The elements of dependence
A case study on inter-organizational dependence

Master thesis within Business Administration
Author: Broman, Christopher
        Karlsson, Emilia
Tutor: Helgi-Valur Fridriksson
Jönköping January, 2009
Acknowledgements

Firstly, the authors of this thesis would like to extend our gratitude to our tutor Helgi-Valur Fridriksson for his guidance and pep-talk in times of darkness.

We also wish to show our appreciation for all valuable comments, insights, and constructive feedback given from course companions during seminar sessions.

Finally, we are truly grateful to the company representatives having shared their valuable time with us; Mr. Christer Salomonson, Mr. Ove Nilsson, and Mr. Martin Wagner of Stoeryd AB along with Mr. Jan-Erik Berglund and Mr. Jonny Karlsson of GGP Sweden AB.

Thank you!

__________________________________________  ________________________
Christopher Broman                          Emilia Karlsson

Jönköping International Business School
2009-03-15
Abstract

Purpose: The purpose of this study is to investigate which elements constitute inter-organizational dependence and how inter-organizational dependence influences the relationship between GGP Sweden AB and Stoeryd AB.

Background: The notion of arm’s length relationships relying on market competition has been replaced with a new ideal consisting of closer, mutually beneficial relationships with extensive collaboration, cooperative actions, and long-term orientation. The benefits of more collaborative supply chains have also been questioned. Collaborative relationships can bring numerous positive outcomes but also conveys reliance on resources or competences of others. Intensified, collaborative relationship is connected to higher dependence, generating vulnerability when depending on others for survival. Several perspectives in social science lay grounds for the research on inter-organizational dependencies. Dependence is regarded to be an important concept for understanding buyer-supplier relationships.

Method: This case study investigates the relationship and inter-organizational dependence of GGP Sweden AB and their supplier, Stoeryd AB. Various perspectives within business research have laid grounds for a framework by which to investigate dependence. Empirical material of the two case companies has been collected with aim to provide further insights and reflections about inter-firm dependence and the elements affecting it.

Conclusion: A revised framework is presented in the shape of a model including the elements of dependence. The study recognizes the significance of regarding several elements for assessing dependence and that these must be seen in relation to other elements. Further, the behavioral factors of the relationship and intangible characteristics of the offering have been determined to significantly affect dependence. Finally, even if inter-organizational dependence is created within a relationship, elements must be seen in relation to alternative relationships. The connection between higher level of dependence and increased collaboration as apparent also in the case relationship. Trust, commitment and mutual interest are factors apparent in the relationship that may help to control the vulnerability striving from dependence.
Magisteruppsats i Företagsekonomi

Titel: Faktorer som påverkar företags beroende – En fallstudie

Författare: Christopher Broman, Emilia Karlsson

Handledare: Helgi-Valur Fridriksson

Datum: 2009-03-15

Ämnesord: Supply chain management, leverantörskedja, inter-organisatoriskt beroende, samarbete, leverantörsrelationer, förtroende

Sammanfattning

Syfte: Syftet med denna studie är att undersöka vilka element som utgör beroende mellan företag samt hur beroende influerar relationen mellan GGP Sweden AB och Stoeryd AB.


Metod: Denna fallstudie syftar till att undersöka förhållandet och beroendet mellan företagen GGP Sweden AB och Stoeryd AB. Flertalet perspektiv inom företagsekonomisk forskning har tagits i beaktning och grundat det teoretiska ramverket studien baseras på. Det empiriska material som samlats in syftar till att ge större insikt om beroendeförhållande mellan aktörer i leverantörskedjan och faktorer som påverkar detta förhållande.

# Table of Contents

1 Introduction ............................................................................... 1  
1.1 Background .............................................................................. 1  
1.2 Development and identification of problem .................................. 2  
1.3 Purpose and research questions .................................................. 4  

2 Theoretical framework .................................................................. 5  
2.1 Supply Chain Collaboration ........................................................ 5  
2.1.1 Elements of collaboration ......................................................... 6  
2.2 Inter-organizational dependence .................................................. 7  
2.2.1 The perspective of transaction cost economics ......................... 8  
2.2.2 The strategic management perspective ....................................... 9  
2.2.3 Distribution management perspective ........................................ 11  
2.3 Dependencies' implications on inter-organizational relationships .... 11  
2.4 Dependence and Power ............................................................. 13  
2.5 Theoretical Conclusion ............................................................. 13  
2.5.1 Elements of collaboration ......................................................... 14  
2.5.2 Inter-organizational dependence ................................................. 14  

3 Method ..................................................................................... 17  
3.1 Research approach ....................................................................... 17  
3.2 Theory selection and categorization .............................................. 18  
3.3 Case study research ..................................................................... 19  
3.4 Case selection and definition ....................................................... 19  
3.4.1 Respondent selection .................................................................. 20  
3.5 Gathering the empirical material ................................................... 21  
3.5.1 Interview method ....................................................................... 22  
3.6 Analysis of empirical findings ....................................................... 23  
3.7 Trustworthiness .......................................................................... 24  
3.7.1 Internal validity .......................................................................... 24  
3.7.2 External Validity ......................................................................... 26  
3.7.3 Reliability .................................................................................. 26  
3.7.4 Evaluating the method .............................................................. 27  

4 Presenting the findings .......................................................... 29  
4.1 Case Companies .......................................................................... 29  
4.1.1 Stoeryd AB ............................................................................... 29  
4.1.2 GGP Sweden AB ....................................................................... 30  
4.1.3 The products of the relationship ............................................... 31  
4.2 Stoeryd AB’s perspective of the relationship ................................. 32  
4.2.1 Communication ........................................................................ 32  
4.2.2 Information sharing ................................................................. 33  
4.2.3 Coordination ............................................................................ 34  
4.2.4 Benefits and risk sharing ......................................................... 35  
4.2.5 Perceived power ....................................................................... 35  
4.2.6 Negotiations and Contracts ...................................................... 36  
4.3 GGP Sweden AB’s perspective of the relationship ....................... 36  
4.3.1 Communication and information sharing .................................. 36
4.3.2 Coordination ......................................................................................... 37
4.3.3 Benefits and risk sharing ................................................................. 37
4.3.4 Perceived power .............................................................................. 37
4.3.5 Contracts and negotiations ............................................................... 38
4.4 Stoeryd AB’s elements of dependence ............................................... 38
4.4.1 The relationship specific asset dimension ........................................... 38
4.4.2 The resource transaction magnitude dimension ............................... 39
4.4.3 The resource characteristics dimension ............................................ 40
4.4.4 The industry dimension ................................................................. 40
4.4.5 The information dimension ............................................................. 42
4.5 GGP Sweden AB’s elements of dependence ......................................... 42
4.5.1 The relationship specific asset dimension ........................................... 42
4.5.2 The resource transaction magnitude dimension ............................... 42
4.5.3 The resource characteristics dimension ............................................ 43
4.5.4 The industry dimension ................................................................. 44
4.5.5 The information dimension ............................................................. 46

5 Analysis .................................................................................................... 47
5.1 Relationship specific asset dimension .................................................. 47
5.2 The resource transaction magnitude dimension .................................... 48
5.3 The resource characteristics dimension .............................................. 49
5.4 The industry dimension ..................................................................... 51
5.5 The information dimension ................................................................ 53
5.6 Implications on the relationship ........................................................ 54
5.7 Dependence and power ..................................................................... 57
5.8 Revising the dimensional framework ................................................. 57
5.8.1 Power in relation to the model ......................................................... 60

6 Conclusion ............................................................................................... 61
6.1 Discussion ............................................................................................ 62
6.2 Managerial Implications .................................................................... 63
6.3 Theoretical implications ..................................................................... 64
6.4 Further research .................................................................................. 65

References .................................................................................................. 66

Table 1 - Tentative framework of elements of dependence ....................... 16
Table 2 - Interview overview ................................................................. 23

Figure 1 - Inter-organizational dependence ............................................. 58
1 Introduction

This introductory chapter will present a background of the research topic in focus. The background is followed by a problem discussion leading to the purpose and research questions of the study.

1.1 Background

Supply management is to been seen as an emergent academic discipline (Storey, Emberson, Godsell & Harrison, 2006; Harland, Lamming, Walker, Phillips, Caldwell, Johnsen, Knight & Zheng, 2006). Yet, the subject is very much discussed and debated in academia and in practice. With increasing interest in large-scale manufacturers streamlining the whole value chain from raw material provider to end customers, the interest for supply chain management has increased along the years. Supply chain management (SCM) is getting increasing attention and is important for strategic reasons. The major drivers identified for supporting this importance are globalization, outsourcing, fragmentation and market polarization (Storey et al. 2006).

Researchers have several different views of the actual meaning of SCM. One of the more used definitions (Mouritsen, Skjott-Larsen & Kotzab, 2003) is the one from Cooper, Lambert and Pagh (1997, p 2), saying that SCM “is the integration of business processes from end user through original suppliers that provides products, services and information that add value for customers”. Some authors emphasize the relations within the supply chain and some the integration and management of different flows within the supply chain (Mouritsen et al., 2003). Mentzer, DeWitt, Keebler, Min, Nix, Smith & Zacharia (2001) describes these as up- or downstream flows of products, services, finances, and/or information from a source to a customer.

Harland (1996) brings forward four levels of uses of SCM as a concept; the internal supply chain integrating functional areas within a firm, management of supplier relationships in the chain, management of the actual chain of firms (supplier, supplier’s supplier etc.), and, finally, the management of inter-organizational networks.

During the last decades there has been a change in theoretical and practice interest from transaction-oriented business towards being more relationship-oriented (Morgan & Hunt, 1994). The traditional view of buyers and suppliers as confronting each other with arm’s length relationship relying on market competition has been replaced with a new ideal consisting of closer, long-term oriented, mutually beneficial relationships with extensive collaboration and cooperative actions (Izquierdo & Cillán, 2001).

Research available about supply chain collaboration is very wide-ranging (Kampstra, Ashayeri & Gattorna, 2006). Also the existing research on the benefits and possible outcomes of supply chain collaboration is extensive. Engaging in supply chain collaboration can bring a number of positive outcomes that can lead to competitive advantage (Howard & Squire, 2007) in the shape of increased sales, decreased costs, improved operational performance (Mauritsen et al., 2003; Howard & Squire, 2007) or accumulation of knowledge (Powell, Koput & Smith-Doerr, 1996). Both economic and behavioral research agree that inter-firm relationships are built upon interdependence (Gassenheimer, Sterling & Robicheaux, 1996), i.e. firms being more or less dependent on each other. The actual benefits of a more integrated collaborative supply chain focus have also been discussed and questioned by various authors. Mouritsen et al. (2003) suggest that SCM theory and business practice have sometimes been divergent, where theory implies a positive stance to integration and
collaboration while business practice more often is against it. The main explanations are to be found in how the relationship should be coordinated in terms of information sharing, strategies for development, mutual division of costs and benefits together with control and power issues.

Product specifications, product life cycles, firm conditions, industry conditions, and power relations vary between firms, supply chains and industries. Therefore, researchers (Cox, 1999; Mouritsen et al., 2003) have highlighted the importance of studying SCM as situational in a specific context and under given circumstances. There are always conditions and factors that contribute to the actual form of supply chain that is mobilized in reality. An understanding of those conditions thus becomes decisive to understand, or to promote, certain SCM practices. The most appropriate form of integration and collaboration thus depends on contextual circumstances (Mouritsen et al., 2003). With intensified relationship comes increased dependence between firms as they come to rely on resources or competences of others (Gassenheimer et al., 1996; Cox, Ireland, Lonsdale, Sanderson & Watson, 2002).

Several theoretical perspectives have during the years been involved to shed light upon the phenomenon of dependencies in relationships and the implications and antecedents connected to them. Whereas social sciences as psychology and political science lay grounds for the research on inter-organizational dependencies transaction cost economics, marketing and distribution literature, strategic management (Provan & Gassenheimer, 1994) and, later on, supply chain management (Maloni, 1994, Cox 1999), with extensive research, have shared the burden. Caniëls and Gelderman (2005) have investigated the fields dependence and power and claim that these fields often are viewed as important concepts for understanding buyer-supplier relationships. Caniëls and Gelderman (2005) further state that this area is still relatively unexplored.

