, increases the acceptance of controls and improves the efficiency of management control in a PSF or audit firm (Macintosh 1985, p. 180; Alvesson & Lindqvist 1993, p. 446; Pierce & Sweeney 2005, p. 359).

3. Professional service firms

3.1. Definition of professions

First of all, a profession consists of members with specialized skills, high education, and a certain knowledge base, which are influenced by the professional association as a whole. Within a professional adherence, individuals are expected to share the same values, beliefs, ethics, and show respect as well as allegiance to their peers. A form of similar and shared understanding connects the members and enables the professional clans to work efficiently (Ouchi 1979, pp. 837-838, 840, 844; Freidson 1984, p. 10; Løwendahl et al. 2001, p. 917; Newell et al. 2002, p. 49).

Professional norms and standards work across different organizations which operate in similar industries or perform the same services for their clients and customers. Within these organizations teamwork between professional specialists is expected, regardless of their actual business or professional orientation. The shared underlying values within a profession allow the individuals or whole entities to provide high quality services. That is even possible when a single process might not exist, but has to be combined by several specialized steps (Ouchi 1979, p. 837). A high level of personal commitment is expected from the members, why it is crucial for the profession's success and efficient maintenance that its goals are aligned with those of the individual member as much as possible. Therefore, the objectives, attitudes, and norms have to be in line with external factors such as the work ethics within a society, as well as internal factors like cultural expectations incorporated by entities (Ouchi 1979, pp. 842, 846; Anthony & Govindarajan 2007, pp. 99-100).

The process of becoming a professional is highly formalized and takes several years of education before the actual training within a profession starts. Shaping the individuals to be loyal members of the profession begins often in the university, when students are socialized into a 'clan' and introduced to their future tasks as well as moral standards (Ouchi 1979, p. 837). During the integration into a profession, explicit instructions and further education is provided in order to guarantee high quality work of future professionals. Additionally, new and current members are closely monitored in order to withstand high rates of turnover which can occur if expectations and concepts are not communicated clearly enough while selecting candidates (Sweeney & Pierce 2006, p. 874-875). 'Professional bureaucracies', such as hospitals, accounting, or law firms can be very demanding and selective concerning their new members or employees and it is essential for these organizations to maintain a high level of

commitment in order to reduce the occurring agency costs due to individual self-interest (Ouchi 1979, p. 842; Freidson 1984, pp. 3, 9).

Professions or clans normally use rituals and ceremonies to stress the importance of several aspects and tasks within their business and conduct in a form of reciprocity in order to legitimate their own authority over the members, even though they work in various organizations or countries. Moreover, professions exercise a high level of influence over their members and the organizations they work in. Still, their reach is limited by professional skills and knowledge (Ouchi 1979, p. 845; Løwendahl 2005, pp. 21-22).

Self-regulation is also a major characteristic of professional federations which often run their own corporate bodies to represent professional interests, provide standards, and guide the profession in general. Supplementary, professions can be sub-structured in three different sections: Normal 'rank and file' workers who carry out the actual business in their own institutions or on behalf of a bigger organization, a 'knowledge elite' that provides guidelines for practitioners and engages in research, and the 'administrative elite' which is responsible for operating organizations on a top-level and leading ordinary professionals (Freidson 1984, pp. 1, 16).

The affiliation to a profession grants the individuals privileges, such as increased economic benefits due to specialized knowledge or independent work in their own facilities. Professionals can be self-employed and do not necessarily have to be engaged in a bigger organization such as hospitals (Freidson 1984, pp. 2, 9; Løwendahl 2005, pp. 20-21). Medicine, jurisdiction, clergy, military, or teaching and researching at universities are examples for professional fields, while accountants, auditors, consultants, or engineers are semi-professions (Etzioni 1970, p. 646; Jarvis 1975, p. 911; Ouchi 1979, p. 842; Freidson 1984, pp. 3, 9).

The field of professions and the organizations in which they operate can be of increased interest in the future, because new professions are likely to emerge. Bankers, financial analysts, financial advisors, and controllers have individual values and standards, which might not be directly comparable to those of physicians. Hence, it is likely that they create their own professional federation with increased autonomy from the organizations they work in. Furthermore, they are also externally influenced by researchers and high-level elites that guide them. Consequentially, specialized programs at universities have already started this process of a particular educational socialization (Jarvis 1975, p. 911).

3.2. The profession of auditing

It is the task of auditors to certify the financial reports of companies in order to prove the righteous strategy implementation and business conduction. The profession provides a highly valuable service for a society and even countries, because investors are willing to fund companies more eager if the accounts are approved by an independent inspector. Hence, auditors are in control of an important part of the relationship between investors and managers and are able to retain some of the benefits of this relationship (Freidson 1984, pp. 2, 9).

The auditors have the obligation to be independent from their client, which has to be checked by their own company and the profession as a whole. No business- or shareholder-relation is allowed between an auditor and the entity whose annual report shall be approved. Additionally, not only one auditor is responsible for the verification of financial statements, a second reviewer is necessary. The profession has therefore more possibilities to monitor individuals via the four eyes principle and the involvement of several responsables during an audit (Nobes & Parker 2010, pp. 529-531).

According to the contingency theory, a control mechanism within a company depends on the situation and the industry an entity operates in (Otley 1980, p. 413). This theory cannot only be connected to the management control system, but also to the overall business of auditing. Every firm and industry is different, wherefore knowledge and comprehension of complex mechanisms is necessary to undertake useful and appropriate accounting measures. Additionally, auditing is highly litigious, why companies and the whole profession have to be aware of the reputational effects that failures of individual members can have (Nobes & Parker 2010, p. 531). Therefore, the audit profession has to educate, train, and monitor individuals and accounting firms closely in order to reduce the risks which are inherent in the audit business.

The main expectations for auditors are to have the latest knowledge about accounting standards, rules, procedures, understanding the clients businesses, and being able to derive problems or hazards within the accounting figures of a company. The certification of a financial statement is based on the information provided by the client's personnel, why the profession has to sensitize its members for the fraudulent behavior of managers to hide the actual problems of a company (Nobes & Parker 2010, pp. 532-533, 537; Sweeney & McGarry 2011, p. 316).

The work in general is accomplished according to several steps which can be summarized as an audit project. Processes such as planning the inspections, sample selection, quality control

like the review process, and the final description of the company's situation are single steps which have to be organized properly. Three general limitations have to be observed and met: Quality, time, and the budget, which enable the management to monitor and observe their team (Lendyuk & Rippa 2009, p. 592, Figure 1; Nobes & Parker 2010, pp. 527-528, Figures 21.1, 21.2). Hence, auditing cannot only be seen as a process of checking the accounts and business of a company, but contains more steps which have to be controlled and taken into consideration when the management schedules and organizes audits.

Auditing as a profession has a varying impact on the economies in certain countries and cultural regions. The legal system for example influences the structure of accounting and the tasks of auditors. In countries with a codified law, accounting standards are based on jurisdiction and are structured as well as specific. Hence, auditors have a more clear guidance how to approve the accounts of a company and professional judgments are less important. On the other hand, when a common or case law is applied, accounting is less structured and clear concerning specific items, wherefore auditors have to make more assumptions or interpret previous decisions and methods. When more professional judgment is necessary, the auditors are able to provide a more valuable service to companies and their reputation along with their influence will be higher, while the actual audit may emerge to be more risky (Nobes & Parker 2010, pp. 32-33).

Another aspect which influences audit as a profession is the source of funds. When entities are financed by banks or are family-owned, audits are less important, because the companies are already closely checked by the funders. However, if companies are mainly financed by a large group of anonym shareholders and managers are employed to run the firm, the risk of fraudulent behavior by the management is increased. Hence, independent audits have a higher value and the profession a higher status (Nobes & Parker 2010, pp. 33-37; Eberle & Lauter 2011, p. 440).

In general, the audit profession is subject to a high pace of change regarding standards, rules, and procedures. This increases the importance of the profession itself as well as the knowledge expectation of its members extremely. For the profession as a whole, it is important that its members are familiar with the latest adaptations in accounting and auditing in order to maintain the status as the deliverer of high quality audits (Freidson 1984, pp. 4-5, 18). Hence, control over the education and further training as well as over the commitment to this unsettled and demanding business has strong implications on control mechanisms in auditing.

Furthermore, accounting companies can be managed by the owners themselves, what influences the structure, hierarchy, and control mechanisms in these companies. Previous employees who showed enough commitment to the goals of an accounting company as well as the values of the audit profession cannot only become managers with stock options, as usual in other industries, but can become a partner. They are responsible for the definition of the long-term strategy, management control tools, and actual audit processes on a high level. Hence, individuals who pass the long educational process from university studies to the practical responsibility, finally exercise management and owner positions, which can be seen as goal alignment (Pierce & Sweeney 2005, pp. 340-341).

The environment of auditing can be described as competitive and stable simultaneously. On the one hand side, audits are a statutory obligation for companies of a certain size and clients can only choose from a limited number of accounting companies which have the abilities and skills to provide the service. Therefore, the audit environment can be seen as an oligopoly with a clear number of actors. Still, the increased commercialization of auditing during previous decades has led to more competition for clients and their fees, why individuals might not see themselves as a part of a whole, but focus their attention and loyalty on the goals of their employer (Lee 1994, p. 45; Sweeney & McGarry 2011, pp. 316-317). In fact, this has implications on the control processes and the usage of professional clan control as described by Ouchi (1979).

3.3. Key characteristics of professional organizations

As audit firms are defined as professional organizations, it is necessary to look into the characteristics and the environment of these institutions in general. The literature defines two streams of professional organizations, known as professional service firms (PSFs) and knowledge-intensive firms (KIFs). A typical overlapping characteristic of both concepts builds on the fact that the value creation emerges to be highly knowledge intensive, since professions are generally constituted by highly educated individuals with close associations to research and science. Based on this, professional services of PSFs demand a high level of personal judgment and diagnosis as the services are aligned with the specific needs of the particular client. Further, mutual interactions with the client are required to ensure the optimal delivery of the services (Løwendahl 2005, p. 22). The professionals as the executing factor possess standardized knowledge necessitated in the organizations' field of operation. In that regard, experts are typically certified by the corresponding authorities of the profession (Løwendahl et al. 2001, p. 913). This means that knowledge is verified and regulated by

external authorities instead of governments or state powers. Consequentially, entry to the profession is gained through apprenticeship and examinations of the certified institutions (von Nordenflycht 2010, p. 163; Lewis & Brown 2012, p. 2). Transferring this aspect to the accounting and auditing profession shows that their legal institutions and bodies ensure this precondition.

A deeper look into the characteristics of PSFs facilitates the three factor framework of value creation, constituted by the domain choice, the resource base, and the value creation process. Thereby, the domain choice accounts for the strategic decision of the firm, including the choice of industry as well as the choice of segment (Løwendahl et al. 2001, p. 914). As the industry is taken for granted as per definition of audit firms, the choice of segment can vary among small and large customers as well as between the businesses of those clients, for example manufacturing or financial services. Hence, the domain choice is crucial for the right choice of a portfolio of clients. Beyond that, it affects which professionals the firm is able to hire and therewith influences the composition of the resource base, consistent of both tangible resources as inventories and financial means, as well as intangible resources, for instance represented by reputation and professional expertise of the employees. Different combinations of these resources lead to varying types of delivered services and underscore the superior role resources play in professional organizations, whereas knowledge constitutes the most fundamental resource and can be combined to a unique service (Løwendahl et al. 2001, pp. 915-916; Grönroos 2007, p. 9).

The value creation process itself distinguishes between direct value creation for the client and internal value generation for the owners. Besides the objective of profit, this incorporates knowledge development in order to confer individual expert knowledge to the level of the firm. This is ensured with the help of databases, routines as well as norms of best practice and is regarded as a by-product. Indeed the firms' main focus lies in value creation, i.e. the service delivery for the clients (Løwendahl et al. 2001, pp. 918-921). As this shows, PSFs are characterized by high labor intensity and the delivery of flexible processes varying due to different levels of customization and professional judgment, both dependent on the clients' demands (Lewis & Brown 2012, p. 2).

According to Hansen et al. (1999, pp. 109-110), value creation has to be distinguished between so-called 're-use economics' that can be applied for recurring, similar tasks as well as expert economics as customized solutions for unique problems. Whereas re-use economics are mainly used by large teams, expert economics appear to be tailored to small work groups.

Based on this approach, Løwendahl et al. (2001) developed a model that distinguishes between different types of interactions, mapping the customization of professional services. Thus, there exists a scale ranging from lower to higher degrees of customization (see Figure 2). At a low degree of customization, professional services deal with scale problems that can be carried out nearly hands-off via information channels, certifications, or reports. On the contrary, services with a high degree of customization are characterized by a deep involvement and interconnection of the client and the PSF in a joint team, dealing with highly unique and not automatable problems (Løwendahl et al. 2001, p. 922).

Figure 2: Customization of professional services

<i>Degree of customization</i>	<i>Professional services</i>	
Lower	Information, market analyses, reports	
	Certification, quality assurance, audits	
	Expertise, advice	
	Training	
	Solutions to problems	
	Innovation, new ideas, creative design	
	Assistance in implementation	
	Mediation, negotiator, 'middle man role'	
	Stand in, management for hire, spokesperson 'on behalf of' ...	
	Higher	

Retrieved from Løwendahl et al. 2001, p. 922.

Overlapping with professional service firms is the concept of knowledge-intensive firms, which appears to be broader and not focused on particular professions. However, a detailed classification is difficult to draw, since companies in all industries and segments require the knowledge-factor to enable businesses. Therefore, a high variety of definitions exists, although law and accounting firms constitute general examples of knowledge-intensive firms (Ditillo 2004, pp. 401-402, 405). Generally, KIFs can be described as “organizations that offer to the market the use of fairly sophisticated knowledge or knowledge-based products” (Alvesson 2004, p. 17), whereat the core setting of intellectual competences is stressed and human capital as well as expertise in order to solve various problems result in a competitive advantage. Consequentially, compared with other industries such as manufacturing, KIF appear to be less capital intensive on the one hand, but more learning intensive on the other (Nurmi 1998, p. 26; Ditillo 2004, p. 404).

3.4. Constrained context within professional organizations

As the precedent section has signified, professional organizations “deliver services within relatively constrained contexts” (Løwendahl et al. 2001, p. 913). This is mainly due to the existence of norms of conduct and codes of ethics that aim to assure appropriate behavior of professionals (Lewis & Brown 2012, p. 2), as well as limits that arise for their professional expertise and judgment. Beyond that, the needs of the associated clients are of higher importance than the common business objective of profit. Further the three factors of value creating processes generate an overall complexity and coordination requirements including cost adherence becomes necessary. The task coordination can take place by standardization for low customized scale services, which keeps cost on a moderate level. In audit firms, this is achieved through detailed guidelines and standards in the auditing process. In addition, the coordination of subtasks through plans and deadlines may be necessary for the completion of tasks, as collecting specific accounting data for audit firms. In a further extent, mutual schedule adjustments are inevitable in case of missing information or supplementary required samples. In contrast, preplanning and scheduling emerge to be much more difficult for high customized, unique services and costs tend to be higher as well as difficult to predefine (Løwendahl et al. 2001, pp. 913, 923-924). At the same time, decision-making demands a high degree of professional judgment and thus is driven by uncertainty, risk-taking, and the application of theoretical knowledge to specific problems and tasks (Brivot 2011, p. 490).

Within the value creation process, especially the knowledge development for the PSF itself is a critical factor, as major challenges exist in order to extract and transfer as much individual knowledge as possible. The transfer of professionals’ knowledge can take place through codification for information-based knowledge and through interpersonal interactions such as mentoring and training for experience-based knowledge. In contrast, personal-based knowledge is either not transferrable or only transmittable via symbolic interchanges such as mimicking, which illustrates the problems in collecting professionals’ knowledge. What is more, conflicts can emerge between the firms’ claim of required knowledge and the wishes of the individuals to ensure their personal development (Løwendahl et al. 2001, pp. 920-921). As von Nordenflycht (2010, p. 162) illustrates: “The assets go down the elevator each night, and the firm can’t control whether they come back”.

As this shows, diverging goals exist between professionals and the organizations they are employed in. In turn, this raises the danger of a “clash of cultures” (Raelin 1989, Abernethy & Stoelwinder 1995, p. 2) as soon as professionals are affiliated into those organizations, because the autonomy of individuals becomes a problem within bureaucratic organizations

(Abernethy & Stoelwinder 1995, p. 2). Thus, the individuals' freedom might be harmed and cause dissatisfied professionals within bureaucratic barriers. Further, the level of conflict is tightened through the breakdown into administrative elites, knowledge elites, and practitioners among all professions, as these groups have different interests and demands. Thereby, practitioners, i.e. rank and file workers, are supposed to be most unsatisfied due to comparably low maintaining independency, even though judgment will remain a part of their jobs (Freidson 1984, pp. 10, 18). As this work will show, management control systems possess certain options to reduce this role conflict between organizations and individuals.

Build on that, a big constraint is that especially knowledge-intensive firms are difficult to manage. As touched in the previous section, it is not sufficient for professional organizations to merely attract workforce. In fact, it is required to integrate as much knowledge as possible of the recruited professionals into the firm. This becomes highly relevant as additional knowledge disparities and uncertainty characterize the complicated environment of professional organizations, whereas uncertainty describes the knowledge complexity within professional organizations. Therefore, the integration of knowledge can assist to reduce these constraints (Maister 2003, pp. 155-161; Ditillo 2004, pp. 403-406).

In general, it can be stated that the professional independence has been challenged. On the one hand this is related to increasing demands from customers for qualitative better and affordable services in short spaces of time. On the other hand, the autonomy of professionals is challenged due to increasing demands from the organizations. They require high loyalty as well as greater accountability from their members, e.g. in form of budgetary and time control as well as performance evaluation (Freidson 1984, pp. 4-8). The circumstance that Freidson (1984) identified these developments almost 30 years ago is not a restrictive fact, since this evolution has been strengthened until today. This is facilitated by a general challenge of professionals' authority, evoked by financial, legal, and medical scandals in the recent years. In turn, this has undermined the trust in professionalism and therefore the work of professional organizations (Champy 2006, pp. 656-657; Evetts 2006, p. 516; Brivot 2011, p. 491). Moreover, happenings as the demise of Enron and Worldcom in the early 2000s have led to a common distrust of non-experts in accounting and auditing expert systems (Unerman & O'Dwyer 2004, pp. 882-883) and therewith questioned autonomy and independence of professional organizations.

Not at least, constraints exist concerning the generalizability of attributes among professional organizations. Although PSFs belong to the same overall characteristics and category, it is

inevitable to note that certain differences among professions exist. Those have become more visible in the recent years and pertain, besides the heterogeneity of produced services, pricing strategies, organizational structures, human resource policies, and client relations. Thus, it is highly notable that heterogeneity among PSFs exists in the dimensions of knowledge, legal controls, and client relationships which for example has been illustrated for accounting, law, and engineering consulting firms (Malhotra & Morris 2009, pp. 895-896).

3.5. Further professional development

3.5.1. Implications on professions in general

The landmark-literature by Freidson (1984) about professions in general points out the possibility of ‘deprofessionalization’ and ‘proletarianization’, which influences the profession as a whole and the control tools which can be used within their organizations.

