



SCHOOL OF ECONOMICS  
AND MANAGEMENT  
Lund University

## **Management control tools within purchaser-supplier relationships**

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AB InBev and Carlsberg Group cases

Master Thesis

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STRATEGY, MANAGEMENT CONTROL, PURCHASER, SUPPLIER, VALUE CHAIN, STRATEGY, MANAGEMENT CONTROL, PURCHASER, SUPPLIER, VALUE CHAIN, STRATEGY, STRATEGY, MANAGEMENT CONTROL, SUPPLIER, VALUE CHAIN, STRATEGY, MANAGEMENT CONTROL, PURCHASER, ACCOUNTING, STRATEGY, MANAGEMENT CONTROL, PURCHASER, SUPPLIER, VALUE CHAIN, STRATEGY, MANA

# ABSTRACT

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**Title:** Management control tools within purchaser-supplier relationships

**Course:** BUSN68 Business Administration: Degree Project - Accounting and Management Control, Master level, 15 University Credit Points

**Seminar date:** 2012-05-30

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**Keywords:** Management control, value chain, strategy, purchaser, supplier

**Aim:** The aim of this master thesis is to describe and analyze what management control tools are used within the setting of purchaser-supplier relationships, how these tools are used and what their interdependencies are.

**Methodology:** The methodology undertaken is based on the qualitative approach using the case study design. The two case companies are AB InBev and Carlsberg Group, both operating in the beer industry. The empirical findings, mainly conducted by interviews, are compared to and analyzed together with the theoretical framework focusing on the inter-organizational management accounting (IOMA) in purchaser-supplier relationships.

**Theoretical framework:** Presented theoretical framework has a focus on the IOMA tools used to manage purchaser-supplier relationships. However, in order to understand specific control mixes including particular control tools, also overall theories about inter-organizational relationships (IOR) and strategic management accounting (SMA) is presented.

**Empirical study:** The empirical findings from case companies AB InBev and Carlsberg Group shows that they rely on both formal and informal control tools in their purchaser-supplier relationships. However, AB InBev focuses more on the formal control tools whereas Carlsberg Group is a more frequent user of different tools and also has more sympathetic relationships with its suppliers than AB InBev.

**Analysis:** Analyzing findings from theoretical framework and empirical studies it can be identified that specific characteristic for IOR and furthermore SMA affects the choice of IOMA and appropriate control mixes. From the case companies it is found that AB InBev and Carlsberg Group both rely heavily on behaviour control as the main tool managing suppliers and that trust as a control tool functions both as a complement and a substitute for formal control tools.

**Results:** Presented results suggest that IOR and SMA should be taken into consideration when creating appropriate control mixes. The mix should include outcome, behaviour and social control tools. However, emphasis on behaviour controls is identified of special importance when managing successful purchaser-supplier relationships.

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## DEFINITIONS

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**IOMA** (inter-organizational management accounting): internal focus with specific control tools used in the control process of the relationship (Kraus & Lind, 2007).

**IOR** (inter-organizational relationship): various forms of cooperation between independent organizations (Kraus & Lind, 2007: 269).

**Purchaser:** individual or group of individuals, who participate in purchasing decision making process, who share some common goals and take risks arising from decisions (based on Arjan & Weele, 2009).

**Purchaser-supplier relationship:** bilateral relationship which take place between purchaser and supplier (based on Arjan & Weele, 2009).

**Purchasing:** management of the company's external resources in such a way that supply of all goods, services, capabilities and knowledge which are necessary for running, maintaining and managing the company's primary and support activities is secured under the most favorable activities (Arjan & Weele, 2009: 3, 408).

**Supplier:** a party which under certain contractual conditions is obliged to supply goods and services (Arjan & Weele, 2009).

**Supply:** includes purchasing, materials management, incoming inspection and receiving. Supply is used relating to buying based upon total cost of ownership in manufacturing environment (Arjan & Weele, 2009: 5, 10, 411).

**Supply chain:** a series of companies in which the consecutive stages of production of an economic product take place, from primary producer to final consumer (Arjan & Weele, 2005: 411)

**SIOMA** (strategic and inter-organizational management accounting): a combination of external approaches in SMA and the internal approach in IOMA (based on Lord, 2007; Kraus & Lind, 2007)

**SMA** (strategic management accounting): external focus with interconnections between strategic management and management accounting (Bowman, 1990).

# 1. INTRODUCTION

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*The purpose of this chapter is to provide the reader with knowledge of what the thesis covers. Firstly, background information of the main areas of the topic is given. Secondly, relevant problems of the topic are discussed and thirdly the aim as well as further structure is presented.*

## 1.1 Background

*“A company is its chain of continually evolving capabilities – that is, its own capabilities plus the capabilities of everyone it does business with.”*

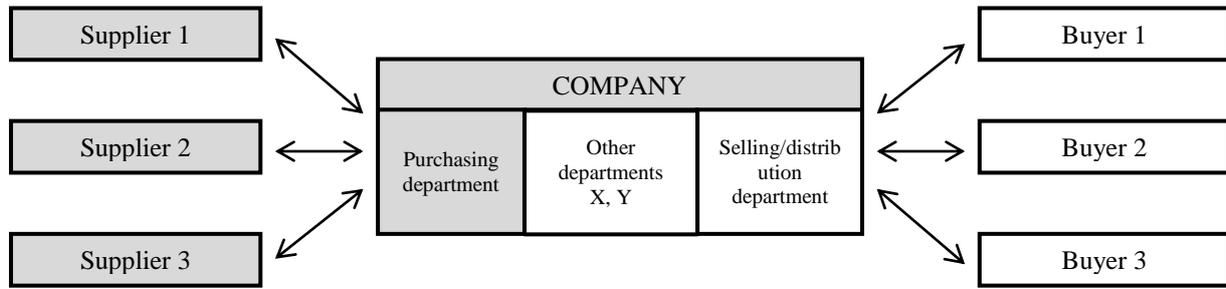
(Fine, 1998:71)

Nowadays, considerations of management have shifted from competition between companies within one industry towards competition between supply chains. The supply chain perspective includes various types of interactions that take the form of IOR. IOR is different forms of cooperation between parties that are developed due to constant changes of firm boundaries and organizational settings (Kraus & Lind, 2007).

The fundamental principle is that IOR emphasizes the value chain approach. Accordingly, there is a focus on interactions between purchasers and suppliers that takes place throughout the value chain, from raw material to end product (Van der Meer-Kooistra & Vosselman, 2000). However, in this type of relationship, the issues of information asymmetry and contractual conflicts are two factors that are critical for the effectiveness and competitive power of the relationship. In order to minimize conflicts of issues like this, the role of management control is enlarged and is no longer identified within the boundaries of only one organization (Skjøtt-Larsen et al, 2008). The new boundary-spanning type of management control can be identified in the SIOMA framework wherein the SMA is identified as the external management perspective and IOMA as the internal management perspective.

The main purpose SIOMA is described as avoiding conflicts and motivating parties to achieve mutual goals and outcomes. The control should be undertaken in a manner which supports the coordination of interdependent tasks between the purchaser and supplier and accordingly, not only the control itself but also monitoring of appropriate control tools is critical in creating competitive advantage (Dekker, 2004; Nilsson et al, 2011).

In the case of supply chain management the important relationship between purchaser and supplier can be examined from two perspectives 1) the company acts as a purchaser in the supply chain and 2) the company acts as supplier in the supply chain. Concerning this master thesis, the focus is with regards to the shadowed parts of figure 1, identifying perspective one. Consequently, the thesis will in the following refer to the purchaser-supplier relationship from the purchasers' perspective where the company itself acts as the purchaser. In this setting there are various management control aspects that are interesting to examine, for example; how appropriate control mechanisms are chosen and how they are used.



*Figure 1: Perspectives of the purchasing process*

Furthermore, depending on the type of industry, the value chain and the interactions within it undertake different forms, hold different complexity levels and are out of different importance for the involved parties. Consequently, the control within different types of supply chains varies. An industry that holds extensive value chains with multiple IOR and also is the chosen context for this thesis is the food industry. Looking more into detail, the brewery industry is an industry that recently has experienced rapid change and development. Large brewery companies look for new competitive advantage, exploiting boundaries of the organization and transferring their best practices to new countries of domicile (Koller et al, 2009). Moreover, result of activities of the four largest players within the brewery industry – Anheuser-Busch InBev (AB InBev), SABMiller, Heineken and Carlsberg Group – is a consolidation of the market which undertakes almost half of the industry volume, 45% (Canadean, 2010). This explains our choice of case companies - AB InBev and Carlsberg Group - as big players in the market. Looking at beer as a final product, ingredients for production is basically the same, thus the process of supply of main materials does not substantially differ among companies. However, organization of the supply chain and usage of management control tools can differentiate among companies within the same industry.

## **1.2 Problem**

There is a general trend that results of effective management in companies depend on its supplier relationships (Ford et al, 2011). Accordingly, focus is directed towards the supply chain wherein management is undertaken to make relationships more efficient. This requires modeling of the purchasing process which in overall can be described as a step by step process of activities. To model and manage the activities between the purchaser and the supplier a certain level of IOMA is demanded, especially since the purchaser and supplier not necessarily act in the best interest of each other. The control tools that are put in place can take the form of either formal or informal control (Arjan & Weele, 2009; Skjott-Larsen et al, 2008; Smith et al, 1995; Ouchi, 1979; Dekker, 2004). Formal control tools contain formal contractual obligations and different standardized procedures within the IOR and can be divided into outcome and behavioral control tools (Ouchi, 1979; Dekker, 2004). However, despite the “formal” definition, these control tools often represent a mix of financial and non-financial measures, such as cost and quality. These kind of specification of inputs within outcome and behavioral control tools plays a crucial role for the definition and impact of informal control (social control) on formal ones (Van der Meer-Kooistra & Vosselman, 2000).

Furthermore, looking more into the purchaser-supplier relationships those can over time be developed from operational to strategic levels where different stages in the development-

process require different types of control (Arjan & Weele, 2009). This process of development can be critical for involved parties but is still essential to reach more efficient outcomes. However, sharing the same business ethics and a high level of trust between the purchaser and supplier are critical informal factors in the relationship when moving from operational to strategic levels (Kraus & Lind, 2007).

The informal controls contrasted with formal ones have become a substantial topic in management of IOR. A high level of trust permits business partners to rely on informal agreements and incomplete contracts. On the other hand, a low level of trust can lead to strict control regulations in order to create protection against opportunistic behavior by counterparties (Dekker, 2004; Skjott-Larsen et al, 2008). The emphasis on informal control tools and especially trust, between the company and its suppliers, is critical in creating value in the chain. Improper performance of control can affect not only the process of supply of necessary goods, but also the quality of the end product and the value that is delivered to the customer.