1.2 Development and identification of problem

Inter-organizational relations have, during the years, become more focused on the relationship than the pure transaction within the relationship (Sheth & Sharma, 1997). However, to collaborate or keep at arm’s length is a question raised when researchers and practitioners now are overcoming the notion that close integration between firms is always healthy. One issue of relevance discussing whether to have a close relationship or not is the concern of dependence, control, and power (Mouritsen et al., 2003). As firms cannot do everything solely, they rely on each other to provide material and inputs of varying importance and value. This creates a dependency situation between the actors (Cox et al., 2002).

Kampstra et al. (2006) claim that only a small proportion of the attempts to collaborate within a supply chain actually result in success, this because of several reasons. One reason is power inequality between partners possibly resulting in dependent firms being forced to participate or dominant firms that strive to have more influence on the collaboration process. Thus, dependence and power play key parts also when managing inter-organizational relationships. Gassenheimer et al. (1996) imply that economical and behavioral research regard it a key principle that dyadic relationships are built upon interdependence. In other words, when firms have a need to engage with other players on the market this will lead to the establishment of some form of dependence.

The process of relationship making creates dependencies between firms. Business partners are always dependent on each other, to some extent (Caniëls & Gelderman, 2005). The dependencies are created as firms rely on their trading partners to supply them with materi-
al and inputs of varying importance and value. Further, the more important the relationship is to maintain for either of the parties, the more dependent the actor becomes (Cox et al., 2002). Researchers also agree that a higher degree of dependence among firms is connected to a greater degree of cooperation (Skinner, Gassenheimer & Kelley, 1992; Maloni, 1997; Laamanen, 2004; Provan, 1993). The connection between an intensified, or collaborative, relationship and dependence is evident.

Some collaborative features have been explicitly described connected to increased dependence. Increased involvement in buyer initiated training (Modi & Mabert, 2007), participation in the purchasing firm’s product development (Carr, Kaynak, Hartley & Ross, 2008), larger integration when developing products (Takeishi, 2001), higher adaptation behavior to meet the needs of the buyer (Hallén, Johanson & Seyed-Mohamed, 1991) are examples. Dependence is also a factor that can be seen as a determinant to corporate governance (Izquierdo & Cillán, 2001), a factor that represses conflict in a relationship (Skinner, et al., 1992) or increase compliance in a relationship (Gassenheimer, Calantone, Schmitz & Robicheaux, 1994).

During our theoretical research it was found that in existing literature much attention has been given to specific circumstances, such as dependence implications in situations of product development processes. Also outcomes of dependence have been focused upon, for instance the impact of dependence on information sharing. Further, studies were found to draw upon only one research perspective, such as looking at factors creating dependence from a resource based view. In addition, much of the research made on dependence and its antecedents, particularly in the area of supplier relations and supply chain management, have been limited to having only one or a few factors as laying ground for the investigated dependence. One example is Hallén et al. (1991) who, even though drawing on resource dependence and taking the power position of a firm into account to measure the dependence, only use one factor to represent dependence and one for the power position. There are, however, more elements that affect inter-firm dependence that can be taken into account, such as the criticality of the resources and number of alternative suppliers of the resource (Pfeffer & Salancik, 1978).

Increased dependence also comes with a price. It will generate vulnerability which may lead to firms taking actions to try to reduce their dependence in any way, for example, by trying to secure the access to resources (Laamanen, 2004). A relationship which produces great dependence from either party also produces power as well as opportunism and coercion possibilities (Provan & Gassenheimer, 1994). Contracts can secure the access for resources and may eliminate opportunism. By cooperating firms develop trust, which may also serve as protection towards opportunism (Laamanen, 2004). Gulati and Sytch (2007) suggest that information exchange, trust building, and joint actions make up the social embeddedness in which transactions are made. The social embeddedness may also help balancing collaboration and the need for safety towards the risk of being dependent. To be able to grasp and understand this dependence or interdependence between firms, Stern and Reve (1980) stress the importance of analyzing both economical and behavioral factors. Scholars have also acknowledged the importance that both parties in an inter-organizational relationship must be considered when investigating dependence, as it is mutually constructed by the partners in the relationship (Caniëls & Gelderman, 2005).

There exists a large amount of research on dependence (Caniëls & Gelderman, 2005) but there are possible contributions to be made. The authors wish to draw upon several research perspectives having discussed the subject of dependence to instead find a number of factors that can give a more holistic and less simplified picture of the complex phenomena of inter-
organizational dependence. The factors creating dependence and the implications that dependence has on the inter-organizational relationship is investigated in a case study. A qualitative case study enables the investigation of a range of elements of dependence while investigating and displaying the social construct of the transaction and relationship. A case allows the presentation of a rich picture of the specific context and given circumstances, something that is requested in supply chain research (Cox, 1999; Mouritsen et al., 2003). The relationship is investigated by its collaborative character in order to, first, present a rich picture of the collaborative actions within the relationship because of the evident connection between dependence and collaboration and, secondly, to discuss the implications that dependence has on the relationship. To avoid definition ambiguity, the applied definition in this study is the one from Frazier (1983, p. 71) saying that dependence is a company’s “need to maintain the relationship in order to achieve desired goals”.

The case investigated is the relationship between GGP Sweden AB, a manufacturing company producing gardening products and one of its subcontractors, Stoeryd AB. Stoeryd AB is a manufacturing company primarily producing steel products as a subcontractor to a variety of companies in different industries. In a supply chain management perspective, the focus of this thesis corresponds to the second of Harland’s (1996) levels of supply chain management, the management of a supplier relationship in a supply chain.

1.3 Purpose and research questions

The purpose of this study is to investigate which elements constitute inter-organizational dependence and how inter-organizational dependence influences the relationship between GGP Sweden AB and Stoeryd AB.

The rationale for fulfilling this purpose is to add on to the existing research on inter-organizational dependence. To assist the journey towards fulfilling the purpose of this study three research questions have been formulated. The identification of collaborative elements lays ground for, and assists, the empirical collection and presentation of the investigated relationship, leading us to the first research question.

How is the inter-organizational relationship between Stoeryd AB and GGP Sweden AB constructed?

Answering this research question entail using the theoretical foundation to guide the investigation of the case. The first part of the empirical findings include a thorough description of the relationship (case) in focus from the perspectives of both firms and provides the context and circumstances to the elements of inter-organizational dependencies, which are the prime focus of this study. The factors of dependence within the relationship are investigated and presented by answering research question number two.

How are the elements of dependence constituted in the relationship between Stoeryd AB and GGP Sweden AB?

The collected empirical material about the relationship, its circumstances and character along with the situation of dependence within it, enables an analysis and discussion of the possible implications that dependence has on the relationship. The last research question represents the guide to complete the study and answer the purpose of it.

How does dependence influence the inter-organizational relationship between Stoeryd AB and GGP Sweden AB?
2 Theoretical framework

In the following chapter theories relevant for this thesis are discussed. Supply chain collaboration and inter-organizational dependence are the main themes presented. Following is a theoretical conclusion of the discussion where a tentative framework on which to base the empirical gathering, is presented.

2.1 Supply Chain Collaboration

Cooperation, integration, and interdependence are crucial ingredients in supply chain management and relationship management. Supply chain collaboration includes developing structures, skills, or processes to overcome inter-organizational differences (Howard & Squire, 2007). Collaborating is generally described as joint work or cooperation with someone not directly connected to oneself. Collaborations share some characteristics with pure transactions on one extreme as well as with the integration on the other. Longer time frame and mutually shared goals are examples that distinguish a collaborative relationship from a transaction. The absence of joint ownership through mergers, acquisitions or joint ventures is what differ collaboration from integration (Bäckström, 2007).

The cooperation or collaboration between firms require some kind of motivation of involved firms, such as reduced transaction costs or increased knowledge (Williamson 1975). Supply chain collaboration goes beyond the mere transaction relationship and can be seen as a cooperative strategy where two or more companies work together to create a mutually beneficial outcome. This implies that two or more firms should build commitment towards an aligned configuration of their interface processes supporting a strategic objective (Simatupang & Sridharan, 2008).

The available research on supply chain collaboration is very extensive (Kampstra et al., 2006) as is the research on the benefits and possible outcomes of it (Howard & Squire, 2007). As the interest has shifted from the traditional way of keeping supply relationships on an arm’s length to avoid dependence and maximize bargaining power towards a focus on closer buyer-supplier relationships, the many possible benefits have been determined. Most areas of performance in a firm (costs, delivery, quality and innovation) can be enhanced by a fruitful collaboration. Gradually, more firms also see collaboration not only as a way to decrease costs or improve performance but also as a possible source of competitive advantage (Howard & Squire, 2007).

With a substantial amount of research on the topic also the identification of difficulties with collaboration and their implications has been found. Kampstra et al. (2006) claim that only a small proportion of the attempts to collaborate result in success because of several reasons. They identify a number of sources, one being power inequality between partners possibly resulting in firms being forced to participate, or strive to have more influence on the collaboration process. This does not, however, imply that equality is needed between firms in order to collaborate. Cox (1999) says that all successful relationships with buyers or suppliers are based on someone having power over someone else, which is needed in order to appropriate value from others. A conflict of interest must be present.

Several positive outcomes has been connected to the collaboration, integration and information sharing emphasized in SCM theory; decreased uncertainty implying lower costs of inventory, improved customer service, more flexible response to changes in customer demand, reduced order cycle times, and improved tracing and tracking (Christopher, 1998; Anderson & Lee, 1999). The positive effects from an integrated supply chain can in turn
lead to decreased costs, improved sales or improved operational performance (Mouritsen et al., 2003). Collaboration can also foster learning between organizations, especially by sharing tacit information and knowledge between organizations. Open and frequent communication is crucial for maintaining such collaborative relationships and facilitates knowledge advancement (Paulraj, Labo & Chen, 2008). The fostering of organizational learning is of central importance for building skills and routines to uphold the competitiveness of firms (Powell et al., 1996).

Sheth and Sharma (1997) concluded in their study on supplier relationships that the inter-organizational procurement process has changed from being focused on transactions towards having a larger focus on supplier relationships. This strategic change has had a major impact on firms’ activities and firms have heavily reduced the amount of external suppliers. The underlying logic to this behavior is to gain increased cost efficiency, increased effectiveness, enabling technologies and increased competitiveness. Deepened supplier relationships is a way for firms to gain a competitive advantage that can be sustained by having mutual commitment to the relationship, which also increases the barriers of exit for both parties leading to reduced uncertainty. Having a relatively large amount of suppliers or buyers also requires the need for control over these transactions. To ensure a thriving procurement, the buyer firm will implement control functions, which will increase cost and inefficiency of the relationship to the supplier. Therefore, having improved and deeper supplier relationships will reduce uncertainty and also decrease the need of control, making the relationship more efficient. Further, a successful supplier relation will enable processes such as Just-In-Time across the supply chain, which can lead to higher customer satisfaction and a competitive advantage (Sheth & Sharma, 1997).

The benefits of the more integrated view of an end-to-end supply chain focus has also been discussed and questioned by researchers. Crook and Combs (2006) imply that most literature regarding Supply Chain Management available relies on a common thinking that integrative and collaborative creates a rising tide that lift all boats (2006, p.554). Mouritsen et al. (2003) bring forward situations where SCM theory may be pro-integration and collaboration, whereas business practice may be against it. Examples of problems are to what extension information is to be shared, difficulties in having a common development strategy, the allocation of shared costs and benefits as well as control and power issues.

That inter-firm relationships are built upon interdependence is regarded a common principle in both economical and behavioral research (Gassenheimer et al., 1996). If firms have a need to engage with other firms, this evidently implies some form of dependence. To be able to grasp and understand the dependence or interdependence between firms, Stern and Reve (1980) stress the importance of a analyzing both economical and behavioral factors.

### 2.1.1 Elements of collaboration

Lee, Padmanabhan and Whang (1997) present three key elements of collaboration described as underlying mechanisms to coordination; information sharing, operational efficiency, and channel alignment. Simatupang & Sridharan (2008) also acknowledge these three key elements as part of the supply chain collaboration design, also adding the factor of synchronized decision making.