‘Deprofessionalization’ refers to the reduced knowledge gap of customers as well as the increased education and knowledge availability. The professionals work will be less judgmental based and recognized as unique, if more individuals are able to perform the tasks (Freidson 1984, pp. 6-8). ‘Proletarianization’ takes place when the historical grown independence, self-employment, and regulation are reduced, because professionals are hired by bigger organizations that exercise tight control over their work (Freidson 1984, pp. 8-10).

Both theories influence the trade-off between the profession as a whole and the companies which employ the individuals regarding the societal appearance, independence, and control mechanisms. Freidson (1984) reported a preserved independence of the profession in total, while the individual members lost some of their professional freedom. In the audit profession, this is likely due to the influence of the big4 accounting firms, which want to maintain the professional prestige on the one side, while reducing the personal liberties for the sake of their corporate goals on the other. This can be beneficial for the profession, when companies exert more control and the customers are more demanding, because it can increase the quality of the audits in order to prevent coming accounting scandals or even economic crises (Haley & Palepu 2003). However, both aspects can also increase the conflict between the sovereign thinking professionals and the emerging hierarchical control, which shall be considered in the following (Freidson 1984; Abernethy & Stoelwinder 1995, pp. 2, 4-6, 12, Figure 1).

3.5.2. Implications on the audit profession

Additionally to the perceived general transformation of professions as well as the work which is done by their members, auditing is influenced by other factors as well. The increased globalization and integration of capital markets has led to a need of harmonized accounting standards along with the creation of multinational audit companies. This development is reflected by the possible creation of an international audit profession which includes several cultural, ethic, and accounting standards (Nobes & Parker 2010, pp. 514, 539).

For example, the European Union is a main driver of harmonizing standards, due to the statutory obligation to use international financial reporting standards (IFRS) for some companies (Nobes & Parker 2010, pp. 81, 100). However, the profession remains also influenced by national accounting and procedures, since audits according to national standards are still compulsory for many kinds of entities all around the globe and a lack of willingness by countries to give too much power to foreign standard setters (Nobes & Parker 2010, p. 516). Hence, even though increased harmonization is reported, an international profession which acts as one, follows equal rules, and could be controlled more precisely, is not achieved yet (Eberle & Lauter 2011, p. 446).

Moreover, especially the profession of accounting and auditing has recently been under severe critique. The failure of Arthur Andersen to warn investors and societies about the fraudulent behavior of its client Enron, as well as the financial crisis from 2008 has decreased the trust in professionals and has led to increased attention by the public (Haley & Palepu 2003; Nobes & Parker 2010, p. 539). Therefore, the Sarbanes-Oxley-Act was adopted in the USA in order to increase the transparency of accounting and to reduce the problems which emerge due to connections between audit and non-audit services (Nobes & Parker 2010, p. 196). These incidents have already led to more obligations for the profession as a whole, which creates additional needs for control within accounting firms. Professional independence seems also threatened by the current development. This shall be considered within this thesis along with the implications for management control.

4. Previous research about management control in PSFs

4.1. Management control in professional organizations

Overall, professionals are subject to two different control institutions. On the one hand, their employing entity monitors their actions, while on the other hand the union of professionals also exercises a certain level of control. Both aspects shall be considered in the following - in the first instance, it is important to illustrate how professions have responded with mechanisms of control to the challenges of professional autonomy described in section three. Freidson (1984) concludes that the control maintains in the hands of the profession and thus no decrease in the control of professional members by the profession occurs. Contrary, professions in general followed a new path of formalizing professional controls, while those occurred mainly informal and provided a 'live-and-let-live relationship' until the late 1970s and early 1980s. Subsequent formalized professional controls mainly implicated antitrust laws and the deregulation of competition with effects on competitive pricing as first actions (Freidson 1984, pp. 12-14). As a consequence of high deregulation and therewith raising performance pressure, professionals within PSFs are forced to control and judge each other to a larger extent. However, this stands against the proposition of professionals that are educated to work mainly independent and are, by education, used to act outside administrative control boundaries. Consequently, and as discussed previously, the integration into organizations, as in audit and accounting firms in particular, exhibit a potential role conflict for professionals between organizational and professional controls. In this regard, especially the use of budgets and other financial target settings as forms of output control is perceived as a threat of autonomy by professionals (Abernethy & Stoelwinder 1995, pp. 3-4, 13).

As a consequence, social and self-control mechanisms are effective alternatives to control professionals. Abernethy and Stoelwinder (1995, p. 13) found evidence that the role conflict is reduced if professionals work in institutions with loose output controls, whereas this perception goes along with findings of previous studies (Hall 1967, pp. 477-478; Organ & Greene 1981, p. 250; Aranya & Ferris 1984, p. 10-11). Two recommendations are presented to optimize the control environment and to reduce the role conflict. On the one hand, a firms' management can influence professionals to approve the culture, i.e. norms and values of the organization and therewith its control systems. This is ensured by the implementation of mechanisms such as socialization or training. On the other hand, management can permit professionals to maintain their independence within organizations, i.e. to impose less output controls and trust in informal control mechanisms instead, so that a role conflict is less likely to emerge. Thus, the more an organization drives towards the norms, values, and objectives of

the corresponding profession, the more likely professionals act in their interest and the less organizational control remains necessary (Aranya & Ferris 1984, pp. 4-5; Abernethy & Stoelwinder 1995, p. 13).

Surprisingly, however, behavioral control imposed in professional organizations does not necessarily exacerbate the existing role conflict. This is due to the fact that, contrary to other industries, supervision is generally exercised by qualified fellow professionals and thus is promptly accepted by subordinated colleagues. Furthermore, professionals may not realize these types of controls as administrative forms of control originating from the organization. Rather, practitioners occasionally seize these mechanisms as parts of the self-control emanating from the profession. This facilitates professional organizations to adopt output controls, which are crucial mechanisms to pursue the firms' objective of competitiveness regarding cost and quality (Freidson 1984, p. 12; Abernethy & Stoelwinder 1995, p. 14).

As it becomes clear in the prior paragraphs, the formalization of control contains new difficulties and challenges for management control in professional organizations. In turn, this has created the following obstacles (Freidson 1984, p. 15-16):

1. Declining solidarity within the professions
2. Differences in authority and power within the professions
3. Raising tensions between knowledge elites and practitioners, skepticism arises especially from rank and file workers

Thus, formalized forms of control have to be carefully applied in professional organizations and must be regarded within the context, i.e. they are possible to implement and easier accepted if imposed and supervised by professional colleagues. However, a focus in a professional environment has to be set on cultural and clan control which means informal social systems. This is based on the precondition that individuals in an organization share the same traditions, values, and beliefs. Further, they underlie the socialization process of the profession and information is conveyed in ceremonies, rituals, and stories. Therewith, a clan mechanism can complement and even replace output and behavioral controls, which not only can be problematic concerning the acceptance among professionals, but might be also costly to apply. In turn, clan mechanisms can constitute the foundation of control in professional organizations (Ouchi 1979, pp. 836-840).

As a consequence, it remains a complex challenge to align effective control mechanisms in professional organizations. The dare is to create management control systems which combine the competitive alignment of the organization, typically connected with a high requirement of

control, while considering the presented control peculiarities regarding professionals (Abernethy & Stoelwinder 1995, p. 14). To handle this balance is decisive to determine an appropriate and operative management control package in the environment of professional organizations.

4.2. Challenges for management control in professional organizations

Several challenges exist for the management control in professional organizations. In order to show potentials as well as possible dangers and risks, the subsequent sections deal with these particular challenges and explain their impact on the design of management control systems.

4.2.1. Knowledge management

Professional service firms create their services and value for their clients via highly educated and motivated professionals. Their knowledge, experience, and expertise are the most valuable asset of a PSF and have to be maintained for the corporation. The easiest way to do so is to customize an individual contract comprising incentives and rewards with the professional to commit the employee to the firm. However, this contractual obligation is not sufficient; still the knowledge of the individual is not preserved for the company and remains at the level of individual knowledge. The challenge for management control in this context results from the necessity of transforming individual into collective knowledge (see 3.4.), which therewith can be used by other professionals and without the originally introducing employee (Løwendahl 2001, pp. 916-917).

In this regard, several authors refer to knowledge management (KM) as a control system for PSFs (Hansen et al. 1999; Empson 2001; Brivot 2011; Ditillo 2012). It implies both the centralization and the control of the processes as well as the creation of knowledge (Brivot 2011, p. 490). Besides the focus of integrating as well as transferring individual knowledge, KM comprises the creation and sharing of knowledge on the firm level, the so called organizational knowledge. Reporting and accounting guidelines, standards as well as controls ensure the use and transfer of this organizational knowledge within the boundaries of the entity. This means that management control techniques assist to effectively to spread knowledge among the members of professional organizations (Ditillo 2012, p. 3). Especially PSFs are predestinated to adopt these knowledge management systems because professional organizations typify codification and standardization of knowledge as a part of their institutional characteristics (Kuhlmann & Burau 2008, p. 624; Brivot 2011, p. 490), as pictured in the sections 3.3 and 3.4. However, “standard operating procedures may not be

effective” (Kellogg & Nie 1995, p. 330) in various situations and knowledge within PSFs can be difficult to transfer, e.g. personal-based knowledge, due to the high individual judgments aligned with the tasks of professions and thus within the audit context. Nonetheless, goal alignment can be seen as a crucial step in achieving the creation of shared knowledge. A professional that is not esteemed and promoted might leave the company or uses the firm to create individual knowledge via the work with the companys’ customers. Hence, incentives have to be granted to achieve complete commitment for the corporation for the sake of both, the professional along with the employing entity (Løwendahl 2001, pp. 920-921).

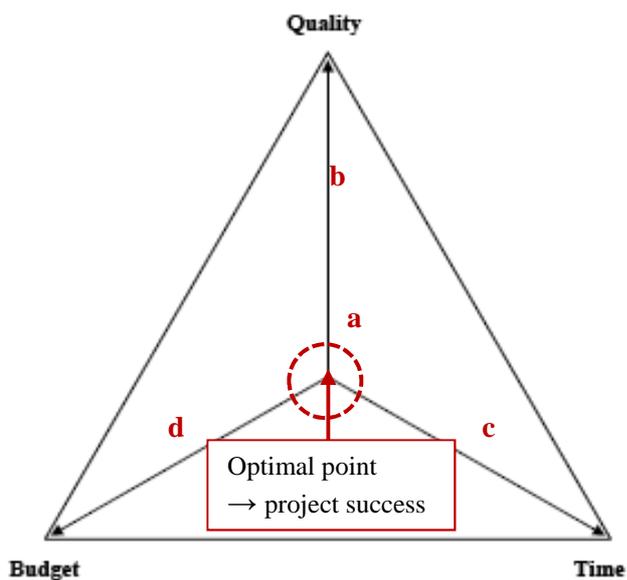
Beyond that, managing professionals and their knowledge is often seen as a problem of “herding cats” (Løwendahl 2005, p. 68). This is explained by the intrinsic inclination of professionals to generate and develop new ideas when they are “stuck in the office”, thus in situations of idle times and low work pressure. While experts extensively use this privilege to refresh and sharpen their professional knowledge in the beginning, they soon perceive their status as a professional being menaced and feel underemployed. The danger emerges that professionals develop ideas that contradict the firms’ strategy or policy on behalf of their own knowledge exploitation, especially in such situations in which professionals remain unsupervised (Løwendahl 2005, pp. 68-69). This problem is conferrable to the audit environment, which is characterized by both periods of hard work and time pressure within engagements and projects (the busy season) as well as periods right after the completion of the audits, broadly used for training, review processes, and preparations. Referred to the problem of cat herding, knowledge management in audit firms therefore appears to be critical especially in these phases.

Since professionals that are convinced by their ideas often leave the organizations in order to launch their own firm and business (Løwendahl 2005, p. 69), the partnership pattern comes into effect. Programs to become a partner, connected with financial payments and reputational encouragements are appropriate tools to guarantee career possibilities for junior as well as senior employees and can help to overcome the problem of high employee turnover that is especially present in the audit environment. In the light of career promotion, this can even create a competitive culture, for example long working days among professionals within a PSF (Lewis & Brown 2012, p. 3; Sweeney & Pierce 2006, pp. 874-875; Pierce & Sweeney 2004, p. 419).

4.2.2. Management control of projects

As PSFs typically solve problems and deliver services in teams, especially in the audit context, the general limitations for management control of a project have to be considered. As Figure 3 shows, three limitations exist in projects which managers have to control, namely time, budget, and quality. Whereas the optimal point resides in the triangle center, it is incumbent upon the project responsible to choose and determine an appropriate weighting of the three variants. Depending on the character of the project, the responsible can either choose an emphasized limitation close to the triangle center (see Figure 3 point (a)) or considerable advance a particular limitation (see point (b)-(d)). However, the general challenge remains in optimizing two limitations, while permanent controlling the third (Lendyuk & Rippa 2009, pp. 591-592). Conveyed to the context professional organizations and especially within the work in audit teams, the control of the three variants remains crucial. For audit engagements the formal maxim might be to minimize the monetary budget and the time (hours) of work, while ensuring client satisfaction, thus high quality audits. Indeed, this formal compatibility is difficult to reach in audit praxis, as the following parts of this work will show.

Figure 3: Limitations of a project



Source: Retrieved and modified from Lendyuk & Rippa 2009, p. 592.

4.3. Management control in audit firms

4.3.1. Particular challenges

The limitations that go along with balancing budget, quality and time are especially present in the audit environment. Firms have to balance the general trade-off in aiming towards low

costs while maintaining high quality, referred to as the cost-quality-conflict in the literature (McNair 1991, p. 637; Otley & Pierce 1996, p. 80). In this regard, time is a driver influencing both dimensions in different directions. On the one hand, additional working hours likely lead to higher audit quality, while this is related to higher costs in form of charged working hours (Pierce & Sweeney 2004, p. 417).

As a matter of fact, dangers occur for audit firms if the executing practitioners are subject to the cost-quality trade-off. Auditors often react by so called ‘dysfunctional behaviors’ as investigated in previous studies (Kelley & Margheim 1990; Malone & Roberts 1996). In fact, this can result in two dimensions of inadequate behavior. One possibility for auditors exists in the manipulation of time records. Thus, auditors may under-report the time (further URT) they have worked on an engagement in order to meet time or cost requirements. A second possibility of dysfunctional behavior exists in reducing the quality of audits or reviews. Such quality-threatening behaviors can emerge in form of (Pierce & Sweeney 2004, p. 417):

- Premature sign-off, i.e. certifying audit steps without completing all required and predefined audit steps
- Superficial reviews
- Acceptance of insufficient client documents and explanations

Looking back at adequate control methods, both time and costs can be simultaneously controlled with budgets and represent administrative control methods. In contrast, the quality of an audit is difficult to measure or quantify and therefore requires more on normative- as well as self-controls (Pierce & Sweeney 2004, p. 417). This confrontation demonstrates that different control approaches are required within the audit firms. It further strengthens the need to analyze the balance of a management control package within this context.

For the management of audit firms, the general challenge arises to control all the described variants and to prevent dysfunctional behaviors. However, it cannot be concealed that while quality-threatening behavior is undesirable by all means, the under-reporting of time can even constitute an eligible effect of an audit firms’ management. It reduces the costs for audit jobs and therewith may motivate responsables to set “artificially tight budgets” (Pierce & Sweeney 2004, p. 417) by purpose.

4.3.2. Importance of management control in audit firms

Audit companies as typical professional service firms are a special challenge for a management control system, because the actual services and performance of an audit

comprises a combination of highly judgmental tasks like valuations including statutory obligations about the rules which are applied to the accounts of a company (Løwendahl 2005, p. 22). On the one hand, the independence and self-regulation of the profession contains a huge potential of value and profit creation for the company. Professionals who use their education, experience, and skills in order to perform highly customized services reduce the need for classical control. On the other hand, professionals want to work independently, resist controls, and can refuse to be managers. Still, this does likely not hold true for auditors, who were business students themselves and are aware of the necessity and usefulness of management control (Løwendahl 2005, p. 191). Hence, leading controllers or responsables within accounting firms face less opposition than their colleagues who have to scrutinize other companies or professions such as physicians or nurses (Abernethy & Stoelwinder 1995, pp. 12-14).

However, in order to reduce the costs for an internal control system and to increase its efficiency, various mechanisms and tools should be used, which are tailored to the need of a complex business such as auditing. Even though there might be differences between industrial producers and PSFs (Løwendahl 2005, p. 58), the professionals still use classical control tools. They rely on mechanisms such as budgeting, which is mainly described as a form of time-budgets, because the reported hours of the auditors are the main cost driver for a PSF (Sweeney & Pierce 2006, pp. 858-859, 884-888). However, the focus does not only lie on the spent time, but quality remains crucial for the success of PSFs as well.

New technologies offer the possibility to derive the worked hours of employees, the actual tasks they performed, and quality measures via instantly available information provided by a globally integrated system. Hence, more sophisticated controlling techniques are additionally necessary.

4.3.3. Applied management control

Different studies discuss management control necessities in audit settings, but rather focus on certain aspects and control techniques in particular than apprehending management control as a package. The following section serves to summarize the findings of the literature and presents particular control methods in the audit environment.

Budgetary control in audit firms is an aspect that has been investigated by several authors. Already in 1996, Otley and Pierce (1996, p. 69) believed, that budgeting will reside its importance as a control system for audit firms. In the following years, other authors examined

the importance of budgeting in the audit environment. Sweeney and Pierce (2004, p. 796) recognized that the changing audit environment makes budget setting more complex and difficult. In this regard, Ettredge et al. (2008, pp. 2, 16) find statistical significant evidence about the phenomenon of asymmetric budget ratcheting in budgeting processes within audit firms. This implies, that budget surpluses, which occur when the budgeted hours exceed the actually needed hours for an audit, are diminished to a greater extent than budget deficiencies are increased in cases where engaged hours overrun the budgeted hours. This practice is used to retain budgetary control via tight budget targets by an audit firms' management.

Sweeney & Pierce (2004, pp. 798-801) developed a framework consisting of three variables, namely time pressure, budget participation and style of evaluation with influence on an audit firms' operational effectiveness in the context of quality threatening behavior. Thereby, regarding the raising degree of time pressure that explains quality threatening behavior (further QTB) (Otley & Pierce 1996), deadlines within engagements get more and more important for auditors rather than the firm specific set budget. In addition, there is the risk that increasing expectations due to more regulations can overburden the clients funds, what will be passed on to the accounting firms and can reduce the quality of auditing due to even lower budgets (Willett & Page 1996, p. 104). In order to protect auditing against future scandals and to secure a certain level of quality, the audit budgets have to be defined realistic (Willett & Page 1996, p. 118), for the client as well as for the executing professional. As the bottom line, a decreasing importance of budgets over time is reported, "although cost control is still critically important for audit firms" (Pierce & Sweeney 2004, pp. 434-435).

Performance evaluation is a further management control tool referred to in the audit literature. It is defined as periodically evaluation of auditors by their direct senior in the hierarchy. However, evidence is found that junior auditors often report directly to the manager or partner instead to the senior of the engagement, whereas the seniors itself not seldom report to partners and not superior managers within their firm. This is explained as a flattening of hierarchical structures in performance evaluation (Pierce & Sweeney 2004, pp. 423, 435-436; Sweeney & Pierce 2004, p. 797). Furthermore, the importance of informal parts of performance evaluation has considerably risen. Thus, performance evaluation has evolved from a more formal to an informal process in audit firms nowadays, which is caused by the high staff turnover. If new people are hired frequently, informal control is cheaper for a firm. As the sustaining of employees is seen as a major difficulty, formal performance evaluation is generally losing importance in the eyes of supervisors (Sweeney & Pierce 2004, pp. 798, 806). It is further pointed out that the review process conduces as a mechanism for quality

control that sharpens the quality of the audit profession (Bedard et al. 2008, pp. 204-205; Mohamed & Ismail 2011, p. 4). Thereby, face-to-face reviews seem to be more adequate than reviews that are solely produced in written form, since a personal meeting leads the reviewer to prepare feedbacks of higher quality (Brazel et al. 2004, pp. 961-963; Agoglia et al. 2009, p. 109).