Looking into the issues of management control within the supply chain with special focus on the purchaser-supplier relationships there are many interesting areas to examine. The following are the main research questions of this master thesis:

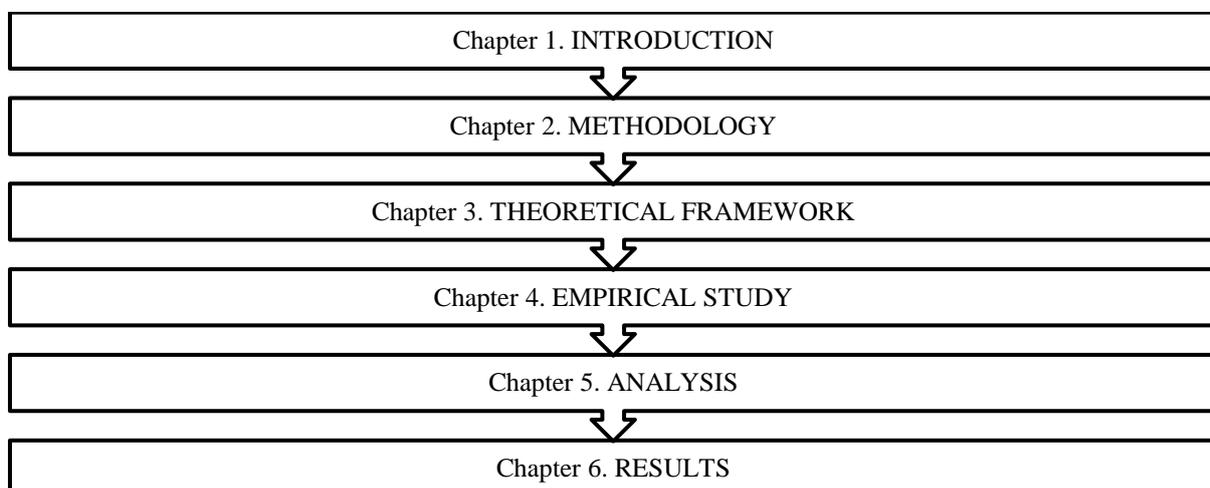
- 1) *What kinds of management control tools are used in purchaser-supplier relationships and how are they used?*
- 2) *What are the interdependencies between formal and informal control tools in purchaser-supplier relationships?*
- 3) *How is the setting of IOR and SMA affecting IOMA?*

Taking into account those questions we arrive at the aim presented in the next chapter.

### **1.3 Aim**

The aim of this master thesis is to describe and analyze what management control tools are used within the setting of purchaser-supplier relationships, how these tools are used and what their interdependencies are.

### **1.4 Structure**



## 2. METHODOLOGY

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*This chapter provides the reader with methods used in the thesis. A description of the research design is followed by the selection of case companies. Further, it is described how data is conducted and analyzed and lastly, validity and reliability of the thesis is discussed.*

### 2.1 Research design

In order to reach the aim of the thesis a qualitative approach is undertaken. This will help us engage in creating a deeper understanding of control tools within the purchasing process which is important when describing and moreover, analyzing the topic.

The qualitative approach will further be used to pursue an empirical support in which the case study design presented by Yin (2009) is used. The choice of the case study approach is basically supported by the fact that the theoretical standpoint, the combination of IOR and SIOMA, creates an operational link which best can be understood through case studies and observations in practice. Furthermore, the qualitative approach and case study design leave room for interpretations specific to the context. This is an important aspect in this thesis as the emphasis on purchaser-supplier relationships and how they are managed certainly has contextual influences. Moreover, as previously mentioned, even companies within the same context may differ a lot and our consideration is that those differences are important to understand and further more interesting aspects to analyze.

It should also be brought to your attention that this thesis makes use of systematic combining, presented by Dubois and Gadde (2002) as a process where theoretical framework, empirical fieldwork and analysis evolve simultaneously. Accordingly, the thesis is developed in a manner, where a continuous movement between empirical findings and theories are undertaken with the objective of comparing and matching outcomes of control in reality with the presented theories.

### 2.2 Selection of case companies

In the process of selecting case companies we came across different meanings advocating either single or multiple case study approaches. Eisenhardt (1989) argues for the use of multiple case studies stating that more than four cases are essential to generate theory with much complexity. Considering this thesis, it is dealt with the complexity built upon the combination of two theoretical approaches why one can argue that the multiple case study approach should be undertaken. However, the classic case study approach including many important studies that have improved the knowledge of organizations, are built upon one case. Arguments support that a careful study of a single case leads to opportunities to see new theoretical theories (Dyer & Wilkins, 1991).

This thesis undertakes a more narrow approach, using two case companies. This enables us to describe and analyze findings and theories in the purchaser-supplier relationships based on a deeper understanding compared to the approach studying many companies. Moreover, the reason not to make it even deeper by choosing only one case company is for us to be able to make a comparison that may bring interesting results depending on company specific

characteristics. Also in order to facilitate the comparison, two different case companies are chosen within the same industrial context; the food industry.

The choice of industry is supported by the fact that the food industry holds extensive supply chains with multiple IOR, covering all steps from production of raw material to delivery of end product to consumers. Consequently, various interesting management control situations between purchasers and suppliers can be found. Furthermore, within the industrial context of food the brewery industry is chosen as a focus with the targeted case companies AB InBev and Carlsberg Group. Both companies have global networks of distributors and are world leading breweries. AB InBev is the world's leading brewer (AB InBev, 2012) and Carlsberg Group is the world's fourth leading brewer (Carlsberg Group, 2012a) and together with Heineken and SABMiller, they produce almost half of all industry volume 45% (Canadean, 2010). Consequently, they hold dominant positions and are most likely able to exercise control over their suppliers. This makes them interesting case companies from the controlling perspective. Moreover, already by investigating material on their respective homepages it can be found that relationships and partnerships are important for both companies.

## **2.3 Data collection**

### 2.3.1 Primary data

The primary data used in this thesis is interviews with the two case companies AB InBev and Carlsberg Group. Interviews are one of the most employed methods in qualitative research and the case study approach. This can be explained by the flexibility the process of interviews creates (Bryman & Bell 2007). In order to create and maintain this flexibility, semi-structured interviews are used. Semi-structured interviews function as a conversation guide where lists of specific topics/questions are used, but the questions may not follow on exactly as the way they were outlined on the list (Bryman & Bell, 2007). In this way we emphasize that the interviews can take different directions to get a better reflection of what the interviewee considers important. Follow-up questions and more individual questions are also used in order to capture case specific circumstances. This is especially important since the same interview questionnaire (see appendix A) were used for both case companies.

Furthermore, in order to provide for best results the interview questionnaire was sent in via e-mail to the interviewees. At AB InBev the contact person and interviewee is Natalia Voloshyna, located at the Ukrainian subsidiary. She holds the position of associated brand manager with responsibilities to purchase goods and services for marketing goals. As a purchaser she is aware of all control tools within supply chain and accordingly she is able to provide us with interesting information about the company's relationships with suppliers and how the control is undertaken. With regards to Carlsberg Group, interviews were conducted from the Swedish subsidiary with main contact person Lennart Mattsson who holds the position of Country Procurement Manager. Additionally Ulrika Ejnarsson, employee at supply department, has extended valuable information. It should be highlighted that even though local subsidiaries is used, they work under influence of global rules and practices.

The first interview with AB InBev was carried out on the 7<sup>th</sup> of May and lasted for 90 minutes. Due to the fact that our interviewee is located abroad the interview was held via

Skype. The second interview was conducted on the 14<sup>th</sup>, also via Skype, and lasted for 35 minutes. The last interview enabled us to get a deeper understanding of the purchasing process.

The first dialogue with Carlsberg was carried out the 13<sup>th</sup> of April and lasted for 30 minutes. It concerned the overall supply chain at Carlsberg and the recently ongoing globalization process. On the 14<sup>th</sup> of May an additional interview was held in order to answer questions that were not answered due to the first conversation. The interview lasted for 40 minutes and concerned more specific control questions. It should be highlighted that all interviews were recorded in order for us to be able to present precise findings.

### 2.3.2 Secondary Data

The secondary data used is in the form of evidential sources; firstly for the theoretical framework and secondly for back-up of the empirical information. For the theoretical framework publicly available information about IOR, SMA and IOMA is used. We made use of databases connected to the library of Lund University School of Economics and Management, to gather books and academic research articles. The key concepts that mainly were used are; inter-organizational relationships, strategic management accounting, inter-organizational management accounting and purchaser-supplier relationships.

With regards to back-up information for the empirical findings information from AB InBev and Carlsberg Groups respective company homepages and also information from annual reports as well as areas of supply chain, culture and social responsibility were examined. Documents that were especially helpful were the respective company's code of conduct for suppliers, for AB InBev - Global Citizenship Report and for Carlsberg Group - Supplier and Licensee Code of Conduct.

## **2.4 Data analysis**

Data analysis within case studies is essential for building theories but also the most difficult part (Eisenhardt, 1989). The primary and secondary data in this thesis is analyzed and interpreted and forms the main part of this thesis. The analysis is undertaken as a continuous manner in line with the systematic combining where our theoretical framework, empirical data and analysis evolve simultaneously. The purpose is to identify similarities and differences in how purchaser-supplier relationships are controlled between theory and reality. Accordingly, empirical findings are compared with the theoretical framework and moreover a cross-case analysis is done between the two case companies, looking at both similarities and differences.

The overall purpose with the data analysis is for us to be able to reach a conclusion of supply chain management that helps us reach the aim, namely: to describe and analyze what management control tools are used within the setting of purchaser-supplier relationships, how these tools are used and what their interdependencies are.

## **2.5 Validity and reliability**

In order to create and maintain quality of the thesis we want to ensure validity and reliability. Yin (2009) states that validity in a case study are achieved when several tactics that deal with tests are applied throughout the case study. Validity in this thesis is created by ensuring clear and consistent definitions of the concepts of IOR, purchaser, supplier, purchaser-supplier relationship, SMA, and IOMA. Furthermore, the validity is ensured by reviews and corrections of empirical data. Though, we are aware of some drawbacks of the validity. For example, the fact that the selection of interviewees can impact the data and its analysis as well as the interviewees may be biased and report in a manner linked to themselves or in a way which is beneficial to the company. To further construct validity, in the secondary data, multiple sources of evidence are used. For example when collecting data it is ensured that different search engines, different academic journals as well as different authors are used. This is in order to encourage inquires of concepts and frameworks as well as subjectivity of the authors.

Reliability is described as whether the same case can be done again, arriving at the same findings (Yin, 2009). In order to create reliability, documentation of procedures such as information gathering and especially interviewing is undertaken. After each meeting also a document of assignments which should be followed up and finalized until the next meeting were created. Those types of documents as well as information collection from both primary and secondary data were dated and saved in a database (Dropbox).

### 3. THEORETICAL FRAMEWORK

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*This chapter provides the reader with selected information and theories within the research area. Firstly, IOR is briefly presented in order to give an overview of the relational characteristics within supply chain. Thereafter, information about SMA and IOMA is given to focus the attention on strategic management and control tools applicable to the purchaser-supplier relationship.*

#### 3.1 Inter-organizational relationship

IOR is defined as “various forms of cooperation between independent organizations” (Kraus & Lind, 2007: 269). Firm boundaries and organizational settings are continuously subject to change, and accordingly several different forms of cooperation takes place. The different types of business relationships create the basis for companies operations in the modern world where their interdependencies can “affect strategies, operations, organizations and ways of thinking of suppliers, customers, development partners and government agencies etc.” (Ford et al 2011: 3).

IOR takes place throughout the value chain of a company and the different relationships can take various forms. According to Lord (2007), business relations as well as IOR can be seen from two different organizational settings; dyadic relationships or networks. A dyadic relationship is a form of vertical collaboration between a company and its business partners. The collaboration takes place between activities but can also be a type of horizontal cooperation between companies focusing on the same customer. They can be arranged as technology licensing, research consortia, joint ventures or strategic alliances. Concerning networks they can be seen as bounded, with a distinct center and defined goals or unbounded without a center and common mission (Lord, 2007; Lind & Thrane, 2005; Mouritsen & Thrane, 2005; Håkansson & Lind, 2004).