Collaboration through information sharing permits members in the supply chain to attain, store, and disseminate information for allowing effective processes and accurate decision making. Information sharing is the integrating glue that facilitates other factors of collaboration. Improved access to information throughout a supply chain leads to increased visibil-
ility of data concerning procurement, production processes, demand conditions, storage and inventory, order status, and performance status. Visibility of such factors and processes increase the ability to grasp a bigger picture and lays ground for better decision making and actions for an individual firm or for synchronized decisions between supply chain partners (Simatupang & Sridharan, 2008).

Channel alignment includes the coordination between channel members regarding a number of factors. Pricing, transportation, inventory, and ownership coordination between firms can reduce uncertainty and irregularities in chain processes. Alignment of chain factors can, in turn, lead to operational efficiency conveying reduced costs, and shorter lead times (Lee et al. 1997).

Decision synchronization is the coordination of decision planning and execution among collaborating partners. The alignment of also the decision making can pay off amongst partners and facilitate the coordination of activities (Simatupang & Sridharan, 2008).

Simatupang & Sridharan (2008) also highlight the importance of seeing incentive alignment as a key element in collaborative relationships, since one of the principle elements of collaboration is mutual benefits. Incentive alignment is the sharing of costs, risks and benefits between members which can motivate members to follow mutual strategic objectives. The contribution of firms can be evaluated by the experienced compensation fairness received along with self evaluation of contribution.

Researchers see openness, communication, common interests, and trust as enablers of collaboration (Mentzer et al., 2001; Bäckström, 1997).

2.2 Inter-organizational dependence

Dependence is created through the process of relationships making and collaboration (Caniëls & Gelderman, 2005). Frazier (1983, p. 71) defines dependence as a firm’s “need to maintain the relationship in order to achieve desired goals”. The higher the value expected in the relationship compared to those of alternative relationships, the higher a company’s dependence (Frazier, 1983). This need to uphold a relationship in order to achieve desired goals [dependency] is a determinant factor of the way to govern the company and thus also if the firm should engage in relationships and how. Relationships can be seen as structures of informal and formal bonds that exist in order to control dependencies arising from economic exchange (Izquierdo & Cillán, 2001). Trading companies always depend on each other, to varying extent. As a large amount of research has scrutinized the subject, scholars have gone from investigating one party of a relationship to acknowledging that both parties in a inter-organizational relationship must be considered, as dependence is mutually constructed (Caniëls & Gelderman, 2005). Firms rely on each other to provide material and inputs of varying importance and value which creates a dependency situation between the actors. The more intense the relationship, the greater the dependence (Cox et al., 2002).

The social construct surrounding pure economic exchange can be referred to in terms of embeddedness. The exchange and transactions are embedded in a social construct, where joint actions, quality and scope of information exchange, and trust can be seen as composing elements (Gulati & Sytch, 2007). Gulati and Sytch (2007) encourage researchers to think more carefully of the relational embeddedness of the exchange transactions when performing research on dependence. As dependence asymmetry and its pros and cons may be best understood by the power dependence theory, cases with more joint dependence have to be examined with greater respect taken to the social construct, which also includes the motivations and actions of individual actors (Gulati & Sytch, 2007). The authors interpret
this as the more a relationship has dependence differences between the firms, the more respect should be paid to the “classic” power-dependence factors (such as proportion of sales/purchase) and their effects, whereas when examining relationships having a higher degree of joint dependence more effort should be given to examining the “embeddedness”, i.e. the social construct and its effect on the relationship situation. It is further stated that the dimension of joint dependence actually is relatively unexplored, since most research is concerned with asymmetries of dependence and their sources and implications (Gulati & Sytch, 2007).

Several researchers (Rosenberg & Stern, 1970; Gassenheimer et al., 1996) stress the importance of analyzing both economical and behavioral factors simultaneously in order to understand the dependence between organizations in the exchange process.

Hallén et al. (1991) have created a model to identify and measure inter-firm dependencies in their research on inter-organizational adaptations in business relationships, which is based upon the previous research of resource dependence and bargaining power. They draw upon the resource dependence model from Pfeffer and Salancik (1978), which refers to the accessibility of alternative resource sources and the possibility to change to these different sources, implying that these sources of dependencies could be expected to be related to the relative shares of business parties do with each other. Hallén et al. (1991) are not alone to make this assumption as several other researchers (Laamanen, 2004; Provan, 1993; Pfeffer & Salincik, 1978) conclude the same connection. Thus, supplier dependency is (at least partly) determined by the customer’s share of the supplier’s total sales and respectively, the customer dependency is (at least partly) determined by the supplier’s share of the total purchase value of the products (Hallén et al., 1991). In addition, Hallén et al (1991) say that measuring dependency is related to the concept of bargaining power, being the opposing party’s dependence. Bargaining power is related to market position and thus the possible way to measure the bargaining power of the customer (and thus dependence of the supplier) would be to examine the customer’s access to alternative suppliers. If many alternatives are present the customer has high bargaining power and if few alternatives exist the bargaining power is low (Hallén et al., 1991). Even though Porter (1980) brings up several other factors as determinants of bargaining power of suppliers and buyers, Hallén et al. (1991) believe that it is a good idea to have the supplier’s market share in the customer’s market as a determinant, when measuring the supplier’s bargaining power (and thus the customer’s dependence). However, product characteristics is brought up as another factor of dependence, implying that more complex products can be purchased from fewer suppliers. Therefore, increasing complexity of products will likely increase the dependence of the buyer.

In this way, the research on inter-organizational dependence many times is simplified to include only one or few parameters when doing research on the subject, and then in particular when performing research about the effects or antecedents of dependence. There are, however, more sources of inter-firm dependence to be taken into account that can be in play simultaneously. The following sections describe views of inter-organizational dependence from research perspectives having added to the load of research on dependence.

2.2.1 The perspective of transaction cost economics

The perspective of transaction cost economics regards the managing of exchanges in efficient ways with the lowest cost of governance, where the concepts of transaction costs, transaction attributes, and governance structures are key elements. Transaction attributes concerns asset specificity, transactions frequency and the uncertainty surrounding the ex-
change (Williamson, 1975). Transaction cost theory view economic exchange as a question of designing and maintaining a relationship and mechanisms to control that exchange (Izquierdo & Cillán, 2001). This two-sided view of collaboration is called relational contracting. Reflecting on this, Izquierdo and Cillán (2001) view relational firms as having a hybrid structure, partly dependent and partly controlling. The choice of hybrid structure (i.e. the degree of control and degree of dependence) is dependent on the investments made in transaction specific assets, the uncertainty and the frequency of transactions. Williamson (1985), being the first to mention this hybrid governance (Proven & Gassenheimer, 1994) views these three factors as sources of dependence, all making it difficult to replace the exchange partner. Transaction cost analysis see the relationship as a way to stabilize the economic exchange and the risk of opportunistic behavior, as it is structured by informal and formal bonds (Pfeffer & Salancik, 1978).

Investments being made in respect to a certain exchange relationship that cannot be used in another context are transaction specific. The assets from such investments are said to have a high degree of asset specificity if the risk of sacrificing value is high if the relationship is terminated. Also human assets can be transaction specific. The transaction specific investments made in a relationships shape the stake a firm has towards another firm (Williamson, 1985).

The uncertainty is described as the disturbances surrounding the exchange which can be environmental of time and place. Uncertainty can also be internal to the transaction, and a result of human actions or lack of actions. Bounded rationality, described below, is the reason that these uncertainties become concerns and lack of communication is exemplified as a human behavior that can increase uncertainty (Williamson, 1985).

As complexity, specialization or asset specificity of firms in a transaction relationship increase, so does the cost of governing it. Increased frequency of transactions and the transaction scope will assist in making these specializations possible but also affect the dependence situation (Williamson, 1985).

Transaction cost economics rely on a number of behavioral assumptions that need introduction. The seeking of rationality and uncertainty reduction of firms are straightforward, while the concept of bounded rationality is less intuitive. Bounded rationality means that firms try to act rational but only does so to a limited extent, because of the limited ability to do so since information upon which to establish these fully rational actions is limited (Williamson, 1985). Bounded rationality and uncertainty make it difficult to determine honest organizations from those acting (or those that will act) of pure self-interest (Howard & Squire, 2007), thus the risk of opportunistic behavior is another assumption of transaction cost economics (Williamson, 1985).

2.2.2 The strategic management perspective

Within strategic management the so called resource-based theory concerns the managing of resources as to increase the competitive advantage of the organization, in relation to the market (Vivek, Banwet & Shankar, 2007). The resource-based view implies that a company’s performance is dependent on its ability to accumulate resources (assets, information, knowledge, capabilities, processes etc.) that are valuable, rare, difficult to imitate, and difficult to substitute. Resources showing all of these four characteristics should be viewed as a possible source of sustainable competitive advantage (Barney, 1991). On the inter-organizational level, relationships are seen as ways to collect tangible and intangible resources (Vivek et al., 2007) where the possible sources of competitive advantage take the shape of knowledge sharing, complementary capabilities, relational governance, and trans-
action specific assets (Dyer & Singh, 1998). Also the resource based view thus highlights the possibility that resources can be firm or relationship specific.

Resources create dependencies to firms when being important, when control over resources are rather concentrated or when they are both. Being important can be shown in the proportion of sales/purchases firm commit to each other or when alternative resources are lacking, should the access to the resource be removed. However, even though proportion of business committed to the other firm may be large, the resource criticality may not be high. The importance of a resource is also determined by the firm’s ability to function without the resource (Pfeffer & Salancik, 1978). Hence, also a resource of small magnitude can be critical to a firm’s endeavors.

The concentration of resource control means having control over resources that few competitors also have control over (Pfeffer & Salancik, 1978). A key indicator of the concentration of resource control is the industry concentration. In an industry with high concentration, the most sales are generated by a small number of competitors that control similar resources. Due to the limited alternative sources in a highly concentrated industry, the firm controlling such industry resources has higher bargaining power and companies in need of the resources are increasingly dependent on these firms (Crook & Combs, 2006). Concentration of resource control and importance of resource individually affect dependency and bargaining power but both factor combined result in the largest dependence and countering bargaining power (Pfeffer & Salancik, 1978).

The need for a relationship, more or less caused by need of resources and following dependence, is a way to gain efficiency and protection towards environmental uncertainties to the firm, as derived from resource dependence theory (Pfeffer & Salancik, 1978).

In the well known research model of the five competitive forces, from Michael Porter (1980), a vertical dimension of power and dependency is discussed in terms of bargaining power of buyers and suppliers. The factors conveying bargaining power of buyers and suppliers more or less mirror each other and are presented as follows. As presented above, Hallén et al. (1991) claim that dependence is closely related to the concept of bargaining power, being the opposing party’s dependence.

Buyers have larger bargaining power when:

- Buyers purchase large volumes relative to proportion of seller sales.
- The products a buyer purchases in the industry represents a large proportion of the industry purchases - leading to that the buyer have higher influence on industry price of product.
- The products it purchases are regular and undifferentiated.
- The buyer faces low switching costs when changing supplier.
- The product supplied is unimportant to the quality of the services or products of the buyer.
- The buyer has complete information of the market concerning, for example, demand, market prices, or supplier costs.

Suppliers have larger bargaining power when:

- The sellers in the providing market are fewer.
• The competition from substitute products is low.
• The buyer does not represent a large proportion of the supplier’s sales.
• The product supplied is important to the buyer’s business.
• The supplier’s product is differentiated or implies switching costs to the buyer if changing supplier. (Porter, 1980)

The factors that lay ground for higher or lower bargaining power thus regard industry characteristics, information, product characteristics and proportion of parties’ sales/purchases.

2.2.3 Distribution management perspective

In relation to resource based explanations, the areas of distribution management have a similar view upon dependencies, but more incorporating the behavioral side of the inter-organizational dependencies. The quality and extent of marketing services with customer services as a binding and uniting force are seen as determining the dependence of a firm in the relationship, as well as the output flowing from it (Gassenheimer et al., 1996). Dependence is shaped by this exchange of marketing services and buyer dependence therefore is based on the perceived quality of the supplier’s offerings, the buyer’s accessible substitutes, and the financial impact that the quality levels of the supplier’s offering has. However, as the exchange of marketing service are seen also as exchanges of resources (Gassenheimer et al., 1996; Frazier, 1983), this thinking is not so distant from the resource based perspective, but viewed as somewhat more incorporating the behavioral side of dependence creation (Gassenheimer et al., 1996).

