



SCHOOL OF ECONOMICS AND MANAGEMENT

Master's programme in Accounting and Finance (BUSN79)

Lund University School of Economics and Management

2020-06-03



Management control tools and firm ambidexterity

- A multiple case study of professional service firms

Master thesis in Accounting and Finance

Authors:

Gabriel Aniol

Semi Serifi

Supervisor: Anders Anell

Examiner: Anna Glenngård

Acknowledgements

We would like to express gratitude to the supervisor Anders Anell, who has provided us with valuable insights and guidance necessary to conduct the thesis. Furthermore, Anell has been very supportive and complaisant throughout the whole process, which has enabled us to perform at the very best. Secondly, thanks shall be given to all case firms' for their collaboration and the participants willingness to answer the interview questions. Lastly, we would like to thank Lund University School of Economics and Management for the opportunity to conduct this research.

Gabriel Aniol



Semi Serifi



Abstract

Title: Management control tools and firm ambidexterity

Seminar date: 2020-06-03

Course: BUSN79 - Business Administration: Degree project in Accounting and Finance.

Authors: Gabriel Aniol & Semi Serifi

Advisors: Anders Anell

Key words: PSFs, MCS, Management control tools, audit firm, IT firm, reuse economics, expert economics, explore, exploit.

Purpose: The purpose of this thesis is to provide insights from three case firms', regarding their relationships between ambidexterity and management control tools. The discussion and analysis ought to provide insights regarding how control tools are used.

Theoretical framework: Management control tools mainly provided by Malmi and Brown's (2008) framework are used to assess control tools in PSFs. Theory regarding the classifications of reuse and expert economics, respectively exploiting and exploring have been used. Ambidexterity entails being a mix of the aforementioned classifications.

Empirical foundation: We have mainly conducted a semi-structured interview to access data about control tools and insights necessary to draw conclusions about organizational ambidexterity. A multiple case study is conducted to extract information about the case firms', their control tools and ambidexterity. We have conducted qualitative research involving interviews.

Conclusions: Control tools support both exploration and exploitation and are used under different conditions and contexts, thus affecting the balance between them and thereby organizational ambidexterity. On the contrary, organizational ambidexterity supports control tools. Thus, relationships between them exist. The implementation of control tools differ substantially depending on classification of the firm, where they aim to have an impact on the organizational context in different ways.

Table of Contents

1. Introduction	5
1.1 Background	5
1.2 Problem discussion	7
1.3 Purpose and Research Questions	8
1.4 Disposition	8
2. Methodology	9
2.1 Research design	9
2.2 Selection of companies	9
2.3 Data collection	11
2.3.1 Primary data	11
2.4. Design of interview guide	12
2.5 Limitations of research method	12
2.6 Validity and Reliability	13
3. Theoretical framework	14
3.1 Classifications of professional services firms	14
3.1.1 Reuse and Expert economics	14
3.1.2 Explore and Exploit	15
3.1.3 Ambidexterity	15
3.1.4 Customization of professional services	16
3.2 Management control systems as a package	16
3.2.1 Planning controls	17
3.2.2 Cybernetic controls	18
3.2.3 Reward and compensation controls	19
3.2.4 Administrative controls	19
3.2.5 Cultural controls	20
3.3 Summary of theoretical framework	21
4. Empirics	22
4.1 Case companies	22
4.2 Firm A	23
4.2.1 Reuse and Expert economics	23
4.2.2 Explore and Exploit	24
4.2.3 MCS package	25
4.2.3.1 Planning	25
4.2.3.2 Reward and compensation	27
4.2.3.3 Cybernetic	28
4.2.3.4 Administrative	29

4.2.3.5 Cultural	30
4.3 Firm B	31
4.3.1 Reuse and Expert economics	31
4.3.2 Explore and Exploit	32
4.3.3 MCS Package	33
4.3.3.1 Planning	33
4.3.3.2 Reward and compensation	33
4.3.3.3 Cybernetic	34
4.3.3.4 Administrative	35
4.3.3.5 Cultural	35
4.4 Firm C	36
4.4.1 Reuse and Expert economics	36
4.4.2 Explore and Exploit	37
4.4.3 MCS Package	38
4.4.3.1 Planning	38
4.4.3.2 Reward and compensation	38
4.4.3.3 Cybernetic	39
4.4.3.4 Administrative Controls	40
4.4.3.5 Cultural	40
5. Analysis and Discussion	42
5.1 Classifications	42
5.2 Planning	44
5.3 Cybernetic	44
5.4 Reward and compensation	46
5.5 Administrative control	47
5.6 Cultural control	47
6. Conclusion and summary	50
Reference list	52
Interview questions	56

1. Introduction

This section consists of a background of the research topic to provide the reader with an overview of the subject. The problem discussion follows, and the purpose behind conducting the research. Lastly, the disposition of the thesis is described.

1.1 Background

It has been over 40 years since Otley (1980) came up with one of the first concepts of Management Control Systems (MCS) where his theory claims that there is no general and optimal fit for all companies regarding MCS. Otley's (1980) contingency theory states that the design of the management control systems should adapt depending on circumstances. Over the years, several reasons have emerged as to why this phenomenon is important to study. For example, how to design the MCS package to achieve the outcomes that are desired (Malmi & Brown, 2008). The definition of MCS has become more extensive over the years (Chenhall, 2003). Initially, one focusing on extracting financially quantifiable information necessary for managerial decision making to one that considers several different aspects (Chenhall, 2003). However, previous MCS research often only considers single unconnected practices or themes and does not take into account how different controls tools operate with each other in a broader control system (Malmi & Brown, 2008). Control tools used by corporations have proved to not be isolated from each other (Malmi & Brown, 2008).

Anthony (1965), being a pioneer in the research area defined management control as “the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives”. However, researchers have stated that Anthony's (1965) view is too narrow only embracing financial and accounting based controls. As a consequence of the complexity and the scope of what management control systems actually entail, a broader conceptualization of control systems becomes important (Merchant & Otley 2007). Professional service firms (henceforth PSFs) and their MCS are exposed to much more unstable environments today than previously, where they have to be able

to adapt to changes more quickly. For example, modern technologies have a significant impact on controls and are being used in enterprises to embrace more data and analyze it more accurately (Anthony & Govindarajan 2007). Due to PSFs complexity, it is crucial to evaluate their control tools.

PSFs models differ significantly from more traditional firms since they are more knowledge-intensive and rely on specific expertise (Greenwood, Li, Prakash, Deephouse, 2005; Løwendahl et al. 2001). Zardkoohi et al (2011) defines the PSFs by identifying three distinctive characteristics, namely; low capital intensity, knowledge intensity, and a highly-skilled workforce and argues that all PSFs are knowledge-intensive but with varying degrees of intensity. However, the most common characteristic associated with PSFs is their mastery of a specific knowledge base (Nordenflycht 2010). Furthermore, it is possible to distinguish PSFs from other firms in terms of them having strong control over how to apply their knowledge via a variety of institutions, such as licensing and training (Maiser, 1982). Alternative organizational structures further characterize PSFs, based on the degree of capital intensity and correspondingly the degree of external investor influence (Maister, 1982, 1993).

PSFs depend on *professionals* that are highly educated with the ability to transform their knowledge into value propositions for the clients (Løwendahl et al, 2001). They operate in autonomous settings and the complexity of their tasks increases as they become more specialized. Furthermore, professionals' customized services entail a high degree of individual judgment and analysis which can not be taught (Løwendahl et al, 2001). Professionals can explicitly be trained in standardized procedures, and they are constantly updated with scientific development and research within their occupational area (Løwendahl et al, 2001). Moreover, professionals are certified by a relevant professional authority and they have to adhere to norms of conduct, involving prioritizing the client before profits (Løwendahl et al, 2001). The knowledge exclusiveness that follows from certification is crucial to maintain high labor costs and the standards of the professions (Lewis & Brown, 2012). The challenge remains to assess

management control tools considering that the professionals' tasks are diverse, complex and autonomous.

Malmi and Browns (2008) framework considers management control tools as a package within a firm and is perceived as the traditional view regarding MCS. Malmi and Brown (2008) argue that links between controls need to be fully recognized, otherwise erroneous conclusions will follow regarding the whole system. This is in alignment with previous research which claims that the findings could be unclear if investigating limited components of the package only (Otley 1999; Merchant & Otley, 2007). However, Merchant and Van der Stede (2012) stresses that controls are of varying importance for a firm. For example, personnel and cultural controls prove to be of greater importance than action and result controls (Merchant & Van der Stede, 2012). In addition to taking Malmi and Browns (2008) MCS package into account when assessing the research topic, Merchant and Van der Stede (2012) provide necessary insights.

1.2 Problem discussion

MCS differs between PSFs mainly because of their complexity (Løwendahl, 2001; Malmi & Brown, 2008; Haustein, 2014). March (1991) was an early advocate of classifying firms as either explorative or exploited because of their complexity. Explorative entails having an innovative approach to operations, while exploiting focuses on streamlining processes (March, 1991). Hansen et al (1999) also classifies PSFs, but as either expert- or reuse economics. The former necessitates customized solutions, whereas the latter involves standardized solutions and frequent use of knowledge assets (Hansen et al, 1999).

On the other hand, Løwendahl (2001) does not classify firms as one or the other (March, 1991; Hansen et al, 1999), instead emphasizing that the degree of customization differs. Zardkoohi et al (2011) underlines that it is problematic to classify PSFs due to changes in ownership and organizational structure over time. Rapid technological changes affect management control tools and their intercorrelation (O'Reilly & Tushman, 2013). Firms show tendencies of being ambidextrous in terms of being both exploratory and exploiting simultaneously, but to varying

degrees (O'Reilly & Tushman, 2013), and this as a result of firms using management control tools differently. However, PSFs still face difficulties regarding being either more explorative or exploiting. There does not exist a best-fit for all PSFs due to their complexity. Instead they need to adapt strategies depending on their specific characteristics. Thus, scarce research exists on PSFs ambidexterity and their relationship with management control tools.

1.3 Purpose and Research Questions

Previous research regarding management control tools does not take all collectively into consideration when examining PSFs, and have mainly been focusing on specific controls, such as planning and cybernetic controls. Furthermore, we have identified that PSFs are exceptionally complex, thus making it difficult to assess the relationship between ambidexterity and management control tools. Therefore, the purpose of this is to provide insights from three case firms', regarding their relationship between ambidexterity and management control tools. With consideration to the purpose of this paper the following research question is being addressed:

- How are management control tools and ambidexterity in PSFs related to each other?