Furthermore, within either a dyad or a network the main focus is on the relationship between the purchaser and the supplier. The supplier often becomes the main contributor when a company aims at reducing costs. This is because the purchased goods or services normally are a significant part of the total costs. Accordingly, the choice of appropriate suppliers is crucial for an optimized purchasing process, development of the overall supply chain as well as realizing the strategic context. There are four basic supplier strategies within supply chain. Firstly, *performance based partnership* where collaboration and partnership between parties is based on mutual participation and involvement of all parties. The choice of appropriate supplier is based on its belonging to “best in class” in the market. Secondly, supplier strategy can be seen as a *competitive bidding*, wherein long-term contracts for supply of a specific product are combined with lowest price for purchasing. Consequently, this strategy is a multiple sourcing strategy where decisions of purchasing are based on minimum price considerations. The third strategy is *securing continuity of supply* which implies that the buyers focus should be on guaranteeing regularity of the supply process. Consequently, the choice of supplier within this strategy depends on whether it is able to ensure permanent deliveries. The last strategy is *category management and e-procurement solutions* which can be defined as “interactive business process whereby retailers and manufacturers work together

in mutual cooperation to manage categories as strategic business units within each store” (Arjan & Weele, 2009:199). Basically, it is a system which simplifies the choice of the supplier by providing electronic catalogues in which the purchaser can place orders from preselected suppliers. Due to the fact that different groups of suppliers are of different interest to different companies, the purchasing process is hard to standardize and is instead performed in a way which supports each company and its strategy (Arjan & Weele, 2009).

The various types of IOR and the strategy within it are important to define in order to create appropriate management accounting and control for the management and performance. Also, the structure chosen to govern the relationship is of substantial importance for success (Ittner et al, 1999; Osborn & Baughn 1990). The main purpose of control within IOR is described as motivating parties to achieve goals and outcomes. Additionally, the control should be undertaken in a manner which supports the coordination of interdependent tasks between parties (Dekker, 2004).

### **3.2 Strategic and inter-organizational management accounting**

The SIOMA framework is a combination of two different approaches, SMA and IOMA, which together handles many issues of IOR. SMA is concerned with different external perspectives of relationships between strategy and the management accounting, whereas IOMA deals with the internal perspective of managing relationships. Accordingly, the interplay between the two approaches combines the external and internal perspectives which enable companies to more efficiently reach desired results.

As this thesis examines control tools within a specific relationship, the purchaser-supplier relationship, further focus is with regards to IOMA. However, in order to give you an overview and also support the importance of understanding the external perspective, SMA is also presented.

#### **3.2.1 Strategic management accounting**

SMA examines the external focus with interconnections between strategy and management accounting (Bowman, 1990; Lord, 2007). Competitive forces such as benefits from partnerships with suppliers and customers have become increasingly important as they can result in lower costs. Accordingly, the linkages between strategic positioning towards those parties and management accounting have become a source of competitive advantage.

In overall the relationship between strategy formulation and management accounting can be empathized in four different perspectives. The different perspectives are presented in figure 2.

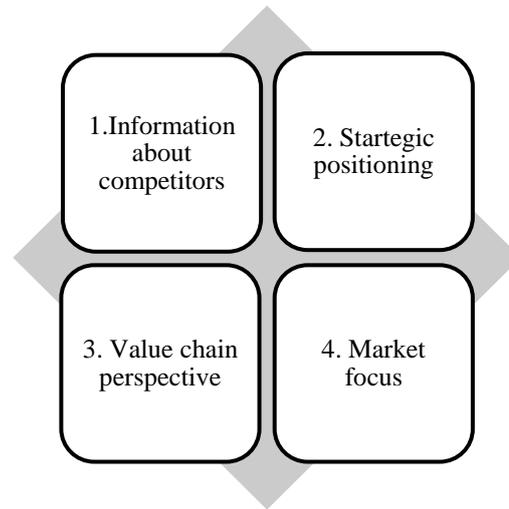


Figure 2: Overall view of SMA (based on Lord, 2007)

### 3.2.1.1 Information about competitors

In this perspective it is stated that SMA is used as a tool to proactively collect information about competitors (Coad, 1996; Collier & Gregory, 1995; Guilding et al, 2000; Simmonds, 1981). Information about cost structure of competing products as well as costs of entrance into particular markets help companies to establish proper price for its products and estimate the behavior of potential buyers. Moreover, “industry structure analysis is a tool to systematically assess the opportunities and threats in the external marketplace” (Anthony & Govindarajan, 2007:71). Consequently it can be assumed that SMA plays the role of a “watchdog”, by monitoring, gathering and providing management with relevant and reliable information about competitors.

### 3.2.1.2 Strategic positioning

In this perspective it is described that companies can choose different types of strategic positioning in the market (Miles & Snow, 1978; Porter, 1985; Porter, 1980). Companies can choose between product differentiation and cost leadership where the positioning can be performed in pure form or as a mixture. Several studies have shown that, based on strategic position, a company’s management selects the appropriate and relevant management accounting technique (Simmons, 1987; Cooper, 1996; Chenhall & Langfield-Smith, 1998a; Shank, 1989). Shank (1989) has presented assumptions about how different management accounting techniques are related to the strategic positions undertaken by companies (table 1).

Table 1: Different management accounting emphasis (Shank, 1989)

	Primary strategic emphasis	
	Product differentiation	Cost Leadership
Role of standard costs in assessing performance	Not very important	Very important
Importance of such concepts as flexible budgeting or manufacturing cost control	Moderate to low	High to very high
Perceived importance of meeting budgets	Moderate to low	High to very high

Importance of marketing cost analysis	Critical to success	Often not done at all on a formal basis
Importance of product cost as an input to pricing decisions	Low	High
Importance of competitor cost analysis	Low	High

To have a strong financial orientation “expressed in budgeting and reporting procedures as well as strict control of overheads is typical for cost leaders” (Arjan & Weele, 2009: 185). They can take into consideration quality characteristics of the produced goods but costs are always emphasized first. This type of strategic positioning is commonly successful when a company already controls a large market share (Arjan & Weele, 2009). Consequently, cost leaders tend to emphasize product costs as input for pricing, cost control, standard costs and importance of competitor cost analysis. This can be explained by the fact that these kinds of companies find the optimal and cheapest configuration of cost structure. (Lord, 2007). With regards to product differentiation, emphasis is on marketing products which develop customer loyalty and brand preference and result in elimination of price importance (Arjan & Weele, 2009). Product differentiators tend to spend more on marketing purposes (consequently incurring more marketing costs) and consequently cost emphasis loses its primary importance (Lord, 2007). In summary, it can be concluded that companies take different advantage of its strategic positioning which influences management accounting.

### 3.2.1.3 Value chain perspective

The value chain perspective of SMA contains value chain analysis, cost driver analysis and competitive advantage analysis (Lord, 2007). From this perspective SMA is seen as a part of the value creation process, which jointly is built between companies themselves, customers and suppliers. Some studies have shown that proper analysis of the chain can lead to cost reductions (Cooper & Slagmulder, 2004; Lord, 2006) and provide management with broader overview of the company performance (Shank & Govindarajan, 1992). Moreover, the value creation process and cost drivers are interconnected. They determine the cost position of the firm and therefore also the position in the market (Shank, 1989; Porter, 1985). Value chain analysis can be applied into the context of the competitor’s value chain (Lord, 2007). Hence, if both value chains are compared, it can lead to correlated strategic decisions which in turn can lead to increased competitive advantage (Porter, 1985). Consequently, incorporating value chain analysis into management accounting information and practice leads to granting a strategic context (Lord, 2007).

### 3.2.1.4 Market focus

This perspective of SMA is a customer oriented approach (Bromwich, 1990), where satisfaction of the customer’s demands is seen as a source of competitive advantage. Consequently, presentation of a product with certain attributes and suitable price can lead to a market leading position. One of the tools of creating such a product is target costing, which will be presented further. Most often it is a question of producing the product at lowest cost and therefore the role of SMA is to design appropriate cost structures (Lord, 2007).

### 3.2.2 Inter-organizational management accounting

Moving from the external perspectives, it will now be focused on the internal management of IOR. Management of IOR is an ongoing process with various procedures such as meetings, negotiations and product as well as production development. Even though many IOR are long-term and built up of close collaboration, the purchaser and supplier do not necessarily act in the interest of each other. This has impacts on the management control in firms as well as between firms. The failures purchaser-supplier relationships are often related to the difficulty in managing them (Ireland, Hitt & Vaidyanath 2002). As touched upon before, the dominant party in a relationship often finds reasons for controlling the other party, since it can contribute to cost reductions (Ford et al 2011).

Management control can be described as the mechanisms put in place in the process of control to influence the behavior of people to work towards the goals of the specific relationship, for example; the goal to reduce costs (Kraus & Lind, 2007). There is often a distinction between formal and informal control where outcome and behavior controls are types of formal control and social controls are informal control. See table 2 for overview.

Table 2: Formal and informal control tools in IOR (based on Dekker, 2004)

Outcome controls	Behavior controls	Social controls
<i>Ex-ante tools</i>		
<ul style="list-style-type: none"> <li>• Goal setting</li> <li>• Open book accounting</li> <li>• Target costing</li> <li>• Inter-org cost management</li> <li>• Value chain analysis</li> </ul>	Structural specifications: <ul style="list-style-type: none"> <li>• Policy documents</li> <li>• Planning</li> <li>• Procedures</li> <li>• Rules and regulations</li> </ul>	Partner selection: <ul style="list-style-type: none"> <li>Trust</li> <li>• Interaction</li> <li>• Reputation</li> <li>• Social networks</li> </ul>
<i>Ex post tools</i>		
Performance monitoring and rewarding	Behavior monitoring and rewarding	Trust building: <ul style="list-style-type: none"> <li>• Risk taking</li> <li>• Joint decision making and problem solving</li> <li>• Partner development</li> </ul>

#### 3.2.2.1 Outcome controls

Outcome controls specify outcomes of the IOR by measuring, evaluating and rewarding the outcomes. Setting goals in relationships sets clear directions for task performance as well as clarifies expectations and increases the congruence between the two parties. Dekker (2004) argues that accounting measures are an important part of outcome controls including for example goal setting, measurement of cost reductions and financial reward systems. The accounting measures motivate both parties in a relationship to cooperate and to put greater effort into the collaboration. Additionally, incentive systems of involved parties can be developed together to monitor and ensure performance.

Except from mutual *goal setting* between parties there are also other techniques used in controlling outcomes. In the following we will describe; open-book accounting, target costing, inter-organizational cost management, value chain analysis, performance monitoring and rewarding.

*Open book accounting* is based on that one or both parties in the IOR open their books for the counterpart and in this manner disclose data important for the relationship (Kraus & Lind, 2007). In open book accounting it is often production and operational costs of the supplier that is inspected. Thereafter an agreement on a profit percentage on the top of those costs is set. In this way the negotiations on profit margins can be compared with the purchaser's profit margin. This type of outcome control provides the purchaser with an assurance that the supplier is reaching for cost improvements in a manner that is not unbeneficial for the purchaser. It may be considered that the supplier is put in an inferior position, but at the same time it provides the supplier with value and demonstration of commitment (Ford et al, 2011).