Another important aspect is related to the criteria of performance evaluation as it can generally be indicated, that evaluating personal performance with bureaucratic control is considered problematic in the ambience of auditing and can additionally be connected with higher costs (Ouchi 1980, p. 132; Jenkins et al. 2008, p. 57). Research has shown that performance evaluation and more specific the detection of quality reductions is very difficult (Pierce & Sweeney 2005, pp. 342, 355). Hence, as an exclusive focus on budget-oriented performance evaluation goes along with an amplified risk of dysfunctional behavior, other criteria than meeting the budgets are gaining in importance. Therefore, the main performance indicators are more and more based upon parameters that are not connected to the budget (Pierce & Sweeney 2004, pp. 423, 435; Sweeney & Pierce 2004, p. 807).

Codes of ethics such as codes of conducts are further possibilities for audit firms. They set limits for dysfunctional or unethical behavior and provide guidance for audit employees in situations of uncertainty as it constitutes a framework for employees to comply with organizational expectations. Codes of ethics are therefore a tool for management control to act against QTB and in turn improve audit quality and judgments of individual accountants. For instance it can be expounded to junior audit staff or newcomers via checklists, programs, or procedures that support the work along engagements (Pflugrath et al. 2007, pp. 569-570, 582-584). In this regard, ethics training is another existent behavioral control and formal mechanism that occurs in audit firms. However, deep insights into the activities are rarely provided in existing literature, while ethic training programs and workshops at the universities are seen as a means (Jenkins et al. 2008, pp. 61-62), since their impacts are proven in several studies (Welton et al. 1994, p. 44; Abdolmohammadi & Reeves 2000, p. 281; Bogharian & El-Cheikh 2011, pp. 55-56).

The role of cultures within audit firms has been investigated by several authors who map out different cultural dimensions. For accounting firms, the challenge starts with diagnosing values and behaviors that characterize the culture of the firm. Referring again to the key concern of establishing goal congruence between the organization and its members, socialization can be seen as a possibility to maximize the goal alignment and to internalize

organizational values within individuals in the audit environment (Jenkins et al. 2008, pp. 45, 56-58). In this regard, clan control is referred to as an important feature of management control systems within professional service organizations and audit firms in particular (Ouchi 1980, p. 136; Pierce & Sweeney 2005, p. 343). McGarry and Sweeney (2007, p. 37) for instance identified two forms of clan controls, namely informal communication and role modelling.

Informal communication typically takes place within audit firms and includes both the transfer of audit information such as granting of compensation within the office, budget information, billing-, and realization-rates, as well as political information represented by career or reputation issues. Indeed, the informal communication progresses the socializing of individuals into audit firms as it introduces individuals to the norms, values, objectives and common practices of the firm. Furthermore, communication and willingness to engage in the expected standards of auditors can reduce the impact of QTB (Pierce & Sweeney 2005, pp. 340). It can therefore lead to a certain commitment with organizational values (Dirsmith & Covalleski 1985, pp. 152-154). On the other hand, mentoring is typically present in organizations with clan controls such as public accounting firms. While mentors often portray role models for younger audit staff, it is perceived as an effective mechanism against the “clash of cultures” (Raelin 1989, Abernethy & Stoelwinder 1995, p. 2). Instead, mentoring assists junior auditors in adapting organizational values, behaviors, attitudes, or even a shared language and therefore enables socialization into the respective firm (Dirsmith & Covalleski 1985, pp. 157-158, 161-165; Jenkins et al. 2008, p. 54).

5. Methodology

5.1. The research approach

In order to investigate the topic of management control in audit companies, a case study approach is chosen. Control mechanisms in audit firms can be complex and range from classical measures and obligations such as budgets to more informal, highly sensitive professional or clan controls. Current problems and challenges shall be discussed on the basis of contextual data and information which offer detailed insights into the tools, methods, and management policies within the profession of auditing and the control package. Further, the case study approach provides the opportunity to gain knowledge about certain control phenomena within audit firms (Bryman & Bell 2003, p. 54; Ditillo 2004, p. 411; Malmi & Brown 2008, p. 291, Figure 1; Yin 2009, p. 18).

5.1.1. The choice of companies

Intuitively, the best sources to gain information about appropriate control tools for audit companies are the mentioned entities themselves. According to McGarry and Sweeney (2007, p. 42), research about control mechanisms in audit firms should contain all big4 companies to have strong explanatory power (Sweeney & McGarry 2011, p. 329). Hence, this work incorporates the big4 companies in Sweden, namely Deloitte, Ernst & Young, KPMG, and PWC. However, it is not appropriate to reduce the category of big audit firms to the dimension of the big4 for the sake of simplicity. Therefore, companies which are not of the scale of the big4, but considerably larger than the diversity of small audit firms are included in the study. In Sweden, these are two firms, namely Grant Thornton and BDO. Furthermore, their inclusion offers the possibility to discuss similarities among management control within the large audit segment. Simultaneously, it reduces the likelihood that the results are distorted towards the opinions and procedures of the big4 firms and increases the comparable sample size of the case study (Yin 2009, p. 114).

In a further step, it is essential to point out why the big audit firms have been exclusively chosen for this study. Primarily, the bigger firms are more likely to have a sophisticated control department and developed options to assess the quality of the accomplished work or the commitment of their employees. The hierarchical structures in complex and large firms enable managers and controlling personnel within auditing firms to execute their tasks more precisely, especially in combination with historical grown practice for the auditors (Anthony & Govindarajan 2007, pp. 110-113). The big audit firms are expected to have a distinctive

interconnected management control system, whereas this is presumed to be less likely the smaller the audit firm. Even though control is exercised in smaller audit companies as well, this appears to be directly top-down exercised. The manager or head of a (small) audit firm conducts and scrutinizes the actions of all his employees, which means that in extreme cases, the control fully remains in his hands. Furthermore, the big audit firms are especially suitable when it comes to social and clan control approaches, as previous research has stated (McGarry & Sweeney 2007, p. 42).

5.1.2. The research strategy

In general, offices in the region of Skåne, more precisely in Lund, Malmö, and Helsingborg were approached. Therewith, comparability between the companies is granted due to the similar size and area. Further, this offers the possibility to examine control procedures or the understanding of clan control and professional affiliation on an actual business level and in cooperation with employees who perform audits and are subject to hierarchical obligations.

First, the companies were contacted in order to gain access to auditors of the firms. Regarding our requests, three preconditions existed for the persons that were tried to contact:

1. The participants had to be exclusively employed in the audit sector, to ensure that only the activity auditing and not such services as tax or consultancy are incorporated.
2. The participants had to be certified public auditors (*auktoriserad, godkänd revisor*). The intention was to ensure that only information from authorized professionals was gathered.
3. The participants had to work on a minimal hierarchical level of senior auditors, i.e. as a head of an audit team, or preferential in higher positions as directors, managers, or partners. This ensured that the information was gathered from personnel in leading positions in their offices, who are aware of different control tools and possibilities.

Corresponding to our preconditions, contacts were made either in person, by phone, or by e-mail to auditors that work for the mentioned companies. Thereby, the topic as well as the purpose of this work have been explained to the participants. Further, the aim to analyze the management control package in audit firms (see 1.3.) was explicitly communicated. The choice of auditors on a comparable managerial level but with different particular positions within the firms improves the sample quality, due to the fact that not only top-management or directors' perspectives are considered, but practitioner assumptions and opinions are taken

into account as well. Indeed, the targeted participants vary among experience related with diverse years of employment within the profession and the particular firm.

Additionally, a former CEO of one of the big4 companies in Sweden was contacted to gain further insight into the profession of auditing. His experience, as well as the fact that he left his former employing company, increase the likelihood that the given answers are of high quality and reliable. In fact, auditors who are still employed in the auditing industry are presumed to criticize their companies, work procedures, the audit profession, or even their own tasks less likely than an unconcerned person. The former CEO is therefore considered to be more independent and free to answer the stated questions honestly. Additionally, a CEO's perspective on a company is perceived to compromise all aspects of auditing and provides a birds' eye view on the topic which improves the overall scope. The participant is familiar with ordinary audit tasks and procedures, high managerial responsibility, as well as with maintaining the reputation and privileges of the professional as a whole. Hence, it allows a close comparison between lower-level and top-management results within this case study and is significant for the argumentations about clan control possibilities and options which are ultimately introduced and implemented by the highest level within a company.

5.1.3. Research procedure: The two-step-approach

Concerning the approach for this study, a more specialized and detailed procedure has been chosen. Auditing is highly complex itself; hundreds of standards have to be applied and many various tasks have to be performed for the certification of a single financial statement. In order to take the sophistication of the profession into account, the information gathering has been divided into two parts (Creswell 2007, p. 73; Yin 2009, p. 9).

As a first step, a questionnaire has been designed to gain data and knowledge about control approaches within the control package, which are applied by each company and impact on the work of the individual participant. As a second means to derive more specialized and detailed information, participants who filled in the questionnaire were asked whether an additional interview in person or alternatively via phone would be possible. The correlating effect between the two methods enables this research to make useful and valuable assumptions about control tools in audit firms and shows where necessary awareness is missing. Therefore, according to Yin (2009) the chosen approach can be described by having a multiple-case structure, due to the individual assessment of each participant's questionnaire along with the results from the interview. Indeed, the final result of the study and the management control

package is derived by a combination of all aspects of the study. Henceforth, the idea behind this two-step approach is finally a single-case study with embedded, multiple units for the analysis (Yin 2009, pp. 47-50, 52-53). Together with the geographical localization within Sweden, the adoption of the case study approach including the implementation of the ‘two-step-approach’ allows a more detailed analysis of each company and the procedures.

As questionnaires can be used to gain more quantitative data, while interviews seem more appropriate for qualitative information (Creswell 2007, pp. 37-38), the two-step-mechanism was used to combine both approaches in order to gain as much relevant data as possible and to intensify the knowledge within the research field. Further, if the questionnaires do not fulfill the expectations or are answered in a too general way, the persons are approached again and more questions can be asked in a face-to-face situation. Both concepts of questionnaire and interview are described and discussed separately in the next sections, before the actual data and research findings are presented.

5.2. The questionnaires

The designed questionnaires consisted of two major parts: The first part contained questions about classical control techniques and is sub-structured into the following topics:

- A) Budgeting
- B) Forecasting
- C) Strategy alignment
- D) Performance evaluation
- E) Compensation and rewards

Whereas these topics represented typical control tools, subheading C) abstracted questions concerning the firms’ strategic focus, long-term planning, and strategic realignments in order to gain information about the firms’ planning horizon. Nonetheless, strategic alignment does not demonstrate a control tool itself. However, questions within this area assisted to draw an appropriate picture in regard of the aim of the study. The second part of the questionnaire aimed on more specialized professional controls which are unique for service firms such as audit companies and PSFs. The covered topics were the mentoring process, recruiting and training, business communication, auditor intuition, as well as professional and clan affiliation. This structure, which is different from the analysis along the management control package, is chosen in order to simplify comprehension and completion for the respective auditors.

Overall, different kinds of questions were designed in order to make it more interesting for the participants to fill-in the questionnaire. Regarding the scale and comparability of the questions, a number between 'one' and 'seven' had to be ticked for most of the answers (Bryman & Bell 2003, p. 148). 'One' is mostly correlated with statements such as 'unimportant' or 'not used', while 'seven' mainly implies opinions as 'very important' or 'always used'. Ultimately, this numerical recording of the responses allows a more detailed analysis and evaluation of the results than only verbally given or written answers. Additionally, a hierarchy of importance, i.e. a list of goals, or simple choices had to be completed for some questions. Overall, the whole questionnaire was structured and designed in a comprehensible way, in order to increase the likelihood of high quality answers due to higher willingness of the participants to support this study. As an illustration, the questionnaire in blank is enclosed in Appendix A.

In total, the questionnaire comprised 36 questions, which were to be filled in spontaneously in an estimated time span of approximately 20 minutes. Furthermore, the questionnaire was of a self-completion form, which was completely administered and filled in by the participants themselves, what they appreciated due to time pressure and high workloads (Bryman & Bell 2003, p. 141). Indeed, all participants have been guaranteed anonymity, i.e. that neither the names of the involved persons nor the companies are connected to the particular answers.

It is necessary to allude, that the former CEO of one of the big4 companies in Sweden received an adjusted version of the questionnaire. More questions about the audit profession were added, while in this context less useful questions for an interview partner of the top-management level were deleted. This customized version contained 38 questions in total and was generally designed in the same manner as the generic questionnaire described above.

5.3. The interviews

Supplementary to the questionnaire, each participant was asked whether an additional interview is possible in order to gain deeper information about management control in their respective company. In general those questions were aimed at drawing a frame of the implementation process of control techniques as well as providing a picture of auditors' behavioral responses to control tools. Therewith, the interview served to obtain more knowledge about the processes as well as interdependences of various control tools and particularly helped to gain additional information and a detailed understanding concerning the statements in the questionnaire in light of the aim of this study (see 1.3.). This offered the

possibility to inquire specific questions according to the given answers, provided emphases in the questionnaire and therefore justified the chosen two-step-approach.

The questions were not forwarded to the interview partners in advance to ensure that the answers occurred spontaneously. In the same way as in the questionnaire, the interviews were sub structured into a more detailed part about classical management control in order to analyze the tools more precisely. The second part of the interview concerned informal mechanisms, clan affiliation, and professional controls which implied more open questions. Here it was the purpose to encourage the participants to talk and report about their own perception and evaluation of both, the professional environment as a whole as well as within the firm. Additionally to the stated purpose, and in personal consultation with the interviewee, both parts of the interviews were used to confront the participants with those questions which were not answered within the questionnaire once more.

In particular, the questions within the interviews highly depended on the answers given in the questionnaire. Each questionnaire was analyzed in order to identify the right questions for the interview. Thus, no standardized document existed that could be used ultimately. Instead, a catalog of questions was designed and then adjusted, i.e. complemented or reduced, dependent on the particular answers of the questionnaire. This led to a semi-structured interview guide as adopted by other researchers in the field of management control and auditing (Dirsmith & Covalski 1985, p. 153; Sweeney & Pierce 2004, p. 784). It has been chosen to be able to react on the given answers by participants, while having a structured list of questions to cover all relevant areas (Smith 1972, p. 119; Patton 1990, p. 295; Lillis 1999, pp. 86-87). This structured guide contained between 22 and 29 questions in total. Appendix B shows one example of an interview-guide that was the foundation for a conducted interview. Again it has to be noted, that the interview guide for the former CEO was slightly different, since it was based on the analysis of the diverging questionnaire.

5.4. Data collection

As previously described, the data collection was carried out as a combination of questionnaires and interviews along with the two-step-approach. In the first instance, the recipients were asked to send the received questionnaires back per e-mail after the completion. Indeed, only a few questionnaires were handed in quickly, whereas non-responding participants received e-mails of reminder after a certain period of time. In absence of any reply, the person was approached by telephone. In two cases, participants agreed to fill

in the questionnaire at first, but were not able to comply with the inquiry at a later stage, mainly due to high workload within the offices and business trips during the time of data collection. Therefore, contacts with other offices of the corresponding firms in Skåne were made. For one firm, it was possible to obtain a questionnaire but not a short-dated interview, while neither a questionnaire nor an interview could have been accomplished with the second firm. Thus, from the six targeted firms, one had to be generally excluded from the sample, which finally consists of five firms. Four could have been analyzed by the two-step-approach, whereas for one firm only information from the questionnaire was available.

Table 1: Sample constitution

	Position	Years as an auditor	1st contact to the firm	Question. received	Interview conducted
P1	Director	11	2012-03-29	2012-04-24	2012-05-02
P2	Senior Auditor, former Partner	35	2012-03-28	2012-04-18	2012-05-07
P3	Senior Manager	14	2012-03-28	2012-05-06	2012-05-09
P4	Senior Auditor	11	2012-03-29	2012-05-10	2012-05-14
P5	Senior Auditor	22	2012-04-11	2012-05-11	-
	Former CEO (10 years)	36	2012-04-09	2012-04-14	2012-05-16

Table 1 provides an overview of the five participants the authors could gain for this case study. As anonymity was guaranteed, they are neither named in person nor related to their employing firms. Indeed, the table gives an overview concerning the positions as well as the years of employment of the recipients and further includes specifications about the contact times. Again, it has to be mentioned that the former CEO is not included in the generic sample of the five persons, but is considered as an additional and supplemental source due to his former top-management position in one of the big4 audit firms.

As reproducible in Table 1, interviews with the recipients were arranged, after the questionnaires were completed. For that purpose, the participants were visited in their corresponding offices either in Malmö or Lund. In addition, the former CEO was interrogated by a telephone interview which lasted 40 minutes. The face-to-face interviews took between 55 and 70 minutes respectively, whereas the semi-structure of the interview led to a useful discussion with the interview partners in all cases. All participants agreed upon the request to record the interview. Based on these recordings, the interviews were afterwards listened to

several times and transcribed with key points and headwords, since protocols are generally recommended (Lillis 1990, pp. 87-88; Miles & Huberman 1994, p. 70). Furthermore, notes were taken during the interview which especially allowed capturing reactions and mimics of the interviewees for the later interpretation of the results.

5.5. Limitations of the research

After presenting the strengths of this research in the prior sections, it is inevitable to point out limitations as well. These can be summarized as the follows:

Since this study only includes the large audit firms in Sweden, i.e. the big4 and one additional accounting firm of large size, this accompanies with a general lack of generalizability as not all audit firms were approached. Hence, the findings display management control within the large audit firms. Further, the research is focused on Sweden and the region Skåne, thus is only conducted in one country. Indeed, the case study approach per definition is not designed to ultimately generalize results but to establish insights in particular themes (Bryman & Bell 2003, p. 54; Ditillo 2004, p. 411; Yin 2009, p. 18), which justifies the chosen approach despite its limitations. In fact, the findings can be seen as an indicator for management control in audit firms and therefore as an exemplarily method to analyze management control in PSFs.

Besides the limitation of generalizability, the target group of middle management within the offices poses restrictions. The authors perceive that especially in large firms, control tools and systems are conceptualized and implemented by the top-management. Thus, the participants of this study might lack involvement and knowledge in the superior management control of the particular firm.

The idea to approach the participants with a questionnaire first, might impose a limitation as well, since it enabled the recipients to prepare their answers carefully. Even though confidentiality was guaranteed this might have led to opportunistic answers within the questionnaire. This constraint is necessary to consider, especially because the auditors of the sample have a high affiliation with their profession, as section six will show. In fact, this could lead to biased answers in order to shelter the reputation of the profession, especially in the light of declining trust due to the recent accounting scandals. However, the two-step-approach can be seen as a correction mechanism for opportunistic behavior in this regard, since the interviewees did not receive the interview questions before and thus had to answer the questions spontaneously and were forced to react on critical inquiries.