1.4 Disposition

This master thesis will have the following disposition; Chapter two will present our methodology and motivation for this study but an explanation on why we're doing qualitative research for our thesis. Thereafter, theoretical frameworks for MCS are provided where we consider the MCS as a package in regards to Malmi and Brown's (2008) article. In the same section, theories concerning classifications of PSFs will be presented, such as the differences between explorative and exploiting firms. In chapter four the empirical data that has been gathered through three interviews with our three case companies will be presented. Afterward, the analysis and discussion will follow, where the aim is to analyze the empirics in accordance with the empirical framework. The last chapter constitutes our conclusions but also a summary, suggestions for further research, and limitations.

2. Methodology

Methodology can be described as the theoretical and systematic analysis of the methods used in a research study. In the following, the research design and approach will be presented. The criteria which the case companies have been chosen upon and data collection are also presented. Additionally, the interview design is presented and limitations of the research method as well. Lastly, the reliability and validity of the research is evaluated.

2.1 Research design

We have conducted a qualitative research, which entails a method of observation of non-numerical data (Yin, 2014), with inductive reasoning. According to Bryman and Bell (2007), this enables a more thorough and detailed analysis. Furthermore, using a qualitative method for this thesis is most convenient due to the complexity of assessing controls in PSFs. We will discuss current challenges and barriers based on empirical data that provides insights into the methods and tools used within PSFs and their management control tools. Case studies serve the purpose of answering why and how phenomena exist (Yin, 2014). A case study can either be conducted as a multiple case study or a single case study, where the former requires two or more comparable cases (Yin, 2014). Yin (2014) stresses that a multiple case study is more convenient to use than a single case study when trying to gain deeper knowledge about a broad and dynamic phenomenon. Our research topic can be interpreted as such.

2.2 Selection of companies

In order to select the firms, we used a two-phase approach. This entails a screening procedure where potential candidates are gathered for further evaluation, with the objective to identify those appropriate for the research (Yin, 2014). Initially, we defined criteria necessary to find the case firms'. Criteria were chosen based on the purpose of the thesis and in conjunction with recommendation from our supervisor. The most relevant being the following;

- The firms operate globally.
- Convenience - easy to access the firm to schedule potential interviews.
- The firm differs to some extent.
- The firm offers knowledge-intensive services.
- Information asymmetry - the firm possesses knowledge beyond what is accessible in the client firm.
- Professionals in the firm should rely on personal diagnosis and judgment.

All the Big4 firms' (Ernst & Young, PwC, KPMG, and Deloitte) were first contacted in Malmo since they fulfilled the criteria specified above. In addition, it was convenient to address them due to the research purpose and that they most often are referred to in relation to the term PSFs. A variety of other consulting firms were also chosen after reviewing their websites based on service offerings and operations. This ensures that they possess the characteristics necessary to be relevant for our research. After finalizing the first phase of the process, 12 companies were obtained in different sectors.

In the second phase of the screening process, we conducted a more in-depth check of the firms', once again controlling them in relation to the now refined and more specified criteria. Thereafter, the case companies were contacted by email describing the background, intention and research topic (with the exception of the IT firm, that was approached through direct contact). In order to do so, we had to find contact details to persons considered to have in-depth knowledge about the research area or that could contribute in some sense. If their emails were not available, an email was sent to the organizations' general email address, asking if they could direct us to firm representatives or key persons. Phone calls were also made to ensure that their emails had reached the firms. Due to the lack of response to emails we had to leverage our existing acquaintances at the firms'. As a result, two of the big four were selected, since they have multiple divisions (thus being immensely complex), fulfill the aforementioned criteria and are highly relevant for the chosen research topic. The last case was selected considering it is a PSF operating in the IT industry, also fulfilling the aforementioned criteria and thus providing

valuable insights and makes the thesis more comprehensive. The selection process described above is what is typically referred to as a non-probability sampling where potential candidates are not selected randomly.

2.3 Data collection

Data has been collected in the form of primary data and secondary data. The former in terms of interviews, and the latter mainly through websites including their service offerings, code of conduct, visions and goals. The collection of data constitutes a major part of the master thesis, but it needs careful consideration in order to conduct a successful case study (Yin, 2014).

2.3.1 Primary data

Primary data in this thesis is based on empirical findings from semi-structured interviews which were constructed by our theoretical framework. We have mainly conducted a semi-structured interview to access data about control tools and insights about the characteristics of PSFs (Bryman & Bell, 2007). This with elements of structured questions as well, in alignment with Bryman and Bells (2007) recommendations. Bryman and Bell (2007) acknowledges that it is most effective to use semi-structured interviews when comparing different cases. Furthermore, the interviews are mainly based on Bryman and Bells (2007) analytical framework. However, in order to not steer the interviewees' in one direction and not get too detail-oriented, subquestions were asked that captured subjective thoughts and opinions. Interviews were being held with two partners at the audit firms' (Firm A and Firm B) and a senior employee at the IT firm (Firm C). The partners had 24 respective 17 years of experience and the duration of the interview was 1 hour respective 1.5 hours. The senior employee at the IT firm had 6 years of experience and the duration of the interview was 1 hour.

The intention was to conduct interviews in person, however, due to external circumstances (COVID-19), the interviews were conducted by telephone. Conducting interviews per telephone resulted in benefits in terms of efficiency and only sticking to the purpose of the conversation. Yin (2014) emphasizes that interviews should be recorded as long the interviewee does not feel

uncomfortable doing so. Two of the interviews for this thesis were recorded and the other one not, due to the interviewees wish. However, careful notes were taken to ensure a high reliability of the findings.

2.4. Design of interview guide

In order to fully understand how each case company uses control tools, semi-structured questions were conducted for the interviews in this multiple-case study. The questions were used as guides for us to cover all of the sections of the MCS packages and further questions were asked to gain deeper insights about each control tool. The interview consisted of two parts. The first part addressed the firms' characteristics, whether they showed tendencies of being reuse or expert economics, explorative or exploiting. The second part constituted management control tools.

2.5 Limitations of research method

Initially, the chosen method normally can not lead to generalizations since the multiple case-study focuses on a few companies (Bryman & Bell, 2007; Yin 2014). Nonetheless, the purpose of this study is to assess the relationship between management control tools and organizational ambidexterity in PSFs, which can add insights for further research. One further limitation is that our research is limited to three interviews.

Another limitation of the method is that the interview answers can be biased and thus affect the conclusions that have been drawn (Yin, 2014). The respondents of the interview may want to provide positive insights regarding the company they work for, which leads to biased answers. Another thought is that those interviewed could not provide accurate information due to their position in their firm. For example, it is reasonable to assume that partners do not view cultural controls as employees at a lower ranking in the hierarchy. Therefore, it is recommended to conduct multiple interviews with employees at different levels in the same company to get a more thorough picture. This would give us a better view of diverse control tools. This was not possible however, due to the scope of the research and difficulties of getting interviews overall.

2.6 Validity and Reliability

Yin (2014) stresses that four criteria should be taken into consideration in order to evaluate the quality of the research method, namely; internal and external validity, construct validity and reliability. Construct validity entails the degree to which a study measures what is intended to measure, and can be enhanced by using various sources of information (Yin, 2014). As previously mentioned, interviews with each of the case firms have been held and further data has been gathered by the firms' websites. Internal validity is partly obtained by using multiple case studies since this avoids confounding and this, in turn, strengthens the reliability and results (Yin, 2014). External validity is the validity of applying the findings of the study in other contexts, i.e. the generalizability (Yin, 2014). However, we do not aim to generalize the results since each firm has different control tools.

Yin (2014) states that the purpose of reliability is to reduce the chance of biases and errors to occur. In other words, if the research is meant to be conducted again by other researchers, they should have similar findings and conclusions. Firstly, it is important to underline that it is difficult to achieve a high degree of reliability when doing a case study. The interviewees might have provided biased answers in order to put their workplace in a favorable position. This might have influenced the conclusions and findings of this paper. Conducting the research once again with the same firms may show different results. Nonetheless, to enhance the reliability, we carefully listened to the interviewees', in order to understand what they intended to express. Recording and taking notes gave us the opportunity to go through the interviews more than once and thereby reducing the risk of misinterpretation of the data. Furthermore, quotes from the interviews are used to enhance the reliability and authenticity of the paper.

3. Theoretical framework

Chapter three provides the literature necessary for the research. In order to answer the research question, contingency theories of PSFs and theories concerning management control tools follow in accordance with prominent literature on the area.

3.1 Classifications of professional services firms

Professional services firms have proved to be utterly complex. This, mainly because of their autonomous workforce and differences in service offerings. Also, because they are exposed to expeditious technological changes and unstable environments, where they have to be able to adapt more quickly. In the following, important theories about PSFs will follow, to provide an overview of different elements and thus the complexity. Classifications of PSFs are necessary to narrate in order to describe firm ambidexterity. As shall be presented in later chapters, the case firms' show tendencies of being classified as one or the other to varying degrees. The classifications are crucial to present in order to extract differences and similarities in the case firm's. Furthermore, also to see how the ambidexterity of a firm is related to their MCS (Gschwantner & Hiebl, 2016).

3.1.1 Reuse and Expert economics

The reuse economic model is known for providing fast, reliable and high-quality solutions (Gottschalk, 2004). It is common that the solutions in previous projects can be used again in various other projects, and are therefore stored (Hansen et al, 1999). Since the knowledge is reused, it requires less partners for a project, and instead more associates take part in projects (Hansen et al, 1999). This strategy enables a company to scale up its business by reusing their knowledge and potentially shorten the time for each project (Hansen et al, 1999).

Expert economics have higher fees since their solutions are customized for new challenges and problems (Hansen et al, 1999). This requires expertise and, therefore, there are fewer associates and more partners instead of the project teams (Hansen et al, 1999). To ensure that their strategy

works, they invest in creating a culture in which they share knowledge, transfer employees to other offices etc (Hansen et al, 1999).