2.3 Dependencies’ implications on inter-organizational relationships

The mentioned research perspectives bring forward the elements affecting inter-firm dependence but not the implications being dependent are associated with. Below follows, first, some of the more general implications linked to dependence and, secondly, a discussion about dependence’s influence on the power position of firms.

A variety of aspects can be connected to different levels of inter-firm dependency. Several researchers have determined that a higher degree of dependence among firms is related to a greater degree of cooperation (Skinner et al., 1992; Maloni, 1997).

In relationships with high levels of dependence, the firm being more dependent on the other party’s performance is more likely to make cooperative efforts to maintain the relationship. Dependence can also be a factor that represses conflict in a relationship, since partners being dependent may suffer more if the relationship was to end as a result of the conflict (Skinner et al., 1992). It has also been determined that larger financial dependency increases obedience in a relationship (Gassenheimer & Calantone, 1994). Izquierdo and Cillán (2001) agree when implying that the most essential reason for firms to search for more efficiency and stability, through relationships, is when firms are dependent upon each other. Hallén et al. (1991) have determined that the share firms command to each other’s business in the relationship and higher degree of complexity in products (factors in their eyes viewed as increasing dependence) have a significant effect on the degree of adaptation behavior in the relationship. Resource dependence theory and transaction cost theory point out that dependence can be seen as a determinant to corporate governance (Izquierdo & Cillán, 2001).
Researchers have also linked a number of collaborative characteristics to the buyer-supplier relationship, when the supplier is dependent on the buyer. More dependent suppliers may have larger devotion to cooperate with the buyer (Laamanen, 2004; Provan, 1993). Presented examples of this have been increased involvement in buyer initiated training (Modi & Mabert, 2007), participation in the purchasing firm’s product development (Carr et al., 2008), and larger integration between buyer and supplier when developing products (Takeishi, 2001).

Gulati & Sytch (2007) have found that a supplier’s higher relative dependence has a negative effect on the performance of the buyer (a manufacturer), while a higher level of dependence of the buyer is not connected to any significant effect on buyer performance. In situations with joint dependence, both the supplier’s and the buyer’s increased relative level of transaction specific assets, increases the buyer’s dependence. By affirming this, they also question the accuracy of the dominating, traditional view on the connection between transaction specific assets and dependence, where it is suggested that an increased proportion of specific assets increase only the investing party’s dependence. The motivation for this questioning has two major points. First, changing from a supplier having specific relational investments is likely to involve switching costs and potential losses for the buyer, when again being forced to find an organization having such specific assets. Secondly, transaction specific assets are likely to generate a significant flow of value for the receiver, making the buyer dependent on such resources. It is even indicated that specific assets generate more dependence with the buyer than with the supplier. Gulati & Sytch (2007) do, however, also find that joint dependence has a considerable positive effect on the performance of a buying manufacturer, from where they draw the conclusion that joint dependence and performance are interrelated and positively affect each other in a significant way.

Through collaboration, companies develop relational capabilities and social capital that can be sources of competitive advantages (Laamanen, 2004). As transaction relationships can secure vital resources it also imposes increased dependence to external parties. A relationship which produces a great dependence from either party also produces opportunism and coercion possibilities (Provan & Gassenheimer, 1994).

Dependency generate vulnerability to which firms take actions, either to make sure that access to resources is secured or in any other way try to reduce their dependence (Laamanen, 2004). Relational contracting can keep these driving forces on a bearable level and restrain also exercising of dependence-based coercion or opportunism. A contract can induce some of the advantages of vertical integration without the costs and the decrease in autonomy that it brings (Provan & Gassenheimer, 1994). In relationships with many or complex transactions it may, however, be difficult to implement ideal contacts which can minimize opportunistic actions. In this case, trust can serve as a protective element that can eliminate vicious thoughts of opportunism (Laamanen, 2004) and by cooperating firms develop trust. Trust can be a substitute to formal contracts or hierarchical control and is a key variable in understanding long-term relationships and collaboration (Izquierdo & Cillán, 2001). Hence, it is the fact that exchanges are embedded in a social construct that may assist to balance the collaboration and the need for safety. Contracts and trust are not unconditional substitutes for each other, but should be viewed as complementary. In uncomplicated transactions neither of the two may be needed, while complex transactions seem to require both detailed contracts and trust, which both reduce the risk for opportunistic behavior (Laamanen, 2004).

Provan and Gassenheimer (1994) found that the attitude towards the relationship, in terms of long-term commitment towards collaboration, affects the relationship between depen-
dency and exercised power. Therefore, it is likely that the relationship of dependence and exercised coercive power is based on the norms towards long-term commitment and trust in the exchange relationship and can be controlled by relationship contracting (Provan & Gassenheimer, 1994).

### 2.4 Dependence and Power

As firms cannot do everything solely, they rely on each other to provide material and input of varying importance and value. This creates a dependency situation between the actors, and the relative power between the parties is dependent on how this relation is viewed, also described as perceived power (Cox et al., 2002). Moore and Williams (2007) define power as the ability to motivate others to engage in activities they otherwise would not have done, for example, to evoke change. Researchers have consequently determined that perceptions of own power positions are appropriate measurements of power (El-Ansary & Stern, 1972). This implies that the real power position between organizations at least is very close to the perceived power situation firm’s believe themselves to be in. Gaski (1984), in turn, claims that power sources and dependence cannot be separated and thus when measuring dependence one will basically measure power at the same time.

Among others, Emerson (1962) has come to the conclusion that all power is founded upon dependencies. The implication of this is that companies being dependent on another company because of that organization controlling critical contingencies will be subjects to attempts of influence from the company controlling these contingencies. Hence, the relative dependence between two parties will decide the relative power they possess. Having resources that the other party in the relationship needs and controlling substitute or alternative resources result in structural power which, in turn, leads to that the power holding party can influence the other party to comply with their needs. Caniëls & Gelderman (2005) also claim that a supplier’s dependence is a source of power for the buyer and vice versa. They claim that it is the net dependence between the firms that make up the power. If a firm depends more on the partner than does the partner on them, the partner has power over them. It is thus the relative dependence or the interdependence asymmetry that makes up power.

Provan and Gassenheimer (1994) agree that dependencies conventionally have been used in order to identify power relationships and how likely one firm is to assert influence over another firm. In their research they do, however, determine that not all dependencies are associated with the actual action of carrying out this influence, even though they still confirm that all power is based upon dependencies. All power that is present in a relationship is based on dependencies, whether it is exercised power or not. Further, Provan and Gassenheimer (1994) claim that dependencies in a long-term, mutual oriented relationship may very well give different outcomes in regard to power than dependencies in a short-term oriented relationship, where loyalty is low. This implies that the orientation of the relationship is a great determinant of the dependency, and thus also the power structure present.

### 2.5 Theoretical Conclusion

Collaborating can be described as mutual work or cooperation with a party not directly connected to oneself (Bäckström, 2007). Collaboration can be seen as a cooperative strategy where parties join forces to create a mutually beneficial outcome (Simatupang & Sridharan, 2008). Collaboration and a more integrative supply chain can bring positive effects that may in turn lead to improved sales, lower costs or improved performance (Mouritsen et al.,
2003) and thereby be a way for firms to gain a competitive advantage (Howard & Squire, 2007). Collaboration can also foster learning between organizations (Paulraj et al., 2008).

Supplier buyer procurement processes have changed from being transaction-focused towards being more focused on the relationship around the transaction. Firms have reduced the number of, and deepened, the supplier relationships aiming to gain the positive effects from collaboration (Sheth & Sharma, 1997). The deepened relationships imply an increased reliance on the other party conveying dependence (Gassenheimer et al., 1996; Cox et al., 2002), which also brings uncertainty in terms of increased risk of opportunism and coercive behavior (Provan & Gassenheimer, 1994) which power can make possible.

Researchers have found that power is based upon dependencies (Emerson, 1962). The way that companies view the dependence determines the relative power between parties in a relationship, or the perceived power positions (Cox et al., 2002). Caniëls & Gelderman (2005) claim that the net dependence between the firms determines power. The dependence situation can show how likely a firm is to assert influence over another firm even if dependencies are not always connected with carrying out this influence. The levels of long-term orientation, mutuality, and loyalty are likely to have impact on the actual power execution (Provan & Gassenheimer, 1994).

Contracts can secure the access for resources and may eliminate opportunism (Laamanen, 2004). However, collaborative behavior and a deepened relationship can also reduce uncertainty and decrease the need of control (Sheth & Sharma, 1997) by developing trust, which may also serve as protection towards opportunism (Laamanen, 2004). The social construct that makes up the relationship around the transaction can help balance the collaboration between the need for safety and the risk of dependence (Gulati & Sytch, 2007).

2.5.1 Elements of collaboration

Lee et al. (1997) present a number of key elements of collaboration or mechanisms of coordination. Information sharing is the glue that integrates the factors of collaboration. It increases visibility of data of processes and lays ground for better common decisions between partners and for better individual decisions for the firm. Channel alignment is the coordination between channel members regarding chain processes that can reduce uncertainty and irregularities but also lead to the third element of collaboration, being operational efficiency.

Simatupang & Sridharan (2008) add two elements to Lee et al. (1997) that together make up the supply collaboration design. Decision synchronization is the coordination of planning and execution of decisions among partners which can further assist the coordination of activities, and, incentive alignment, which is the sharing of costs, risks and benefits between members that can be evaluated by the experienced compensation fairness received, along with self evaluation of contribution. Openness, communication, common interests, and trust enable collaborative efforts (Mentzer et al., 2001; Bäckström, 1997).

2.5.2 Inter-organizational dependence

Dependence can be defined as a firm’s “need to maintain the relationship in order to achieve desired goals” (Frazier, 1983, p. 71). If a company can expect higher value in an existing relationship compared to those of alternative relationships, this increases the dependence on the party (Frazier, 1983). There is extensive research available, from various perspectives and schools of research regarding the area of dependence and power. We propose a concluding framework drawing on elements from various research perspectives, for descrip-
tion and analysis of the complex situation of dependence between two firms in a supplier-buyer relationship.

Since researchers on dependence come from different schools of research this study has aimed at becoming broad in the sense that it draws upon the findings of the research perspectives of transaction cost economics, strategic management with its resource based perspective, as well as distribution management research.

From the theoretical discussion five dimensions of factors influencing dependence have been derived, drawing from presented research perspectives discussing inter-organizational dependence. These dimensions and its elements can be seen as a conclusion of the theoretical discussion which has then laid ground for the empirical collection made by interviews on respective parties in the relationship. In the literature, brought up factors are treated as elements affecting dependence with one exception, the factors that affect the bargaining power of buyers and suppliers. However, since bargaining power has been treated as the opposing party’s dependence (Hallén et al., 1991) and the goal is to make the framework broad and intuitive, the reasoning from Porter (1980) will be included to make up these “dimensions of dependence”.

The relationship specific asset dimension includes the concepts of transaction specific assets from transaction cost economics (Williamson, 1985). From the resource-based perspective (Dyer & Singh, 1998) comes the view that also resources can be relationship specific. These concepts are similar in nature and consider resources or assets that would be of little or of no use to the firm having made these investments should the relationship, or transaction, end. Gulati & Sytch (2007) imply that transaction specific assets can be both in possession of a buyer and a supplier. These transaction specific assets (or resources) can also take the form of human assets (Williamson, 1985).

The resource transaction magnitude dimension is derived from the concepts of transaction frequency (Williamson 1985), being the frequency and scope of transactions between firms (from transaction cost economics), and proportion of sales/purchases firms commit to each other, taken from resource-based view (Pfeffer & Salancik, 1978) and Porter’s (1980) theories within strategic management. These concepts are similar since they consider the magnitude of transactions and value that firms commit to each other, in the latter case in proportion to total sales/purchases.