6. Findings about the control package in audit firms

In the further subsections, control approaches in the audit environment are pointed out. Structured in topics, each section methodically deals with a subheading from the control package (Malmi & Brown 2008, p. 291, Figure 1), whereas the results from the questionnaires as well as inquiries during the interviews are used to provide an overall picture. The part about cybernetic control includes various control tools, while product costing, which was part of the questionnaire, is disregarded due to the fact that it is not applied by the participants of this study. In the particular sections, evaluations and perceptions of the authors that directly refer to statements of the participants are marked distinctively. Furthermore, some long sections close with a small paragraph that interprets the findings as a whole.

6.1. Administrative control

6.1.1. Organizational structure and procedures

Administrative controls are concerned with how a business is executed, which standards are applied, or according to which criteria samples are chosen. Within the scale of one (lowest) and seven (highest, see methodology section 5.2 and Appendix A), the participants were asked to evaluate whether their work is more routine-based or highly judgmental. Table 2 (Q1) shows this mean as well as the minimal and maximal scores that were identified in the questionnaires of the five recipients (P1-P5). As the mean score yields 5.4, the replying persons consider auditing and their own tasks to be unique and not standardized. The response was reliable, with answers between four and six, while P4 stated the lowest number. He mentioned during the interview, that some parts are mechanical, while others are more about verifying complicated facts. Moreover, sampling for example became much more formalized, while the profession has to find a balance between formalization along with structure and the necessity to leave space for judgments and adaptations to the situation. Therefore, it is concluded to be a mix of both, judgments and mechanical work, while it also depends highly on the client.

The last column of the Table 2 complements the answers of the former CEO for the sake of comparison. The supplementary participant stated only a score of four concerning this topic, what is surprising. Control is more easily exercised over standardized procedures, while the accomplishment of individual tasks cannot be checked without time consuming reports. In account of that, a very high employee within a firm who is mainly managing and not auditing

any more might develop a preference for structured guidelines, even for judgmental tasks in order to record as much as possible.

Table 2: Administrative control

Questions (Q1-Q2)	Min	Max	Mean (average P1-P5)	Former CEO
Q1. Do you consider your own work as standard-procedure-based or are professional judgments necessary? (standard procedures = 1 to highly judgmental = 7)	4	6	5.4	4
Q2. How has your individual independence as a professional developed in the recent years? (more dependent = 1 to more independent = 7)	4	6	5	5

Additionally to the questionnaire, the participants were asked about management control within their firms during the interviews and whether a specialized controller follows or prepares the budgets for the engagements. The findings were varying - P3 mentioned that a partner in the specific office is responsible for the controller tasks, while no particular position is created on an office level. Still, controlling would be performed centrally within the headquarters, what is based on the same procedures for all locations and facilities. The same was reported by one of his colleagues, who also named the responsibility of the head office for management control (P4).

On the contrary, the remaining interview participants mentioned another approach, which is more customized to the circumstances and the office location. P1 reported an independent controller, who takes care of the budgets, forecasts, and monthly reporting. Further, the person is not an auditor himself and is part of the national controller group, while he controls seven to eight offices in the Southern region of Sweden. Still, the team in Sweden in his entity consists of six or seven controllers. A regional controller who is in charge of the Southern region including Skåne was also named by P2. Hence, the implementation of a separate controlling department seems to be the case in most of the companies. This can be either handled through a location close to the concerned offices, or from the central headquarters.

6.1.2. Independence

As a second step, it was investigated whether the independence and self-regulation of the audit profession is maintained (Table 2, Q2). All auditors including the former CEO reported a score of five concerning this question, what shows that other audit stakeholders and

regulators did not capture the standard setting and rule introduction. Hence, the profession of audit can set a considerable part of the rules and procedures along with the firms, while specific or risky areas are externally defined in order to improve the quality of auditing.

In the adapted questionnaire for the CEO, it was asked whether there is a threat for deprofessionalization due to hierarchical structures and a loss of independence within a corporation. A four was stated, what represents a completely balanced answer. Hence, employment in an audit corporation can have implications, but it is not considered to be a threat for professional independence, wherefore administrative controls still work in a professional setting.

In connection to that, the participants of the interviews were also asked about the situations or procedures concerning auditor independence and how it has developed. All interviewees stated the importance and strengths of their companies' internal control system regarding independence. P1 mentioned an individual office, which checks the relationship between the professional and his clients, based on an independence report, which comprises explicitly four pages in this case. Accordingly, P3 stated that independence would be very high, also due to an "independence partner" (P3). The very structured system in the participant's company expects communication with the responsible partner along with the participation in further education and trainings regarding auditor independence.

Another participant named very strict rules concerning independence in Sweden (P2). The international standards of auditing would be less demanding than the local rules and in combination with internal control, independence would be secured. The threat of clients' influence on the auditors was also mentioned by P4, who considered it as relevant to engage in preceding steps in order to limit their force on a particular employee of the firm and mentioned the importance of an effective control system. All statements were supported by the opinion of the former CEO. Therefore, it can be concluded that the auditors within the sample are aware of the importance of internal processes to secure independence and that the introduction of a separate department seems important to them.

Not only the independence of the profession itself was inquired, the interviews also revealed information about the individual independence. Therefore, the participants were asked whether the maintained independence referred only to the profession in total or if single auditors were also included. The result was the same as for the previous question; all interviewees including the former CEO mentioned that independence for the profession as well as the individual is maintained. P2 for example elaborated that the fraudulent behavior

which caused public attention due to scandals might be a problem elsewhere, but not in Sweden. Thus, the internal control mechanisms to determine the relationship between auditor and client are perceived to be effective (P4).

Question 3 (Table 3) asked the participants about their corporate and professional goals. Regarding the corporation, satisfied clients and employees, meeting the demands of authorities as well as clients, or gaining trust were mentioned. This is extended by the goals of growth and profitability, stated by the former CEO. Based on this, it can be noted that the managers and senior auditors on an office level are more concerned with matters which are close to the actual business, while a CEO has to think in other terms and is focused on different, more macro-economic issues.

Table 3: Corporate and professional goals

Question (Q3)	Participants (P1-P5)	Former CEO
Q3. What are the goals of your		
a) Corporation	satisfied clients and employees, gain trust, meet the interested parties demands	growth, profitability
b) Profession	strong ethics and independence, further education	further risk assessment, usage of technology

On the other side, the professional aims are perceived to be the maintenance of strong ethics and independence, further education of the members, while the growth into other sectors was mentioned. Furthermore, the former CEO specified some more aspects which should be achieved by the profession. Higher quality and risk assessment along with a faster distribution of information to the market can be accomplished by using modern technologies. “Auditors should be more online” (former CEO); internal reporting, risk reviews, and reports therefore have to be produced faster. The improved processing of information regarding all aspects of auditing should allow to “predict the unpredictable” (former CEO).

The participants were also asked what could be done to settle the conflicts between the stakeholders of an audit company. Clients demand an unproblematic and cheap audit, while the profession wants to maintain quality and privileges for the members and the partners want to report profit. One participant neglected the existence of a conflict, while he pointed out, that the organizational structure has to focus on risks for the sake of all concerned groups (P1). Additionally, more value could be created when the internal system of the client is tested and not just simple valuations are performed. Two other auditors referred to quality standards in this context. “If you can’t have quality, you can’t have a profitable firm” (P2)

was mentioned, wherefore the quality of an audit is the most important aspect which should combine the interests of all stakeholders automatically. P4 shared his opinion that quality is the factor which is most important for the audit business and that not only profit has to be taken into account.

The former CEO stated regarding goal congruence, that the goals are automatically aligned and that a conflict does not exist. Auditing is a “business of selling trust” (former CEO) and if a company does not provide the quality clients expect and require for their financial statements, the market for information and audits would realize this. Hence, the companies along with their employed professionals do not engage in anything to harm the trust and quality standards, which are the basis for their work and the actual reason why the audit profession was created.

Finally, administrative controls should be aware of new challenges, why it was investigated whether the audit environment has changed during the recent years. The findings seem to differ – two participants stated that there were not many changes regarding the actual work, even though they approved the change from Swedish accounting standards to IFRS (P2, P4). However, the other interviewees mentioned that the business is either growing or that more administrative work due to more regulations or internal policies occurs (P1, P3, former CEO). Especially the increased need for documentation makes an efficient administrative system necessary (P3). Supplementary, the former CEO stated the importance of internal policies which have to be followed along with the increased importance of auditing for the clients.

6.2. Planning

First of all, in order to gain knowledge about the chosen strategy within audit companies and to provide an overall and comprehensible question, the participants were asked to state the general strategy of their firms (Table 4, Q4). All mentioned that they are not aiming at cost efficiency, but want to provide a unique and high-quality service. Indeed, it was expected that the participants would state that they focus on quality due to their professional education and the awareness of providing a highly valuable service to their clients.

Table 4: Strategy

Question (Q4) * = Question not incorporated in the adjusted questionnaire for the CEO	Participants (P1-P5)	Former CEO
Q4. What is the overall strategy of your company?	N = 5	
Unique and high quality audits	5	*
Low cost audits (compared to peers)	0	

In order to find out more about this general statement and to test their commitment for quality, the participants were asked during the interviews, whether profit or quality is ultimately more important in their personal view. The given answers varied considerably – P2 had the most convincing appearance for the initially stated quality. This participant considered quality as much more important for the audit business and his company. P3 reacted a little bit more balanced and mentioned that quality would be secured by the increasing regulation for accountants. Further, a more profit oriented approach was conceded by P1, who regards profit and quality as equal since auditing is done in “a professional service firm” (P1) with the obligation to report profit while the firm has to maintain its status as quality brand. An even more clear statement from P4 shows a stronger focus on profit in some firms: “You will always be evaluated on profit, but not always on quality”.

Figure 4: Quality quotes

“... is the most important thing for everyone working in this firm”

“If we don’t have a high quality in everything we do, we can’t make profit either”

“Everything else must come in second hand” “It’s important for me to live up to the quality”





“We are selling trust and quality” “If we can’t guarantee quality we can’t do the audit”

“Quality reducing is not an option” “You cannot put profit before quality in the long run”

“Even if a budget is tight, it shouldn’t influence the quality of work”

Therefore, a strong commitment for quality that is communicated to the public is observed and illustrated by some quotes of the participants (Figure 4), while this form of image management is needed to be noted as quality focused. Still, there is also a tendency to focus more on profit, what can represent a threat for the necessary quality. Hence, from this general point of view, the applied control tools are useful to sensitize the auditors for their professional obligations, while for some profit seems to be important too.

Additionally, the participants were asked to state their opinion whether their firms' strategy is more introspective and historical, or outward- and forward-looking (Table 5, Q5). The average of this answer was quite balanced with 4.8 but a small tendency to forward-looking. The former CEO reported an even more proactive oriented strategy approach with a six. This allows the interpretation, that there can be a gap between the expectation of the top-management and a lower office level regarding the strategy implementation and the use of control tools. Hence, a CEO who ultimately defines the strategy has to be aware of the fact that his subordinates understand or introduce new strategies differently than intended. Communication or more sophisticated control tools can be the key to avoid this problem and to achieve even higher goal congruence.

Table 5: Planning

Questions (Q5-Q8)	Min	Max	Mean (average P1-P5)	Former CEO
Q5. Which type of strategy do you perceive as more important? (historical/introspective = 1 to forward/outward looking = 7)	4	6	4.8	6
Q6. In which interval do you reconstruct long-term planning and the strategic focus?	3years	5years	ca. 3years	3years
Q7. As how important do you perceive strategic realignments? (not important = 1 to very important = 7)	4	5	4.3	7
Q8. Do you evaluate the company's performance in comparison to competitors / peers or is it mainly internally oriented? (internal performance = 1 to compared performance = 7)	4	5	4.4	6

To derive the frequency of strategic changes within the profession of auditing, the questionnaire asked about the interval of strategic adaptations within audit firms (Table 5, Q6). Most of the participants including the former CEO stated three years; one opened a time-frame with up to five years, while another made it up to the clients' needs and situation. For that, it is not necessary to reconstruct the strategy very often and a three year interval seems to be adequate. More modifications of strategy would only disorient the employees and further

adaptions of the chosen control tools can disintegrate each separate tool from the control package.

Not only the frequency of strategic realignments, but also the auditors' opinions about their importance were ascertained (Table 5, Q7). The result is also moderate with an average of 4.3 - with a big difference to the statement of the former CEO who reported a score of seven. Hence, normal managers are likely more commissioned with the actual audit tasks or meeting budgets and do not engage in strategy definition or reconsideration. However, restructures were at least perceived to be reasonable, while in case the result would have been unfavorable for changes, the company must be aware of missing goal congruence. If the chosen strategy is not supported by the office managers or senior auditors, control tools cannot work effectively and a combined control package is impossible to achieve.

Moreover, the question whether a company's performance is compared with historical results or externally with peers (Table, Q8) was balanced the same way as the previous question. All participants reported four or five, while the former CEO stated a six; a much more outward-looking performance comparison. This allows the comment that the higher the level, the more exterior oriented the company reacts and gets evaluated. Especially a CEO, who has "the big picture" (P3) is very much aware of external influences, which should be passed on to the lower-level managers. Still, the result seems acceptable, even though more could be done to increase the consciousness about peer and relative performance.

6.3. Cybernetic control

6.3.1. Budgeting

As it can generally be observed, budgeting is used by all participants of the study. Based on this, the general importance of budgeting was inquired (Table 6, Q9). The participants measured the importance of budgeting with 5.4 in average. Concerning the importance of budgeting, four of the five participants perceived budgeting as very important (5-7), while one respondent considered it as comparably less relevant with a score of three. The CEO evaluated the importance of budgeting with five, which approves the average score among the five participants. Consequentially, the authors perceive this as an indication for relatively importance of budgeting within the audit context.

Table 6: Budgeting

Questions (Q9 – Q16) * = Question not incorporated in the adjusted questionnaire for the CEO	Min	Max	Mean (average P1-P5)	Former CEO
Q9. Please measure the importance of budgeting within your company: (not important = 1 to very important = 7)	3	7	5.4	5
Q10. Do you participate in setting the budget of an audit engagement? (no participation = 1 to total participation = 7)	1	7	5.8	*
Q11. Please evaluate how tight (time) budgets are to achieve in your engagements: (not tight to achieve = 1 to very tight to achieve = 7)	4	6	5.2	6
Q12. In which extend do you perceive time pressure through tight budgets? (no time pressure = 1 to high time pressure = 7)	4	6	5	6
Q13. How many times could you achieve the preplanned time budgets without additional efforts / supplementary actions during your last 5 audit jobs?	2	4	3.25 times	*
Q14. If a time budget is not attainable, does budget flexibility to record additional time exceeding the planned parameters exist? (no flexibility = 1 to total flexibility = 7)	4	7	6.2	7
Q15. When pressure to meet the deadlines within fixed budgets arises, how do you achieve the target? (not used at all = 1 to always used = 7)				
(a) Work more intensively	2	6	4.6	5
(b) Reduce testing/samples	1	6	3	2
(c) Work overtime, i.e. under-report time	1	6	3.4	5
Q16. Which constrain is more important for your work – meeting deadlines (1) or fulfilling quality standards (7)?	4	7	5.4	7

Moreover, the recipients were asked about their participation in the budget setting. The overall result is a high average participation (Table 6, Q10), mostly stated as seven among the participants, while one respondent reported the score of one, thus no participation at all. In this regard, the interview helped to gain further insights into budget participation among our recipients. The interviewees were asked to describe the budgeting setting process in-depth, while they commonly reported that monetary budgets are used, which in fact are based on time within audit engagements. P1 reported a shifting focus towards time budgets in his company, stating that controlling the hours is most important. Therefore, when a time budget for engagements is set, the monetary calculation follows automatically through the equation of worked hours per employee, multiplied with the hourly rate of the corresponding auditor. In this regard, P3 complemented that an internal price list exists for each team member and that after choosing the team members for an engagement, the budget for the audit can be set by negotiating the hours with the client. When all hours are determined, it is finally known

how much will be expensed for the employed auditors and thus how much the audit will cost. Further, P3 made the distinction that for him personally the budget is predefined for jobs that are part of audits of multinational firms in other countries. Indeed, participation remains for smaller, national engagements. He declared that budgeting in this context is a management tool for the time bookings of an engagement. P2 generally confirmed the given explanations and added a dimension due to his former position as a partner, by experiencing a relatively independence in budget setting on a partner level. Because a partner has full responsibility towards clients and authorities, he is empowered to set his own targets and is “not locked up by what the firm says” (P2). He also concluded that partners are very independent concerning budgeting, while internal and external rules or standards have to be obeyed. No interview was accomplished with P5, why he could not have been asked for the reason of absolutely no participation in budget setting.

Question 11 evaluated the tightness of budgets with a score of 5.2, which is rather high. As no respondent reported less than four and more than six, all participants perceived audit budgets as relatively tight. However, the expression ‘tight’ can be subject of different definitions and represents a relative measure, wherefore the interviewees were asked to define the word ‘tight’ in the context of budgeting. P1 perceived a constant pressure from clients what leads to lower fees and offers no possibility to increase them in Sweden. P3 stated that tight budgets are the result of the negotiation within the office and can be loosened by extra charges, whether the client does not provide the necessary documents in time. P4 argued, based on his prior statements, that budgets are especially tight in the shared engagements of the firm with a client from another country. In this case the budget is fixed, cannot be exceeded, and therewith is tight to achieve. In accordance to this, P3 perceived them to be less tight on a local level, while international audits are more demanding and more constraints occur. In the same manner he evaluated budgets as tight for partners, since they are negotiated with more and more demanding clients. Thus, it can be interpreted that the high competition within today’s audit environment increases the tightness of budgets.

Due to tight budgets, time pressure emerges for auditors as the numbers for question 12 (Table 6) show. Consequentially, participants that evaluated time pressure by five or higher were asked in the personal interviews how they handle pressure which arises through tight budgets. P1 explained this issue with an example of a project, illustrated in Figure 5. If the factual budget exceeds the predetermined calculation, all additional times and therewith costs are “important to record on the project, regardless what the budget is” (P1). Thus, an “internal loss” (P1) is captured as soon as the project is finished off, which means that it is not charged

on the client in general. P3 similarly stated that “re-budgeting” can get necessary as a consequence of tight budgets. In the corresponding firm this is discussed internally with the office managers, while not affecting the client immediately. These statements of the interviewees are interpreted as an indication for legal mechanisms to react on time pressure on a managerial level. Besides that, it is an interesting indication that the CEO evaluates time pressure as even slightly higher than the practitioners.

Figure 5: Time pressure in a project (example)

Predetermined budget (<i>ex ante</i>):	100 h x 1,500 SEK = 150,000 SEK
Factual budget (<i>ex post</i>):	120 h x 1,500 SEK = 180,000 SEK
	- 30,000 SEK = Internal loss
With 1,500 SEK = pre-calculated/fix hourly rate, profit margin included	

Source: Illustrated by P1 during the interview, 5th of May 2012.

However, P4 was aware that time pressure through tight budgets “will not affect auditing in theory, but in practice of course it can”. Therefore and in order to capture other positive and negative effect of low budgets, all participants of the interview were asked how tight budgets influence their motivation. The overall responses were that they can encourage employees to work harder (P1, P3) and can be used a strategic tool to increase efficiency (P3, P4). In fact, it is recognized that it might be dangerous for quality, especially when younger auditors are concerned and receive too much pressure. Internal communication can be used to reduce the problems of too tight budgeting (P3). In contrast to all other auditors, P2 stated that he “does not care if a budget is tight”, since he exceeds it if necessary in order to “live up to the quality” (P2). However, he reflected that due to his former position as a partner some privileges remain for him. Nonetheless, he confirmed the statements of the other participants that problems occur due to too low budgets for the younger audit staff.