3.1.2 Explore and Exploit

Explore is a term used by March (1991) which means that firms are exploring new areas for improvement. Terms used for describing exploring firms are experimentations, innovation, risk-taking and variation (March, 1991). Exploit, on the other hand, is a classification of firms that are trying to increase efficiency (March, 1991). Firms are adapting to existing solutions and trying to make them even better (March, 1991). Terms associated with exploitation are implementation, efficiency, and refinement (March, 1991). However, even though they are crucial for firms, both approaches compete for scarce resources (March, 1991). Therefore, firms have to make implicit and explicit choices between them. However, recognizing the choices and improving the balance between them is difficult since they vary with respect to their variability and their timing (March, 1991). As previously mentioned, the business landscape undergoes rapid technological changes, and firms need to be able to adapt to this (Anthony & Govindarajan 2007). Considering this, it is difficult to distinguish firms as either explore or exploit since they change and evolve over time. For short-term success, exploitation is necessary, but exploration might be equally important in order to remain competitive in the long-term.

Nonetheless, we have identified that these have overlapping characteristics with Hansen et al (1999) classifications. One could argue that being classified as reuse economics entails being exploiting, meanwhile expert economics involves being explorative. However, we acknowledge the importance of describing all of them to give a more thorough analysis.

3.1.3 Ambidexterity

O'Reilly and Tushman (2013) states that companies simultaneously have to be exploratory and exploitative in order to be competitive. The study shows that ambidexterity can be achieved by having separate established units that are exploiting and exploring simultaneously (O'Reilly & Tushmand, 2013). Furthermore, the study concludes that there is a positive correlation between

firms being ambidextrous and their performance. O'Reilly and Tushman (2013) also emphasizes that ambidexterity benefits firms with uncertain environments. Nonetheless, the findings from O'Reilly and Tushman's (2013) study shows that ambidexterity is more prominent in firms that are highly dependent on technology. Thus, clearly defining PSF as either explorative or exploiting is problematic due to their complexity and their external environment.

3.1.4 Customization of professional services

Even though previous research (March, 1991; Hansen et al., 1999) states that it is possible to classify PSFs, Løwendahl et al. (2001) claims that PSFs are too complex in order to do so. Instead, Løwendahl et al. (2001) have developed a model that shows the degree of customization based on task characteristics. Thereby, a scale ranging from low to high in customization exists (Figure 1). As mentioned in the former section, it is difficult to clearly classify PSFs. We acknowledge that Løwendahl et al's (2001) model is important since it provides a different approach to evaluating PSFs.

<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
Higher	Mediation, negotiator, 'middle man role' Stand in, management for hire, spokesperson 'on behalf of'...

Figure 1. Retrieved from Løwendahl et al. (2001)

3.2 Management control systems as a package

Management controls include all the systems and devices managers use to steer employees towards a specific aim (Malmi & Brown 2008). Malmi and Brown (2008) uses the word package as a means to embrace all control tools in contemporary organizations. Controls in their entirety are not compromised as a single system, rather as a package of systems (Malmi & Brown 2008).

To choose the right evaluation methods an entity can use Malmi and Browns (2008) framework below involving five different dimensions.

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	

Figure 2. Retrieved from Malmi and Brown (2008).

3.2.1 Planning controls

Planning controls are based on the goals and direction of the functional areas of the firm, and as a result, direct effort and behavior (Malmi & Brown 2008). Moreover, planning controls are established to clarify certain behaviors and the level of effort needed from organization members (Malmi & Brown 2008). It coordinates goals through the diverse divisions to ensure that the individuals and groups are working towards the desired outcomes of the organization (Malmi & Brown 2008). It is possible to identify two categories, action planning and long-range planning (Malmi & Brown 2008). The first has its focus on tactics in regards to the near future, which is 12 months (Malmi & Brown 2008). The latter is based on the medium and long run, where the emphasis lies on the strategic focus (Malmi & Brown 2008). In some instances, strategic planning can be perceived as unnecessarily restraining (Løwendahl, 2005). Therefore, it is of interest to evaluate the importance of planning controls in PSFs classified as either reuse or expert economics. This, since their strategic aim differs on a short and long term basis.

3.2.2 Cybernetic controls

Malmi and Brown's (2008) MCS package includes four management control tools within cybernetic controls and these are; financial measures, budgets, non-financial measures, and hybrid measurement systems (see Figure 2). Cybernetic controls can also be used in order to compare the performance to previous years, peers, and other divisions within the organization (Malmi & Brown 2008; Green & Welsh, 1988). Budgets include allocation of resources and integrated processes but the emphasis lies on planning and evaluating those plans (Malmi & Brown 2008). However, for PSFs classified as expert economics it is difficult to estimate man hours needed on projects to solve complex problems (Løwendahl, 2001). Thus, making it difficult to establish budgets (Løwendahl, 2001). Furthermore, the ability of PSFs in this regard find it difficult to have predefined plans since they vary depending on experience (Løwendahl, 2001). However, for PSFs classified as reuse economics involving standardized solutions, establishing controls in relation to budgets is more convenient (Løwendahl, 2001).

Furthermore, financial measurement systems are used to set targets such as economic value added or return on investment (Malmi & Brown, 2008). Non-financial measures are used to analyze what drives performance by overcoming limitations that may occur in the financial measures (Malmi & Brown, 2008). Examples of non-financials are customer satisfaction, organizational learning and growth, internal business processes and quality (Otley, 1999). When classifying firms as being exploiting, quality is of importance (Sitkin et al, 1994). Total quality control is commonly used in order to control customer satisfaction (Sitkin et al, 1994). On the other hand, PSFs characterized as explorative emphasises non-financial measures such as for example learning (Sitkin et al, 1994). Thus, ensuring employee improvement and that they are gaining experience is of great importance in this aspect (Sitkin et al, 1994).

Kaplan and Norton (1992) underlines the importance of combining non-financial and financial measures to understand interrelationships, and one example of this is the balanced scorecard (BSC). In order to achieve long-term objectives, it is not sufficient to evaluate only financial

measures in terms of budgets (Kaplan and Norton, 1992). By combining non-financial and financial measures the BSC assists managers to make improved decisions and solve problems (Otley, 1999). Otley (1999) also states that the performance measures are critical since they set the strategic direction for the business. Thus, the BSC is at the core of a firm's control tools to effectively actualize the business strategy and link it to operations (Otley, 1999). However, PSFs are governed by professional standards and regulations that change over time. Thus, it is reasonable to assume that difficulties arise using a clearly defined BSC.

3.2.3 Reward and compensation controls

Reward and compensation controls are primarily being used as a means to enhance employee and group performance by achieving goal congruence between activities and goals (Malmi & Brown 2008). Malmi & Brown (2008) differentiates between extrinsic and intrinsic rewards, whereas management accounting research primarily has focused on extrinsic rewards. The latter has its focus on increasing effort from individuals by monetary incentives (Malmi & Brown 2008; Bonner & Sprinkle, 2002). Anthony and Govindarajan (2007) underlines that rewards and compensation packages are necessary in order to achieve firm-specific goals due to individuals' self-interest. Furthermore, reward systems should emphasize individual goal setting that motivates employees and avoid punishments, to ensure that individual interests are aligned with those of the firm (Anthony & Govindarajan 2007). Merchant and Van der Stede (2012) stresses that monetary reward systems are of less importance since they have proven to be insufficient with regards to their intent in PSFs. Instead, professional recognition in terms of career development is of great importance (Merchant & Van der Stede, 2012).

3.2.4 Administrative controls

Administrative controls constitute the first level in the framework by Malmi and Brown (2008). It is being used to monitor employee behavior throughout the organization of groups and individuals. Furthermore, it entails making employees accountable for behaviors and specifying how tasks should be performed (Malmi & Brown 2008). Malmi and Brown (2008) takes three groups into account. Firstly, governance structures that relate to the firm's composition and

board structure but also authorities and accountabilities within the firm (Malmi & Brown 2008). Furthermore, it includes all systems necessary to carry out daily administrative tasks (Malmi & Brown 2008). Secondly, the organizational structure encourages certain types of relationships and lastly policies and procedures, that specify the behavior and processes within an organization (Malmi & Brown 2008). According to Merchant and Van der Stede (2012) administrative controls in terms of separation of duties, are of utmost importance in PSFs to ensure internal control. This in turn increases efficiency and productivity (Merchant and Van der Stede, 2012). Furthermore, administrative controls have proven to be more flexible in knowledge oriented firms than in other firms that are not (Chenhall, 2003). However, the extent of administrative controls depends on the organisational structure in PSFs. Centralised firms use administrative controls to a greater extent than firms with a decentralised structure (Chenhall, 2003).

3.2.5 Cultural controls

According to Flamholtz et al (1985) is organizational culture “the set of values, beliefs and social norms which tend to be shared by its members and, in turn, influence their thoughts and actions”. Thus cultural controls are used by the organization to ensure that members will behave in a way that results in the attainment of goals (Flamholtz et al, 1985). Cultural controls are systems used to steer behavior towards specific aims, whereas cultural controls can be expressed in several ways (Malmi & Brown 2008). Value-based controls are systematically reinforced by senior managers that convey purposes and values to employees. Symbol-based controls emerge as visible expressions, such as workspaces and dress codes in order to develop distinguished cultures (Malmi & Brown 2008). Dent (1991) emphasizes that organizations are characterized by having distinctive cultural properties and that they have established norms for improper and proper behavior. Within organizations, there are clear subcultures that can be labeled as clans (Dent 1991), and within these clans, a socialization process occurs that provides them with a set of values and skills (Malmi & Brown 2008). Ouchi (1979) further elaborates on this, stating that the socialization process secures goal congruence. It is also convenient to use clan controls in the case formal controls within an organization are not sufficient in order to monitor behavior (Ouchi 1979).

Furthemore, Merchant and Van der Stede (2012) stresses that cultural control proves to be of greater importance than other controls, such as action and result controls. This since cultural controls monitor the behavior of all employees, meanwhile the two latter are particularly important to control individuals with decision authority. Nevertheless, cultural controls are especially significant in dynamic and unstable environments, consequently being highly relevant in most PSFs (Ouchi, 1979; Chenhall, 2003). With this stated, it is reasonable to assume that cultural controls are used to a greater extent in PSFs classified as being explorative.

3.3 Summary of theoretical framework

Being explorative entails constantly trying to find new areas for improvement. Terms used for describing exploring firms are experimentations, innovation, risk-taking and variation. Exploit, on the other hand, is a classification of firms that are trying to increase efficiency. This is mainly done by adapting to existing solutions and optimizing them. The same applies to reuse and expert economics, with the former showing similar characteristics as exploit and the latter as explore. Management control tools are intercorrelated and associated with both exploration and exploitation, to varying degrees and depending on the strategic orientation of the firms’.