With regards to *target costing* it is used to reduce the overall cost of a product. Both purchaser and supplier are involved with a focus on the period before the product is produced. All steps of the life-cycle are investigated in order to reduce the cost of new products. However, the critical aspect in target costing is to maintain the quality and to ensure that customer requirements are met when cutting costs. Suppliers are often crucial in target costing as the supplier costs are normally a large part of the total cost (Kraus & Lind, 2007). If companies integrate its suppliers in the process of target costing, cost consciousness of both purchaser and supplier can be affected. Accordingly, the value added for final customers increase.

Also *inter-organizational cost management* is a form of outcome control. The underlying assumption is that there exists information asymmetry between the purchaser and the supplier in the purchasing process which can lead to the creation of unnecessary specifications that increases the supplier costs. In order to reduce these costs, formalized purchaser-supplier interaction to reduce the overall costs takes place and forms the domain of inter-organizational cost management (Cooper & Slagmulder, 2004). The key function is that both the purchasers and suppliers design teams are involved in the joint cost reduction. Cooper and Slagmulder (2004) have identified three approaches in the inter-organizational cost management;

- **Functionality-price-quality trade-offs (FPQ trade-offs):** FPQ trade-offs is a minor cost overrun problem. It is used when an item exceeds the target cost; the way to reduce the price is to lower either the functionality and/or the quality specifications in a way which is acceptable for the purchaser. Only limited interactions between the purchasers and suppliers design team are necessary to lower the price to the target level. According to Kraus & Lind (2007), estimated cost savings are between 0-5 percent. Additionally, successful FPQ trade-offs function as a kind of value-engineering project which helps both the purchaser and the supplier to ensure the generation of adequate returns.
- **Inter-organizational cost investigations (ICI):** ICI is undertaken when FPQ trade-offs cannot ensure sufficient cost reductions to meet the target price. It not only include product design changes but also more extensive changes undertaken when redesigning

all steps from raw material to finished product. Accordingly, more intense interactions between purchaser and supplier are identified. Moreover, often more than two engineer teams from the companies in the supply chain are involved and the ICI has a bigger scope of design changes that enables greater cost savings across the entire supply chain. Estimated cost savings are between 5-10 percent (Kraus & Lind, 2007).

- Concurrent cost management (CCM): CCM is identified as the most intense management technique of cost overrun problems. Fundamental changes are undertaken in both purchaser's product and supplier's component in order to aggressively reduce costs. There is often a higher supplier concentration in order to easier make changes in the design compared to if the component were sourced from multiple suppliers. The involvement of suppliers also takes place much earlier in the design process in order to enable their innovative solutions. Accordingly, CCM requires more intense meetings between the purchaser and supplier and Kraus and Lind (2004) argue that cost savings in a range from 10-15 percent can be generated.

*Value chain analysis* is another outcome control mechanism. The whole value chain is analyzed in order to identify, coordinate and optimize linkages between interdependent activities. All stages of a product, from raw material to end product, are segmented in a way which creates a better understanding of critical elements in relationships and cost behavior (Krause and Lind, 2007).

Finally, *rewarding* is a type of outcome control. It is a way of motivating suppliers in different directions, for example to produce cost savings and make quality improvements. A study by Gietzmann (1996) identified a type of reward systems in which suppliers were ranked according to excellence. High performing suppliers achieved a higher reward and were more likely to get profitable assignments in the future

#### 3.2.2.2 Behavior controls

Behavior controls specify relationships of partners and how they should act. The controls also evaluate the outcome of the behavior and whether specifications have been followed (Kraus & Lind, 2007). The behavior controls are especially important as different cultures and behaviors in collaborating organizations may give rise to conflicts. Thus, if certain behavior is agreed to be undertaken, the relationship can reach more efficient outcomes.

Typical control mechanisms are policy documents, planning, procedures and rules and regulations specific to the context or IOR. In purchaser-supplier relationships policy documents and standards of accepted behaviors, quality plans to ensure high quality, ordering schedule to be in time, group monitoring and planning scheme can be identified as behavior controls (Dekker, 2004). Kraus & Lind (2007) also argue that frequent meetings in IOR are an important behavior control mechanism. Both parties should have representatives that meet in order to discuss projects and time plans. Meeting then functions as a forum for communications and often provides for joint solutions through the processes of clarification and agreement.

### *3.2.2.3 Social controls*

Social control is informal control and it is made up of values, norms and cultures that influence people and their behaviour in relationships. Social control tools cannot be designed but are substantiated through meetings and negotiations as well as the selection of partners. Therefore, those activities are important for companies emphasising social controls. The selection of a partner may be a process where considerations such as background and matching cultures are identified in order to evaluate a future relationship. If a relationship is later formed, preferences of both parties should be undertaken in order to create shared meanings and visions (Kraus & Lind, 2007).

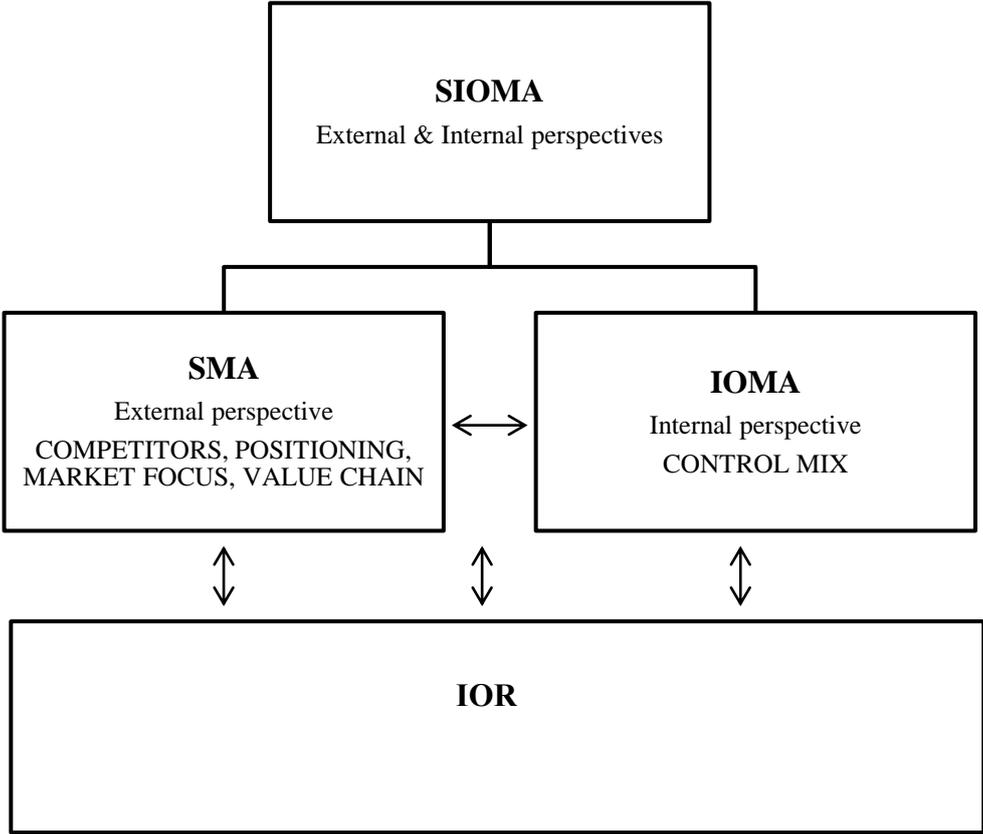
Trust is an important underlying factor in social controls in IOR (Dekker, 2004; Tomkins, 2001; Child 2001; Kraus & Lind, 2007; Adler 2001). There are various definitions of trust but the basis is that it can be associated with expectations based on intentions or behaviour. Trust on the organizational level is between organizations and how they expect each other to behave. According to Kraus & Lind (2007) it is difficult for individuals in the relationship to make agreements and establish mutual behaviour and outcome controls if not a certain level of trust is established. On the contrary, a high level of trust facilitates agreements between parties regarding, for example, goal setting and rules. Accordingly, a high level of trust substantiates processes of finding acceptable outcome and behaviour controls.

There are different ways in creating trust. One way of building trust is through the selection of a partner which was presented above as a tool for building overall social controls. With regards to the creation of trust, the partner selection influences future expectations of efforts and outcomes. Selecting the right partner with appropriate quality, technological capabilities, supplier certification or other desired attributes, reduces uncertainty about the expected outcomes. Accordingly, trust is created between the parties. Other ways of generating trust is through risk taking between parties as well as increased interaction. Increased interaction can be undertaken through joint agreements, problem solving, development activities and more. According to Dekker (2004), this type of interaction leads to more commitment and increased interest in the outcomes of the relationship.

Trust is also important with regards to information sharing. Adopting something without full information is often substantiated with trust (Tomkins, 2001). Applying this on IOR means that information sharing between parties will in general only be required when there is a lack of trust. This leads to another aspect, namely trust as a low-cost solution within IOR (Tomkins, 2001; Dekker, 2004). A lack of trust in relationships will lead to the need for more complete information about plans, procedures and results. Development of plans will describe what the other party intends to do, processes explains how it is done and information about result should be able to tell us both expected and unexpected outcomes. The work to develop the information requires time as well as resources and accordingly a higher cost compared to a relationship with higher trust and smaller information needs. Accordingly, building trust in the setting of IOR will be a low-cost solution.

**3.3 Integrated theoretical framework**

The theoretical framework is constructed in order to give an overview of the research area as well as function as a source of reference and comparison basis when describing and analyzing the empirical findings. Presented in figure 3 is an integrated theoretical framework which brings the different dimensions of IOR, SMA and IOMA together.



*Figure 3: Integrated theoretical framework*

The management of IOR is herewith presented with SIOMA which handles both the external and internal perspectives. Even though SMA and IOMA can be identified as two separate perspectives, it is undeniable that successful and efficient IOR present a strong link and explanatory power between SMA and IOMA. IOR definitely needs to be aware and monitor the external perspective in order to create appropriate management and control mixes suitable for the specific circumstances.

As this thesis deals with control tools in purchaser-supplier relationships the focus is with regard to IOMA. However, empirical findings from case companies and further analysis will include a brief presentation of IOR and SMA in order to substantiate correct analysis of IOMA.

## 4. EMPIRICAL STUDY

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*This chapter includes empirical findings from the two case companies; AB InBev and Carlsberg Group. The companies are presented as two separate cases, starting out with brief background information. Thereafter companies' respective IOR is presented, followed by the SIOMA approach divided into SMA perspective and IOMA perspective. It should be highlighted that all findings are due to interviews, except sourced paragraphs which are gathered from published external information.*

### Case company I – AB InBev

AB InBev is one of the leading high-end consumer product companies in the world, as well as leading global brewer producing four out of ten of the world's bestselling beers. The company manages 200 beer brands within their portfolio among which consumers can find global, multi-country and local brands (AB InBev, 2011).

AB InBev conducts its operations in 23 countries which together constitute six operational zones. The company sustains to hold number one or number two position in the markets where it does business. AB InBev as an organization is based on "Dream, People, Culture: 10 principles", with help of which it maintains a constant growth (AB InBev, 2011).

### 4.1 Inter-organizational relationship

The value chain of AB InBev is carefully managed and considered as one of the main perspectives in the company. Overall, the value chain is developed to ensure that the beer is "made in a right way" (AB InBev, 2011:14) and includes the steps of: crop cultivation, power housing, brewing, packaging, distribution and retail and consumer activities.

Within the value chain of the purchasing process the procurement in supply department, handles the main activities within the process (figure 4). Additionally, all activities undertaken are based on the Global Supply Policy and relationships between suppliers and AB InBev can be described as dyadic in the form of a vertical collaboration.