As a consequence to the presence of tight budgets, the participants were asked how many times they could meet the time budgets without additional efforts, i.e. supplementary actions, during their last five audit jobs. The participants were able to meet the predefined time budget approximately three out of five times (Table 6, Q13), whereas it has to be noted that P2 did not answer the question and was excluded from the mean calculus respectively. However, he was asked once again in the interview and countered that there have not always existed time

budgets within his last five audit engagements, which did not allow a comparable answer with the other recipients. In accordance to prior propositions he mentioned that for his company, time budgets only exist for engagements with bigger clients, whereas it is only used as a planning tool for smaller clients and engagements. In addition, the former CEO stated in an complemented query in his customized questionnaire that it is common to use tight time budgets in order to put pressure on the team to reduce costs (score seven). The authors interpret the findings above as an indication that audit top-management uses tight budgets and pressure as a strategic tool to influence the behavior of audit employees. The objective is to design audit work as effective as possible, which was referred to several times during the interviews. As the budget is a mechanism to do so, it is still considered as very important within auditing.

Question 14 (Table 6) covered, whether budget flexibility exists to record additional time when a predefined budget is not attainable. In compliance with the picture that was drawn by the recipients so far, budgets were perceived as very flexible. The average score is 6.2 and even reported at a maximum of seven by the former CEO. Due to that it can be concluded, that while pressure is communicated to be high, allowance to exceed predefined budgets is admitted. In fact, this answer was not expected, while more attention on the compliance with budget targets was anticipated. Indeed, a combination between high pressure and flexibility regarding budget targets is surprisingly observed.

In response to that, interviewees who evaluated this combination (P1, P3, former CEO), were asked why they perceive budgets to be tight when full flexibility to record additional time can be granted. P1 referred to the prior mentioned recording of an internal loss, while P3 conceded that pressure exists, but full flexibility is used either to reduce the risks within the litigious environment of auditing as well as to sensitize staff to be more efficient. In addition, the former CEO replied that “I asked myself that question several times also” but finally expressed that “time is not an obstacle”.

In order to capture dangers that can arise through tight budgets, question 15 (Table 6) aimed at inquiring behavioral responses of auditors whether deadlines are fixed. Therefore it was asked in which extent more intensive work, reduced testing and working overtime are applied. Work more intensively is of an average usage, and more likely used compared to reduced sampling and working overtime. As the average scores for these two actions are relatively low (3.4 and 3 respectively), a picture of low acceptance regarding quality threatening behavior among auditors is drawn. In contrast, more efficient working capabilities are communicated

as the main technique to react on deadline pressure. However and for the sake of completeness, it has to be stated that the answers among the three categories varied between one as the lowest answers and six as the highest responses. Connected to that, the authors are aware that responses to a question like this highly depend on the personality of the auditor. For all mentioned criteria, the possibility of opportunistic answering has to be taken into consideration. Therefore, the participants might not have answered this question honestly even though confidentiality was guaranteed within this research. The reason can be seen in the respondents' overall strong professional affiliation (as will be shown in section 6.5.), which can lead to aligned answers in order to protect the profession. The fact that the interview meetings took place in the companies' offices might have increased this shirking effect.

Overall, the former CEO stated similar answers regarding that matter. However, he measured working efficiently and overtime with an equal score of five. Therefore, he especially evaluates the possibility to not record worked hours as rather common and thus different from the average view of the participants. In contrast, he perceived reduced testing as almost not present among auditors (score of two). Further, an additional question for the former CEO captured as how dangerous he perceived the previously mentioned dysfunctional behavior for the quality of an audit. While the authors expected a rather high answer, the former CEO reported a score of three, thus below balance. An interpretation of this statement might again be the professional affiliation that makes him to purposely understate this threat. Consequentially, the former CEO was asked in the interview why he does not think that dysfunctional behavior can threaten the audit quality if auditors are supposed to work more intensively or overtime. In his view it is a normal situation in an audit firm to work overtime with the pressure to meet the deadline. As little information exist about the clients before one engages in the audit, more personal flexibility is necessary. Besides that, he concluded that reducing samples can even lead to better or more efficient audits in certain cases, as it allows the staff to concentrate on significant problems.

To further test the matter of quality within the context of budgeting, a final question captured the quality/deadline trade-off. The respondents measured more importance towards quality than meeting deadlines (Table 6, Q16). This result was supplemented by various statements among all participants during the interviews. In comparison, the former CEO perceived quality as ultimately important compared to the constraint of meeting deadlines.

Through the insights that the authors have received in the budget setting process and the picture that is drawn in the prior paragraphs, it becomes clear that budgeting is still an important control tool within audit firms. However, budgets seem not to be rigid in general and solely a fixed borderline in large, cross-national engagements of big audit firms. Especially for smaller engagements, the budget process is used as a planning tool. One interviewee accentuated that “budgeting is also used to stretch the audit work over the year” (P3). Therefore, budgeting is also used to structure audit work and employ the staff effectively. It is further expected that today’s high competition on the audit market as well as the picture that the participants perceive budgets to be tight, makes it more difficult for audit firms to provide the necessary quality. This underscores the expectations of low budgets for audit engagements. However, it can be perceived that budget pressure is relative moderate, even though it is stated as rather high in average. This is due to the possibility for audit managers to account for an internal loss as reported in the interviews. The high degree of participation on a middle managerial level is a further indication in that regard. Nonetheless, it has to be underlined that a budget system including internal losses to allow exceeding the budget can only be operative to a certain extent, since for the whole office and entity, a profit has to be generated over time.

6.3.2. Forecasting

As a second part about cybernetic control, the forecast procedures were investigated within the questionnaire. Question 17 (Table 7) asked the participants to state which form of forecasting is applied in their corporation, or if only budgeting without further adjustments is used. In the questionnaire, two out of five companies reported only the usage of an expense calculation for a complete year, while three stated that the budget is supplemented by a rolling forecast procedure. During the interviews, all denying participants were asked about forecasting again and it became apparent that four companies use forecasting additional to the budget, whereas only P4 neglected its usage. Further, he stated forecasting as applied in the opening question of the questionnaire (Appendix A), but only budgeting - the correct answer – for Q17. It was possible to clarify such mistakes during the interview, what increases the relevance of the chosen two-step approach once more.

Table 7: Forecasting

Questions (Q17-Q18)	via Questionnaire	Interview & Questionnaire
Q17. Which form of forecasting is applied?	N= 5	N= 5
Only budgeting	2	1
Budget and forecast to year end	0	0
Budget and rolling forecasts (for an entire year)	3	4
Q18. If forecasting is used, how frequent do you adjust it?	N=5	N= 5
monthly	1	1
quarterly	1	1
Individual	1	1
Not applicable / not answered	2	2

Overall, the results from this question show that forecasting is quite common among auditors on a managerial level. It seems that if the budget is updated with the latest information, it is done in a more sophisticated and complete way. Not only the remaining months of the fiscal period are considered, but the forecast always comprises a complete year. Hence, the rolling forecasts in the applying companies can be seen as a kind of ‘simpler budgets’ with the same time horizon. The fact that one of the firms does not use forecasts is likely caused by the less centralized structure concerning forecasting on an office level and the more independent use of this tool.

Supplementary, to gain more knowledge about the actual process, the participants who applied forecasting were asked about how it is accomplished. P1 mentioned that the forecast is always based on the budget of the current year, with reflection of the previous budgets and fiscal periods. In order to adapt the pre-calculation, the participant uses an invoice program to determine how much money has already been spent on particular audit engagements. Furthermore, he stated an example about the process: If already 100,000 SEK have been spent in December, while the total budget is calculated to be 150,000 SEK, he knows that he cannot complete the audit for the remaining 50,000 SEK, why a reserve has to be registered. Within his company, “project accounting” (P1) is applied and internal losses can be covered by a reserve which has to be written off. The fact that he is able to exceed the budget and to use an internal loss combined with the full flexibility regarding additional time records (Table 7, Q14), allows the interpretation that the forecast process is crucial in order to calculate losses while maintaining quality, even though a particular audit engagement does not yield any profit.

Another participant (P2) who did not report forecasting within the questionnaire described it as an individual planning tool and that there are no further obligatory budget adjustments. Moreover, P3 stated different answers regarding the usage of forecasting within the questionnaire, but during the interview it became apparent that forecasting is used individually. The participants' firm has very structured budget procedures, while the prognosis is "not that structured as the budget" (P3). Additionally, he mentioned that there is no formal need to provide a forecast for other higher hierarchical levels, while the adaptations of the budget have to be communicated with the office management or the responsible partner.

These findings show that forecasting is very much up to the person who prepares the budget and that a certain level of professional independence and personal responsibility is granted. During the interview, the way how the recipients described the individual forecasting showed that they appreciate this freedom not only to maintain professional quality standards, but also to act self-contained.

The following question regarding forecasting captured how frequently the budget is updated and forecasts are prepared. The findings are presented in Table 7 (Q18) while some facts have to be pointed out. P2, who did not state forecasting initially in the questionnaire, but mentioned it during the interview, had no formal or individual procedure how often he updates his personal prognosis. In addition to P4 who did not state the use forecasting at all, P5 did not answer the frequency of adaptations in the questionnaire, while no interview was accomplished. Hence, the sample comprises the answers quarterly, monthly, or completely individual. Therefore, the results of this question underlines the findings of question 17 – if forecasting is applied, it is rather sophisticated and updated often. If auditors decide to elaborate in budget adjustments, they consider it as a personal, but still important control tool.

6.3.3. Balanced scorecard

Additionally, the balanced scorecard has been investigated in the interview, while in the questionnaire it was only generally captured whether it is used. The participants who did not report the usage of this control tool were asked why it is not applied in their firms. Two of these auditors expressed that it is not a part of ordinary day-to-day business, even though they are on a managerial level. It was also their impression that balanced scorecards are mainly used for strategic conferences, or on a high managerial or international level, while it is not communicated to lower levels (P1, P3, P4). One also mentioned that they "don't call it balanced scorecard" (P3), because it would not be structured enough.

Supplementary, the contacted former CEO regarded a balanced scorecard as one tool among several and stated that he always used his own, individual scorecard for himself. Furthermore, the goal of transparency within auditing was mentioned and that it is relevant that every employee regardless of the hierarchical level knows which measures and rules are applied to derive individual performance. Taking this statement into account, the balanced scorecard cannot only be seen as a checking management tool, but also as a way to communicate expectations to the employees. In this regard, the senior managers have a different opinion than the top-management of a firm. Lower managers considered the balanced scorecard as difficult to communicate demands and strategy to their subordinates, while the former CEO wanted to use it at all levels for transparency reasons. Hence, it can be concluded that the combination of different dimensions and perspectives remains a broad or executive office tool, which is challenging to implement on rank and file levels. Therefore, due to the mentioned lack of understanding a balanced scorecard on an audit performing level, it can be interpreted to be difficult and might merely consume too much time of the concerned.

Furthermore, it was also investigated if a balanced scorecard will be introduced in the near future. P1 stated “mixed feelings” about it while it could be useful “if it is good used in the right way” to identify strengths and weaknesses, what is done by higher organizational members. The reaction of another senior auditor was that there will be no further implementation, because they already have an elementary scorecard, which however will remain on the top of the organization (P3). Moreover, P4 was very clear and straight forward concerning this question and mentioned its usefulness for a partner or the big office level instantly. On the contrary P2, who reported a scorecard as applied within his office, was asked as how important it is considered. He stated that there was a focus concerning scorecards on every level ten to 15 years ago, while he considered it as time consuming on a normal auditor or managerial level. However, he conceded that the top-management might use it for strategic considerations.

As an overall interpretation of the given answers and behavioral reactions, a balanced scorecard is only perceived to be useful for strategic considerations on a high hierarchical position, but not for ordinary rank and file professionals.

6.3.4. Performance evaluation

The following section is about performance evaluation in audit firms. As a starting question, the participants were asked to whom they have to report, while all answers defined the partner

as the corresponding person (Table 8, Q19). Indeed, P2 did not answer this question and was further asked in the interview. He expressed that normally a strict reporting system exists in his firm, while he does not need to report due to a health problem, which forced him to step back from his former partner position. In general, it can be concluded by the observation of reporting directly to the partner that the performance evaluation hierarchy is flattening in big audit companies. Due to the internal hierarchy and the quality reviewing system in audit firms, employees normally should report to the next higher rank, i.e. the immediate supervisor. Indeed, this means that (excluding P2 due to the mentioned reasons), P4 and P5 as senior auditors are accountable to the corresponding senior manager of the firm. As they in reality report to a partner of the firm, this can be perceived as merging reporting hierarchies.

Table 8: Performance evaluation structures

Questions (Q19- Q21)	Questionnaire	Interview
Q19. To whom do you report?	N = 4	
Senior auditor	0	-
Manager	0	-
Partner	4	-
Q20. How is your personal performance evaluated?	N = 5	N = 5
Direct face-to-face reporting, discussion with the supervisor	1	0
Written quality review documents	1	0
Both	3	5
Q21. How is your personal performance evaluated?	N = 5	
Half-yearly	1	-
Yearly	3	-
All three years	1	-

Besides that, it is essential to find out whether financial performance, based on meeting budgets and financial ratios, or non-financial performance evaluations as deadlines, quality reports, and client statements are more important. The mean score yields five for financial and six for non-financial (Table 9, Q22) and it has to be mentioned that no response among both questions resulted in a lower score than four. As this shows both dimensions are of considerable importance, whereas non-financial evaluations seem to be slightly more important due to the participants. The former CEO even evaluated both dimensions with a maximum importance of seven. In order to make a clear distinction between the measurements, the interviewees were asked in person which dimension they perceive as more important. P1 and P4 stated that the importance depends on the hierarchical level. That

means, the higher the level within the firm the more important the financial outcome. Thus, performance evaluation on the partner level is the most financial based, while the evaluation of juniors and associate managers more rests upon technical abilities, communication with the client, and behavioral attitudes. Due to his former position, P2 confirmed that financial performance evaluation on a partner level is mainly based on the “amount of kronor” as well as on “raw statistics” (P2), while quality and internal performance issues are considered as well. Overall, P3 supplemented that both dimensions, financial- and non-financial, are very much evaluated within audit firms.

Furthermore, the recipients were asked how their personal performance is evaluated. The picture drawn by the questionnaires is that performance evaluation is for most, but not all participants (Table 8, Q20) conducted by both direct face-to-face reporting, i.e. discussions with the supervisor, as well as written quality review documents. However, the interviews demonstrated a slightly different picture. Both participants that stated only one of the two processes as accomplished for their evaluation, admitted or incidentally mentioned the other process as applied during the personal conversations (P2, P4). Consequentially, it can be summarized that the performance evaluation of all participants is accomplished by both mechanisms, which is supplemented by the view of the former CEO who evaluated both dimensions as exercised in audit firms. He elaborated during the interview that performance evaluation today is more a formal process while it was a relatively loose, informal procedure 15 or 20 years ago. Therefore, it can be perceived that performance evaluation as a multifarious procedure, which contains formal as well as informal dimensions, but is mainly structured and formalized nowadays.

In order to gain more detailed knowledge, the interviewees were asked how the process of their personal performance evaluation is accomplished. Among all four interviewees it was expressed, that a global and integrated online evaluation system exists within the firms. P3 analyzed this as a “structured evaluation of each employee”, while the process is represented by an anonym downward- and upward-feedback, supplemented by meetings that take place twice a year. While an upward-feedback system in which “people have to evaluate their bosses” (former CEO) represents an interesting feature and its use is confirmed (P1), statistics are the main component within online evaluation (P2). Further, P3 emphasized that even a quality evaluation system exists within his particular entity. Consequentially, it was observed that the online evaluation system is a very formalized part of the performance measurement in big audit firms. It demonstrates the tool that is used for the creation of the written evaluation reports described above.

Table 9: Financial and non-financial performance evaluation

Question (Q22)	Min	Max	Mean (average P1-P5)	Former CEO
Q22. As how important do you consider... (unimportant = 1 to very important = 7)				
(a) Financial evaluation (meeting budgets, financial ratios)	4	6	5	7
(b) Non-financial evaluation (meeting deadlines, quality report, client statements)	5	7	6	7

In a further extent, it is relevant to find out the typical interval of performance evaluation in big audit firms. The answers of the participants imply that yearly performance evaluations are the most common, while each recipient reported performance evaluation being conducted twice a year (P3) or all three years (P2, Table 8, Q21). However, the latter case appeared to be a surprisingly long interval but could be explained via the health problem and the former partner position of the participant, which still enable special performance evaluation procedures that are applied to him. In fact, we trust that goal congruence within the firm is already approved due to the 35 years of employment and the long interval between his personal performance evaluations appears to be adequate under the mentioned circumstances. Thus, it could be observed that performance evaluations are in most instances carried out in a standard yearly period. In contrast to the statements of auditors from the middle management level, the former CEO stated that performance evaluation was accomplished on a quarterly basis within his former audit firm. He was confronted with the answers of the auditors who described yearly performance evaluation as usual but countered that it should be done quarterly. It was reasoned that if something is not working good, “it offers the possibility to talk to the personnel” (former CEO) in shorter intervals. Due to him, it is therefore important to accomplish it on a regular basis since otherwise there do not exist any possibilities for change.

In Question 23 (Table 10), the participants were asked to rank the six given criteria according to their importance. As P1 has not answered the question, the average of the particular scores of the four answering auditors was taken. This results in the highest rank for quality as a foundation for evaluation. Only one auditor considered it as less important with a score of three (P4), while all others allocated the maximum points of six. Supplementary, the same score was given by the former CEO. Further, meeting deadlines, capabilities to communicate and technical abilities are relative important due to the results. However, to meet the budget is least important regarding the performance evaluation of audit employees, which is affirmed

by the former CEO. Overall, this picture fits to the findings in the budgeting section. Flexibility to exceed the budgets was widely reported, at least for small engagements and clients. Moreover, the importance of the quality aspect was permanently stressed by all respondents during the interviews (see Figure 4 in section 6.2.).

Table 10: Criteria of performance evaluation

Question (Q23)	Questionnaire (average)	Former CEO
Q23. Please rank which criteria you think are the most important for your evaluation? (least relevant = 1 to most relevant = 6)	N = 4	
Quality of the work	5.25	6
Meet deadlines	4.5	2
Ability to communicate & relationships with team members &	3.25	5
Technical ability	3.25	3
Effort put into the job	2.5	4
Meet budget targets	2.25	1

Nonetheless, the interviewees were asked face-to-face, which criterion they perceive as the most important for their personal evaluation. In contrast to the general answers but in line with his answer in question 23 (Table 10), P4 reported that besides the acquisition of new clients, financial issues and budget targets are relatively important. Indeed, this can be explained by the high amount of multinational engagements this participant is faced to. P2 evaluated selling and enlarging the products and services as the main basis for his personal performance evaluation and therefore showed a new dimension which was not incorporated in the questionnaire. In compliance with that, P3 stated growing the business as major part in his personal performance evaluation. In addition, P1 and P3 elaborated much on the interaction with people, communication capabilities, the involvement in the clients' and internal firm relations, as well as so called "engagement management" (P3). In contrast, technical abilities appear to be pre-required and expected conditions as "they go without saying" (P1). Indeed, together with the mentioned soft skills, they assist to gain industry experience and special knowledge (P1). In fact, this can be seen as a signal of knowledge creation in PSF, as P1 mapped out the transfer of knowledge from a special client in an industry to the firms' level, which opens the possibility to gain a comparative advantage and extend audits to other clients of this branch. Supplementary, asked about which criteria are the most important for performance evaluation of auditors, the CEO referred to equally importance of a couple of

criteria, namely the quality of the work, handling of personnel, client structure and profit generated with the client.