4. Empirics

In this section, empirical data about the case companies will follow, primarily based on the conducted interviews. The case companies will be presented shortly, followed by specific characteristics about them retrieved from the interviews. Thereafter their control tools will be described.

4.1 Case companies

The selected PSFs for this multiple case study are two of the Big4 and a firm in the IT industry. These two audit firms are major in their industry in terms of revenue. However, in Sweden all firms are close to equal in this aspect. In addition to what they primarily are recognized for (auditing), these firms have several other divisions with different service offerings which are also examined. It is reasonable to assume that the two audit firms are similar in their structure and strategy. Furthermore, the IT firm is a part of a group and constitutes one of their six business areas. The IT division offers consulting services but their control tools differ from that of the audit firms. The case firms' in this thesis are located in Malmö, Sweden and we believe that the findings apply primarily to the Swedish divisions. The data in the table below was collected through the case firm's websites.

Firm	Number of employees globally	Number of countries they operate in	Turnover in Sweden, in SEK	Number of employees in Sweden	Professions
Audit Firm (A)	250 930	>150	5.7 Billion SEK	2626	Advisory & Audit
Audit Firm (B)	312 000	>150	2.6 Billion SEK	1224	Advisory & Audit
IT Firm (C)	5 000	13	4.0 Billion SEK	3985	IT Management Consultants

Firm	Position at firm	Experience	Duration of interview
Audit firm (A)	Partner	24 years	1,5 hours
Audit firm (B)	Partner	17 years	1 hour
IT Firm (C)	Senior employee	6 years	1 hour

4.2 Firm A

4.2.1 Reuse and Expert economics

Based on the interviews and additional information from Firm A’s website it is not possible to clearly distinguish them as either reuse or expert economics. Rather, the firm shows tendencies of both with regards to the scope of their activities and service offerings based on their website. Furthermore, the partner interviewed found some difficulties answering the questions due to limited knowledge about all divisions, but overall valuable insights could be drawn. For example, the division of audit is predominantly reusing their existing knowledge-base due to standardized procedures and a low degree of complexity. However, audit practices have shown to become increasingly oriented towards advisory over time, thus not only entailing standardized approaches. Auditors need to be much more flexible with consideration to clients needs than before. In this aspect, audit is also slowly becoming aligned with expert economics.

Even though a lot of our professionals apply the same knowledge over and over again in different contexts, they all have to be able to find solutions appropriate for different clients. Thus being creative and having an inquisitive mindset is very important.

This reinforces the fact that reusing the existing knowledge-base is not enough. However, some professions in Firm A can be classified as expert economics to a greater extent than others. According to the interviewee, this is especially important for professions such as management consulting and financial advisory, whereas the clients need tailored solutions to specific problems. The interviewee emphasized that roles with more focus on advisory required expert

knowledge to enhance the clients' decision making. This is especially true for management consulting practices. However, consultants also use standardized frameworks to solve complex problems, thus indicating that all of Firm A's professionals in Malmo are a mix of both classifications to varying degrees. Moreover, auditing has many associates in relation to partners. After formal training auditors do not need support from senior managers to the same extent as in other areas. On the contrary, consulting and advisory have a low associate to partner ratio, since the areas require a high degree of close interplay.

Whether outcomes of long-term projects will be successful or not highly depends on the composition of teams. Therefore it is crucial that partners are able to connect with associates on a deeper level.

Something that permeates all units at Firm A is a culture of cooperation. More specifically, all employees have the opportunity to contact each other worldwide to access knowledge necessary for providing solutions to complex client problems. In addition, employees have meetings and brainstorm solutions for the clients. It is also usual that lower-ranking staff reaches out to senior employees when needed. The interviewee emphasizes that this is something that clearly distinguishes Firm A from other Big Fours, i.e. a less rigid culture where all employees are of equal importance. However, databases are also important in order to extract the necessary information for solving problems, and this especially applies to audits.

4.2.2 Explore and Exploit

According to the interviewee, the firm does not solely rely on one aspect. They *always* aim to increase efficiency in existing procedures, but also explore new areas for improvement. In the last decade, much emphasis has been put on leveraging knowledge through data and analytics to cut costs. The difficulties concerning this has primarily been to do so, without affecting clients negatively.

After all, it is a client-facing business. When trying to increase internal efficiency clients need to be prioritized.

The interviewee emphasizes that Firm A in the last ten years, has made major improvements with regard to how they process information and spot patterns of errors and wastefulness. Furthermore, Firm A has recognized the importance of being at the leading edge of innovation due to rapidly changing client needs. Furthermore, stating that innovation is undoubtedly necessary to sustain long-term competitive advantage but that there still is room for improvement. Firm A, therefore, invests heavily in the new generation of workforce, that according to the interviewee possesses adequate knowledge.

Moreover, the interviewee underlines that Firm A has become increasingly exploring in terms of experimentation, by realizing that conventional is not always “*as good as it seems to be*”. This has been especially true for employer branding, where Firm A earlier has faced challenges due to harsh competition. Furthermore, Firm A tries to convey a feeling of being familiar and caring but meanwhile professional to a greater extent than the other Big Four companies. Something that has proven to be exceptionally good for the prosperity of the firm. Through their website they want individuals and potential candidates to have an engaging experience before interacting with representatives, with the goal to provide an authentic image of themselves. Furthermore, is digitalization and its impact on Firm A’s operations constantly taken into consideration due to its rapid acceleration. The interviewee highlights that Firm A needs to focus on making the right investments and taking risks with regards to this, and that they are currently “*working on it*”. It primarily concerns the audit department. Thus, over time Firm A has gone from mainly focusing on internal efficiency to exploring. However, the interviewee recognizes the importance of both.

4.2.3 MCS package

4.2.3.1 Planning

Planning controls are aligned with the chosen strategy of the firm. In order to get an overview of their planning controls, general questions were initially asked. The interviewee stresses that Firm A’s planning consists of both short-term and long-term aspects. Meanwhile, emphasizing that it is difficult to define planning in terms of either being short-term or long-term. This, due to unexpected barriers that may arise when working towards specific objectives. However,

short-term planning is usually between one to three years and long-term planning for three to ten years. Furthermore, planning controls are crucial to Firm A in order to ensure that employees commit to strategic goals.

Without clearly defined plans, involving what is expected of all employees and how targets are going to be met, we will most likely fail.

Considering this, it is especially important for Firm A to make decisions regarding plans on a senior management level, but also include employees to reach unanimity. When plans are of more strategic orientation and need to be implemented quickly, Firm A solely relies on seniors with the right expertise and knowledge. This also applies to when precautionary arrangements ought to be done.

Furthermore, Firm A's planning activities take many forms and they do differ with regards to time and external circumstances. The interviewee exemplifies this with the current COVID-19 that has resulted in a major outplacement for the firm. The recent months have entailed intensive planning for Firm A around how to navigate employees working from home. It has also exposed Firm A to weaknesses in their IT systems, making it possible for them to plan on future improvements. In conclusion, the interviewee accentuates that their planning controls can be strategically oriented in both the short and long-term.

Moreover, planning concerning investments and budgeting requires careful consideration both in the short and long-term. The CFO and COO establish plans together which extend over approximately two years in order for their operations to coincide since they are highly dependent on each other (projects need to be monitored in accordance with budgets and investments). These plans are reviewed to and from to ensure that they can be adjusted when needed. More specifically, the CFO decides on budgets and investments after receiving information from the COO and project managers. After the plans are set the board of directors either approves or declines them.

4.2.3.2 Reward and compensation

Compensation and reward schemes primarily exist as a means to motivate employees, but also to show the firm's appreciation to employees being loyal. However, the interviewee recognizes that employees get motivated by different things, as some employees strive to maximize their bonuses and salaries while others prioritize always learning. Something that distinguishes Firm A from other audit firms is the lack of bonuses at the beginning of the professionals' careers. Furthermore, Firm A focuses on hiring individuals that prioritizes long-sightedness before short-term monetary rewards.

We want to hire the right people that share our values and are long-term in everything they do.

However, the interviewee underlines that Firm A's employees have paid over-time which separates them from other firms. Furthermore, employees should be aware that it is the norm within their industry to work for longer hours than they are contracted to, in order to maintain professionalism.

Firm A does have compensation and reward schemes but they vary a lot depending on which division the professional belongs to and their seniority within the firm. Most commonly performance and dividend agreements exist in the firm. The former exists with the intention to motivate employees to exercise their tasks more arduously when they are under time pressure. The latter entails contracts that seniors agree upon with Firm A regarding the extent of the incentives when goals are attained. Nevertheless, no monetary incentives in terms of bonuses emanates before reaching management level. For example, the most common model for monetary incentives is based on a percentage of what the auditor invoices. Furthermore, Firm A has a wage review once a year, where employees have the opportunity to negotiate their salaries. Increasing wages are most often done accordingly to established frameworks. However, Firm A also takes personal achievements into consideration when considering pay raise. Lastly, the interviewee shared that the primary incentive for employees to stay with the firm should be to achieve partnership.

4.2.3.3 Cybernetic

Financial measures are significant for Firm A and are primarily used to control the quality of outcomes. However, without elaborating on specific ones due to confidentiality. Financial measurements are evaluated at different levels in the organization starting from the associates all the way up to partners. Lower-ranking employees most often do the analysis and conduct reports at the request of seniors, which thereafter checks the correctness. Non-financial measurements are taken into consideration as well, such as meeting deadlines, customer satisfaction ratios, conducting quality reports and innovation. The interviewee states that both financial and non-financial measurements are of importance, but the balance between them varies depending on the department. Moreover, partners are most interested in improving financials, since it constitutes the foundation of the business. Non-financials measures primarily have their function at the associate level, since it is of utmost importance that they develop the right mindset. Clearly defined balanced scorecards do not exist because they would need to be adjusted constantly. Instead, all projects are evaluated separately and individual meetings are held to ensure that both financial and non-financial measures are being met. Partners are also being evaluated based on several factors. Most importantly on the feedback received from clients and employees, with emphasis on the former. The interviewee stresses this due to their client-facing exposure. Considering this, quality is a lodestar to the firm.

Budgets are definitely important for Firm A, and they are prepared every year. Further, the CFO has an explicit area of responsibility in this regard, involving monitoring and adjusting them when required. The CFO also reviews them to ensure that projects and departments use resources efficiently. Managers on different levels are also expected to have a holistic overview of budgets to run operations smoothly. Budgets are used in concurrence with forecasting, thus making it necessary to have a flexible approach and update them when needed.