*Figure 4: AB InBev purchasing process (Natalia Voloshyna, 2012)*

It is identified that the purchasing process is highly emphasized and also strictly regulated. It starts with the step of application which is reviewed in the head of the department. After a series of tests, the application is passed to the procurement in the supply department. It should also be highlighted that applications for big purchases must be registered in a specific global system. However, the procurement in Supply Department organizes a tender process in order to choose among applicants and find appropriate suppliers. In this stage the supplier is obliged

to provide samples, contracts conditions, price terms of delivery and more. Thereafter, the supply department forms an application in the global system. This is further passed through the process of briefing and electronic auction to the final choice of suitable suppliers.

AB InBev has global supply partners which handle most of the orders of the strategic products. Those relationships are valuable and consequently also long-term contracts are formed as a step in maintaining those strategic suppliers. However, the company refuses to operate under a monopoly based supply process and thereof they substantiate the business of local and small suppliers. Moreover, AB InBev conducts its business under conditions of post payment, which means that services of suppliers will be paid after all goods are delivered. This is crucial for the purchaser-supplier relationships in the company, and also signals a high level of trust between the parties. Herein it can be observed that the purchasing strategy of AB InBev includes emphasis on a mix of competitive bidding, securing of continuity of supply and category management.

## **4.2 Strategic and inter-organizational management accounting**

### 4.2.1 Strategic management accounting

AB InBev maintains its operations through deep understanding that being the best company in brewery industry is not enough. AB InBev extends the concept and work towards the goal of “brewing in a better world”. The strategy is performed with regards to three pillars; Responsible Drinking, Environment and Community, which together compile the bottom line for corporate social responsibility in the company (AB InBev, 2011:10).

Considering the presented theoretical framework, it is possible to identify the same SMA perspectives in AB InBev. Firstly, *competitor perspective* is identified including concerns mostly about the major global players, Carlsberg, Heineken and SABMiller. However, in the local market of Ukraine, the main competitor is Carlsberg Group and thereafter local beer companies. The strong position of AB InBev, both globally and locally, is maintained through market analysis followed up by benchmarking of best practices. Secondly, with regards to *strategic positioning*, AB InBev positions itself through cost leadership. AB InBev realizes this position by merging or taking over local products in new markets, or by bringing the worldwide brands into local markets. They make use of economics of scale and are possible to produce beers to low costs, even in small local markets. Thirdly, the *value chain perspective* is emphasized and seen as a competitive advantage in the company. It is identified that the chain incorporates optimization of processes with strong focus on the three pillars; Responsible Drinking, Environment and Community. Accordingly, the value chain clearly supports the overall strategy and strategic positioning of AB InBev. Lastly, *market focus* is stressed as being the customer focus especially through establishment of low cost position and CSR responsibility. The CSR responsibility is a considerable part of the company and is also incorporated into all processes and activities.

#### 4.2.2 Inter-organizational management accounting

Concerning the description of control tools within the purchasing process of AB InBev it should be stated that “formal control is created in order to protect the company against its suppliers, however without behavioral there is no outcome control”. This expression actually covers and defines the entire control system of the company, where control tools are used in every step of the purchasing process in order to support all activities. Additionally, it is identified that the system of social control acts as supplement and is believed to be an essential part in the control mix.

The control process of purchasing in the supply chain starts with calculations for purchased goods and is considered to be one of the most important control tools. The calculations are a type of outcome control and are also supported by goal setting which identifies the aim of the outcome. When AB InBev act in line with the presented calculations as well as deliver desired results, the supply process is considered to be successful and well performed. Moreover, AB InBev analyses the costs of all individual activities in the supply process, which means that they undertake value chain analysis in each step of the supply process. AB InBev also undertakes open book accounting which functions as a “tool of pressure” put on the suppliers. All the outcome control tools together are considered to help the company to optimize its chain and deliver better outcomes.

Moving further to behaviour control, these tools have significant impact in the purchasing process. Different types of behaviour control tools can be found, where among policy documents, planning, procedures, rules, and regulations are identified being the most important. It should be highlighted that all activities are handled under the behaviour control tools where, for example, the choice of supplier is dependent on compliance with policy documents. These documents contain clear procedures, rules, demands, specifications and expectations that are put on the suppliers. For example, on the stage of tender, all suppliers are ranked into three levels, from the most creditable to the most risky. Unfortunately, we were unable to get information about special demands put on suppliers, but in overall the supply department checks financial position and history of individual suppliers. Depending on which level the supplier is categorized in, different contract conditions and control tools are imposed. In this process, AB InBev also forms a “black list” in order to ensure that businesses with unscrupulous suppliers are not undertaken.

AB InBev also relies on social control tools. It can be identified that the purchasing process and choice of supplier is highly dependent on reputation of both the supplier and AB InBev. AB InBev is considered to be a company with strong brand and market position and can therefore take advantage of a good reputation. In order to protect its value chain, AB InBev carefully controls it and tries to ensure a low level of risk by imposing this on the suppliers. Concerning trust it is believed “to be a pleasant complement but in reality the AB InBev does not rely on these tools more than in terms of the contract”. Hence, trust and trust building is identified in the contractual agreement.

## Case company II – Carlsberg Group

Carlsberg Group is the worlds fourth largest brewery group. It holds a product portfolio including more than 500 brands of beverages with especially focus in beers. The flagship brand is the beer recognized as Carlsberg which also is one of the best-known brands in the world (Carlsberg Group, 2012a).

The business of Carlsberg Group operates in Northern and Western Europe, Eastern Europe and Asia in which they hold strong market positions. Other parts of the world is also reached out to in form of export and license agreements. The activities in the different markets are focused on activities in which the Group has expertise as well as right products and accordingly they can secure a leading position (Carlsberg Group, 2011).

In order for Carlsberg Group to hold leading positions, there are overall improvements made across the whole business. The improvements include projects at local, regional and Group wide levels where actions are taken to become more efficient. For example a transformational step was taken in October 2011 when the Group announced to integrate the supply chain of market in Northern and Western Europe. The aim with this process of change is to improve competences, overall efficiency and customer service, but also to increase the speed and optimization of asset utilization. The change is named as The Business Standardization Programme and will facilitate the creation of a future integrated supply chain.

### 4.3 Inter-organizational relationship

The overall value chain perspective of Carlsberg Group is important and includes the steps of: research and development, procurement, brewing and bottling, logistics, sales and marketing, consumers and customers as well as communities (figure 5). Throughout these different steps, emphasis on various types of relationships is undertaken and moreover identified as a way to learn from each other and share best practices with the result of improving performance.



*Figure 5: Carlsberg Group supply chain (Carlsberg Group, 2012)*

Looking into detail of the step of procurement it is identified as the main step handling purchasing activities. The focus is to optimize purchasing activities but also to make sure that environmental questions and CSR criteria is included in the decisions and monitored also by the supplier.

The purchasing process is more or less centralized and carried out at Group level. There is no specific focus on the setting of a partner in networks or dyads; rather it is focused of the treatment of a partner as a supplier or licensee. Although, there are some distinctions between different suppliers where a few major global suppliers are treated as extraordinary business partners. Nevertheless, all suppliers and licensees are valuable for Carlsberg Group as they

contribute in delivering financial success and conducting the business strategy. They value supplier relationships that are honest with open communication and moreover of a long-term character. The contractual basis is normally two to three years and then renewed. It can be identified that the purchasing strategy in Carlsberg Group holds a mix of performance based partnership, securing of continuity of supply as well as category management. However, in order to optimize this strategy and for relationships with suppliers and licensees to be efficient, they are managed through the Carlsberg Group Supplier and Licensees Code of Conduct which will be described later.

#### 4.4 Strategic and inter-organizational management accounting

##### 4.4.1 Strategic management accounting

Carlsberg Group is gathered by the slogan “thirst for great”. This is a motto based on a belief that things can always be better, and in the same line the future ambition of the Group is to “be the fastest growing global beer company”<sup>1</sup>. To realize strategies like this it is believed that external factors needs to be brought together and efficiently monitored.



Figure 6: Carlsberg Group strategy map (Carlsberg Group, 2012)

Looking at the SMA perspectives in the theoretical framework, clear links are also identified in the strategic approach of the Carlsberg Group. Firstly, the *competitor perspective* is dealt with, but it is not a focused area in the strategic map. Carlsberg Group is aware of its leading position and their major concern is to benchmark practices with the other major players; AB InBev, Heineken and SABMiller. They benchmark within specific areas such as premium brands, standard products or regional area. Looking into the specific market of Sweden, wherein our interviewees are located, Carlsberg holds the leading position and competes in the local market. Secondly, *strategic positioning* is identified in the “products and innovation” segment in figure 6. Carlsberg Group drives their growth by focusing on beers and the innovation of these products by taking advantage of local market opportunities. Consequently, the strategic position is towards product differentiation rather than cost leadership. Thirdly,

<sup>1</sup> Measured in terms of average organic growth in net sales and growth in operating profit over a three year period.

Carlsberg Group has a strong *value chain perspective* which can be identified in the segment called “efficiency”. It emphasizes a focus on more activities within the chain in fewer locations to leverage on scale and cost. Consequently, Carlsberg Group can optimize their value chain and cost structures. Lastly, *market focus* is recognized in the segments of “consumers and customers” and “structure and society”. Except from satisfying customers with premium and local brands and products, Carlsberg Group also highlights its corporate social responsibility in order to fulfill demands regarding not only the product itself but also requirements of appropriate acting in society.

#### 4.4.2 Inter-organizational management accounting

The management of internal relationships in Carlsberg Group is emphasized through the Carlsberg Group Supplier and Licensees Code of Conduct. The Code reflects the minimum standards that should be followed within four important areas: human rights, labor rights, environment and anti-corruption. The different business practices that are described are undertaken at Group level and apply to all Carlsberg Group suppliers and licensees. It is also the responsibility of suppliers to guarantee that their sub-suppliers do not violate against the practices. Moreover, the Code extends all parties, even though they are engaged informally, hold short-term contracts or is part-time based. The Code is the common factor to all parties and is definitely a powerful tool put in place to manage and control the behavior of people (Carlsberg Group, 2012b).

Suppliers must in addition with the Code also meet national regulations and laws. It is the suppliers’ responsibility to document the compliance and if conflict between the Code and national laws is identified, meetings and evaluations between the Group and the individual supplier is undertaken. Most often, corrective action plans are created which should help the supplier remedy the issues that not complies. Carlsberg Group believes that this approach is based on open dialogues and transparency is a key to build successful business relationships. In summary, the Code is used to build closer relationships with suppliers, to minimize the level of risk within the supply chain and to maintain future supply.

Looking more into detail of specific control tools it can be seen that Carlsberg Group uses both formal and informal controls. The formal controls are represented by outcome controls where first and foremost mutual goal setting for suppliers is undertaken. Goal setting is agreed upon in every relationship and the mutual commitment is important in delivering desired outcome. Considering both open book accounting, target costing and inter-organizational cost management it is only undertaken with the major and global suppliers in the Group. Those relationships are valuable and managed with more resources and time. With regards to open book accounting it is in the interest of both Carlsberg Group and the supplier to open their books to disclose data important for the relationship. For Carlsberg Group it is important to agree upon a profit percentage that satisfies the supplier. Target costing and cost management is also emphasized in the major supplier relationships where continues meetings between the Group and its supplier is carried out in order to reduce information asymmetry of cost characteristics. Consequently the target agreed upon in the goal setting is reached. With regards to minor suppliers of the Group, presented control tools are not put in place.