6.4. Reward and compensation

An additional question in this section was included in the questionnaire which was sent to the former CEO and inquired whether rewards are highly relevant to ensure high audit quality, again measured on a scale from one to seven. The highest number seven was reported, which shows that the top-management is aware of the importance of compensations to secure the audit quality.

Table 11: Criteria and form of rewards

Questions (Q24, Q25), frequency of occurrence	via Questionnaire	via Quest. & Interview	Former CEO
Q24. What criteria are the basis for your compensation and rewards? (multiple answers were possible)			
Profit	3	3	x
Acquisition of new clients/personnel	2	3	x
High audit quality	2	2	x
Client satisfaction	2	3	
Meeting deadlines, time budgets	2	3	
Efficiency, reducing audit costs	1	2	
Q25. Which form of compensation and rewards is applied in your company? (multiple answers were possible)			
Monetary, financial rewards/bonuses	4	4	
Prestige, personal honors, influence	3	3	
Career development	5	5	x
More interesting, demanding jobs	2	2	x
Others (personal satisfaction)	1	1	

Further, within the ordinary questionnaire, the participants were asked to mark which criteria are used as a basis for their personal rewards and compensation (Table 11, Q24). In order to check the results of the e-mailed answers, the interviewees were asked about it once more during the personal meeting. This revealed that more dimensions are used for some auditors. P3 for example, reported only profit in the initial response, which was “perhaps too quick” (P3), while it was admitted that more measures are applied. Again the interview as an additional step helped to discover this issue.

Profit was stated the most important, even though it was only mentioned by three of the participants. The other dimensions depend on the firm and hierarchical level, while no consistency could have been determined. P5 reported only the acquisition of rewards, while

another senior auditor named additional criteria (P3). On the contrary, the former partner (P2) was only rewarded for acquisitions as well, such as one of the senior auditors.

Moreover, even though most of the participants focused on quality and mentioned it repetitively often during the interview, acquisitions as a basis for rewards were more often ticked. The behavior to talk about quality, even though profit is more important can be seen as image management and the protection of professional values, which are practically less important. It can even be concluded that rewards push auditors to accept risks. If acquisition, client satisfaction, and profit are more important than quality to achieve rewards, an incentive is provided to accept risky clients, even though the necessary quality cannot be guaranteed; QTBS can be the result. Therefore, risk management has to be more detailed and should be more significant when it comes to rewards. This assumption can be underpinned by the compensation in the company of P2. For particular employees in the firm it is possible to receive 10% of the final fee for two years, if a new client who is acquired by this employee signs a contract. The former CEO also stated acquisition of new clients or personnel, customer satisfaction, and high quality audits, what was expected due to his long representational position. Due to him, it is not recommended to focus on profit if a good image of an organization should be created or maintained.

In order to gain more knowledge about the rewards in audit firms in general, the participants were asked to state which forms of rewards were granted (Table 11, Q25). Career development and monetary rewards were crossed by the most participants, while intrinsic satisfaction or more demanding jobs were not considered to be very relevant. This underlines the assumption of the previous question, that financial success both personally and of the company is more important than professional values or the supply of highly appreciated services. For instance, the former CEO stated that career development and more interesting jobs are used within audit firms, what shows the awareness of top-management for intrinsic motivation, even though it is not permeated to lower levels - noticeable by the questionnaire and interview results.

Another interesting question about the relation between short- and long-term rewards was tested (Table 12, Q26). The average stated response was 4.4, a balanced result with a minor tendency for long-term compensation. Four auditors indicated a complete balance, while only one perceived long-term rewards as more relevant. On account of these numbers, it is obvious that the audit firms on an office level use a balanced ratio between long- and short-term rewards to secure goal alignment. This was supplemented by the former CEO, with a much

more proactive and forward looking answer. Hence, the top-managements' desire to focus on long-term compensation becomes visible, which is not implemented on lower levels. Normal managers might not have such a long time-horizon as a CEO and thus still some more short-term incentives are offered.

Table 12: Importance of rewards

Question (Q26)	Min	Max	Mean (average P1-P5)	Former CEO
Q26. Which rewards are more important / stressed in your company? (short-term = 1 to long-term = 7)	4	6	4.4	6

Additionally, Question 27 (Table 13) investigated the use of bonuses to provide the necessary incentives. Four participants stated a yearly distribution, while one named a continuous payout. However, the former CEO had a very contrary opinion stating that bonuses are never distributed. Nonetheless, monetary rewards seem to be applied in audit firms (Table 11, Q25), for example for the acquisition of new clients (P2, P3, P5), what was investigated more closely during the interviews.

Table 13: Frequency of rewards

Question (Q27), frequency of occurrence	Questionnaire	Former CEO
27. Regarding financial rewards, how frequently do you receive bonuses?	N=5	
Yearly	4	
Continuously	1	never

All auditors were asked whether they perceive their personal rewards as appropriate. P2 and P3 answered in affirmative instantly, due to the former position of a partner (P2) and the affection for each single step and promotion during a career in an audit firm (P3). However, P1 answered that he is satisfied, but also due to his age and settled personality, while the younger P4 did not seem to be pleased and hoped for more long-term success and compensation in auditing. Supplementary, the former CEO elaborated more about his statement that auditors never get a bonus. During his time as the highest responsible in one of the big4 firms, bonuses were not used at all. "I do not think profit rewards are good" (former CEO), because they would not drive the company in the right direction. To get higher within the organization and to get recognized by colleagues within the firm should be the most relevant criteria as an incentive to be an auditor and to engage in long-term thinking.

Furthermore, all interviewees were asked, whether rewards are withheld when the budget could not be met. Each recipient replied that it depends on the situation and the premium is still granted, “if I can explain” (P3) the failure and make rational statements why it was necessary to exceed the budget. This is completely reasonable, because the audit firms have to maintain their quality standards and due to the fact that they can check their employees not only via the budget, but can make use of their sophisticated management control system.

Beyond that, it is inevitable to note that all participants answered the questions very quickly and did not seem to think about replies which would support their companies or the audit profession as a whole. This reflects another positive aspect of the study itself and the validity of the gained information.

6.5. Cultural control

6.5.1. Professional affiliation

The cultural aspects within the control package to increase the efficiency of an audit firm are various, but first of all, the individual affiliation with the profession was examined (Table 14, Q28). The average of six shows how strong the consent between individual and profession is perceived. Hence, the auditors of the sample are very much in line with standards, ethics, and values of accounting. A company can rely on external clan control as a second authority which disciplines and motivates the employees to share the professional and corporate goals. Additionally, the former CEO stated a seven, the highest possible number. Thus, both the middle-level managers as well as the top-management are aware of clan control.

Table 14: Professional affiliation

Questions (Q28-Q29)	Min	Max	Mean (average P1-P5)	Former CEO
28. Please measure your individual affiliation with the auditing profession? (weak =1 to strong = 7)	5	7	6	7
29. Which organization has a higher influence on your ethics and foundation of work? (corporation = 1 to profession =7)	4	6	5	4

In order to gain more insight into the importance of professional affiliation and to derive possible implications for management control in audit firms, the participants of the interviews were asked again, as how important they appraise their professional membership. P1 answered enthusiastically and explained the very strong culture within his office. Social

events are organized for the employees, which strengthen the emotional affiliation with their job and company. His firm wants the people to “feel strong and proud” (P1) about the services they provide what makes the affiliation towards the company stronger than to the profession. As a result, not a single person left the firm during the last one and a half years and the typically high staff turnover in audit firms does not appear. Moreover, the other auditors also reported very high affiliation with their profession, while especially the quality standards and values were pointed out (P2, P3, P4). It is their opinion that the applied rules of the audit association can effectively align goals and reduce QTB, what finally increases the efficiency of an accounting firm.

Another issue inquired in the questionnaire was, which organization has the stronger impact and influence on the respondent, either the company or the profession (Table 14, Q29). The answers ranged from four to six and yielded an average of five; slightly more towards the profession. The former CEO reported also a balanced ratio of four. Hence, all companies are aware of professional influence on the work of individuals, newly introduced standards, or changes in general.

6.5.2. Social control

The participants in the questionnaire were asked about the importance of some social controls (Table 15, Q30). As the mean scores show, all of the mentioned factors are of relative importance in the audit profession. The highest score was reached by face-to-face-communication which seems to be an important part of the daily business and networking. Further recruiting, training, and mentoring as well as auditor intuition were evaluated with average scores above five, thus with coherent importance. For all three dimensions (Q30, (a), (b), (d)) the interval of reported minimum and maximum scores is stable and reflects a good median. In contrast, one participant reported a low importance for codes of behaviors and image management in the audit profession which has led to a lower score compared to the other factors, but still with relative importance. Except auditor intuition, the CEO even distributed higher and maximum scores for the mentioned factors. The authors interpret this as a sign of his even higher awareness concerning the importance of social controls than the participants of this study, who also exercise managerial functions but are much more integrated in the operative level.

Table 15: Social control

Questions (Q30-Q31)	Min	Max	Mean (average P1-P5)	Former CEO
Q30. How do you evaluate the following parts of social control according to their importance? (unimportant = 1 to very important = 7)				
(a) Auditor intuition	5	6	5.25	4
(b) Recruiting / training / mentoring	4	6	5.4	7
(c) Image management / code of behavior	2	6	4.8	7
(d) Face-to-face-communication / networking	5	7	5.8	7
Q31. How useful do you perceive the business communication during unscheduled face-to-face meetings, social encounters such as coffee and lunch breaks? (not useful = 1 to very useful = 7)	4	6	5.4	7

Some questions of this work already dealt with the effect of face-to-face-communication and have shown their influence in various processes, e.g. in performance evaluation. Nonetheless, Q31 provides insights into the further dimension of social control. The participants were asked as how useful they perceive the business communication during unscheduled face-to-face meetings and social encounters such as coffee or lunch breaks. Here, the median score of 5.6 (Table 15, Q31) reflects the high importance of unscheduled face-to-face-communication and is once more supplemented by the measurement of the former CEO.

6.5.3. Mentoring

Further, the mentoring process in audit firms was subject to several questions within the questionnaire and the interviews. As a first step, the participants were asked whether they are a mentor of a subordinate or a protégé of a mentor within their organization. All participants specified to be a mentor, while two declared to be a protégé at the same time (Table 16, Q32). As these are P1 (director) and P3 (manager), it can be extracted that the feature of counseling as subordinates is important on these hierarchical levels. On a higher managerial level, auditors are mentored to get both, support for their responsibilities and preparation for their future position as partners. The fact that all recipients are in charge of a mentor position clarifies the importance of mentoring in big audit firms in general and involves the awareness that junior auditors have to be introduced to professional values and are prepared for the work-life by support and advice from more experienced colleagues.

Table 16: Mentoring structures

Question (Q32-Q33) * = Question not incorporated in the adjusted questionnaire for the CEO	Questionnaire	Former CEO
Q32. In your particular organization: Are you... Mentor of a subordinate Protégé of a mentor	5 2	*
Q33. How do you communicate with your mentor / protégé? Direct face-to-face reporting, discussion with the supervisor Written quality review documents Both	1 1 3	x

The communication of mentoring takes place at different levels. While two auditors of the sample solely communicate via direct face-to-face or written letters of recommendation, three participants as well as the former CEO reported both channels as the combining method for mentoring (Table 16, Q33). This can be seen as a sign that both channels are simultaneously used to control, monitor and supervise the subordinates within mentoring in the big audit firms.

To gain further insides about the mentoring process in general, the interviewees were asked to describe the relation with their mentors and protégés. P2 who solely reported direct face-to-face discussions as the foundation of mentoring, described it as “definitely very informal” and further elaborates that “there is no real mentoring process” (P2) in his company. Indeed, he conceded that all employees of a higher level take responsibility for a few of younger persons. These protégées do not direct their questions immediately to partners or managers, but are instructed to the senior of the next hierarchical level. In contrast, P4 described mentoring as much more formalized, with meetings that take place twice a year and an electronical tool that ensures the evaluating of mentees in databases.

Particular interesting are the demonstrations of P1 and P3 who both state a movement away from the word mentor in their organizations. P1 refers to coaching as a “softer word”. Long-term plans are discussed with the corresponding coaches in meetings that occur three times a year. Web-based performance evaluations are made by the heads of the particular engagements which end up in general conclusions by the coach, who further set new goals for the protégé. The degree of interaction is mainly up to the person who is getting coached in the regard of an open relationship where the subordinates should “feel free and comfortable to talk about everything” with the coach. Similarly, P3 referred to a counseling program in his firm. This means that everybody is dedicated to a more senior person who is in charge of

maximal four counselees at the same time. The whole process was described as “very structured” (P3), with meetings which are based on the evaluations and are followed by a discussion about the coming steps. P1, P3 and P4 described that in addition to these formalized processes “informal parts” (P4) occur, because “open-door relationships” (P1) exist and include the possibility to talk to everyone anytime.

Table 17: Mentoring adaptations

Question (Q34)	Min	Max	Mean (average P1-P5)	Former CEO
Q34. Do you perceive that you have adapted shared values/language through mentoring processes?	4	6	4.8	6

One question was particularly designed to measure the usefulness of mentoring. The participants were asked whether they have adapted shared values or a shared language through the mentoring process. While score one represents low and score seven strong adaption, the mean score yields 4.8 (Table 17, Q34), i.e. just modest over average. Even though the former CEO reported a higher score, we perceive the mean as a moderate and not significantly important sign for mentoring as a cultural dimension. Therefore the interviewees were inquired a more general question, namely whether they perceive the mentoring process as well as the common habits that go along with it as useful. The overall answers imply that mentoring is perceived as important. While some respondents concentrated on the overall meaning by expressing the importance as a “key ground for compensation” (P3) and by helping junior staff in their starting years (P4), others more responded to the implications in form of shared values. One answer evaluated the clothing code as normally important but less formal than in the late 1990s (P1). Thus, it depends highly on the client and situation (e.g. in industrial audits a suit is not common) whereas the mentoring process can help to sensitize junior auditors for these situations. Another answered more referred to the progressing of mentees within internal communication that helps to convey the quality standards and professional values, knowledge creation as well as to sensitize beginners for quality. The former CEO underscores this intention through mentoring, as it supports staff not to concentrate on bonuses, but to create commitment to quality.

Finally, the questionnaire contained the inquiry whether mechanisms have been put in place to replace the mentoring process in big audit firms (Table 18, Q35). Among the participants only one reported career advisors as well as training seminars as forms of substitutes for mentoring, while the other four respondents reported that such mechanisms are not applicable in their firms.

Table 18: Replacing structures for mentoring

Question (Q35) * = Question not incorporated in the adjusted questionnaire for the CEO	Questionnaire	Former CEO
Q35. Are there mechanisms that have replaced the mentoring process in the last 5 years?		
Career advisors	-	*
Training seminars	-	
Both	1	
Not applicable	4	

As an overall interpretation of the findings in this section, mentoring is still important in the big audit firms even though some companies try to replace the terminology. Rather, the process has become much more formalized in the recent years, but still emerges as a mix of formal and informal mechanisms. Furthermore, it can depend on the willingness of the junior employees to accept professional values conveyed through mentoring, coaching, or counseling on how strong the adaption of clan affiliation and professional values within an audit firm emerges.

6.5.4. Recruiting

In response to the high importance of recruiting that was reported via the questionnaires, the interviews were used for additional insights. The interviewees were asked if special programs exist in their firms in order to hire new employees. P1 as the director of his office, referred to his responsibility in this process and emphasized once more that while technical skills are pre-expected, social skills and teamwork capabilities are key features in the recruiting. The process is described by him as a “three-step-mechanism” (P1). In order to find the right people that fit in the team, candidates first meet the junior manager and the human resource (HR) responsible in a second step. This stage includes:

1. Personality tests
2. Analytical tests
3. Verbal tests

Successfully completing all these steps means to meet the director in the final step for an interview. While the position of P1 was helpful to gain insights in the process at least in one particular firm, other interviewees added further dimensions. On the one hand, an emphasize was directed towards hiring of people with the right personality (P3), while even bonus systems exist for every employee to find experienced people, independent from the hierarchical level within the firm. However, this only involves potential employees from other firms or departments, but not university graduates (P2). In fact, P4 admits that special recruiting mechanisms exist in his firm, while he “don’t work with it”. Particular insights were gained from the former CEO, wherefore the aspect of recruiting was stressed in the interview questions with him. He confirmed the characteristics which are emphasized in recruiting new audit personnel with “social skills and competences” (former CEO), while he at the same time admits that there are no control mechanisms to hinder high staff turnover in audit firms except providing better training and personal development. Moreover, he disclosed that a high effort was put in hiring during his time as the CEO, because it constitutes a “key factor in a professional service firms’ business”. Furthermore he stressed the strategic importance in the near future, as the demographical alteration has to be taken into account. Due to the decreasing population in Europe, less people will be available to hire and competition to attract the best people will be higher. As, due to him, other countries like the UK already have troubles to fill their new recruiting, problems can arise from a Swedish perspective, as audit firms may try to entice good educated people. In regard of this international competition for audit employees, he referred to cases in which good educated people were transferred directly from Skåne or Sweden to big offices in Frankfurt, Zürich, Paris, or the UK.

An additional question captured whether the big audit firms have special events and programs at universities to attract good young students. It was clarified that the big audit firms spend a lot of time and money in the top-universities. As new graduates are seen as the primary source of new employees, the big audit firms engage to be well known at the universities to attract future employees, while they are aware of the high competition for graduates and engage a lot of time and money in order to get the best students (P1, P3). In another firm, a relation to a number of top-universities (five or six in Sweden) exists, which is shaped by career fairs, events, and sponsorships (P2). From another recipient it was confirmed that case studies,

partly organized from the regional office and the national headquarters, are used to identify talented student (P4). Besides that, the idea to induce a positive image of the audit firm among students that will engage in other companies that reflect possible future clients of audit firms (P1) was particularly interesting.

P3 reported from his personal experience, that the number of events in the universities increased a lot during the last ten years. He reflected that “when I was studying in Lund, it was like once a year you could see the real world” (P3), while events and courses now are facilitated every single week. The intention lays in a strong interaction with the students. P3 further elaborated that his firm follows an accounting program which graduates in 2013 (“class 2013”) through their whole study time, from the commencements to the end. The main arguments he evaluated were to understand how the university works, how the students and future employees’ personality evolves, and which courses they have read in order to generally adjust the process of recruiting in universities. Furthermore, the former CEO stated in regard to the mentioned demographical alteration that the audit firms that have the best connections with the university and best relations to students will find it the easiest to hire new people. Thus, he evaluated an audit firm to be very near to the university as a “key factor for success” (former CEO) and competitive advantage.

7. Discussion and analysis of the control package

7.1. Detailed analysis of the framework

As the prior chapter provided detailed insights within the gathered information, the subsequent section serves to analyze the implications for the management control package in audit firms. The dimensions of the package are highlighted from a broader perspective and are compared with results from prior literature.