Partners do have a significant role in budget setting as well. It begins with them informing those responsible, about how many hours they believe they will charge clients. Thereafter a calculation is done automatically that evaluates the extent of resources that are going to be utilized. Based on

this budgets are determined. When clients actually are being charged the initial budget is being updated and finalized. The interviewee follows up on this, stating that COVID-19 will have severe impacts on companies that are currently being revised by Firm A. This will require flexibility in the budgeting. Overstating billable hours can be troublesome for the firm. Furthermore, has the competitive landscape affected how much Firm A can charge for their services, and budgets are being adjusted accordingly. This results in time pressure for our employees and increased efficiency in order to reduce costs. Thus, budgets can be perceived as a control tool to affect employee behavior.

4.2.3.4 Administrative

Administrative controls take many forms and are applied with the intention to achieve different outcomes. Firm A has a hierarchical structure with partners in the top, followed by directors, senior managers, seniors, and thereafter associates. The interviewee emphasizes that this structure is most commonly used by audit firms and that it coincides with reward controls. Further, that having a defined career path for associates is appropriate in order to ensure loyalty and commitment. Administrative controls also entail increasing expectation of obtaining new customers as employees advance.

As employees get more and more accustomed to how we do business, we expect them to generate cash flows, in addition to their primary tasks.

Thus, Firm A holds employees responsible for achieving certain budgets and objectives. Moreover, the structure of Firm A is designed carefully to clarify guidelines regarding how and who to report to. This, in turn, simplifies controlling the relationships in the firm.

Firm A's policies and procedures are established on a local level in accordance with organizational guidelines and frameworks. Difficulties have earlier emerged with regards to procedures, due to differences in work approaches between offices. As a result, they have become more flexible and situational. According to the interviewee, they are crucial since they

align the firm's operations with its strategy. This is only possible if documentation and monitoring of business functions are prioritized.

4.2.3.5 Cultural

The interviewee emphasizes that working together, helping each other and being able to reach out to everyone regardless of position is at the core of their operations. Further, elaborating on this, claiming that they have evolved more in this regard than their competitors.

What mainly characterizes our firm is the relaxed atmosphere and that everybody is being treated equally regardless of position within the firm.

At Firm A the most prominent values are acting with integrity, entailing always acting in alignment with what the individual finds being right. Also, always acting as an ambassador for the brand name of the firm. The interviewee also stresses that Firm A appreciates when employees dare to be bold and breach existing patterns, in case processes can be improved. Firm A also appreciates employees that acknowledge local and global problems and want to be a part of a movement towards a better life for everyone. By having this approach to life, societal impact is created. This is also required to be perceived as serious and generally aware to external stakeholders. Moreover, caring is a lodestar for Firm A which entails making an effort to understand others' inherent beliefs and accept them for who they are.

The firm's values are communicated through many channels. Most importantly, the interviewee believes that all employees undergo a socialization process from the moment that they are being hired. New employees learn about Firm A's values and code of conduct as a part of the onboarding process. Firm A's values naturally permeate the whole organization, and are communicated from the top to the bottom of the hierarchy. Having a familiar but meanwhile professional culture results in a high degree of employee involvement, which in turn generates high customer satisfaction. Furthermore, values are indirectly being communicated through joint workouts, breakfasts, activities, and competitions. This also promotes a better group cohesion.

Firm A has an open landscape office with large spaces and there are no definite places. This has been done intentionally so that employees can change seats, and thus being able to interact with each other. The office is divided based on practice groups, such that auditors and consultants sit for themselves, etc. However, the more senior employees have their own offices. According to the interviewee, this is required for them in order to be fully focused, but it also serves as a signaling effect to motivate junior employees.

Firm A has informal but still professional dress-codes. There are no requirements to wear a suit or coat, rather it is important to always look representative. Employees also get a sense of how to dress depending on which clients they meet, after all, it is a *“people-oriented business”* as the interviewee expressed it. Lastly, some of the employees at Firm A. For example, auditors are members of a professional association. However, this does not inflict a certain behavior. Auditors and the rest of the employees behave according to professional standards and common sense.

4.3 Firm B

4.3.1 Reuse and Expert economics

Firm B's strategic orientation differs between departments and projects. The interviewee states that knowledge is primarily being reused in the departments of accounting, auditing, and administration. In auditing, for example, methods on how to solve problems used in previous projects can easily be used again. Changes in technology and legislation requires flexibility in this regard, as clients need more customized solutions. In divisions such as M&A, customized solutions are predominant due to clients having unique and complex problems. This also requires employees to use their global network to find solutions. Regardless of division, information is often extracted from databases to support operations. Further, it happens that professionals need to take advice from their global network. Thus, the firm shows tendencies of being both reuse and expert economics. The management consulting division solves complex problems, by being

innovative and using the latest technologies. The interviewee stresses that this division clearly can be classified as expert.

The associate to partner ratio varies depending on division and projects. Firm B has more associates in standardized procedures (example auditing), and more seniors in projects that require customization (for example consulting). The interviewee emphasizes that whenever they can not provide a solution to complex problems, they put together a team with diverse experience to find a solution.

4.3.2 Explore and Exploit

The main focus of Firm B is to increase their overall efficiency, however, exploring new areas is still essential. Therefore, the interviewee points out that there are multiple factors that matter when answering this question. For instance, if a new revolutionary working technique is better than the current one, the firms adapt to it. One example of this is digitalization, where Firm B is on the leading edge. Furthermore, Firm B is constantly updating their databases to ensure that they contain relevant and easily accessible information. Digitalization affects Firm B's structure and strategy. More specifically, the interviewee stresses that it serves as a means to fulfill clients' needs better, and thus increase their competitive advantage. However, choosing the right technology at the right time is challenging for the firm and investments in technology need careful consideration. The respondent acknowledges that having an inquisitive and creative mindset when evaluating potential technological advancements in the sector is crucial to long-term success. Moreover, auditing in Firm B has evolved drastically in the latest couple of years. For example, the way of examining revenues has changed.

From examining numbers to understanding internal controls. From random samples to checking the firm's processes and programs.

4.3.3 MCS Package

4.3.3.1 Planning

Planning controls are employed in firm B, also as a means to steer employee behavior and beliefs towards desired end results. Firm B uses both action and long range planning to achieve desired outcomes. The former has its focus on a 12 month period, with the intent to meet changing client demands and being able to smartly adapt to unexpected external circumstances. The latter with a more strategic orientation, without clearly defined timeframes. It can range between five to ten years and the plans primarily entails making budgets for an estimation of billable hours. Managers and partners work together on plans that are of non-financial character. More specifically, the partners propose ideas for planning, and the managers assist when necessary.

According to the respondent, budgets are primarily in place to achieve cost efficiency, meanwhile being able to provide high-quality and unique services. Furthermore, the CFO is primarily responsible for planning regarding budgets and resource utilization, who does all the relevant estimations and projections together with the financial department. Project managers (often the COOs') are responsible for providing information to the CFO. In the case of deviations from plans or unexpected events, project managers have the ultimate responsibility to inform the CFO. With this stated, they are highly dependent on each other. After the final budgets are set, senior managers at the head office in Stockholm review its veracity.

4.3.3.2 Reward and compensation

Firm B previously had individual bonus schemes for each employee. Bonuses emanated once a year, linear with increases in salaries. Bonuses existed as a means to motivate employees to work more diligently and effectively. Also to ensure that the employees were resilient in times of high workload. Moreover, paid overtime did not exist, thus bonuses being provided. The respondent of firm B emphasized that junior associates receive higher salaries than in other audit firms due to the lack of bonuses. Furthermore, bonuses and paid overtime do not exist since it causes an unsustainable achievement-oriented environment, with the interviewee stressing that their

lodestar is “*working as one*”. However, the firm still assesses individuals yearly to ensure that they deliver what is expected. Even though there is an established wage trend for associates, those who are exceptionally good can accelerate their salaries more quickly. Furthermore, monetary rewards in terms of bonuses and similarities exist for partners and are primarily based on three parameters; a percentage of what they invoice, recurring clients and client satisfaction. According to the interviewee, partners have the most important function of the firm in this regard.

4.3.3.3 Cybernetic

Firm B uses financial measures for performance assessment, benchmarking with previous years and comparison with other similar firms in their industry. Examples of financial measures that the firm uses are EBITA and Net Profit Margin. Non-financial measures are of equal importance to the firm such as quality and customer satisfaction. The interviewee stresses that the firm has several quality controls to ensure that they constantly exceed what is being expected of them in terms of service. Quality controls are combined with organizational learning to learn from past mistakes and to make improved decisions. The interviewee mentions that in order to remain competitive it is of utmost importance to have access to information that competitors have not. Thus, competing on the basis of quality, differentiation and customization is necessary. Non-financial figures force the firm to abandon only relying on financial measures such as net profit, which instead becomes the by-product. For long-term success, the respondent emphasizes that there is a need for coherence between financial and non-financial measures. Non-financial measures constitute the action needed to obtain constant growth. Furthermore, the interviewee mentioned that performance measurement systems also need to be flexible to ensure that they comply with auditing standards, which changes over time.

The BSC has previously been used but in the firm to evaluate performance. However, it has been discarded since managers have perceived it as being irrelevant and too static to their context of operations. Furthermore, the BSC is lacking for the firm since it does not take external stakeholders into account (such as for example competitors, regulatory bodies and the

government). Furthermore, components in the BSC are measured individually, thus not being desired in the firm.

The firm's most important assets are expertise, employees and clients. Employees use their expertise to meet client requests, which in turn provides revenues that spurs growth. This enables the firm to hire new employees and so the circle goes on.

As previously mentioned, budgets do exist. The firm uses a program that handles resource allocation based on client specification, entailing project extensiveness, type of service, etc. This applies to all departments at the firm.

4.3.3.4 Administrative

Firm B has administrative controls to ease and make the work more efficient but also to avoid conflicts. The structure is hierarchical similar to other audit firms involving partners at the top, followed by directors, senior managers, seniors, and thereafter associates. According to the interviewee, it is important to maintain a hierarchical structure as it promotes internal control. Further, it allows employees to understand the chain of command and where decisions are being made. It also provides a definite career path for employees. Clear career paths with internal training and education facilitates performance according to the respondent. Policies and procedures are established at the head office in Stockholm. However, managers in local offices are allowed to adapt procedures to situational circumstances when required. Policies also vary slightly between departments. Moreover, firm B holds employees responsible for achieving certain budgets and goals but also reporting on achievements diligently. This in order to ensure that operations are conducted in a smooth way. Lastly, the interviewee states that administrative controls are needed in order to maintain focus on the strategies and goals of the firm.