The resource characteristics dimension considers the characteristics of products or services that flow between the members of the relationship. It is derived from the concepts of product (or service) differentiation (Porter, 1980), product complexity (Hallén et al., 1991), product’s importance to buyer’s business performance (Porter, 1980), and the resource criticality - the ability for a firm to function without the resource (Pfeffer & Salancik, 1978). Product’s importance to buyer’s performance and resource criticality are here regarded as having similar meanings. Other factors in this dimension are drawn from the distribution management perspective and are perceived quality of the offerings (including service level), the quality’s effect on the financial results of the buyer, and the accessible substitute products to the buyer (Gassenheimer et al., 1996). The distribution research thus highlight the service level as part of the marketing offer, or the resource provided. The accessibility of substitute products is brought up by Porter (1980) as a factor affecting bargaining power similar to the element alternative resources, brought up by Pfeffer & Salancik (1978) from the resource-based perspective.
The industry dimension includes the concentration of resource control (Pfeffer & Salancik, 1978) and number of alternative suppliers of the resource (Porter, 1980), which can be seen as having similar meanings. Further, the level of switching costs of the buyer to change supplier (Porter, 1980) can be seen as a factor affecting dependence connected to the industry, even though switching costs can have several underlying determinants, such as internal costs. The importance of looking beyond the relationship for investigating inter-organizational dependence becomes apparent reflecting on Frazier’s (1983) point that the value expected in the relationship compared to those of alternative relationships is determining the level of a company’s dependence within a relationship.

The information dimension refers to the possession and access of information that a buyer has about the supplying industry. If the buyer has full information about, for example, market demand, market prices, or supplier costs, this will imply a higher bargaining power (Porter, 1980), something that may be seen as higher respective dependence of the supplier (Hallén et al., 1991).

A tentative framework of five dimensions has been provided including the following factors affecting the level of dependence in a business relationship, which can be found in table 1. The factors previously described as similar have been merged into one factor. Even though some of these factors are applicable on one party of a relationship the aim is to, to the largest extent, apply the factors on both the buyer and the supplier as the interest lies in the case, being the relationship. The intension is that this framework of elements can be used as an intuitive tool for analysis when investigating inter-organizational dependence which can be applied on both parties in a relationship. The following factors will thus lay ground for the empirical investigation of the inter-organizational dependence in the relationship. The aim is to reflect upon and discuss the brought up elements affecting inter-organizational dependence and their implications for researchers as well as practitioners in inter-organizational relationships.

Table 1 - Tentative framework of elements of dependence

<table>
<thead>
<tr>
<th>The relationship specific asset dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- relationship specific assets/resources,</td>
<td></td>
</tr>
<tr>
<td>(tangible and intangible)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The resource transaction magnitude dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- magnitude of seller sales in proportion to total sales</td>
<td></td>
</tr>
<tr>
<td>- magnitude buyer purchases in proportion to total purchases</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The resource characteristics dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- product differentiation</td>
<td></td>
</tr>
<tr>
<td>- product complexity</td>
<td></td>
</tr>
<tr>
<td>- resource criticality</td>
<td></td>
</tr>
<tr>
<td>- perceived quality of the offerings and service level</td>
<td></td>
</tr>
<tr>
<td>- the perceived quality’s effect on the financial results of the buyer</td>
<td></td>
</tr>
<tr>
<td>- accessible substitute products</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The industry dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- alternative suppliers of the resource</td>
<td></td>
</tr>
<tr>
<td>- switching costs of the buyer</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The information dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- possession and access of information about the supplying industry</td>
<td></td>
</tr>
</tbody>
</table>
3 Method

This chapter first describes the research approach taken in this study. In the following sections the case selection, the empirical gathering, and the analyzing process are described. Finally, we will be discussing the credibility of the method of the study.

3.1 Research approach

There are several different ways to approach research and two commonly identified are induction and deduction (Bryman, 2001). Further, Bryman (2001) claims that most research has elements of both, few studies are purely taking one approach.

In line with what Bryman (2001) suggests about most research, also this study has elements of both approaches. For this study an extensive literature review was done before the problem emerged. When starting the literature assessment the first focus was on supply chain management, that developed into an interest in supplier relations, that later emerged to the focus on dependencies in inter-organizational relationships. The nature of the study is to explore and understand an empirical setting, through using pre-existing theories in the field of research. The research previously conducted in the field of interest was found to look at inter-organizational dependencies from various angles, which were assessed to make up the theoretical foundation from where this research takes off. During the process of problem formulation and empirical gathering there has been a process of reassessment of the theoretical framework. Even if the theoretical framework provided a clear platform and area of interest to take off from and to base the empirical investigation on, it has been matched with the empirical findings during the process. This was done in order to enable a deeper understanding of the phenomenon studied. The approach taken is similar to how Davis (1972) views the abductive approach. Abduction has been described as taking a creative leap, looking at how one phenomenon can fit in and be explained in a broader context (cited in Ezzy, 2002). Ezzy (2002) explains the abductive research approach as using pre-existing theories to guide the research process through suggesting interpretations of observations. Abductive reasoning allows the researcher to move back and forth between theory and empirical findings and to “match” theory with findings. This combining of theory and findings leads to successively increased understanding and learning of the researched phenomena (Kovács & Spens, 2005) and allows taking the creative leap Davis (1972) describes. The aim of this process is to understand the phenomenon and to suggest new theory in the form of new propositions (Kovács & Spens, 2005). Ezzy (2002) claims that abductive research plays an important role in the creation of new theories and in the development of a research area.

This thesis has an exploratory nature that intends to increase the understanding of dependencies and related concerns in an inter-organizational relation. To reach this goal, the methods used have been chosen to facilitate a setting where the researched area can be investigated and presented in a comprehensive way to facilitate a deeper understanding of the phenomenon. To enable this a qualitative research method has been applied to best fulfill the purpose. Zikmund (2000) claims that qualitative information can yield deeper knowledge of the investigated problem compared to quantitative research since it allows interpretation to a larger extent. Ruane (2006) suggests that many researchers engaged in exploratory research tend to use smaller samples of the population investigated, allowing a close-up of the empirical data collected. In-depth interviews, for example, enable the creation of an intuitive image of the scenario investigated.
3.2 Theory selection and categorization

The theoretical research process of this study has undergone some twists. Starting the process with an open mind of finding an interesting subject within supply chain management, the research turned towards the question if it is really possible to manage a supply chain at all. Within such discussions it was realized that power relations in supply chains was frequently discussed, which is a topic relatively new to the supply chain perspective (Maloni, 1997). Thus this became the first theoretical area of interest and the research was initiated in the subject.

We soon came to realize that researching inter-organizational power imply a number of difficulties. Apart from definition vagueness, there exist no clear boundaries between the sources of power, the usage or strategies of power, and when a party is being “exposed”. At the same time it is an abstract phenomenon difficult to investigate where perceptions play a big part (Maloni, 1997). Instead focus was turned to the concept of dependence, being related to power. The focus on dependence was made because of, first, the ambiguity surrounding the concept of power as such. Secondly, research is pointing at a relationship between dependence and power which the authors found interesting to discuss. Finally, to investigate dependence was found more straightforward since it can, more intuitively, be divided into more concrete factors to examine, which was to be found in the previous research on the subject.

The subsequent research on inter-organizational dependence in supply chains lead to the insight that much of that research stemmed from different perspectives within business research and that references were made to these perspectives. The most commonly found was the perspective of transaction cost economics, the strategic management perspective including Porter’s (1980) research and the resource-based view. In addition, distribution management theory was found interesting because of it adding elements which more focused on the behavioral sides of inter-organizational dependence. When researching these perspectives it was noticed that the different elements brought up as affecting dependence was in several cases alike among the different perspectives. Therefore, instead of choosing one perspective as focus we wished to gather elements from these perspectives to make the theoretical foundation on which to base the empirical collection. These elements were thereby summarized and concluded in what has been called dimensions of factors influencing dependence.

To get the right focus of the gathering of empirical material, the interview guide was based on the theoretical dimensions derived from theory on inter-organizational dependencies. Further, to enable an analysis of the dependencies it was concluded that it was important also to assess how the relationship between the two firms is characterized on a more general level. In the theoretical research process it was found that collaboration was a concept closely connected to dependence. The level of collaboration is linked to various extents of dependencies (Cox et al., 2002) and vice versa (i.e. Skinner et al., 1992; Maloni, 1997). Therefore, the relationship questions are based on theory of collaboration. This also contributed to a more comprehensive investigation of the relationship; something which questions based on only theory about inter-organizational dependency may not have been able to do. This was done to give the study more empirical depth to support possible conclusions made. The theoretical categorizations made have also supported the structure of the analysis.
3.3 Case study research

Yin (1994) suggests that case studies are best applied on research that focuses on how and why questions. Merriam (1988) claims that when choosing to conduct case study research the choice should be based upon what type of questions that are interesting for the study, what degree of control the researcher wants to have, and how the results are imagined to end up. Further, case studies are appropriate when, for example, a specific phenomenon, social group, institution, or event is researched. Case studies can be of either qualitative or quantitative nature where the aims of qualitative case studies often are to explore, understand or interpret the case studied, instead of testing a hypothesis (Merriam, 1988). As the idea of this study is to draw upon previous research in the field of interest to explore and interpret a new empirical setting, it was concluded that the rationale for a qualitative case study would best assist in capturing the complexity of the phenomenon of interest, namely inter-organizational dependencies and the relationship in which they occur.

Yin (1994) presents four main types of case study designs; holistic single-unit studies, embedded single-unit studies and holistic multiple-unit studies. The sub-units are units in the sense of being units for research and analysis (Saunders, Thornhill, Lewis, McMillan & Weyers, 2007). For this research an embedded single-case study is applied. However, since it takes two to tango it would only yield a partial picture of the relationship if not both the supplier and the buyer would be investigated. This choice also makes the research double focal, having multiple units of investigation, focusing on the views of the buyer and supplier with equal emphasis.

The rational for conducting single-case studies is presented by Yin (1994) from a theoretical stand point, as to confirm, challenge or extend the pre-existing theories within the field of investigation. The single-case can be used to test a theoretical model or shed new light on the problem investigated and therefore, having a single case is justified. It is also stated that the contributions from a case study can possibly add to new theory building or suggestions for further research within the field, taking off from the findings (Yin, 1994). This can be strengthened by conducting a multiple-case study as it is more robust in its nature. However, multiple case studies often require extensive resources and time (Yin, 1994). Mintzberg (1979) suggests that the focus of qualitative organizational studies should be on providing depth of the evidence collected, instead of quantity. The choice has been made to focus all resources on researching one case, instead of several, in the attempt to get a deeper understanding of this particular case.

Multiple-unit case studies can be used when then the researchers have an interest in investigating some logical sub-units that have been detected within the case, (Yin, 1994). Caniels and Gelderman (2005) suggest that research on dependencies previously has been focusing on one side of the relationship, in which dependencies are constructed, instead of including both parties. Therefore, the logical sub-units of this study are the two company perspectives of the inter-organizational relationship, the buyer side and the supplier side. Further, as the theoretical framework of this thesis was assessed a categorization of different dimensions were made, which have also been used as theoretical sub-units of investigation. The logic of doing so is to structure the study further and to keep it focused on the area of investigation.

3.4 Case selection and definition

When setting up this research it was not clear from the beginning that a case study were to be used, instead this emerged as the theoretical area of investigation was discovered. The nature of the theoretical subject and the suggestions made by researchers in the area made
the choice definite. Many researchers put a lot of emphasis on the possibility to generalize for the population investigated in the study, whereas some method of probability sampling is used. Probability sampling is mostly used in studies of quantitative character (Saunders et al., 2007). The aim of this study is not to quantify or measure any data collected but instead to explore the elements of dependence and the implications dependence has on a specific relationship. Honigmann (1982) suggests that non-probability sampling is the logical choice as long as the aim of the case study is not to answer questions like how much or how often (cited in Merriam, 1988). Saunders et al. (2007) claim that non probability sampling is justified as long as the objectives of the research are to get in-depth information of a phenomenon studied, and is commonly used when a case study strategy is chosen.