7.1.1. Administrative control

Within the theoretical framework provided by Malmi and Brown (2008, p. 291, Figure 1), administrative control is the basis for all other perspectives and therefore is discussed at first. According to the participants of the study, reporting and formal control is very important and structured within their companies (Table 2, Q1-Q3, interviews). Even though the auditors defined their own work as highly judgmental, the former CEO perceived it still as balanced between standardized procedures and professional judgments (Table 2, Q1). These standards of auditing have to be defined and controlled by the administrative system in the companies. Therefore, entities can have various people concerned with managerial accounting tasks. Controllers without an audit background can exercise control over professionals, or a superior partner can keep track of the numbers and work of the office managers. Hence, it can be concluded that routine supervision is still very important in the big audit firms in Southern Sweden. But not only hierarchies are affected by the administrative controls, they also form a connection to cybernetic controls within the chosen framework. The mentioned controller does not only compare budgets to actual outcome, but communicates deadlines and expectations indirectly.

Additionally, not only a regional or centralized controller is concerned, but independence partners or consultants are connected to the relationship between auditors and their clients. Not only the formal budgets or standards are controlled, but also the professional values, why this category within the framework is also affected and controlled by the administrative system.

The literature stated, that formal control will be opposed by professionals and that a conflict can appear if independence is threatened by corporate obligations or monitoring by non-professionals (Abernethy & Stoelwinder 1995, p. 12, Figure 1; Otley & Pierce 1996, p. 80). This is not the case for the participants of this study – even though all auditors occupy a managerial position on an office level, they seem to be in favor of the administrative and

formalized procedure. Especially the reactions of the interviewees allow the statement that they embrace the formal, structured, and routinized work. However, this might be connected to the special audit environment that has to respond to scandals and increased distrust in their profession (Reinstein & McMillan 2004, p. 956; Unerman & O'Dwyer 2004, p. 977). Thus, for PSFs in general different results can emerge.

In addition to the acceptance of administrative controls, some parts of auditors' tasks such as forecasting are more an individual planning tool, while no tight control seemed to be exercised, what can reduce the theoretical conflict which can appear. On the contrary to the problems which may arise due to obligations and rigid procedures, some theorists state that structured processes within auditing can increase job satisfaction or the efficient operation of audits. Unnecessary tasks during an audit can be removed or relocated into other procedures, why routines can also improve professional work (Manson et al. 2001, p. 110). The former CEO stated the importance of technology and that auditors should use fast communication systems in order to be connected among each other, with supervisors, clients, or the market. The other participants also seem to be in favor of integrated controlling and reporting, wherefore the administrative system within the approached firms is structured and makes heavy use of information technologies, which is not opposed by the professionals. Along with previous research, this study reveals that the auditors are not afraid of deprofessionalization due to the introduction of sophisticated computer systems, but that they act in favor of simultaneous control and monitoring (Freidson 1984, pp. 6-8; Manson et al. 2001, pp. 118, 120).

Additionally, the participants mentioned the changing procedures regarding documentation, which increased in recent time. At first, other researchers reported a decreased need for documentation just a few years ago, while they restated their observations into a higher level of reporting and data storage in the meanwhile (Pierce & Sweeney 2005, p. 350; Sweeney & Pierce 2011, p. 345). Hence, this study can confirm the recent research result of a higher demand for documentation.

Additionally, professionals are under a constant threat of losing independence, what has implications on the administrative self-control of the profession and also of the audit firms. Pierce and Sweeney (2006) stated a reduced likelihood for professional self-regulation, what cannot be confirmed due to the participants' opinions and statements (Pierce & Sweeney 2006, p. 33). This would not only affect the general administration of an audit firm, but also the values of the profession in the long run (Freidson 1984, pp. 4-8).

7.1.2. Planning

Audits as yearly reoccurring tasks can be easily planned by using the information and data of previous engagements. The participants perceived the planning process to be only slightly outward-looking, even though previous literature recommended a more proactive approach almost 20 years ago (Wilson 1995; Lord 2007, pp. 135, 137, Table 7.1.). Accordingly, strategic realignments and external comparisons are also mainly perceived to be of average importance. Hence, the planning process in the participating firms has not yet achieved its full potential. However, the former CEO reported a more outward-and forward-looking approach concerning planning. Therefore, it can be concluded that the top-management is aware of the possibilities improved planning can have.

Within this study and in line with theory, budgets were perceived to be the main source for the audit planning process (Sweeney & Pierce 2011, p. 345), since it allows to determine whether profit is created or an internal loss has to be reported. Hence, the planning tool has a strong linkage to cybernetic controls and the budget in particular, as well as to the 'general tasks and structure' within administrative control. Along with the budget, the planning was also seen to be structured and formal, what confirms the findings of previous research (McGarry & Sweeney 2007, p. 43).

Moreover, strategy and audit procedures were considered to be adapted approximately every three years, which seems appropriate due to the statements of the participants that the audit environment did not change tremendously in recent years. However, the literature mentioned that some clients would wish their auditors to take adaptations of their business into account, what can hardly be done when the previous audits and their budgets are used each following year (Sweeney & Pierce 2011, p. 345).

Finally, it can be concluded that strategic decisions and long-term planning remains mainly on the top-management level, while the office responsables and senior managers use the budget and individual forecasts for planning purposes. Therefore, planning is neither perceived to be an important, nor well integrated tool within the management control package in audit firms.

7.1.3. Cybernetic control

This study has strengthened former implications of literature that it is crucial to set appropriate but considerable tight budgets for audit personnel (Sweeney & Pierce 2004, pp. 794, 802). The results of this work indicate setting tight budgets as an important means to increase practitioners' motivation. Thus, high expectations regarding expenses and time-

reporting are perceived as a form of tiptoe budget setting (Cooper & Chew 1996, p. 76), whereas it remains a crucial concern to optimize the trade-off between achievable and unattainable budget targets. Thus, the results of this study imply that tight budgets in big audit firms are a strategic management control mechanism to prevent dysfunctional behavior and to attain efficiency (Ettredge et al. 2008, p. 15). However, the implication that budget compliance is of greater importance in smaller audit engagements could not be confirmed (Pierce & Sweeney 2004, p. 434). In contrast, the participants of this study expressed that flexibility in exceeding budget targets exists for small audits, while budgets are more rigid within engagements of multinational clients that are active across borders.

Moreover, Otley and Pierce (1996, p. 80) stated that budgets are rigid and that the problems which arise by too tight budgets have to be resolved by the performing auditor. In opposite to that, this study has shown that budgets can be exceeded as long as the additional expenses can be explained by quality standards or the behavior of the client. Hence, the mentioned fixed fees which were considered to be a main problem for auditors and can result in QTB (Sweeney & Pierce 2006, pp. 871-872) were not perceived as that problematic by the participants. Additional charges or the reporting of internal losses are common and ultimately maintain quality.

Concerning time-budgets, the literature stated that under reporting of time (URT) can appear due to several reasons, e.g. tight budgets for the personnel (Otley & Pierce 1996, p. 78) or the request by managers (Sweeney & Pierce 2006, p. 872). No such behavior could be found based on this research, because the participants did not state the practice of such actions, but even explained that auditors have to keep track of the spent time for additional services. Therefore, no loss of moral, such as previously inspected (Sweeney & Pierce 2006, p. 874), could be found. For the sake of completeness it must be mentioned that this can rest upon opportunistic answers by the participants, or the different country context (Sweden) in comparison to authors as Sweeney and Pierce (Ireland).

Further, researchers mentioned the problem of increased commercialization and the focus on profit, what has severe implications on budget setting. This can have negative effects on professional values as well as on the quality provided by audits (Sweeney & McGarry 2011, p. 316). All participants stated the importance of quality for continuing the business of auditing, even though profit was mentioned likewise. As this study is based on interviews, image management is likely to occur (Power 2003, p. 380; Sweeney & McGarry 2011, pp. 321-322). Hence, the statements concerning budgeting, QTB, and commercialization might

have been used to influence the opinion of the public about the participants' companies. However, due to the findings of this thesis, it can be stated that budgeting and time recording remain important tools to structure and organize the work of auditors, what is in line with Otley and Pierce (1996, pp. 69, 82). In fact, findings of other researchers who mentioned a decreasing importance of budgeting (Sweeney & Pierce 2004, p. 434) are contradicted.

Budgeting is the most important tool used among auditors, but it is not used exclusively. Even though there are no formal needs reported by the participants of this study, forecasting is broadly applied as well. The connection between budgeting and its continuous adaptations in further outlooks is rather individual and used to support the previously calculated budget. While the hierarchically communicated budgets have clear procedures, forecasting is also used in a sophisticated way, according to the statements during the interviews. Hence, it can be concluded that the budgeting process has implications on individual forecasting, even though there is no obligation to do so. The participating firms can introduce a system of forecasting indirectly via budgets, while allowing the professionals to remain independent in some matters. Furthermore, the procedure of forecasting supports the professional values of independence and individual task handling.

Concerning other possible management control tools in audit firms, the balanced scorecard seems not to be applied in a sophisticated way. Even though it allows the combination of financial and non-financial, external as well as internal measures to derive the efficiency of auditors (Kaplan & Norton 1996, p. 4), it is merely perceived to be a tool among several. Within the framework of Malmi and Brown (2008, p. 291, Figure 1), it can be seen as a "hybrid measurement system". However, it mainly remains on a high level and has no clear connection to the other approaches; partly it is only applied for individual use, or on a high level respectively. Due to the fact that this thesis focuses on the utilization of the control package on a managerial office level, the findings did not provide evidence for relevant connections nor its general importance in the control package.

Concerning performance evaluation an ambiguous picture can be drawn in comparison to previous literature. The results of this study have shown that a movement towards flattening reporting structures in performance evaluation takes place within big audit firms. This stands in line with recent literature about these practices (Pierce & Sweeney 2004, pp. 423, 435-436; Sweeney & Pierce 2004, p. 797). Furthermore, the literature suggests that other criteria than meeting budgets raise in importance for performance evaluation (Pierce & Sweeney 2004, pp. 423, 435; Sweeney & Pierce 2004, p. 807), while the results of this study underscore the shift

in importance. Meeting the budgets was the least important criteria according to the participants. However, and in contrast to previous findings of Pierce and Sweeney (2004, p. 431), the effort put in the job was ranked low among our participants. Instead, the quality of work and meeting predefined deadlines are communicated as most important concerning performance evaluation, while general differences have been shown according to the position within the firm. Nonetheless, this study has not proven a general movement from formal to informal performance evaluation, as presented by Sweeney and Pierce (2004, pp. 798, 806). In fact, the opposite is implied and elaborated through the former CEO who seizes performance evaluation nowadays as a much more formal process than 15 or 20 years ago. Even though this study draws a picture towards more formalized performance evaluation, it has been pointed out that informal parts and procedures as face-to-face review remain of considerable importance.

7.1.4. Reward and compensation

Concerning rewards, several relations to other control tools can be found. First of all, within the theoretical considerations about budgets, it was stated that they can be used as a basis for compensation (Anthony & Govindarajan 2007, pp. 380-383). In this study, rewards are not ultimately connected to meeting the preplanned budgets, because they are not withheld if exceeded by underlying the use of budgeting for planning purposes. Hence, other performance measures have to be taken into account to derive the foundation for rewards. One possibility could be a combination of several different measures - a balanced scorecard. Since this control tool is only perceived to be of minor importance in the audit control package, it can be stated that there is a weak connection between rewards and cybernetic controls in general, while only profit and quality seems to be important.

Audit quality is related to the underlying values of a profession to provide a unique and valuable service to the customer (Løwendahl et al. 2001, pp. 915-916; Grönroos 2007, p. 9). However, due to the statements in the questionnaires and the participants appearance in the interviews, quality and values seem to be used for 'image management' (Power 2003, p. 380; Sweeney & McGarry 2011, pp. 321-322), while profit remains most important for rewards. Otley (1980, p. 132) assumed that compensation is also granted due to non-performance evaluations, such as the overall maintenance of audit quality or the commitment to professional values. Additionally, intrinsic motivation or the satisfaction due to interesting and challenging tasks is not important and no close connection to 'cultural rewards' could be reported.

Overall, the rewards do not seem to be a highly relevant tool to achieve goal congruence and secure audit quality. The former CEO stated, that bonuses should not be used and the fact that the reward system is not ultimately long-term oriented shows that it has no major importance in the audit control package yet.

7.1.5. Cultural control

The importance of clan control in the audit environment has been pointed out with various aspects in this study. Even though personnel may not be aware of such a mechanism, several considerations implicate its use. As highlighted in the context of budgeting and approved by this research, constant time pressure remains for staff in audit firms (Pierce & Sweeney 2005, p. 342). As a consequence auditors have to work hard and overtime (Sweeney & McGarry 2011, p. 326), while the former CEO stated that it is possible to double the working time of audit practitioners up to 16 hours per day in certain cases. He referred to the fact that people in that business are “willing to sacrifice their spare-time and work” and elaborated on the possibility to make people enthusiastic and committed to work. In line with that, the participants of the study stated that a positive image wants to be created by social events and career perspectives within the firm. One participant referred to weekly jogging and monthly pub events as a way to strengthen the culture and solidarity within the respective office. In line with prior findings in the literature this represents a form of internal image management, thus the objective to create a positive image of the firm (Sweeney & McGarry 2011, p. 324). It can be seen as a reaction on high staff turnover in audit firms, which is a phenomenon that is often explained by the problem of the work-life balance for auditors (Sweeney & Pierce 2006, p. 874).

Therefore, clan mechanisms seem to be successfully applied in the big audit companies that were approached by this study. On the one hand, most participants emphasized the growing business and the expansion of their offices in the personal discussions. One interviewee elaborated that no employee has left his firm in the last one and a half years and the former CEO showed perceptible enthusiasm referring to his erstwhile efforts in hiring and retaining staff. Thus, it strengthens the implication that the establishment of strong clan affiliation is a management control mechanism to reduce staff turnover, to retain personnel, and therefore to support sustainable recruiting in big audit firms. Further, indications could be found that the big audit firms in Sweden engage in ethics trainings at universities (Abdolmohammadi & Reeves 2000, p. 281; Jenkins et al. 2008, pp. 61-62). Even though trainings via workshops and programs have not explicitly been stated, several aspects such as the strong emphasis on

relations with students prefigure such practices. The illustrative example of one firm that follows the 'class 2013' through their whole study time (P3), shows the possibility of audit firms to actively exert influence on students' ethical values.

As pointed out in section 6.5.3, mentoring is an important mechanism of cultural control in the approached audit firms. It is shown that both the protégés and mentors as individuals, as well as the organization itself benefits from mentoring (Dirsmith & Covalleski 1985, p. 165). Most respondents reported it to be consistent of both formal and informal parts, while only one stated that mentoring as very informal. In all other firms, mentoring evolved more and more as a formalized process and therewith contradicts earlier findings in the literature (Dirsmith & Covalleski 1985, pp. 164-166). Thus, with the insights that were gained in this study, former presumptions that formal mentoring is largely ineffectual and has limited effects (Covalleski et al. 1998, p. 313; Viator 1999, p. 39; Viator 2001, pp. 88-89; Jenkins et al. 2008, p. 55) cannot be approved. In fact, mentoring requires some formal parts to enable its function as a form of cultural control as indicated in this study. Nonetheless, formalized processes that are intended to further formalize the mechanism of role modeling, such as career advisors or special training seminars (Dirsmith & Covalleski 1985, p. 159), are not broadly used to replace mentoring.

7.2. Audit control package

The prior section has generally pointed out which management control systems exist and how they are applied in big audit firms. Instead, this chapter proceeds to show intertwining effects within the package and emphasizes the key parts of the management control system in audit firms. Hence, a new control package within the context of auditing can be drawn, which is presented in Figure 6. In general, the known dimensions from Malmi and Brown (2008) are adapted based on the findings of this study, while the most important are accentuated in bold letters. Beyond that, implications to PSFs and professions are stated wherever possible.

Figure 6: Management control package in audit firms

<i>Cultural Control</i>				
Professional affiliation	Face-to-face communication		Mentoring	Recruiting
<i>Planning</i>	<i>Cybernetic Control</i>			<i>Compensation</i>
	Budget	Forecasting	BSC	Perf. Evaluation
				<i>& Rewards</i>
<i>Administrative Control</i>				
Organizational structure & procedures			Independence	

Adapted from Malmi & Brown 2008, p. 291, Figure 1.

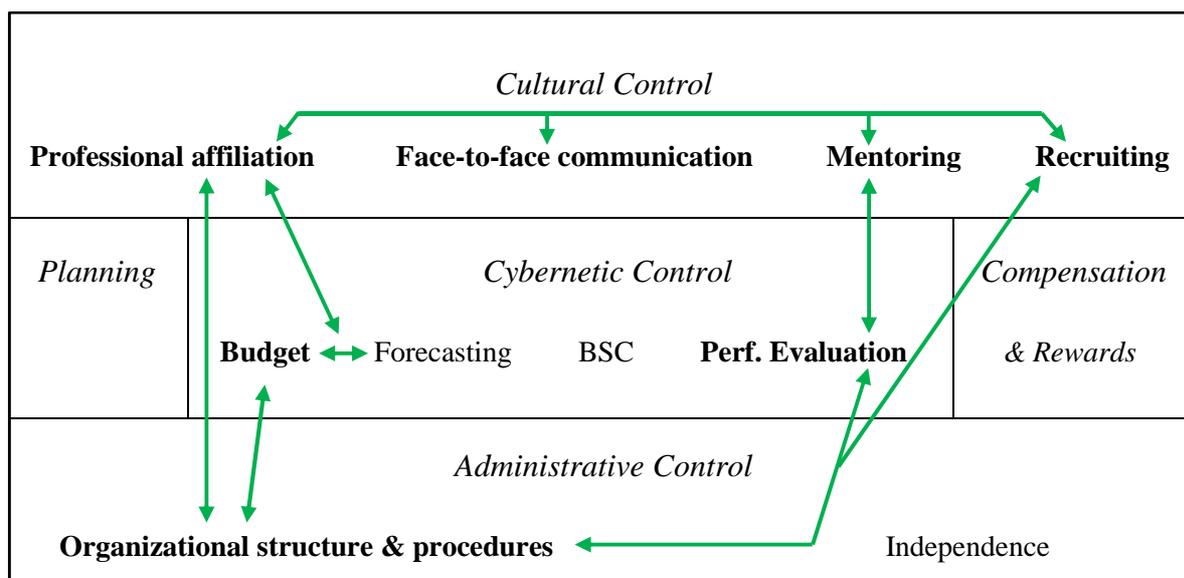
Previous literature suggests that output controls in the audit environment are of limited use (Pierce & Sweeney 2005, p. 343) and that based on high staff turnover, the general effectiveness of formal control systems is decreased in the audit ambience (Sweeney & Pierce 2004, p. 807). However, these implications do not seem to comply with the results of this research. Instead, budgeting remains its importance as a control tool. On the one hand it ensures cost control, whereas on the other hand it is useful as a planning tool and provides strategic decision advice for particular engagements and offices. Moreover, it is used to communicate financial expectations in a very structured way, while quality can still be preserved even though budgets can be rigid (Anthony & Govindarajan 2007, pp. 380-382). If necessary, the pre-calculations can be adapted and internal losses are reported in order to enable the auditors to focus on necessary sampling. As a consequence, budgeting constitutes one of the most important controls in the management control package for audit firms (see Figure 6). Furthermore, it is connected to the administrative system, since there are obligations and corporate rules regarding the budgeting process within the approached firms. The planning of time and the final expenses for an audit engagement are perceived as very important according to the participants. The companies secure the initial calculation and commitment to the responsables by providing clear structures and reporting procedures, what is finally based and controlled by the administrative system (see Figure 7).