4.3.3.5 Cultural

Firm B's lodestars are solidarity and integrity. The interviewee underlines that the firm can be characterized as having an inclusive and supportive environment. Activities and conferences

reinforce this and improve the group coherence. However, the most important value of the firm is always prioritizing the client. This is being communicated through meetings, conferences, and managers. Having a mentor as a part of the onboarding process is something that further distinguishes the firm from other firms, and is meant to convey a feeling of unanimity. Furthermore, the office culture entails an open landscape with all employees being accessible when needed. However, senior managers and partners have their own offices. This serves as a motivating factor - that junior employees are able to achieve that as well if they deliver great results. The dress code is 'business', meaning that males wear suits and women blazers and high heels. According to the interviewee, there are slight differences in culture between offices, with Stockholm having the most status-oriented culture. Furthermore, the values of the firm follow the code of conduct that permeates the whole organization, but also professional standards and the law. Employees receive training, certificates, and authorization which further creates a culture of professionalism in the firm.

4.4 Firm C

4.4.1 Reuse and Expert economics

Firm C clearly distinguishes itself from the other case companies and can be classified almost solely as reuse economics. Procedures and knowledge are standardized and employees are expected to deliver high-quality solutions within short deadlines. IT consultants apply their knowledge in the same way at different companies.

Regardless of whether I am placed at Ikea or Alfa Laval as a consultant, I conduct the same work, such as programming in Python and Java. However, we [consultants] also deal with highly sensitive and confidential data, which requires a detail-oriented mindset, carefulness, integrity and patience.

With this being said, it is less about being flexible and more about doing tasks routinely and properly. Furthermore, it is common that the solutions in previous projects can be used again in other projects. In some instances, however, the firms that are hiring consultants request solutions on new problems related to their internal flaws. In order to be able to adapt to shifting demand

consultants are provided with training and courses at the IT firm. Further, the interviewee underlines that the hiring firms sometimes expect the consultants to do work in addition to what appears in the area of responsibility. Thus, having a service-oriented mindset is also an important element in the work of an IT consultant.

As previously mentioned, Firm C has established frameworks for solving problems, and employees receive training and certification necessary to do so (such as ISTQB and SSTB certifications). Using the IT firm's network to access information is not usual, rather relying on the tools received from the local office. Moreover, the firm most commonly works in teams consisting of four to eight persons, with the primary reason to being able to help each other when difficulties arise.

4.4.2 Explore and Exploit

Firm C's main focus is rather being innovative in terms of exploring new areas of improvement than increasing efficiency in existing approaches. However, the former most likely as a result of the progress of digitalization that replaces old systems at the hiring firms. The interviewee mentions that Firm C does not try to streamline processes that they currently have. Streamlining processes become relevant first as the consultants have found a new innovative way of conducting their work. The respondent underlining the following;

It depends on where in time we are. If a new revolutionary approach or program to work emerges that we perceive as being better than the existing ones, we adapt to it and streamline it continuously.

Due to the characteristics of the IT firm the interviewee assumes that it always has been this way, however not being entirely sure. Furthermore, as an IT firm, they merely rely on digitalization, advancing linearly with it as an organization. The interviewee exemplifies this with their asset performance center, where experience from clients and other external sources are gathered covering digitalization, in order to provide them with critical digital solutions. As a matter of fact, Firm C is not vulnerable to rapid technological changes as firms in other sectors are. This as a result of being at the leading edge of it.

4.4.3 MCS Package

4.4.3.1 Planning

Firm C uses both short and long-term planning strategies. The latter is most often in the form of detailed budget plans on a two-year basis. However, the interviewee highlights that both relate to strategic objectives and have a significant impact on operations. This is reasonable considering the varying magnitude of the projects that proceeds within different timeframes. Action planning is usually in the form of twelve months that easily can be altered. Revisions of short-term plans take place at the beginning of each quarter, and two times per year for long-term plans. The firm recognizes the importance of having flexibility in this regard as a result of uncertainties. The planning activities start at the departmental level, gathering information about their planned IT projects and costs associated with it. Thereafter, senior managers further disseminate the information to the upper management of the firm which ultimately decides whether to proceed with the projects or not. These decisions are primarily based on if it is feasible or not, planned costs and expected outcomes. If it carries on from that point it is sent back to departmental level for a final review. Those primarily responsible for plans are the CEO, board of directors, regional chief, and business area managers.

4.4.3.2 Reward and compensation

Firm C's main compensation is having competitive salaries. Having higher salaries than the standard of the industry is meant to attract the best workforce, but also acts as an incentive for the employees. The firm does not have bonuses in place for junior employees and middle management. Bonuses exist for top management and partners when they achieve established goals, such as achieving certain billable hours, etc. Furthermore, the interviewee states that not having bonuses for lower-level employees is in alignment with their culture as an IT firm, as they want to promote cooperation and not competition between them. The interviewee highlights that by not having bonuses, their employees have the opportunity to choose clients and industries that appeal to them, instead of solely thinking in monetary terms. The interviewee argument that

if employees have the opportunity to choose their own missions, their satisfaction will increase. This, in turn, results in improved quality and client satisfaction.

4.4.3.3 Cybernetic

Firm C uses financial measures such as Return on Investments (ROI), Earnings before taxes (EBT) and recurring costs as a means to evaluate performance and benchmark it with previous years. The CFO has the primary responsibility and reports to the board of directors in this respect. Furthermore, the management team and project leaders also play a vital role ensuring that targets are being met. The performance measurement system includes non-financial and financial measures. The former is a necessity since clients' needs have the greatest impact on innovation. Additionally, non-financial measures such as client satisfaction and quality are of great significance in Firm C, since they support KPIs. Even though both non-financial and financial measures are taken into consideration, there is no clearly defined BSC. The firm perceives rigid measurements as a barrier to flexibility. Moreover, senior managers have individual meetings with employees where several factors, including accomplishments and client satisfaction, are evaluated. During the meetings, employees are also offered to take additional courses to advance in their careers. The aforementioned to ensure that they share the common principles of the firm.

Budgeting serves an important role in Firm C, with the interviewee stating that they primarily exist to finance new projects and as a means to always be able to assist clients when requested. As earlier mentioned, the firm needs to be innovative in order to design IT solutions. In this aspect, budgets are also important to estimate costs and resources which might vary between projects. Thus, budgets are flexible and constantly reviewed. Business controllers monitor the projects periodically to ensure that resources are used efficiently. Additionally, consultants linked with the budgets are accountable to deliver the expected results. Therefore, communicating the content of the budgets to employees is of great importance for the firm. However, estimating costs and resource utilization for budgets is difficult, as the clients sometimes request the consultants to stay for a longer time than is expected. Further, budget

estimates are revised in the case of software devices being updated to a better version than the current.

4.4.3.4 Administrative Controls

Administrative controls exist to ensure that business is executed in alignment with the goals of the firm. According to the interviewee does Firm C's administrative controls indirectly steer and monitor employee behavior. Since administrative controls affect goals, strategies and policies employee behavior is also affected. Policies and procedures are established at a group-level in Firm C and exist as a means to specify expected or undesired actions. Furthermore, controls in Firm C are easily exerted over formalized and standardized procedures. It is challenging to control the accomplishment of assignments that require individual judgment. However, this is only needed when consultants have to evaluate problems that they have not handled before. Moreover, The respondent acknowledges that governance structures exist in research and development, which enables the firm to organize activities both vertically and horizontally. Governance structures are rather formal in the IT sector, as a result of access to highly sensitive and confidential data. To ensure that the consultants conduct business accordingly, weekly meetings are held with senior managers.

4.4.3.5 Cultural

Firm C emphasizes a collaborative and inclusive environment, where all employees are appreciated for their talents and uniqueness. Furthermore, Firm C has a familiar culture with open landscapes and without separate offices for seniors of the firm. Furthermore, their vision is underlined at their website with "*expecting a better tomorrow*". According to the interviewee, this means always being optimistic, contributing to the world and making an impact. These values are communicated in many forms. In the introduction for "newcomers," they are exposed to the firm's values through keynote speakers, slogans, workshops and more. The employees also receive weekly motivational messages from their CEO to ensure that they maintain the spirit of the firm. Furthermore, these values are in correlation with the goals of Firm C. The firm aims to be innovative, which according to the interviewee is necessary for a better tomorrow. Another value that is prominent for Firm C is prioritizing clients and always exceeding what is expected

from the firm. To assure that the values are being shared within the company, the firm hires the people who have qualities like humility, drive, social skills, positivity and sales in focus.

Technical qualities necessary for the job are also important since the new employees should have these mandatory skills to be able to consult the clients. Furthermore, the interviewee states that employees always should act as brand ambassadors. Further, it is important that they have soft skills in order to be able to establish long-term relationships.

Firm C's offices are designed as open landscapes with no individual offices for seniors employees. The dress code at the firm varies depending on which client they are consulting. At their own office, they are mostly casually dressed. For example, if an employee is consulting at a bank, the employee has to adjust their clothing accordingly. The interviewee states that their culture differs from other IT firms by having employees that really care about the firm and the customers. Other firms usually hire those with the highest technical skills to be able to charge as much as possible. Firm C on the other hand, is trying to create value for their customers, and thus relies on the marketing technique of word of mouth.

5. Analysis and Discussion

In this section, the findings from the case firms' is compared, discussed and analyzed in detail. When analysing management control systems the terms exploit and explore (since they are closely intercorrelated with reuse and expert-economics) will be used to evaluate organizational ambidexterity.

5.1 Classifications

The results extracted from the empirical data provided in the interview are similar on some aspects for all firms in this research. Due to the similar services offered and characteristics of Firm A and Firm B, both can be classified as a mix of both reuse or expert economics. However this varies depending on divisions within the firms', which is in alignment with Løwendahl et al (2001) that underlines that the firms can not be classified as one or the other. Instead different degrees of customization are prominent depending on division. Firm A clearly distinguished itself in terms of having a major audit division with a strong orientation towards reuse economics. However, this is also prominent in Firm B, but not to the same extent.