A common strategy for non probability sampling for case studies is criteria related sampling. A set of criteria are set up to define the field of investigation from which the sampling is done (Merriam, 1988). Since inter-organizational dependence is created between organizations the authors wanted to investigate at least one supply chain relationship with two organizations. Hence the access to a supplier-buyer relationship became the first criteria. Further, as it was found in theory that transaction specific assets and proportional sales and purchases volumes often were used as determinants for dependence. Therefore it was decided that the supplier would have to have a significant sales volume to the buyer firm, and that the supplier would also be selling manufactured goods. As these criterion were established the search for appropriate firms started.

Since a non-probability sampling method was used for case selection, the firms chosen were sampled due to accessibility and that they fit the set up criterion. The first contact was made with Stoeryd AB, a company known by the researchers to be a sub-contractor to several larger firms. The researchers also personally know company representatives and access was therefore more likely. The CEO of the firm was contacted and asked if the organization could participate in a case study, on the premise that also access to one of their larger customers in terms of sales volume was provided. After the CEO had discussed with their customers, a purchaser from GGP Sweden AB confirmed that they could participate in the study.

Yin (1994) states that one of the crucial events within case studies is to define the case investigated. Having no clearly set boundaries can lead to misinterpretations of the evidence gathered. Instead a clearly defined case can increase the possibility to assess the required material for the study objectives. Defining the case is of importance when looking at the trustworthiness of a study (Merriam, 1988). The case studied in this research is defined as following:

*The relationship between the supplier firm Stoeryd AB and the buyer firm GGP Sweden AB.*

### 3.4.1 Respondent selection

For this case study several different methods for gathering info have been used, where the main source have been interviews with persons involved in the relationship of the two organizations. It was important to select respondents for the interviews that are highly involved in the relationship and have knowledge about the inter-organizational relationship to be able to answer the questions drawn from the theoretical dimensions. Respondents' knowledge about the regarded area of interest was therefore the criteria for selection of interview respondents. The interview respondents were first selected at Stoeryd AB, in discussion with the CEO Christer Salomonson. Mr. Salomonson was informed about the theoretical focus and was asked to give names of possible candidates that could match the crite-
ria. Thereafter, three persons at Stoeryd AB were asked to participate in the interviews, the CEO, the production manager and the production planner.

Since the CEO at Stoeryd AB has extensive communication with GGP, being one of the organization’s most important customers, Mr. Salomonson was also asked to name the persons at GGP that he thought would be best suited to answer the questions for the study. The purchaser Jan-Erik Berglund was asked to participate. He was also the person that agreed for GGP to take part of the study. Further, a purchase planner from GGP agreed to participate in the study.

This method of non probability sampling can also be regarded as criteria related sampling, described as sampling based of personal knowledge. Merriam (1988) explains it as choosing individuals for investigation based on recommendations from experts within the field. In this case, the CEO of Stoeryd AB was asked due to his knowledge about the relationship investigated.

3.5 Gathering the empirical material

When conducting research it is of importance to be aware when you start the analysis. Ezzy (2002) claims that the analysis of all qualitative studies starts out as the data is collected. If this would not have been possible, much valuable information and new knowledge would have been lost since some insights can only be gained at the moment of data collection.

Interview method is one of the most common techniques for data collection in qualitative studies (Ezzy, 2002) and interviews are what make up the largest part of the empirical findings in this study. Yin (1994) states that there are three different principles for data collection appropriate for case studies. Principle one suggests that one should use multiple sources of evidence. The rationale for doing so is the possibility to emphasize a wider range of attitudinal, historical and observational issues. In this study primary material was collected by using interviews, and secondary material from documentation and archival records. Yin (1994) suggests that these three can be seen as main sources of evidence for research. Since the objective of this study is to investigate the relationship and the dependencies within it, the interviews have been emphasized to a great extent. This was done mainly due to that an extensive amount of information about the problem investigated could be extracted from the respondents’ answers. Annual reports, website information, sales data, and presentation material make up the archival records and documentation used. The fact that both parties of the same relationship have been investigated gives two sources of evidence regarding the relationship, also in line with Yin’s (1994) first principle.

Yin’s (1994) second principle suggests that a case study data base should be established. This can be presented as a complement to the actual report since a lot of data is reduced from the actual findings presented in the finished study. To add depth to study the material not used for the study form of case study notes, tabular materials and narratives could be added to the data base. The authors have chosen to include a lot of the empirical information gathered into the thesis, however the parts that was left out was found to be information that the authors felt was irrelevant to the purpose of the thesis. This material was placed in a case study data base together with the documentation received from the companies.

The third principle of Yin (1994) is to make sure that the reader can see the chain of evidence. This implies that the process from start to end conclusions should be traceable for the reader in the case study report. Further, nothing that was found in the data collection is allowed to be misleading, causing bias to the research. To fulfill this principle the authors
have chosen to apply a structure in the report that allows the reader to follow the process. This principle has thus guided the structure from empirical display and analysis to concluding parts, so that the reader can see where the findings of the study have their roots. The structure also makes the reader able to see what thoughts were presented by which organization and by whom. The reader should also be able to follow the rational of the theoretical dimensions applied, throughout the thesis. Further, notable is to again point out that the work process has been of abductive character and all sections have been revised and evaluated throughout the work process to best display the research conducted. Further, as the interviews are the core to the findings of this study, misinterpretations were to be avoided to the highest possible extent. The interviews were transcribed, translated into English from the interview language Swedish and was also interpreted and rewritten in order to fit into the format of the empirical findings. This process can, however, cause a level of bias to the chain of evidence. To minimize this risk, the documentation was sent to each interviewee respectively to get their approval and view of the interview material. This was also done as the study was finalized so that none of the interviewees were to feel that their thoughts had been misinterpreted. Some minor changes were noted by the respondents when asked to approve the interview material, which were adjusted. None of the interviewees suggested that their opinions had been used in an inappropriate way, when asked to approve the final version.

3.5.1 Interview method

The most common interview techniques in case studies are of open-ended type, where the interviewer put emphasis on the respondents view on the topic researched and sometimes also the opinions on a specific event. Further, interviews are many times the most important part of case studies since this form of research often focus on human affairs (Yin, 1994). Such interviews are often of in-depth character to enable the formation of a story from the interviewee that can be interpreted by the researcher (Ezzy, 2002). This does not imply that the analysis is done after the interview responses have been gathered but also during the actual event. This does not mean that it is correct of the researcher to start predicting the responses of the interviewee, but instead listen to what is said not making precipitous interpretations (Ezzy, 2002). Still, as the researcher is coloured by previous knowledge of the field of investigation and issues that are studied it is natural to say that some analysis is started already as the information is gathered. To ensure that the information the person has given is valid, Ezzy (2002) proposes that the interviewer should summarize the collected information and ask if the interviewee feels that the answers interpreted correspond to what was stated during the interview, which was also done for this study.

To gain understanding of the complexity of the dependencies and the relationship investigated, in-depth interviews were conducted. To enable an in-depth information gathering, a semi-structured interview method was applied. This method allows both the interviewee and interviewer to be flexible in questions and answers (Bryman, 2001). This was also done to be able to capture interesting aspects of the field of investigation that are not directly connected to the interview questions stated in the interview guide. Semi-structured interviews enable the interviewer to build the interview on questions that are placed in an interview guide but it still allows flexibility in the order the questions are asked and which questions that are asked (Bryman, 2001).

Further, as the study has an abductive research approach, a flexible data collection method was preferred giving the opportunity to change the focus during the course of the study. However, this was not necessary as the researchers felt that the information retrieved from the interviews was both thorough and relevant. To gain some structure in the process from
empirical gathering to analysis, the interview guide was based on the tentative theoretical framework which was worked out from the theoretical foundation and categorized in the same way. The complete interview guide used can be found in Appendix 1 and 2.

All interviews at Stoeryd AB were conducted face-to-face, where both the researchers were present as interviewers. The interviews with GGP were conducted by phone.

Table 2 - Interview overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Interview type</th>
<th>Date</th>
<th>Length of the interview</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Christer Salomonson</td>
<td>CEO</td>
<td>Face-to-face interview</td>
<td>2008-11-27</td>
<td>1h 57 min</td>
<td>Stoeryd AB</td>
</tr>
<tr>
<td>Mr. Ove Nilsson</td>
<td>Production Manager</td>
<td>Site tour - company presentation</td>
<td>2008-11-27</td>
<td>approx. 1h</td>
<td>Stoeryd AB</td>
</tr>
<tr>
<td>Mr. Ove Nilsson</td>
<td>Production Manager</td>
<td>Face-to-face interview</td>
<td>2008-11-27</td>
<td>1h 4 min</td>
<td>Stoeryd AB</td>
</tr>
<tr>
<td>Mr. Martin Wagner</td>
<td>Production Planner</td>
<td>Face-to-face interview</td>
<td>2008-11-27</td>
<td>54 min</td>
<td>Stoeryd AB</td>
</tr>
<tr>
<td>Mr. Jan-Erik Berglund</td>
<td>Purchaser</td>
<td>Telephone interview</td>
<td>2008-12-05</td>
<td>1h 15 min</td>
<td>GGP</td>
</tr>
<tr>
<td>Mr. Jonny Karlsson</td>
<td>Purchasing Planner</td>
<td>Telephone interview</td>
<td>2008-12-09</td>
<td>45 min</td>
<td>GGP</td>
</tr>
</tbody>
</table>

3.6 Analysis of empirical findings

After the empirical material was gathered and the information transcribed, the approved information retrieved became subject for analysis. The analyzing process and presentation has been structured as the theoretical categorizations applied in the empirical findings. With the help of this structure Kovács and Spens’s (2005) abductive “matching” process took place, where new understanding and theory could be generated as empirical evidence was interpreted in the light of pre-existing theory.

An initial reduction of the empirical material was made to focus the material to be subject of analysis. The process of data reduction and data display visualize the essentials of the study, aiding the authors to draw conclusions of the findings (Saunders et. al., 2007). The remaining information has not been included in the empirical findings but remains in the case study data base, as suggested by Yin (1994). Saunders et al. (2007) claim that the process of data reduction includes elements of simplifying the data in order to make it more focused. On the more focused material analysis was carried out.

The reduced data should be organized into diagrammatic and/or visual displays such as networks and matrices (Saunders et al., 2007). This was done for this study in a first stage
of analyzing the data. The networks of information that was drawn have been transformed into written form and presented as intuitively as possible, in the analysis section. As this process evolved it became final what parts of the empirical findings that were relevant to the problem of the thesis. After the analysis it was, however, found that some information was suitable to include in the empirical findings, despite not being subject of further analysis. The rational for doing so is for the reader to be able to understand the case investigated, and not lose the chain of evidence, stressed as important by Yin (1994).

3.7 Trustworthiness

Case studies can be described as interpretive research that is useful when the study aims to show understanding of a case that goes beyond what is instantly recognized. If the objective of the research conducted is to understand, the criterion for whether or not the results are reliable and valid are different than if the aim would be to test a hypothesis or search for a new scientific law (Merriam, 1988).

Yin (1994) states that it is of great importance to have a clearly defined case, which minimizes the risk of misinterpretations due to poorly defined boundaries. Having a clearly defined case can also enable trustworthiness of the study as such (Merriam, 1988). Further, Merriam (1988) states that what makes the qualitative case study scientifically grounded is the control of the methods chosen for assessing the evidence material to reach the target of the research.

This case study conducted is not an exception from Merriam’s (1988) claims, since the methods used have to be critically discussed and evaluated. These aspects concerns for example whether appropriate theories are used as the foundation of the study, as well as how the empirical information was gathered, interpreted, evaluated and presented in order to give a trustworthy picture of the phenomenon investigated. The following sections concerns how trustworthiness was established in terms of internal validity, external validity, reliability, and generalizability. As this study is not made in perfection, there are some drawbacks worth pointing out. This is the reason why a section about evaluating the method has been added to the trustworthiness section.

3.7.1 Internal validity

Internal validity concerns to what extent the evidence presented in the study are corresponding to the real nature of the phenomenon. Researchers should consider that the evidence of the study never represents an objective picture of reality. There is always subjectivity present, as the researchers interpret the empirical evidence in one way or the other. All types of data are subjectively described representing a picture of the reality not the reality itself (Merriam, 1988). For this study the goal is not to present an objective reality, but it is instead in line with Merriam’s (1988) claims that the case study researcher should try to capture the reality in a way that it is experienced by its interpreters. Interpretations are made by both the interviewees describing their view on things as well as by the researchers interpreting these views.