The other formal type of control is the behaviour control which is represented by the Code of conduct. It is structured as a policy document where overall rules and regulations are presented, applicable to all suppliers, regardless whether it is a minor or major supplier. Except from handling overall rules, the Code also includes monitoring processes of behaviour, for example when suppliers do not meet compliance with the Code. Planning and procedures are identified with regards to this monitoring process where specific action plans are undertaken to correct behaviour and create compliance with the Code. It should be mentioned that the Code is an important tool in the Group due to the global network of suppliers that is dealt with. The different cultures and behaviour of suppliers could easily be a major problem, but the Code makes sure that certain behaviors are undertaken, and that all are in line with values and ethics of the Group.

Moving further to the informal control tools and social controls it is identified that even within this field, the Code has significant impact. It effectively reduces some level of risk by ensuring certain behaviour. Consequently, also trust between the Group and its suppliers are substantiated. However, likewise other control tools in the Carlsberg Group, the issue of trust is also more developed and emphasized in the relationships with major and global suppliers. They have a closer and increased amount of interactions and share a higher level of trust which also results in decreased risk taking for both Carlsberg Group and its suppliers.

#### 4.5 Overview of case companies

In order to sum up the empirical chapter and give an overview of the gathered information, both case companies are shortly presented in table 3. The table will also function as a source of reference for analysis presented in next chapter.

Table 3: Overview of case companies

CHARACERISTICS/ PERSPECTIVES/ TOOLS	COMPANY	
	AB InBev	Carlsberg Group
<b>IOR CHARACTERISTICS</b>		
- <i>Relational focus</i>	Dyadic focus	Supplier and licensee focus
- <i>Relational emphasis</i>	AB InBev dominant over parties	Carlsberg Group dominant over parties
- <i>Supplier strategy</i>	Mix of competitive bidding, securing continuity of supply and category management.	Mix of performance based partnership, securing continuity of supply and category management.
<b>SMA PERSPECTIVES</b>		
- <i>Competitors</i>	Global: Carlsberg Group, Heineken, SABMiller Ukraine local market: Carlsberg group and local players	Global: AB InBev, Heineken, SABMiller Swedish local market: local players
- <i>Strategic positioning</i>	Cost leadership	Product differentiation
- <i>Value chain</i>	Value chain with focus on efficiency	Value chain with focus on efficiency
- <i>Market focus</i>	Customer focus through establishment of premium brands and CSR responsibility	Customer focus through establishment of premium brands and CSR responsibility
<b>IOMA TOOLS</b>		
- <i>Outcome control</i>		
Goal setting	X	X
Open book accounting	X	X
Target costing	-	X
Inter-organizational cost management	-	X
Value chain analysis	X	X
- <i>Behaviour control</i>		
Policy documents	X	X
Planning	X	X
Procedures	X	X
Rules	X	X
- <i>Social control</i>		
Trust	X	X
<u>Trust building:</u>		
Risk - taking	X	X

## 5. ANALYSIS

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*This chapter contains analysis of gathered findings. The case study information from each company will be compared with each other but also with the theoretical framework. The structure is the same as that of chapter three and four, starting out with brief analysis of IOR, followed by analysis of SIOMA divided into the SMA perspective and the IOMA perspective including respective companies control mixes. Lastly, independencies of control tools as well as analysis from a wider perspective are given.*

### 5.1 Inter-organizational relationship

*Table 4: IOR CHARACTERISTICS*

<b>IOR CHARACTERISTICS</b>	<b>AB InBev</b>	<b>Carlsberg Group</b>
- <i>Relational focus</i>	Dyadic focus	Supplier and licensee focus
- <i>Relational emphasis</i>	AB InBev dominant over parties	Carlsberg Group dominant over parties
- <i>Supplier strategy</i>	Mix of competitive bidding, securing continuity of supply and category management.	Mix of performance based partnership, securing continuity of supply and category management.

With regards to IOR (see table 4 for overview) it is identified that both AB InBev and Carlsberg Group emphasize their relational settings from the value chain perspective. Both case companies hold extensive value chains which are considered as a source of competitive advantage. Within their respective value chains it can be identified as a separate stage that handles the purchasing process. When separating it from the other activities it is clearly communicated that this is an important step wherein both AB InBev and Carlsberg Group hold the dominant position as purchaser over suppliers.

Holding the dominant position is of course realized by means of the world leading positions in the brewery industry that both companies have. Both AB InBev and Carlsberg Group are attractive business partners as they can offer suppliers a long-term relationship within a safeguarded business. Due to the dominant position the companies can also exercise their desired behaviour, ethics and standpoints over suppliers. Of course, there is a mutual communication and winning in the IOR, but still there is a trade-off for the supplier when engaging with a dominant party. Either they undertake a subordinate position ensuring future business, or they engage with a less dominant party risking a safe position and long-term contract.

Concerning AB InBev they have a detailed purchasing process where it can be identified that also suppliers have possibilities to present contract conditions, price terms of delivery and more. Also Carlsberg Group tries to take into consideration suppliers preferences, for example when signing the Code of Conduct where it can be agreed on specific circumstances for individual suppliers. This implies that both AB InBev and Carlsberg Group handle their relationships in a way where joint agreements are an important step and learning from each other is considered to improve overall performance.

Looking at differences between the two case companies one main difference is identified. It is with regards to the characteristic of IOR where AB InBev has a dyadic focus whereas this is not emphasized in Carlsberg Group. Instead, they undertake a direct focus on suppliers and licensees; this we explain by the factors of size and dominance. Size is most often an explanatory factor for dominance where larger companies retain the leading positions which substantiate dominance. If size is measured in terms of total assets, AB InBev with total assets of 112 427 million US dollar (AB InBev, 2011) is larger compared to Carlsberg Group with total assets of 25 967 million US dollar<sup>2</sup> (Carlsberg Group, 2011). Consequently AB InBev also have bigger dominance than Carlsberg Group where the Group more carefully have to monitor individual suppliers whereas AB InBev can take advantage of the leading position and treat suppliers more in a collective manner in the dyadic setting.

Another difference that can be denoted is the suppliers' strategy within the case companies. Both companies have differentiated purchasing strategy, where distinction between usage of competitive bidding by AB InBev and performance based partnership by Carlsberg group can be found. On the one hand, implementation of competitive bidding strategy by AB InBev can be explained by the fact that they take all the advantages of using electronic auction as an input for further decision. Price considerations play a key role in placing an order for a particular purchase from a certain supplier (Arjan & Weele, 2009). Carlsberg Group, on the other hand, conducts the strategy from performance-based partnership, where the output of purchaser-supplier relationships is expressed in "mutual participation based on pre-planned and mutually agreed cost and operational improvement targets" (Arjan & Weele, 2009:198).

Lastly, it should be added that both case companies take advantage of electronic sources of information in the supply market when managing their IOR. One such source is the AIM-PROGRESS which is a forum for consumer goods, assembled to "enable and promote responsible sourcing practices and sustainable production systems in order to manage the purchasing process with best practices of sourcing in supply chain" (AIM-PROGRESS, 2012a). The main goal of the database is to exchange and benchmark companies audit protocols, which results in a shared list of audited suppliers. Member companies "agree to recognize supplier audits completed on behalf of another company and will review submitted assessment reports to confirm it meets internal company requirements" (AIM-PROGRESS, 2012b:1).

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<sup>2</sup> Translated from DKK to US dollar with currency-rate of 2011-12-30

## 5.2 Strategic and inter-organizational management accounting

### 5.2.1 Strategic management accounting

Table 5: SMA PERSPECTIVES

SMA PERSPECTIVES	AB InBev	Carlsberg Group
- <i>Competitors</i>	Global: Carlsberg Group, Heineken, SABMiller Ukraine local market: Carlsberg group and local players	Global: AB InBev, Heineken, SABMiller Swedish local market: local players
- <i>Strategic positioning</i>	Cost leadership	Product differentiation
- <i>Value chain</i>	Value chain with focus on efficiency	Value chain with focus on efficiency
- <i>Market focus</i>	Customer focus through establishment of premium brands and CSR responsibility	Customer focus through establishment of premium brands and CSR responsibility

Considering the analysis of SMA, all perspectives are individually discussed (see table 5 for overview). Firstly, with regards to the *competitors*' perspective both companies consider each other as main competing parties on the global level. The global context of competition between the two companies is brought to the local market of AB InBev in Ukraine, where Carlsberg Group is considered as a main competitor. Moreover, both case companies take advantage of their brand recognition and extensive market position to benchmark best practices with other key players in the beer industry. Also, with the help of market analysis both companies can compete with specific and local markets and producers of beer. This advocates the idea that SMA not only operates on the internal level of the company but also as a support for developing competitive advantage over the time (Simmonds, 1981). Combining the use of global practices and market analysis, the best practices (especially of organization and control of supply chain) are transferred to the local markets trying to gain a competitive advantage. As result, the global context of competition is narrowed down to fit the local one, wherein SMA acts as proactive collector of data (Bromwich, 1990).

Moving further to *strategic positioning*, it can be identified that AB InBev and Carlsberg Group have different positioning. On the one hand, AB InBev positions itself using cost leadership which is realized by means of economies of scale and bringing worldwide brands into local markets. On the other hand, Carlsberg Group positions itself towards product differentiation which is implemented through innovations and new beer products. The strategic positioning is considered a crucial factor in the comparison of our case companies beholding the fact that different strategic approaches most often lead to different emphasis on management accounting. By making use of results of research, done by Shank (1989) it can be identified that AB InBev, holding a cost leadership position, would rely more on management accounting and control tools than Carlsberg Group. It is considered that emphasis on management control is greater for companies holding cost leadership rather than for companies realizing product differentiation. For instance the empirical results show that the choice of suppliers in AB InBev relies heavily on inputs of meeting calculations and

therefore the product price is an important factor in pricing decisions. Hence, “price and costs are central in the negotiating process with suppliers” (Arjan & Weele, 2009:186). Moreover, the strategic positioning of AB InBev matches the purchasing strategy, where competitive bidding is one of the starting points for the final choice of supplier. For Carlsberg Group holding the product differentiation position in the market cost analysis is important due to the strategic goal of “products and innovation”. To reach this strategic goal, Carlsberg Group emphasizes contribution from suppliers in the process of product development. Accordingly, a performance-based partnership purchasing strategy is called on to develop cooperation and mutual participation. However, among similarities between the case companies it can be observed that both of them take advantage of local market opportunities where SMA in overall can be seen as a mechanism which searches, sorts and presents management with relevant data (Bromwich, 1990; Simmonds, 1981).

With regards to the third perspective, both AB InBev and Carlsberg Group have a *value chain* perspective with focus on efficiency where optimization of cost structures is considered a competitive advantage. This can be explained by the fact that both companies work closely with their suppliers, both major strategic and minor suppliers, which over time results in lower costs (Arjan & Weele, 2009; Skjøtt-Larsen et al, 2008). This process is crucial for the success of both cost leaders (AB InBev), where it helps to eliminate expenses for a final product, and for product differentiators (Carlsberg group), where a development of proper supply chain often leads to changes in specification and functionalities for a final product (Lord, 2007). Furthermore, the value chains of our case companies are constructed in the way which considers CSR. Overall, they are elaborated on for support of companies’ strategies and constitute a considerable part of SMAs in both companies.

Lastly, analysis of the *market focus* perspective has shown that both case companies perform customer oriented focus through establishment of premium brands with emphasis on CSR responsibility. Presenting new brands, as well as merges with local producers helps companies to create customer satisfaction. The market focus perspective also has a strong connection to the strategic positioning of both of the companies; it makes cost leadership possible for AB InBev and product differentiation possible for Carlsberg Group.