In general, Firm A and Firm B are becoming increasingly oriented towards expert economics as a result of a greater focus on the departments of advisory and consulting. This is in alignment with March (1991) which states that firms evolve over time. O'Reilly and Tushman (2013) also underlines that firms must be both exploiting and explorative and take a more active approach towards the latter to remain competitive in the long term. It is reasonable to assume that this trend exists as a result of the digitalizations recent sweep. We have recognized that digitalization requires a new way of thinking and conducting business, thus making advisory and consulting more relevant. However, as Firm B emphasises the importance of being able to adapt to digitalization *most*, they are also perceived as expert economics to a greater extent than the other firms'. Firm C that offers completely different services than the aforementioned also proves to be a hybrid of Hansen et al (1999) classifications. As previously mentioned, this is important in

order to stay competitive according to O'Reilly and Tushman (2013). The firm is on the leading edge of digitalization as a result of directly working with it. Innovation *fosters* within the firm, but standardized solutions are most frequently implemented. This is further reinforced by the fact that clients of Firm C request consultants with specific expertise, such as Java or Python.

Being classified as reuse economics coincides with the classification of exploitation, and this also applies to expert economics with exploration. Firm A and Firm B show tendencies of being both exploitative and explorative. Over time, the firms' have evolved from being more exploitative to explorative. March (1991) highlights that firms have to change and adapt due to uncertain external environments and rapid technological changes. Focus has shifted from solely trying to be cost efficient to being innovative as a result of digitalization. Furthermore, we believe that the firms' will become even more explorative due to this, but still without neglecting focusing on cost efficiency to be competitive in the long-term. Firm C is predominantly explorative, since they constantly *find* innovative solutions to changing demands (however, as previously underlined - they *implement* the solutions in a standardized manner).



Figure 3. Exploit - Explore

In accordance with the aforementioned Firm C is predominantly reuse economics and explorative, thus being the most ambidextrous of the firms'. This is not intuitive with regards to what has been presented in previous sections, but can be explained as a result of Firm C being exposed to most uncertain environments characterised by rapid technological changes. O'Reilly and Tushman (2013) emphasises that firms that frequently depend on technology have to be able to adapt and be ambidextrous. Firm C operates in unstable environments and thereby it is reasonable to assume that being ambidextrous is beneficial for them in this aspect.

5.2 Planning

Planning controls differ in the three case firms'. Short term planning mostly occurs in Firm C and as a result of them being explorative, which makes it harder to plan in the long term. This is in alignment with Løwendahl (2005) which states that long term strategic planning can be perceived as unnecessary restraining - restricting the exploring activities of Firm C. The lack of strategic controls in firm C, might also be a result of the culture, which embraces innovation and creative thinking which is utterly important according to Hansen et al (1999). This in turn requires new ideas and being able to constantly adapt to changing plans. However, Firm C's short term planning controls exist to enhance exploration with focus on interactions and knowledge-sharing. In Firm A and B, a mix of both short and long term planning controls exist. Clear goals exist and approaches on how to achieve them are established. As previously mentioned, ambidexterity is a result of being both explorative and exploiting. Therefore, Firm A and Firm B are perceived as most ambidextrous in terms of planning, since both action and strategic planning controls are prominent. Their divisions do not solely require either innovation or cost efficiency, rather both simultaneously.

Planning controls in all case firms' facilitates the achievement of ambidexterity since they promote exploration and exploitation simultaneously. Firm C's planning controls are primarily used to persistently challenge short term action plans, adjust them when required and achieve an explorative environment through this approach. However, long term plans of strategic intent also exist as a complement and thus emphasises exploration.

5.3 Cybernetic

Firm A and Firm B uses cybernetic controls as a means to provide objectives and goals that have to be obtained, which encourages exploitation. Thus, with regards to this budgeting and quality was most prominent in the audit firms. Budgets are especially important in the audit firms' and they are prepared every year to evaluate resource utilization. Malmi and Brown (2008) highlights

that budgets primarily are used in this manner. Budgets are used in concurrence with forecasting, thus making it necessary to have a flexible approach and update them when it is needed.

Establishing budgets as a control tool, indicates that the firm is more oriented towards reuse economics according to Løwendahl (2001) due to their standardized solutions. Forecasting facilitates future plans and makes it easy to control outcomes. Even though the audit firms' primarily can be classified as exploiting, they do not have clearly defined BSC. Thus, leaving space for exploration in conjunction to their goals and in turn promotes ambidexterity.

Budgeting is not equally important in Firm C, that rather focuses on new solutions and innovation. Not using budgets as a control tool, the firm is most likely oriented towards expert economics according to Løwendahl (2001), since it is harder to estimate and calculate budgets due to their customized solutions. The implication of this might be the industry they operate in, their services and the rapid advancement of digitalisation. Firm C does not have clearly defined frameworks on how to achieve goals, rather embraces exploration, autonomy in work procedures and risk-taking in alignment with March (1991), thus making it easier to achieve ambidexterity. However, for Firm C it is crucial not to prioritise cybernetic controls too much since it can hinder creativity, innovation and the opportunity to be ambidextrous. Furthermore, we have recognized that it is utterly important for ambidextrous firms to be able to perceive changes in the external environment and adapt to them. This is especially important for Firm C, that is directly exposed to technological changes. O'Reilly and Tushman (2013) emphasises the importance of firms being ambidextrous in uncertain- and rapidly changing environments. We also recognize that all firms use cybernetic controls both to achieve specific goals but also to leave space for employees to be innovative and having inquisitive mindsets.

We have identified that cybernetic controls facilitate clear goals to be achieved that promote exploitation. However, these controls do not always define how to accomplish specific objectives, and as a result leaves space for exploration and achieving ambidexterity in the case firms'. To summarize, all firms' uses cybernetic controls to facilitate both exploration and exploitation, but to varying extent and with different aims.

5.4 Reward and compensation

Firm A and Firm B have similar reward and compensation packages but with slight differences. Both firms have distinctive hierarchies, where career advancements serve as the most important reward mechanism. Merchant and Van der Stede (2012) states that professional recognition in terms of career development is of greater importance than monetary incentives. Increases in salaries that are aligned with career advancements serve as an incentive and motivating factor. We have identified that information obtained from cybernetic controls, such as the degree of fulfillment of goals related to budgets, is important in order to determine how reward and compensation packages emanate. This conformance between controls ensures that employees adhere to goals of the firm and as a result reinforces exploitation. Furthermore, the strong focus on financial measures that exist for Firm A and Firm B might impede them from achieving organizational ambidexterity. This as a result of employees focusing their efforts on achieving objectives necessary to advance in the hierarchy rather than those of the overall firm.

Firm C compensates their employees by having salaries higher than those of the competitors. However, no monetary incentives emanate for junior employees and there does not exist distinctive hierarchies in the firm. We reason that Firm C's reward and compensation controls are closely related to their cultural controls, where they want to encourage familiarity and collaboration by having a decentralized structure. Thus, compensation in relation to hierarchies and performance is not as apparent and formal as in Firm A and Firm B. This might depend on the fact Firm C wants to maintain an exploratory environment that embraces collaboration and achieving common goals. To summarize, Firm A and Firm B are more exploiting and Firm C more explorative in relation to reward and compensation controls. However, a balance exists between them for all the firms as in the case of the other control tools and thereby enhances ambidexterity.

5.5 Administrative control

By having established frameworks for responsibilities and work procedures administrative controls influence employee behavior. However, these are more notable in some instances than others. As previously stated, Firm A and Firm B have clearly defined hierarchies which require more emphasis on administrative controls, which is in alignment with Chenhall (2003) which states that firms having a centralized structure are using more administrative control tools. Clear guidelines, policies and separation of duties characterizes these firms. It is reasonable to argue that this reinforces exploitation, as it does not leave space for creative approaches to conducting work. Furthermore, administrative controls most likely restrict employees as they need to relate to certain ways of communication and behavior, thereby supporting exploitation. An example of this is constantly being exposed to the codes of conduct at the firms'.

However, in Firm C administrative controls do not exist to the same extent, since they have a more decentralized structure than the audit firms'. In contrast to what has been stated in the aforementioned paragraph, Chenhall (2003) underlines that decentralized firms have less administrative controls. Policies exist at group-level as a guideline for how to conduct work. We recognize that less administrative controls are necessary for Firm C since it gives the employees flexibility and freedom to explore and promote innovation, making them motivated and efficient. Furthermore, it allows employees to adapt to changes. However, having some administrative controls are beneficial for Firm C in terms of being exploiting, to ensure that consultants adhere to what they are expected to solve at the hiring firms (i.e. only relating to their main tasks). With this taken into consideration, administrative controls influence organizational ambidexterity in all case firms' by using more or less control tools.

5.6 Cultural control

Cultural controls are especially important when evaluating controls in the case firms' because they affect all other controls that exist. Assessing cultural controls in firms A, B and C clarifies

the strong presence of value, symbol and clan controls. However, we recognize differences in how they emerge depending on the case company. All firms have value based controls, in which the firms communicate their values through different channels and to varying extent. Firm C's communication is perceived as the most important of the case companies, as they have weekly meetings where their CEO conveys the importance of adhering to their values. The implication of this being that they are trying to promote a familiar and less rigid culture than that of the audit firms'. In alignment with Ouchi (1979) and Chenhall (2003) this culture is most appropriate to have in a Firm C since it is explorative to encourage innovation, creative thinking and employee empowerment. The audit firms' primary focus is to convey their values through code of conduct, which employees constantly are being exposed to instinctively. The consequence of this being values conveyed which shapes the individuals' perceptions indirectly according to us. Having established frameworks on how to convey values should be related to the audit firms' being classified as exploiting due to having a more rigid culture.

Symbol-based controls such as dress-codes and office architecture also differ in the case companies. Both Firm A and B have business oriented dress-codes. Even though both are audit firms belonging to the Big4, the former has less formal clothing than the latter. This since Firm A wants to be perceived as familiar and less rigid. Furthermore, Firm C distinguishes itself from the audit firms' since casual dress-codes is the norm. Formal clothing counteracts the purpose that permeates the organisation in Firm C - having an flexible and friendly atmosphere that empowers employees. However, dress-codes are not explicitly communicated in any firm, rather expected to be understood by employees. In the audit firms' certain dress-codes are expected to reflect professionalism. Furthermore, the office landscapes differ as well. Most prominently is Firm C's offices that are affected by their decentralized structure. Thus, personal offices for the top management do not exist, in order to enhance the familiar culture. This is most likely to be the fact when the firm is explorative. Firm C does not promote disciplined atmospheres that encourage exploitation since it can counteract social and human capital that searches for exploration. The firm rather uses cultural controls to ease exploration through innovation and creativity. The fact that employees at the audit firms' receive training, certificates and

authorization creates a culture of professionalism which reinforces exploitation, and thereby counteracts creativity.