Merriam (1988) presents several important aspects to consider in establishing internal validity, which are triangulation, participant control, observation during a longer period of time, horizontal evaluation and critique, participation methods and clarification concerning biases.

Triangulation, calls for the usage of multiple methods of data gathering, a solid theoretical foundation, and finally, having several researchers claiming the same results (Merriam,
The empirical evidence was attained through interviews with representatives from the two organizations that are involved in the case studied. Secondary data, by Yin (1994) called documentation and archival records, was used in the form of annual reports, official web pages, and sales volume information. Further, to make a sufficient triangulation also for the theoretical assessment, a significant amount of theoretical material has been studied, evaluated and selected to make up the framework which the research is based upon. Concerning the last of Merriam’s (1988) aspects on researchers claiming the same results, this has not been fulfilled in the sense that multiple researchers have been able to confirm the same results. However, two researchers have gathered and analysed data leading to extra reflections and more credible results.

The next aspect presented by Merriam (1988) concerns the participant control. This stresses the importance of letting the respondents take part of the information attained and interpreted, and to ask them if the material presented is reliable and trustworthy. To assure this, the interviewees were asked, first, to look over the interpretations from the interviews and, secondly, to go through the finalized work to give their view on the authors interpretations. Participation method for the research, deals with the involvement of the studied persons throughout all states of the research (Merriam, 1988) which has been done to the described extent.

The third part of establishing internal validity from Merriam (1988) suggests that observation should be done on several occasions studying the same phenomenon over a longer period of time. This aspect is not applicable to this study since it is not of longitudinal character. Resources have instead been focused on investigating one occasion.

Horizontal evaluation and critique is described as getting feed-back from other researchers as the study evolves (Merriam, 1988). This has been done on monthly basis, where both guidance and suggestions for improvements have been appointed from fellow students and tutor. Also an opposition from fellow students will be the final step before revealing the results in public.

Clarifications concerning biases, Merriam (1988) connects with the researchers’ statements of research approach, underlying assumptions and theoretical perspectives. There are also several biases that come from conducting qualitative case studies, and the ones detected for this study is discussed in section 3.7.4.

The aspects of internal validity presented by Merriam (1988) have been helpful in guiding the researchers in their discussions on how to increase validity to the study. However, there are aspects that could have been done differently which possibly could have increased the level of internal validity. A longitudinal study could have brought higher validity. However, relationships evolve over time so the empirical setting might not yield the same results if the same setting ought to be investigated on several occasions. Having more interviews within GGP and receiving more secondary material could have lead to a more solid triangulation.

Yin (1994) claims that to be able to gain some level internal validity for the case study conducted it has to be on causal nature, investigating how one factor affects the other. Further, case study investigators will make inferences as soon as the phenomenon is not directly observed, moving from objectivity to subjectivity arising validity concerns. Merriam (1988), on the other hand, states that interpretative research is a way of capturing what cannot be directly observed and therefore subjectivity has to be allowed. For this study the ideas presented by Merriam have been applicable since interpretation was thought to be the best way to gain deep understanding of the investigated case. Further, case studies in general have high validity if the aspects triangulation, participant control, recurring observations, hori-
horizontal evaluation and critique, participation methods, and, clarification of biases are systematically considered (Merriam, 1988).

### 3.7.2 External Validity

External validity concerns to what extent the results of the study are generalizable to other relevant contexts (Saunders et al., 2007). This study does not aim to test any hypothesis or generalize to a larger population. Instead the aim is to apply a theoretical framework, derived from a various perspectives in a research field, on a new setting to shed additional light on the research topic. This, in order to possibly extend and develop the pre-existing theories in the field. When conducting qualitative case studies it is hard or even impossible to argue statistical generalization for the population. Yin (1994), however, has an alternative suggestion on how to view the results of a study from a generalizability stand point. For qualitative studies analytical generalizability can be claimed, which implies that the researcher generalizes the results against some broader theory. However, it is further suggested that this theoretical generalization has to be tested against other studies, to see if the results are replicable (Yin, 1994).

Merriam (1988) has a different view on generalizability suggesting that if non-probability sampling is conducted instead of random sampling, it is unlikely that the researcher aims to generalize the results of the study. This is argued on the basis that case studies in its nature are chosen because the researcher wants to investigate a situation, person, or event in depth and not to be able to claim something in general about a population. Instead the importance of the contributions from case studies represents a greater understanding, experience and accuracy of what is already known (Merriam, 1988).

Another suggestion is that the reader or user should make a general generalizability assessment on the finalized results. An own opinion should be created on whether or not the results are applicable for more than the setting investigated. Some researchers have even suggested that researchers conducting qualitative studies should not at all care about the generalizability issue and leave it to the reader to see to what extent he or she can make use of the findings (Merriam, 1988).

As stated earlier, this study aims to shed new light on the problem investigated, which is done by applying the theoretical framework presented and investigating this in a new setting. This is in line with Merriam’s (1988) suggestions that case study research can give a deeper understanding of the phenomenon investigated, and give room for parallel studies to exist without one having to be wrong and the other right. Therefore, the theoretical generalization presented by Yin (1994) can be used for this study as the authors have based their research on other researchers’ findings and analysed the findings in the light of these theories.

### 3.7.3 Reliability

In order to attain reliability the results have to be possible to replicate, to be tested against another similar case. Reliability means that the same study should be able to replicate in the same setting and show the same results. All empirical material gathered in case studies are seldom kept for the reader to take part of, therefore it is suggested that researchers should use an approach so that it would be possible for another researcher to go through the same process and arrive at the same findings (Yin, 1994). Merriam (1988) however claims that case studies are almost impossible to replicate in a true sense since peoples’ behaviours and opinions change. Further, even if the research would be done in exactly the same way, in the same setting, getting different results does not necessarily imply that one of the results
are wrong, but instead different interpretations of the phenomenon investigated. Qualitative research does not try to extract laws on human behaviour but instead aims to explain the view attained from the respondents in the case studied (Merriam, 1988). Guba and Lincoln (1981) suggest that if a study has internal validity it is also reliable, because the concepts are interrelated (cited in Merriam, 1988). The methods of a case study can change during the course of the study and therefore the reliability cannot be measured in the same way as when having a fixed method. Instead focus should be on the interpretations of the results, where several different interpretations can be valid. Further, the findings of a case study holds until someone proves them wrong (Merriam, 1988).

As mentioned previously, effort has been laid on presenting the way that the research has been conducted so that a reader can follow the process or could perform the research again, in accordance to Yin’s (1994) point stated above. The interview guide used to attain the information is placed in the appendices (Appendix 1 and 2), further aiding this possibility. Also, a lot of emphasis has been put on explaining the stance of the researchers throughout the thesis, which could help a new researcher that would like to test the results. It is, however, important to stress that the authors of this thesis do not believe that a researcher that were to replicate the study in an empirical sense would get the same results since relationships evolve and change over time, as can the inter-organizational relationship in this case be expected to do. It is, nevertheless, possible for a researcher to use the theoretical model presented in this study to apply in another setting and to see if the results of this study are similar.

3.7.4 Evaluating the method

As discussed several times throughout this study, the research conducted is of interpretive character. Interpretative research aims to provide depth and understanding to what cannot be detected instantly (Merriam, 1988). Therefore, subjectivity is present causing bias in sense that the investigated phenomenon is not gathered, analysed or presented objectively, but instead is coloured by the respondents firstly and then by the researchers. As Merriam (1988) suggested, a case study should present the interpretations of the people investigated. However, even if the authors have tried to assure that no misinterpretations of the findings have occurred by sending the empirical material twice to the respondents, it can still not be concluded that no bias is present. A translation bias caused by the authors exists, as does a bias possibly caused by the respondents since the material was translated into English. Respondents may have had lingual issues interpreting information as something they have said even if it was not case. Further, as the material was sent out via e-mail the authors cannot assure that the respondents actually read the document and instead confirmed the information anyway. Even if this process helped reduce the bias of misinterpretation, the complete exclusion cannot be claimed. Also the interpretation of one the researchers may have been biased since pre-existing knowledge of interviewers and the companies existed.

Always when conducting interviews there is a risk of gaining interviewer and interviewee biases. The interviewer biases concern how the communication of the interviewer is interpreted by the interviewee, for example by tone of voice or non-verbal communication. These factors can affect trust of the interviewee and how the interviewer is perceived by the interviewee. This in turn can have an effect on how the interviewee chooses to respond the interviewer and if answers given to the interviewer is not really what the interviewee think or believe, this will cause bias to the material gathered. Further, in-depth interviews of semi-structured type can cause the interviewee to get confused and be reluctant to give full answers due to the interview being unstructured. This can result in attaining a partial picture of the reality or even a false picture. These factors are quite difficult for the researcher
to avoid (Saunders et. al., 2007). When conducting the interviews for this thesis the authors felt that they had a good contact with the interviewees and the evidence collection is seen as truthful. However, whether or not only a partial picture of the researched area is gained cannot be known for sure. In order to minimize that risk, interviews with several persons within the two organizations were conducted. The same interview guide was used for all interviews within respective company, but the order of the questions and also comments and follow-up questions varied in the interviews as they evolved.

Interviews with Stoeryd AB were conducted in person whereas the interviews at GGP were done via telephone. This is another possible source of bias since respondents in the phone interviews did not have the chance to meet us and interpret the non-verbal communication between the interviewer and interviewee. How the interviewees are interpreting is, however, quite hard for the interviewer to control (Saunders et. al., 2007). However, the authors of this thesis, also being the interviewers, felt that they had a good exchange with all persons interviewed and a good contact was established.

Yin (1994) argues that a pitfall of using sub-units as a tool for research is that it can become impossible to get an overview of the study as a whole and instead presenting an analysis consisting of units only. The sub-units of this study, namely the two company perspectives, have been investigated independently and are presented separately in the empirical findings. In the analysis they are, however, merged into a joint analysis of the two different perspectives giving a holistic view of the case - the relationship. Further, there is a risk in not retrieving the organizational views of the firms, but instead the opinions of the persons interviewed (Yin, 1994). This has been considered also in this study as, obviously, people and not organizations have been interviewed. The authors have chosen to present respondents’ opinions individually in the empirical findings with the aim to, first, add credibility to the statements made. In addition, it will give credibility to the investigation as a whole since readers can follow the chain of evidence, from empirical material to conclusions made, stressed as important by Yin (1994). Important to note is that one can hardly ever purely get an organizational view since it is always depending on whom you are asking the questions.
4 Presenting the findings

This chapter presents the empirical material gathered regarding the two companies and their relationship. The material is foremost based on interviews made within the two companies. Company descriptions will introduce the chapter. The following section answers the first research question when describing the relationship from the perspectives of both parties. The last section in this chapter presents the findings regarding the dependence elements identified, also from the perspectives of the two companies.

4.1 Case Companies

4.1.1 Stoeryd AB

Stoeryd AB is a privately owned company located in Tranås that has continuously grown and developed since the start in 1969 (Stoeryd AB, 2008a). The manufacturing company today has nearly 50 employees, as compared to 1996 when they were seven. In 2007 the company had a turnover of approximately 46,5 MSEK and a profit margin of 5,5% (Stoeryd AB, 2008b). The production of the company is mostly done on subcontract basis but Stoeryd also has own developed and manufactured products to window fittings and fittings to glass doors (O. Nilsson, personal communication 2008-11-27).

Stoeryd AB is a versatile company. Apart from office and warehouse, the production site has a full range of machinery to handle and produce various metal products of varying complexity. The mechanical workshop has machinery for welding (manual and robots), cutting (manual and laser), lacquer coating, lathe machining, assembly, and edging pressing among other equipment. The machinery ranges from advanced laser cutting machines and welding robots to less complex drilling or cutting equipment. Stoeryd has the competence and capacity to take orders on most things produced from sheet metal. They do also offer construction or development services in relation to the area of expertise something which most often is carried out in close collaboration with the ordering customer. The business idea is to be able to offer a complete system solution from raw material to sub-product, end product or packaged product if desired (O. Nilsson, personal communication, 2008-11-27).