## 5.2.2 Inter-organizational management accounting

Table 6: IOMA TOOLS

IOMA TOOLS	AB InBev	Carlsberg Group
- <i>Outcome control</i>		
Goal setting	X	X
Open book accounting	X	X
Target costing	-	X
Inter-organizational cost management	-	X
Value chain analysis	X	X
- <i>Behaviour control</i>		
Policy documents	X	X
Planning	X	X
Procedures	X	X
Rules	X	X
- <i>Social control</i>		
Trust	X	X
<u>Trust building:</u>		
Risk - taking	X	X

Analyzing the IOMA in respective case companies both similarities and differences can be found (see table 6 for overview). With regards to the formal control tools and the *outcome control*, the tools of goal setting, open book accounting and value chain analysis is identified in both AB InBev and Carlsberg Group. It is seen that both case companies base their outcome controls, to a large extent on accounting information, where AB InBev especially use the calculations and Carlsberg Group by means of open book accounting. Other studies have also shown the link between accounting information and outcome control in defining appropriate outcomes (Dekker, 2004; Cooper & Slagmulder, 2004).

Studying the outcome control tools in overall, it can be identified that Carlsberg Group is relying more on those tools than AB InBev when including also target costing and inter-organizational cost management as active control tools. It is described that companies that learn about their processes and activities tend to rely more on outcome controls (Kraus & Lind, 2007). This can be linked to the ongoing Business Standardization Programme in Carlsberg Group which will facilitate the creation of a future integrated supply chain. Due to this process Carlsberg Group undertakes extensive investigations of processes and activities which can be an argument for why they rely more on outcome controls than AB InBev. However, looking at the strategic positioning of AB InBev they hold a cost leadership position, whereas Carlsberg Group undertakes product differentiation. To assist in realizing its strategy it is expected that AB InBev should have more focused cost perspectives undertaking target costing and inter-organizational cost management. Nevertheless, Carlsberg Group is more dominant in using these techniques.

Moving further to *behaviour controls*, empirical results show that both AB InBev and Carlsberg Group have extensive systems of behavioral tools which form the basis of their

relationships with suppliers. AB InBev holds the Global Supply Policy Document and Carlsberg Group the Suppliers and Licensees Code of Conduct which both are global policy documents including procedures and rules as well as planning for accepted behaviour. This type of policy document is of particular importance since both case companies are global players operating in various regions with many different suppliers. Accordingly, they encounter differences in both cultures and behaviour which the global documents handle by standardizing behavioral requirements. Hence, the documents are effective in reducing goal incongruence and vagueness of joint performance which are otherwise usual characteristics in IOR (Dekker, 2004).

Overall, with regards to formal control mechanisms such as outcome and behaviour controls, both case companies use identified tools also presented in the theoretical framework. However, two different approaches are seen; AB InBev uses the system of formal control to reach their desired results and to create protection against its suppliers. Whereas within Carlsberg Group the system of formal control is by all means also used to reach goals and results but they show higher respect and value mutual satisfaction in the relationship with their suppliers. Accordingly Carlsberg Group uses their formal controls to minimize the level of risk that are applicable to both parties.

Concerning informal control and *social control* tools both case study companies clearly have values, norms and cultures that they by means try to influence their supplier with. Once again the Global Policy Document in AB InBev and the Code of Conduct in Carlsberg Group are important mechanisms in which the companies indirectly communicate their values, norms and cultures. However, other routines that also signal the use of social control can be identified. For example in AB InBev the partner choice is highly emphasized where historical and financial checkup is considered for choosing appropriate supplier. Companies that substantiate their social control through the process of partner selection are in theory considered as companies highly dependent on social controls (Kraus & Lind, 2007).

Within social controls, trust is identified as an issue in both AB InBev and Carlsberg Group; however the level and nature of trust differ. The variation of trust can in theory be viewed as a result of different interdependencies (Cooper & Slagmulder, 2004). In relationships where a close bond is undertaken between the company and its suppliers, a higher level of trust can be observed. This is the case regarding Carlsberg Group and its major and global suppliers which rely more on trust than in the less developed relationships with minor suppliers. It should be further observed that the purchaser-supplier relationships in Carlsberg Group are based on mutual trust building from both the Group and the supplier's perspective. In AB InBev, trust is seen as a pleasant mechanism, but in reality it is only seen in the contractual agreement.

Furthermore, the theoretical framework presents that trust can be built upon by parties undertaking risk (Dekker, 2004). This issue is hard to identify in AB InBev and Carlsberg Group as both companies hold leading positions and are not likely to put itself in a risky position for the benefit of suppliers. It can actually be observed that AB InBev imposes its risk on the suppliers in order to protect its value chain. Accordingly, most often it is the suppliers that undertake risk in order to build trust in their purchaser, namely AB InBev or

Carlsberg Group. The case companies also signal low-risk by mitigating any opportunistic behavior of suppliers; this is ensured, once again, by The Global Policy document and the Code of Conduct which confirms and structure the behaviour undertaken by suppliers in a certain and desirable way.

Elaborating more on the issue of trust, different classifications can be found in theory and parallel also in our case companies. The weakest type of trust which can be observed in relationships in both AB InBev and Carlsberg Group is the contractual trust. This type of trust is created by the contract and implies expectations that both the purchaser and the supplier will keep promises and agreements included in the contract (Cooper & Slagmulder, 2004). Further, goodwill trust is a type of trust that implies the willingness of both parties to act in the interest of the relationship, even though it may be a disadvantage to themselves (Dekker, 2004; Cooper & Slagmulder, 2004). Both AB InBev and Carlsberg Group have interest in the relationships formed with suppliers. However, it is more often seen that the supplier acts to a disadvantage as opposed to AB InBev and Carlsberg Group. This can be explained by the dominance and power both companies hold by having leading positions in the beer industry. The final type of trust is competence trust which is based upon the belief of the purchaser that the supplier will complete the order satisfactory and need not to be monitored during the process (Dekker, 2004; Cooper & Slagmulder, 2004). With regards to AB InBev they create a type of competence trust in their supplier selection process. The final choice of supplier should of course include high competence to complete orders individually. Concerning Carlsberg Groups it is identified that some monitoring can take place during the process, especially if there are factors that do not comply with the Code of Conduct.

Looking at the issue of trust in overall, a slight difference can be considered between theory and empirical findings, where theory has a bigger focus on the issue of trust than identified by our case companies. However, the observed difference can be due to the fact that AB InBev and Carlsberg Group handle trust as an implicit issue, however still underlying most supplier relationships.

In summary it can be concluded that AB InBev and Carlsberg Group both rely heavily on behaviour control. Concerning outcome and social control, Carlsberg Group is a more frequent user of different tools and also has a more sympathetic relationship with its suppliers than AB InBev.

### **5.3 Interdependencies of management control tools**

Until now we have basically discussed the different management control tools separately from each other. However, management control in reality often consists of a mixture of the different tools where they interact and affect each other.

There are many concerns whether informal control tools such as trust function as a substitute or a complement for the formal tools in the management of relationships. If trust functions as a substitute, a high level of trust in a relationship will result in a low level of formal control tools and vice versa (Dekker, 2004). This can be observed in the case of AB InBev with regards to the partner selection process. Even though AB InBev do not emphasize trust in its

relationship, trust can be identified in their supplier selection process where they choose a partner out of trustworthiness and suitability. This means that when they have chosen a reliable partner they can actually rely less on the formal control tools. This is fully observed compared to Carlsberg Group, who uses more formal, and especially outcome, control tools. If trust instead functions as a complement for formal control tools, an increased level of trust would result in an increased level of formal control (Dekker, 2004; Poppo & Zenger, 2002). This can be illustrated with the case of Carlsberg Group that has a more developed and trustworthy relationship with their global and major suppliers compared to minor suppliers. Simultaneously as emphasizing trust in those relationships, a higher level of formal and especially outcome control tools is used considering the fact that they undertake open book accounting, target costing and inter-organizational cost management only in those relationships.

Presented in the theoretical framework is trust as a low-cost solution. This also implies an interdependent relationship between formal and informal management control tools. Whenever a sufficient level of trust is established between the purchaser and supplier, less formal tools such as plans and procedures have to be put in place for monitoring which will save a lot of time and resources. Accordingly one can argue that both AB InBev and Carlsberg Group should rely more on trust in order to cut costs. However, this is not observed as a low cost solution in either of the companies. Instead, they emphasize value chain analysis as the optimal solution for cutting costs.

Another interdependent relationship between formal and informal management control tools is with regards to the issue of task coordination. It is suggested that when creating relational trust, influences in a parties' ability to manage learning from each other can be seen (Kale et al 2000). This is especially an issue for Carlsberg Group that states the importance of learning from its suppliers and share best practices in order to improve performance. The issue of trust is clearly implied in the statement.

In summary we can conclude that interdependencies of formal and informal control tools are important for an efficient functioning of the control mechanism. The interdependencies is observed not only in theory but also in practice in our case companies where AB InBev practice informal control as a substitute for formal control whereas Carlsberg Group undertake informal control as a complement for formal control. Furthermore, the issue of trust as an individual component has different importance in AB InBev and Carlsberg Group which is a natural issue in creating an appropriate control mix in each company.

#### **5.4 A wider perspective: SIOMA framework**

Throughout the thesis all parts of the SIOMA framework are described and analyzed separately. In the following part discussion of how components of SIOMA framework affect each other is presented with respect to the theoretical framework, empirical findings and analysis. To clarify the links the starting point is decided to be IOMA, then SMA and lastly IOR.

The central part of the SIOMA framework represents the mix of management accounting control tools, the control mix. The control mix represents a certain number of outcome, behavior and social control tools which fit with other forms of control so that the whole system becomes integrated (Nilsson et al, 201; Kraus & Lind, 2007). Accordingly, it is important that informal and formal controls support and complement each other. Consequently one can argue that management control in IOR acquire a sense of dynamic mechanism which emphasize particular control over time (Nilsson et al, 2011; Kraus & Lind, 2007). Kraus & Lind (2007), states that outcome control tools gain their importance when parties are able to specify measures of an output and standards for these measures, while social control tools can be recognized in the early stages of development in the IOR. Moreover, emphasis on behavioral control tools becomes more beneficial over time when the IOR develops. The case companies have proved their emphasis on behaviour control and it can be identified that other key players within the beer industry also emphasize certain behaviors by presenting code of conducts for their suppliers (SABMiller, 2011; Heineken group, 2011a, 2011b).

Figure 7 reflects positioning of both case companies with regards to usage of formal and informal control tools.

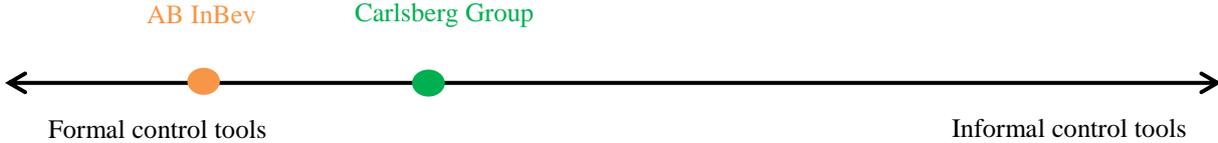


Figure 7: Management control emphasis of AB InBev and Carlsberg Group

Although results of empirical findings have shown that Carlsberg Group is deemed to use more formal management control tools than AB InBev, it can be shown in figure 7 that Carlsberg Group has a closer positioning to informal control than AB InBev. This can be explained by means that Carlsberg Group treats its suppliers as contributors to the business development, wherein trust and mutual satisfaction plays a significant role. Consequently, they also take into consideration the informal control tools to a greater extent than AB InBev.