Moreover, Firm A and Firm B have more distinctive hierarchies than Firm C, which impedes creativity and innovation. However, Firm A has been trying to improve this by recently introducing open landscapes, less personal offices for seniors and more teamwork. Still, difficulties exist in this regard for the firm due to the clear distinction of the different ranks of the hierarchy. However, this might eventually change due to the new generation of employees that request more familiar cultures.

6. Conclusion and summary

This section will summarize the findings of this multiple case study in order to provide an more in-depth understanding to the reader. Furthermore, contributions to the research area and examples of further research are presented.

Firstly, the result of this thesis shows that there is no best fit for all companies regarding management control tools. Management control tools differ depending on division within the PSFs, but also between industries such as audit and IT. The external environment is constantly changing due to rapid technological advancements, which have resulted in all three case firms' increasingly becoming more and more explorative.

The planning controls in the firms' demonstrate that Firm A and B are predominantly exploiting, and Firm C predominantly exploring. However, in all firms' planning controls facilitate the achievement of ambidexterity as a result of having both short and long term plans. This is also the case with regards to reward and compensation controls. All firms' show tendencies of being exploiting and explorative, but with Firm C mainly focusing on the latter. Administrative controls are significant in Firm A and Firm B with clear guidelines, policies and separation of duties which demonstrates exploitation. However, Firm C has a decentralized structure, thus being the opposite to the other case firms' in order to promote creativity and innovation. The conclusion drawn is that the degree of administrative controls affects organizational ambidexterity. Cultural controls are complex to evaluate, however important to all firms' since they clearly are intercorrelated with the other controls. Firm A and Firm B tends to have more rigid cultures as a result of their centralized and hierarchical structures, thereby mainly supporting exploiting activities. On the contrary, Firm C being explorative, due to less formality and strictness. To enhance ambidexterity, firms can have a balanced culture involving both strict procedures and innovative practices. We have identified that cybernetic controls facilitate clear goals to be achieved that promote exploitation. However, not always defining how to accomplish

specific objectives, space is created for exploration and thus promoting organizational ambidexterity.

With this being stated, this thesis has illustrated that there exists a relationship between management control tools and exploration and exploitation, thus the ambidexterity of the case firms'. Control tools are used under different conditions and contexts, thereby affecting the balance between exploration and exploitation and vice versa. We understand that it is possible to evaluate differences between the industries examined. However, it is important to be aware of the fact that rapidly changing environments (mainly due to technology) eventually will affect control tools and thereby organizational ambidexterity in the future. Therefore, research covering how ambidexterity is and will be affected by this will contribute to the research area. As previously stated, control tools are closely intercorrelated. Therefore, relationships between control tools and their effect on ambidexterity could be investigated more in depth. Lastly, firms operating in other contexts and industries could be evaluated with the same research objective, to provide further insights about organizational ambidexterity.

Reference list

Anthony, R. N. (1965). *Planning and control systems: a framework for analysis*. Boston: Harvard Business School.

Anthony, R. N. & Govindarajan, V. (2007). *Management Control Systems*, McGraw-Hill, 12th international edition, New York.

Bonner, S.E. & Sprinkle, G. B. (2002). The effects of monetary incentives on effort and task performance: theories, evidence, and a framework for research, *Accounting Organizations and Society*, vol. 27, iss. 4/5, pp. 303-345.

Bryman, A., & Bell, E. (2007). *Business research methods*. Oxford: Oxford University Press.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future, *Accounting, Organizations and Society*, Vol. 28 (2) pp. 127–168.

Dent, J. (1991). Accounting and organizational cultures: a field study of the emergence of a new organizational reality. *Accounting Organizations and Society* 16, 705–732.

Flamholtz, E., Das, T., Tsui, A. (1985). Toward an integrative framework of organizational control. *Accounting Organizations and Society* 10 (1), 35–50.

Gottschalk, P. (2004). *Strategic Knowledge Management Technology*. Idea Group Inc.

Greenwood R., Li S. T., Prakash, R., Deephouse, D. L. (2005). Reputation, diversification, and organizational explanations of performance in professional service firms. *Organization Science*; 16(6): 661-673.

Gschwantner, S., Hiebl, M. R. W. (2016). Management control systems and organizational ambidexterity. *Journal of Management Control* 27, 371–404.

Hansen, M. T., Nohria, N. & Tierney, T. (1999). What's your strategy for managing knowledge? *Harvard Business Review*, March–April, 106–16.

Haustein, E., Luther, R., Schuster, P. (2014). Management control systems in innovation companies: a literature based framework. *Journal of Management Control*; 24: 343-382.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: measures that drive performance. *Harvard Business Review*, January-February: 71-79.

Lewis, M., Brown, A. (2012). How Different Is Professional Service Operations Management? *Journal of Operations Management*, 30(1-2).

Løwendahl, B. R., Revang, Ø., Fosstenløkken, S. M. (2001). Knowledge and value creation in professional service firms: A framework for analysis, *Human Relations*, Vol. 54 (7), pp. 911-931.

Løwendahl, B. R. (2005). Strategic Management of Professional Service Firms, *Copenhagen Business School Press*, third edition, Copenhagen.

Maister, D.H. (1982). Balancing the professional service firm. *Sloan Management review* 24(1), 15-29.

- Maister, D.H. (1993). *Managing the professional service firm*. New York: Free Press.
- Malmi, T. & Brown, D. A. (2008): Management control systems as a package - Opportunities, challenges and research directions, *Management Accounting Research*, Vol. 19 (4), pp. 287-300.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*; 2 (1): 71-86.
- Merchant, K. A. & Otley, D. (2007). A review on the literature on control and accountability. in: Chapman, C., Hopwood, A. G. & Shields, M. D. Amsterdam et al. *Handbook of management accounting research* (pp. 785–802). Elsevier. Vol 2.
- Merchant, K. A., Van der Stede, W. A. (2012). *Management control systems: Performance measurement, evaluation and incentives*. Harlow, UK: Pearson Education. 3rd ed.
- Nordenflycht, A. (2010). What is a Professional Service Firm? Towards a Theory and Taxonomy of Knowledge Intensive Firms. *Academy of Management Review*, Vol. 35, No. 1, pp. 155-174.
- O'Reilly, C. A., Tushman, M. L. (2013). Organizational ambidexterity: past, present, and future. *The academy of management perspectives*; 27 (4): 324-338.
- Otley, D. T. (1980). The Contingency Theory of Management Control, *Accounting, Organizations and Society*, Vol. 5 (4), pp. 413-428.
- Otley, D. T. (1999). Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), 363–382.
- Ouchi, W. (1979). A Conceptual Framework for Design of Organisational Control Mechanism. *Management Science*, 25(9), 833-848.

Sitkin, S., Sutcliffe, K., & Schroeder, R. (1994). Distinguishing Control from Learning in Total Quality Management: A Contingency Perspective. *The Academy of Management Review*, 19(3), 537-564.

Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks, Calif: Sage Publications, fifth edition.

Zardkoohi, A., Bierman, L., Panina, D., Chakrabarty, S. (2011). Revisiting a Proposed Definition of Professional Service Firms, *The Academy of Management Review*, 36(1).

Interview questions

Part 1

A) Classification - reuse and expert economics

1. In order to remain competitive in the long-term firms can adapt to different strategies. PSFs can provide high-quality solutions by reusing their existing knowledge-base and/or provide creative solutions to unique problems. How would you describe your firm's service offerings? Solely as one or the other or in terms of both? Is one or the other predominant, or of equal importance?
2. Do your project teams consist of a low or high associate to partner ratio? Or both? Does it differ depending on the characteristics of the project?
3. How do you approach a client when your firm can not provide a solution to their problem? Is it usual that you search for solutions in your databases, or do you use your network for assistance?

B) Classification - Explore and Exploit

4. What is your firm's main focus; increasing efficiency in existing procedures or exploring new areas for improvement (the latter in terms of experimentations, innovation, risk-taking, and variation? Is it a mix of both? Which one is of most importance?
5. How has this changed over time?
6. Describe how digitalization affects your structure and strategy.

Part 2 - Control tools within an organization

A) Planning controls

7. What planning strategy does your firm implement and is it primarily short-term or long-term? Or, different strategies depending on time and external circumstances?
8. What do your planning controls primarily try to achieve?
9. Does your firm have a tactic and/or strategic orientation with regards to planning controls?

10. Who establishes the plans and how well do they adapt to changes? Have they changed over time?

11. Are the plans of each functional area clearly defined or are they applicable to several areas?

B) Cybernetic

12. What type of financial measurements do you have (e.g. EVA or ROI)?

13. Do you use a balanced scorecard involving both non-financial and financial measures?

14. Can you elaborate on this?

15. Does your firm have budgets?

16. What functions do budgets primarily have?

17. Are you involved in the budget setting? If yes: How are these calculated and set?

18. How often do you revise/monitor the budget for a year?

C) Reward and compensation

19. Does your firm have an established compensation and reward scheme?

20. Why do they exist?

21. What type of rewards do you have and do they differ depending on the functional area of the firm?

22. Can you describe your reward packages more in-depth, i.e. how do they emanate?

D) Administrative

23. Why does your firm have administrative controls in place? As a means to monitor employee behavior or to attain other objectives?

24. How is your governance structure established with regard to the firm's composition and board structure?

25. At which organizational level are policies and procedures established and how does your firm ensure that they are followed?

F) Cultural

26. How would you describe the culture of your firm?

27. What are the most prominent values and beliefs in your firm? How are they noticed?

28. How are the values of your firm communicated?

29. How well do values correlate with the objectives of the firm? Do they exist as a means to attain specific goals of the firm?
30. On what basis are professionals hired except for skills necessary for the position?
31. How are workspaces designed? What dress-codes do you have?
32. Does the culture of your firm distinguish itself from other firms' within your industry?
How?
33. Are your employees members of a professional association? Do you recognize differences in employee behavior with regard to their profession?