Since budgeting is very important within the audit firms, the values of the professionals have to be in line with the corporate expectation of budgetary commitment. Hence, the

administrative control is also connected to the professional affiliation within cultural control (Figure 7). According to the participants, obligations regarding the structured budgeting process are not perceived to be a problem. Therefore, the professional need for increased independence is less strong in the context of auditing, likely because they are aware of the need for formal control to run a company such as an accounting firm.

Furthermore, forecasting does not have an eminent position within the control package, but is still closely related to budgeting. It is mostly applied individually with no obligations regarding how the auditors should perform it, but remains based on the budget. The companies grant the professionals' independence concerning forecasting, but not about budgeting, what can be seen as a trade-off between the corporate requirement for control and the allowance of professional freedom. Hence, budgeting as well as forecasting is connected to cultural control and professional affiliation (see Figure 7).

Figure 7: Strong connections between control tools in audit firms



Adapted from Malmi & Brown 2008, p. 291, Figure 1.

Performance evaluation is another output control with highlighted importance in the audit control package. Among all respondents it has been shown that performance evaluation is accepted as an important part of their work. Even more, it is perceived as necessary and path breaking in the regard of personal learning and quality protection. Hence, this aspect of the study supports the significance of administrative control in audit firms, since practitioners appreciate clear structures and audit procedures.

These results are especially astonishing as output controls are esteemed with caution if imposed on professionals who may perceive them as a threat of autonomy (Abernethy & Stoelwinder 1995, pp. 3-4, 13). Thus, it has to be accentuated that budgeting and performance evaluation as cybernetic controls are essential in the audit environment, whereas this implication cannot be transferred to PSFs without any problems. It is for example conceivable that similar results can be found for consultancy or tax firms but not for less business orientated professions as clerics or academic teachers who are used to work very independently. However, other professions like physicians or surgeons might not be focused on budgets or monetary constraints but need a structured system themselves. Thus, administrative control can be considered as supportive or unfavorable depending on the PSFs. A transmission about impact and importance of cybernetic control on other professional service firms can only be accompanied by investigating the particular characteristics and incidents of the profession.

Nevertheless, cultural control is a cost-effective alternative of output controls, as they represent social and self-controls and are useful in many circumstances (Jenkins et al. 2008, p. 58). However, as indicated above, they are not sufficient to replace any kind of output controls in the audit environment. Instead, they are a supplementary instrument to administrative as well as cybernetic controls and refine the management control package. For instance, this is supported by the interaction of cybernetic and cultural control that has become present during the case study. Particularly, a strong interaction exists between performance evaluation and mentoring. The web-based performance evaluation, conducted during the engagements by the head of the team, builds the foundation for the mentoring process. Based on the plurality of evaluations that the mentor collects, conclusions are drawn and new personal objectives are set for the protégé. Thus, both controls are strongly intertwined in the control package of audit firms (see Figure 7). Additionally, due to the fact that the performance evaluation along with the general approach of governance within the firms is very structured, cultural controls are also connected to the administrative system. The recruiting and mentoring processes are based upon the procedures and applications defined and provided by the administrative foundation. Even though auditing is undertaken by professionals who might oppose structures (Abernethy & Stoelwinder 1995, p. 2), the findings reveal the underlying importance of administration throughout the firm and up to cultural controls, which were previously defined to be less formal (Ouchi 1979, p. 834).

Connected social controls such as face-to-face-communication as well as the strong affiliation with the profession sharpen the relevance of cultural control in the audit context. As the study

has shown, recruiting constitutes an accentuated role in the audit firms' control package as it is used to incorporate employees with high technical skills as well as with adequate ethical perceptions. Hence, an overall connection between all tools within cultural control can be reported. Professional affiliation is secured by initial recruiting and the formal part of mentoring, while the rather informal face-to-face meetings are also used to monitor complete commitment to the audit profession (see Figure 7). In contrast to output controls, the importance of such controls can be generalized to PSFs (Ouchi 1979, pp. 836-840; Aranya & Ferris 1984, pp. 4-5; Abernethy & Stoelwinder 1995, p. 13). Since the work of professionals is highly customized and based on the experience of the individual, a strong commitment to the standards, values, and ethics is important to maintain the necessary quality. This does not only refer to the audit profession, but can be generalized to all PSFs. Hence, the importance of cultural control can be transmitted to other professional firms within business and beyond to all entities which provide specialized and highly valuable services.

8. Conclusion

Professional service firms are a special challenge for a management control system, because the value creation for clients depends mainly on the experience, commitment, or capability of its professional employees (Løwendahl et al. 2001, pp. 912-913; Løwendahl 2005, p. 22). Problems such as reduced goal alignment can emerge when the special context and environment of a PSF is not taken into account by management control. Hence, particular approaches have to be adapted and applied to the needs of a PSF (Ouchi 1979, pp. 836-840).

Moreover, the present literature is aware of the fact that management control tools should not be seen separately, while they cannot be used effectively if not combined to a complete system. Malmi and Brown (2008) provide a generalized 'management control system package' which defines several levels and tools to be important to achieve a structured and efficient control system (Malmi & Brown 2008, p. 291; Nilsson et al. 2011, p. 70). This theoretical package to describe management control as a complete system is applied to the problems PSFs face. Since the field of different professional organizations is rather broad, the authors decided to use audit firms as a methodological choice within PSFs, but also due to their personal interest in the topic.

Cultural or clan controls are specialized approaches which are applied in the environment of PSFs and the literature recommends them to overcome the previously stated problems. Further, classical controls which are summarized as cybernetic controls, seems to be of decreasing importance when professionals are concerned (Sweeney & Pierce 2004, p. 434). Additionally, rigid and mainly financial oriented control tools are not only refused in the special case of audit firms, but their overall usefulness had been questioned by prior research (Wallander 1999). However, the findings of this study do not support the observations of the literature, while cybernetic controls and especially budgeting are still very important. The importance of cultural controls is also relatively high, whereas it was surprising for the authors to find out that they are more of a supporting role within management control in audit firms. Therefore, it can be stated that financial controls such as budgeting are not yet effectively replaced by the less formalized tools.

Abernethy and Stoelwinder (1995) described the general rejection of obligatory control and monitoring by professionals, due to their expectation of highly individual and independent work (Abernethy & Stoelwinder 1995, p. 2). For the context of auditing, this must also be denied based on the findings of this research. The participants did not oppose the formalized structures and procedures; while it can be assumed that they rather embrace the formalized

systematic within their firms and no threat to the professional privileges can be reported (Freidson 1984, pp. 4-5). Therefore, the main tools within the derived control package are organizational structure as a basis, while cybernetic and cultural tools perform the actual controlling process. These are also the controls, which are connected to each other and form the core of the audit control package. Taking these results into account, it can be stated that more could be done to really integrate the other approaches such as planning and rewards systems into an intertwined package to complete it and increase the efficiency of management control in audit firms.

Overall, a study should not conclude without providing further research recommendations. Studies can engage in using one kind of professional organization to derive information and knowledge about the management control package in PSFs. Additionally, tax, law, and consulting firms might be similar to audit companies, why the results of this study can be compared to research about other professional organizations. But not only PSFs can be further researched, other industries or organizations also contain a potential to derive a control package. This can either be done in one context within one country and region, such as performed in this work, or on a more international and global level taking multiple countries into account (Ditillo 2012, p. 21). This seems especially applicable as basic research about the control package is accomplished by this master thesis.

Another recommendation concerns the methodological procedure. The detailed analysis of the management control package in audit firms was accomplished by using data derived by questionnaires and interviews from employees within five different audit firms, what was beneficial do gain more insights, find mistakes, and inquire critically. Hence, concerning the overall research procedure, adding a supplementary source - in this case the former CEO - as well as performing a two-step approach is highly recommended for further research due to the experience of this study. Furthermore, the two steps and adding a supplementary source are not restricted to investigate the control package in audit firms, but can be used in other research fields as well.

The authors want to conclude that writing this master thesis was a personal experience. The research approach which included contacting auditors for the questionnaire as well as the personal interviews were unique encounters which should not be missed. Finally, the authors hope that this thesis will contribute to further research about the management control package in audit firms and to the success of the mentioned companies.

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Appendix A: Questionnaire

Questionnaire: Management Control in audit firms

Dear participant,

within the process of writing a master thesis in 'Accounting & Management Control' at Lund University, we designed this questionnaire for the first step of data gathering.

Several aspects of 'management control in professional service companies, with a focus on audit firms' shall consider, support, or contradict findings of previous studies and research. Additionally, a managerial control package will be developed, based on theoretical argumentations as well as the evaluation of the selected research procedure.

Therefore, a two-step-approach has been chosen, in order to enable general and more specific questions. We would like to ask you to fill in this questionnaire as a first step, which analysis will provide general insight into the context. As a second step, we would like to interview the participants and ask more open, specific, and detailed question with the knowledge of this questionnaire.

We will not connect your answers to your names or company, hence all data is processed anonymously. Any answers are useful to aid our empirical work concerning the mentioned topic.

Instructions:

This questionnaire consists of two main parts; one contains questions about classical control tools such as budgeting, forecasting, strategy, performance evaluation, and reward systems. The second aims on more specialized professional controls which are unique for service firms such as audit and accounting companies. It will take you approximately 20 minutes to fill in the answers.

There are several types of questions, where you can tick, or fill in your statement. In general, please tick only one box for each question. If multiple answers are possible, it is explicitly stated. Many questions are based on a scale between 1 and 7, which allows to make more precise answers and evaluations, why this form of data gathering was chosen.

Thank you very much for participating and answering the following questions.

Henrik Huber and Alexander Kästle

Please fill in the following information

Position (Job title):

Years of Employment:



Part I – Classical control techniques:

1. What types of management control exist in your company? (multiple answers possible)

- Budgeting
- Forecasting
- Balanced scorecard
- Performance evaluation (quality review)
- Product costing
- Rewards
- Others (please list) _____

(A) Budgeting:

2. Please measure the importance of budgeting within your company:

Not important					Very important		
<input type="checkbox"/>							
1	2	3	4	5	6	7	8

3. Do you participate in setting the budget of an audit engagement?

No participation					Total participation		
<input type="checkbox"/>							
1	2	3	4	5	6	7	8

4. Please evaluate how tight (time) budgets are to achieve in your engagements:

Not tight to achieve					Very tight to achieve		
<input type="checkbox"/>							
1	2	3	4	5	6	7	8

5. In which extend do you perceive time pressure through tight budgets?

No time pressure					High time pressure		
<input type="checkbox"/>							
1	2	3	4	5	6	7	8

6. How many times could you achieve the preplanned time budgets without additional efforts / supplementary actions during your last 5 audit jobs?

Once Twice Three times Four times Five times



7. If a time budget is not attainable, does budget flexibility to record additional time exceeding the planned parameters exist?

No flexibility

Full flexibility

<input type="checkbox"/>							
1	2	3	4	5	6	7	

8. When pressure to meet the deadlines within fixed budgets arises, how do you achieve the target?
(please measure the usage of the statement)

(a) Work more intensively

Not used at all

Always used

<input type="checkbox"/>							
1	2	3	4	5	6	7	

(b) Reduce testing/samples

<input type="checkbox"/>							
1	2	3	4	5	6	7	

(c) Work overtime, i.e. under-report time

<input type="checkbox"/>							
1	2	3	4	5	6	7	

9. Which constrain is more important for your work – meeting deadlines or fulfilling quality standards?

Deadline

Quality

<input type="checkbox"/>							
1	2	3	4	5	6	7	



(B) Forecasting:

10. Which form of forecasting is applied?
- Only budgeting
 - Budget and forecast to year end
 - Budget and rolling forecasts (for an entire year)
11. If forecasting is used, how frequent do you adjust it?
_____ (monthly, quarterly, half-yearly, etc.)

(C) Strategy alignment:

12. What is the overall strategy of your company?
- Unique and high quality audits
 - Low cost audits (compared to peers)
 - Other (please list) _____

13. Which type of strategy do you perceive as more important?

Historical/introspective					Forward/outward looking		
<input type="checkbox"/>							
1	2	3	4	5	6	7	

14. In which interval do you reconstruct long-term planning and the strategic focus?
_____ (1 year, 2 years, 3 years, etc.)

15. As how important do you perceive strategic realignments?

Not important					Very important		
<input type="checkbox"/>							
1	2	3	4	5	6	7	

16. Do you evaluate the company's performance in comparison to competitors / peers or is it mainly internally oriented?

Internal performance					Compared performance		
<input type="checkbox"/>							
1	2	3	4	5	6	7	



(D) Performance evaluation:

17. To whom do you report? (multiple answers possible)

- Senior auditor
- Manager
- Partner

18. As how important do you consider...

(a) Financial evaluation (meeting budgets, financial ratios)?

Unimportant							Very important
<input type="checkbox"/>							
1	2	3	4	5	6	7	

(b) Non-financial evaluation (meeting deadlines, quality report, client statements)?

Unimportant							Very important
<input type="checkbox"/>							
1	2	3	4	5	6	7	

19. How is your personal performance evaluated? (multiple answers possible)

- Direct face-to-face reporting, discussion with the supervisor
- Written quality review documents

20. In which time intervals is your performance evaluated?

_____ (monthly, quarterly, yearly, etc.)

21. Please rank which criterions you think are the most important for your evaluation? (1-6 with 1 = least relevant, 6 = most relevant)

- Effort put into the job ()
- Meet deadlines ()
- Meet budget targets ()
- Quality of the work ()
- Technical ability ()
- Relationships with team members & ability to communicate ()



(E) Compensation and rewards:

22. What criteria are the basis for your compensation and rewards? (multiple answers possible)

- Profit
- Efficiency, reducing audit costs
- Acquisition of new clients/personnel
- High audit quality
- Client satisfaction
- Meeting deadlines, time budgets
- Others (please list) _____

23. Which form of compensation and rewards is applied in your company? (multiple answers possible)

- Monetary, financial rewards/bonuses
- Prestige, personal honors, influence
- Career development
- More interesting, demanding jobs
- Others (please list) _____

24. Which rewards are more important / stressed in your company?

Short-term rewards

Long-term rewards

- | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

25. Regarding financial rewards, how frequently do you receive bonuses?

_____ (monthly, quarterly, yearly, etc.)

Part II – Special audit control approaches:

26. Do you consider your own work as standard-procedure-based or are professional judgments necessary?

Standard procedures

Balanced

Highly judgmental

- | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

27. How has your individual independence as a professional developed in the recent years?

More dependent

Equal

More independent

- | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |



28. How useful do you perceive the business communication during unscheduled face-to-face meetings, social encounters such as coffee and lunch breaks?

Not useful							Very useful
<input type="checkbox"/>							
1	2	3	4	5	6	7	

29. Please measure your individual affiliation with the auditing profession?

Weak affiliation							Strong affiliation
<input type="checkbox"/>							
1	2	3	4	5	6	7	

30. What are the goals of your ...

(a) Corporation? Please list:

(b) Profession? Please list:

31. Which organization has a higher influence on your ethics and foundation of work?

Corporation							Profession
<input type="checkbox"/>							
1	2	3	4	5	6	7	



32. How do you evaluate the following parts of social control according to their importance?

(a) Auditor intuition

Unimportant

Very important

<input type="checkbox"/>							
1	2	3	4	5	6	7	

(b) Face-to-face-communication / networking

<input type="checkbox"/>							
1	2	3	4	5	6	7	

(c) Image management / code of behavior

<input type="checkbox"/>							
1	2	3	4	5	6	7	

(d) Recruiting / training / mentoring

<input type="checkbox"/>							
1	2	3	4	5	6	7	

33. In your particular organization: Are you... (multiple answers possible)

Mentor of a subordinate

Protégé of a mentor

34. How do you communicate with your mentor / protégé? (multiple answers possible)

Direct face-to-face reporting, discussion with the supervisor

Written quality review documents

35. Do you perceive that you have adapted shared values/language through mentoring processes?

Low adaptation

Strong adaptation

<input type="checkbox"/>							
1	2	3	4	5	6	7	



36. Are there mechanisms that have replaced the mentoring process in the last 5 years? (multiple answers possible)

- Career advisors/counselors
- Training seminars
- Others (please list) _____
- Not applicable

Thank you very much; we appreciate your time it took you to answer all questions. It will support us in writing our master thesis and will contribute to future research within the field of management control and auditing.

Yours faithfully,

Henrik Huber and Alexander Kästle



Appendix B: Interview guideline

Interview questions

The interviews will be accomplished to gain deeper information about controls. The particular questions within these interviews highly depend on the answers given in the questionnaire. In general those questions are aimed at drawing a picture of the implementation process of control techniques as well as provide a picture of auditor's behavioral responses to control tools.

Part I – Classical control techniques:

Which control tools do you use / and which are most appropriate for audit companies?

(A) Budgeting:

1. You participate in budget setting: Please describe how budget targets are set and calculated in depth? (based on prior experience of the manager with the client, hierarchical from the headquarter, participative with all concerned auditors) (connected to I-3. from the questionnaire)
2. How do you define a tight budget / what is tight for you personally?
3. Why do you perceive budgets to be tight, when full flexibility and additional time can be granted?
4. You evaluated relatively high time-pressure through tight budgets; how do you handle this pressure?
5. How can too high (low) budgets influence your motivation?
6. Is the goal of quality ultimately more important than profit and is it guaranteed via flexible budgets?
7. You reported to work more intensively when you have pressure to meet deadlines (tight budget targets). Can you describe how you do that? Do you have a special line of action?

(B) Forecasting:

8. At one question you stated that you do not use forecasts while in a later question you reported rolling forecasts during the year: (If you do that...), please describe how you forecast particularly? How do you forecast?



(C) Balanced Scorecard:

9. Why do you not have a balanced scorecard, an often used control tool?
10. Will it be introduced in the future? Would you personally perceive it as appropriate / useful to do so?
11. How is it possible to be cost efficient and guarantee high quality at the same time? Is there a role conflict? How can the management control system support cost efficiency along with quality?

(D) Performance evaluation:

12. Do you perceive non-financial evaluation as more important than classical financial evaluation?
13. How is the process of your personal performance evaluation accomplished?
14. Nowadays: Is the performance evaluation more a formal or informal process?
15. Which criteria are the most important for your evaluation?
16. Do you have an online system or performance evaluation within your company?

(E) Compensation and rewards:

17. Do you think that your rewards are appropriate?
18. How are you rewarded for generating profit? Is that the only reward basis for you?
19. Are rewards granted due to meeting the budget and are they withhold if additional time has to be reported?

Part II – Special audit control approaches:

20. Can you shortly describe the relationship between you and your subordinate (protégé) / mentor?
21. Do you perceive the mentoring process and common auditor values as important?
22. Did the audit environment change in the last years?



Explain an example of quality – profit conflicts between the audit profession and corporations.

23. What could be done to align the conflicts between audit stakeholders?
24. As how important do you consider professional (clan) affiliation?
25. Have you experienced a loss in independence as a professional auditor in recent years?
26. Did it only affect individuals or the profession as a whole?
27. Is the emerging commercialization of the audit profession a threat for quality reports and do you see problems for the economy due to decreased trust of investors in financial reports and increased risk of accounting scandals?
28. Do you have special programs/mechanisms to hire your employees?
29. Do you have special programs or events at universities to attract good young students?