Moving further to the SMA, it is identified that differences in the management control emphasis can be explained by the different perspectives in SMA. With regards to *strategic positioning*, cost leaders like AB InBev hold a financial and economic orientation which is expressed in exact control of costs. This is done to maintain its market share and consequently formal control tools are emphasized (Arjan van Weele, 2009). Carlsberg Group on the other hand positions itself through product differentiation, and tends to prioritize marketing costs and control in the cost structure. This leads to less emphasis on meeting calculations and consequently greater emphasis on the social control tools are undertaken (Shank, 1989). In overall, it can be seen that different strategic positions result in different supplier strategies and consequently the level of formality within purchaser-supplier relationships are affected. Price considerations as an input for the competitive bidding in AB InBev goes in line with

cost leadership strategy conducted by the company, whereas cost as an input for pricing decisions is of a great importance for the choice of a supplier. With regards to the product differentiator, Carlsberg Group suppliers performance based partnership strategy is a right hand in creating a diversified product portfolio, where suppliers are treated as assistants. Consequently, the strategic positioning undertaken by companies often reflects matches with the purchasing strategy, and hence it affects IOR. Furthermore, it is shown that companies also take advantage of its *market focus* when elaboration in the internal IOMA. For instance, Carlsberg Group has shown that impact on customer orientation is expressed by usage of target costing where the aim is to reach the desired cost preferred by customers (Lord, 2007). Moreover, the *value chain perspective* and its impact on IOMA in form of value chain analysis as a part of the outcome controls are highlighted in both case companies, especially with regards to environmental and social issues and consideration throughout the value chain. Further, behavior control is emphasized where respective companies code of conduct sets out certain directions for behaviour undertaken within single activities in the chain. With regards to *competitors' perspective* it is considered as a supplement for the strategy and withholding a leading position, where management control acts as a “watch dog” for benchmarking of best practices.

Lastly, it should be stressed that not only interconnections between IOR, SMA and IOMA can be found, but also parts that affects and supports each other. For instance, differentiated purchasing strategy in IOR supports the mutual commitments on long-term basis together with “best prices” for the particular delivery and also ensuring continuity of supply (Arjan van Weele, 2009). Likewise, competitive advantage analysis section in the value chain perspective is closely connected and supports competitor’s perspective and competitor’s analysis in the Shank (1989) model of the management control emphasis regarding strategic positioning.

Consequently, it can be seen that IOR, SMA and IOMA are interconnected and interdependent within the framework of SIOMA. The change in one perspective results in alters in another one. Likewise, it can be identified that the overall strategy of the company affects the management control and specific tools used within it.

## 6. RESULTS

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The aim of this thesis is to describe and analyse what management control tools are used within the setting of purchaser-supplier relationships, how these tools are used and what their interdependencies are. Main findings suggests that a control mix including both formal and informal control tools are chosen and used out of the context of the specific company's strategic context. Additionally it is found that interdependencies between control tools varies, where it is identified both a complementary and a supplementary relationships between formal and informal controls.

Firstly, with regards to our theoretical framework and empirical findings a wide mix of outcome control tools are identified such as goal setting, open book accounting, target costing and inter-organizational cost management. They are used in order to optimize the outcome of the relationship with suppliers and depending on the importance of relationship, the outcome control tools may also be used to different degrees where important relationships are supported with more resources and control tools. Concerning the behaviour control tools, findings suggest first and foremost the use of policy documents; however, planning, procedures and rules are also identified. In theory the behaviour controls are emphasised the least, but in reality it is found that those tools are most often the main source of control mechanism in purchaser-supplier relationships. The behaviour controls are generally maintained through policy documents signed by suppliers. Those can give rise to trade-offs where the supplier sometimes has to undertake certain behaviour to gain access to a long-term and beneficial relationship. Furthermore, findings suggest that social control mechanisms are used in form of interaction, risk-taking and trust between the purchaser and supplier. AB InBev and Carlsberg Group are clear examples of the fact that trust is undertaken at different levels in the form of contractual trust, goodwill trust and competence trust. The main explanation of a variation of the level of trust is because of the mutual benefit and mutual interdependencies between purchaser and supplier.

In order to explain what and how these certain control tools are used, it is found that the SMA explaining external perspectives are critical factors. Different companies undertake different strategic approaches which also impact the use of control tools. Case companies illustrate for example that a strategic approach towards cost leadership leads to an increased use of management control and especially formal controls whereas a strategic positioning towards product differentiation relies less on management control but more on informal controls emphasising supplier attributes.

Secondly, the interdependencies between formal and informal management control tools are widely discussed in theory. The different case studies in this thesis show that interdependencies can have different outcomes in different companies. AB InBev practices informal control as a substitute for formal control, whereas Carlsberg Group practices informal control as a complement for formal control.

Lastly, findings suggest that the selection process of suitable suppliers is highly considered. Selecting an appropriate partner may reduce problems between the purchaser and supplier and accordingly extensive and expensive management control systems can be limited.

In summary the results contribute to the literature in accounting by presenting an overview of the IOMA with specific control tools and moreover by linking IOMA with the external perspectives of SMA and the overall setting of IOR. Similarly to Shank (1989), the strategic positioning and its effects on management control are discussed and elaborated on. Furthermore, contribution to the work of Dekker (2004) concerning interdependencies between formal and informal control tools is presented, as well with respect to how standardizing behavioral requirements are helpful in uncertainty avoidance within IOR. Likewise, the thesis contributes to studies of Cooper & Slagmulder (2004) and of Dekker (2004), where links between outcome control and accounting information assists the setting of appropriate outcomes. Lastly, Carlsberg Group case contributes to the work of Kale et al (2000), in terms of creation of relational trust and its input to learning effect between parties.

## **6.1 Result discussion and future research**

Presented results reflect information from both theoretical framework and empirical studies. It can be questioned whether a different methodological approach would have generated another outcome of result or divergent parts within it. With regards to the theoretical framework it is conducted in form of a literature review in order to present main theories within the field from various authors and researchers. In this way, the framework is more safeguarded from presenting biased theories than if theories would have been built upon by only a few authors. With regards to the empirical findings there is more risk for bias and other outcomes. Firstly, if interviews were conducted from more persons and from both higher and lower level employees, results may have differed. Secondly, considering also the perspective from the suppliers' point of view, more findings including the perspective from a party that is controlled rather than control could have been presented. A third concern is that the case companies represent subsidiaries of international companies where global practices of management control are brought and implemented on the local level. If information from more subsidiaries and even the head quarter was gathered, results may also have slightly different outcomes. However, with regards to time limits and other restrictions, presented data can be treated as relevant and reliable for the purpose of fulfilling the aim.

Finally, within the research area of management control tools in purchaser-supplier relationships there are still areas that are interesting to elaborate on. The following areas are proposed for future research:

- Lord (2007) states that there are not enough arguments for how management accounting reflects market-oriented aspects of a company. Results of this thesis have shown that strategic positioning and market orientation clearly affect the management control of a company, however more precise research on the presented basis can be done.
- The thesis discusses interdependencies between SMA and IOR, where strategic positioning affects the supply strategy within the relationship. This link between SMA and IOR and its correlations is interesting to further elaborate on.

- The paper shortly describes how case companies take advantage of the AIM-PROGRESS (2012a) project, which can be considered as one of the tools of insuring sustainable supply chain and responsible sourcing. Consequently more detailed research can be done in order to figure out how such kind of projects affect or complement the control over suppliers (for instance, AIM-PROGRESS, 2012a, SEDEX, 2012).
- The focus of the thesis is with regards to management control tools in purchaser-supplier relationships within the food industry. However, one can find it interesting to make similar research for companies in other contexts, such as manufacturing and service industries.
- The thesis includes case studies of AB InBev and Carlsberg Group. They are subsidiaries of big international companies but maintain their operations under conditions of different macroeconomic and cultural circumstances of local economies. One can argue that some cultural and social factors impact the management control of relationships, such as purchaser-supplier relationships. Consequently, future research is proposed to take into consideration how the SIOMA framework is influenced of such cultural and social factors. Hofstede's cultural model (Hofstede, 1993) consists of four dimensions (power distance, individualism/collectivism, masculinity/femininity, uncertainty avoidance) which creates a significant input for how management accounting control in purchaser-supplier relationships within global companies can be put into context and analyzed under conditions of local environments.

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# APPENDIXES

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## A. Interview questionnaire

### Part I: Inter-organizational relationship

1. How does the overall process of purchase in the supply chain look like?
2. The process of supply chain is considered to be a form of inter-organizational relationships within organization. Respectively, business relationships, as inter-organizational collaboration between companies can be seen from two different organizational settings: dyadic relations or networks. Dyadic relationships can be presented in form of vertical collaboration between company and its business partners during its activities or horizontal cooperation between companies focusing on one customer. They can be arranged in form of technology licensing, research consortia, joint ventures and strategic alliances. Second one is relationships within company's network and interconnections within it. Further, networks can be seen as bounded, with distinct center and defined goals or vice versa - unbounded networks, without center and common mission.

With regards to everything stated above, our questions are as follows:

- 2.1 Are there any dyadic relationships established in the company? If yes, how can it be described?
- 2.2 Is there any network collaboration in the company's supply chain? If yes, is it treated as bounded or unbounded?
3. Are any of the suppliers treated as strategic suppliers? If yes, how can the relationships with these be described?

### Part II: Strategic management accounting

1. What is the company's strategy within the region?
2. What is the company's supplier strategy within the organization? Does the company rely on long term or short term relationships?
3. Which are the company's main competitors on the global level? Which are the company's main competitors on the local level?

4. How can the strategic positioning of the company be described?
  
5. The value chain is considered to be a set of value-creating activities all the way from basic raw material to ultimate end product delivered to consumers. All companies analyze their activities in different ways and define cost drivers for them. Linkages, between the way how an activity is conducted and costs for this process can provide company with the possibility for optimizing, coordinating and reconfiguring the activity.  
 Respectively, we would kindly ask the following questions:
  - 3.1 How can the value creation process in the company be described?
  - 3.2 What activities add value in the process of supply?
  
6. What is the company's market focus?
  
7. Good organized supply chains can be a source of competitive advantage.
  - 4.1 Is a well-organized supply chain considered to be a competitive advantage?
  - 4.2 If yes, how do suppliers contribute to implementation of strategic goals?

### **Part III: Inter-organizational management accounting**

Inter-organizational management accounting can be used to support and control purchaser-supplier relationships. The tools are out of formal character (outcome- and behavior control) and informal character (social controls).

1. Control system
  - 1.1 Is there any overall system of control tools that can be used in various supplier relationships in the company?  
*If not*
  - 1.2 How is control of individual suppliers undertaken?
  
2. Control tools
  - 2.1 What are the control tools used and how are they used?
  
  - 2.2 Which control tools are most important and efficient in supplier relationships?

3. Formal versus informal control tools

3.1 Is there any distinction of the extent to which formal respective informal control tools are used?

3.2 Are formal or informal control tools most effective in controlling your suppliers?

3.3 Which formal control tool is most important and efficient in the supplier relationships?

3.4 Which informal control tool is most important and efficient in the supplier relationships?