The company’s goal is to be able to be a complete producer from raw material to finished product, to uphold short lead times and high service level while decreasing the dependence on the company’s suppliers (Stoeryd AB, 2008c).

Most production is steel-based but the company can also produce products of alumina and stainless steel. The history of not being such a complete provider has brought a broad contact base and knowledge about both local competitors and complementing suppliers. The company thus also provides a range of complementary articles, for example, plastic products (O. Nilsson, personal communication 2008-11-27). The company has knowledge about surface treatment for products and can, apart from the company’s own coating, supply other treatment with help from external providers (Stoeryd AB, 2008c). The production batches ranges from one or a few especially ordered products to larger volumes of serial bulk production (O. Nilsson, personal communication 2008-11-27). Stoeryd supplies components to, for example, forklifts, furniture, heavy vehicle, automatic warehousing, and lawn movers (Stoeryd AB, 2008a).
The guiding philosophy of the company’s business idea is quality, flexibility and customer service (Stoeryd AB, 2008a). Ove Nilsson, the production manager of Stoeryd AB, believes that, apart from having a very broad range of competence and capacity, Stoeryd differentiates itself by offering a flexible solution with competitive short lead times and by putting the customer needs in first place. The service level is described as sometimes even too high for Stoeryd’s own good, and an obvious “can-do-attitude” is promoted by the production manager (O. Nilsson, personal communication 2008-11-27).

The degree of complexity and technical level of machinery and manufacturing have increased continuously during the last decade. Also the competence and knowledge of staff and management has developed significantly during these years, something which has become an active focus of the company (O. Nilsson, personal communication 2008-11-27). Production, internal process management, and inventory management have become significantly more cost efficient along with the development of the company, something which recently have been supported with the implementation of a new ERP-system. The production manager does, however, stress that there are a lot of potential improvements to be made to reach an efficient inventory management (O. Nilsson, personal communication 2008-11-27).

The company is certified according to quality standards ISO 9001 and received also an environmental certification according to ISO 1400 in February 2009 (Stoeryd AB, 2008a). Currently the company is partly seeing passivity accompanying the global economic downturn. The order stock of window fitting is described as extremely low while other customers order stocks are larger than usual. A satisfactory yet uncertain picture is expressed about the near future’s business (O. Nilsson, personal communication 2008-11-27).

4.1.2 GGP Sweden AB

GGP Sweden AB (GGP) is a part of the Global Garden Products concern, registered in Luxembourg. The main owner of Global garden products is currently the English concern 3i after being mainly owned by ABN AMRO Capital until the end of 2007 (GGP Sweden AB, 2008). Global Garden Products sells a variety of gardening products to around 80 countries in the world, such as chainsaws, snow throwers, lawn movers, and tractors. The company has four production units where two are in Italy, one in Slovakia and one is in Tranås, Sweden (Global Garden Products, 2008).

GGP Sweden AB has its history in Swedish Stiga AB. Founded in 1934, the company and brand name Stiga has, during the years, been known for a range of products. Table tennis products, plastic sledges, plastic hockey-games, and weapons are some examples of what have been produced in the facilities in Tranås. Initiated in 1958, the production of lawn-movers soon became the main business of Stiga AB. After having merged with the GGP group in 2000, focus was turned only to lawn movers and at present only “ride-on” lawn-movers are manufactured in the Swedish production site which is also the main dealings of GGP Sweden AB. Lawn-movers under the GGP brands Stiga, Mountfield, and Castelgarden are produced in Tranås (Global Garden Products, 2008). Around 250 people are employed in Tranås and the site can produce 200 lawn-movers per day during high season (Global Garden Products, 2008). GGP Sweden AB had a yearly turnover of approx. 1 220 MSEK in 2006-2007 and a profit margin of 9.5 % (GGP Sweden AB, 2008).

Along with the merger of Stiga into Global Garden Production started a major restructuring in the company. The decision was made to outsource all component production for lawn-movers to instead focus on the assembly and distribution. The production of “walk-behind” lawn-movers was moved abroad and a production line of producing “ride-ons” was
built in Tranås (personal communication, J. Karlsson 2008-12-09) where all models can be manufactured in the same production line instead of the previous assembling in stations. The production site relies on lean manufacturing and is inspired by car manufacturers (Global Garden Products, 2008).

Before the summer of 2003 much of the outsourced, former in-house component production, was placed at a supplier in the Czech Republic. GGP decided to bring back some of the production that was outsourced to Czech Republic back to Sweden after the fall of 2003, because of various experienced problems with the Czech supplier. The products “brought back” from the Czech supplier were subcontracted to Stoeryd and a number of other suppliers, similar to Stoeryd (J-E. Berglund, personal communication, 2008-12-05).

GGP started working with the lean principles at the time that the in-house production was outsourced. This has reduced the inventory stock of components and all goods purchased are going straight into the assembly line. In connection to this, controls of arriving goods as have been removed, which means that malfunctioning components may be first detected as they are assembled in the raiders (J-E. Berglund, personal communication, 2008-12-05). The lean orientation thus has implied harder demands on GGP’s supplier in terms of quality and security in keeping delivery times. The capacity of the production line has improved during the years leading to a better flow within GGP (J. Karlsson, personal communication, 2008-12-09). Today the demands on delivery accuracy accept one day late or early deliverance. The company is, however, looking into the possibility to implement a Just-In-Time delivery. This would primarily be focused on the more complex and costly components supplied, which does not include products supplied by Stoeryd. Also a system allowing constant monitoring of delivery times and quantity supplied is being developed and should be implemented the coming spring (J. Karlsson, personal communication, 2008-12-09).

GGP products have a very distinct seasonal product cycle. The sales of lawn-movers around doubles in the beginning of the year, compared to late fall. This is one reason to why GGP does not wish to have suppliers being too dependent solely on the sales from the company since it would imply “unhealthy” changes in demand for that supplier. The GGP purchasing strategy is to place a considerable chunk of orders on a few key suppliers. The general idea is to have long-term relationships with suppliers that can develop in terms of productivity and competence (J-E. Berglund, personal communication, 2008-12-05).

4.1.3 The products of the relationship

Stoeryd AB supply GGP with subcontracted products to GGP’s production of lawn-movers. Most of the products are serial produced and ranging in complexity from simple cut pieces of metal to products processed in a number of ways. The annual forecast of production for GGP is approximately 25 000 lawn movers, meaning that Stoeryd supplies a range of semi-manufactured products that is to be included in this production. A large proportion of the products supplied by Stoeryd makes up the frame of the cutting device to several models of lawn-movers. Stoeryd also produces a number of products to GGP which are in the development stage, ordered by GGP’s department of research and development (O. Nilsson, personal communication 2008-11-27).

GGP divides products supplied by Stoeryd’s into two main levels; products produced which are laser cut where investing in specific tools for pressing subcomponents is too costly, and “usual” products that are for example pressed cut, bent, and welded while being tied to tools provided by GGP. In comparison to GGP’s other suppliers, products supplied by Stoeryd are generally smaller, having thinner metal due to limitations of Stoeryd AB’s
machine park’s capacity. Products ordered from Stoeryd that are laser cut and processed in other ways have increased significantly.

4.2  Stoeryd AB’s perspective of the relationship

In the following sections results from interviews conducted 2008-11-27 are presented. The respondents were Christer Salomonsson, CEO of Stoeryd AB; Ove Nilsson, Production Manager of Stoeryd AB; and Martin Wagner, production planner in Stoeryd AB.

4.2.1 Communication

The CEO of Stoeryd AB, Christer Salomonsson, regards the relationship between GGP and Stoeryd AB as good on all levels. Stoeryd has active contact with around 15 people in the GGP administration. Stoeryd has close contacts with several functional levels in GGP; R&D, purchasing, production, production planning, quality, after sales unit, and the logistic department. Connected to this is the only negative remark expressed regarding the communication in the relationship; that it can be difficult to determine who “owns” the question and has the last word when making decisions. Even so, the relationship is described as friendly and reciprocal on all levels. To some extent the contacts are also of a more personal and even private nature.

Also Mr. Nilsson, the production manager of Stoeryd AB, describes the relationship as close with daily contact. In high season and in times of product development contact is made several times per day. The relationship is described as personal but not private. Mr. Nilsson highlights an event in the two companies’ mutual history that have had great impact on the outcome if the relationship. In 2004, when GGP decided to outsource most of its semi-manufactured metal production instead of producing most components in their own factory the relationship with GGP was deepened. A period of extensive communication followed as Stoeryd AB overtook some of the outsourced production. Ove Nilsson continues, saying that during the process of outsourcing, GGP turned much of the attention to a supplier in the Czech Republic. This outsourcing experience was not very successful and a large part of the outsourced production was brought back to suppliers within the boundaries of Sweden. When this happened, Stoeryd received further orders and GGP became one of Stoeryd’s larger customers. At that time, Stoeryd’s service level played a major role, when the company put great effort in trying to help GGP in this troublesome situation.

According to Mr. Wagner, working as a production planner processing orders from GGP, the relationship between the firms has always been close. Despite his relatively short time in Stoeryd AB, he has been in the relationship for a long period of time. Mr. Wagner has an eleven year old history within GGP, working in production, purchasing, and later on with the outsourcing of GGP’s mechanical production. He was involved in the outsourcing of metal production to the Czech Republic in 2003. This project was described as very troublesome, mostly because of cultural differences in organizational matters and the short period of time between the decision making of outsourcing and the implementation of the change, described as notably bad planning.

Martin Wagner has daily contact people within GGP and describes the relation with GGP as good and close. He would describe it as personal but in a professional framework. Mr. Wagner believes that the relationship between GGP and Stoeryd AB is also the closest that GGP has with any of its suppliers and that there is a mutual desire to uphold a good relationship.
4.2.2 Information sharing

Mr. Salomonson says that information is shared about several processes between the two companies. Purchasing, production, demand/forecasting, transportation, product development, and product alterations are discussed on more or less daily basis and sometimes many times per day. The only expressed issue where no information is shared is inventory processing and planning, where the companies have no outspoken influence on each other’s activities. The last few years, the orders received from GGP have increased and so has the contact base within GGP. As a result, the sharing of information between the companies has increased significantly.

Mr. Nilsson also states that there are information sharing and collaboration in several different stages of the processes within the close relationship. Mr. Nilsson claims that there are some levels of information sharing in all these different stages. GGP provides forecasts for the rest of their season, on average being about 8-9 months in advance. The verified orders are confirmed usually within a period of two months. The forecasts provide a good foundation for production planning and planning of purchasing for Stoeryd, according to Mr. Nilsson.

In the role of production planner, Mr. Wagner works mostly with the procurement process and the needs and forecasts prepared by GGP, which he says is what most of his communication with GGP evolve around. GGP sends their forecasts and orders once a month by fax and Mr. Wagner plans production according to the requests. If there have to be changes made this is negotiated by phone. Changes can occur due to raw material shortage, heavy workload in high season, new products taken into production or changes in demand from GGP’s side. Issues concerning product specifications and R&D are mainly handled by the CEO or the Production manager at Stoeryd AB. The production planning and internal order processing are mostly done within the verified order period of the forecasts but sometimes also on unverified, forecasted orders. The sharing between the organizations is often intensified when new products are developed and prototypes are ordered and produced, Mr. Wagner states. Further, Stoeryd AB has a close collaboration with GGP when it comes to R&D of components to GGP’s products. When asked about the learning between the firms, Mr. Wagner first says that there is none, but changes to saying that the learning is probably an unconscious process that follows the close collaboration.

Mr. Salomonson says that experiences, knowledge and competences are shared between the organizations. Stoeryd’s competences are frequently used by GGP, since after outsourcing its own metal processing the knowledge level in GGP about metal production is experienced as somewhat lower.

Mr. Nilsson states that there is knowledge and experience sharing between the organizations, a lot thanks to the close collaboration when developing new products and the frequent contact between the firms in general. Prototypes are welcomed in the belief that it may lead to received orders of the products, something which has proven to be the case on several occasions. In the early stages of serial production or while producing prototypes discussions are held between the companies about the product’s construction. This is done, in order to improve the design of the product to ensure the possibility to produce a product in an efficient way, with good quality and functions. In these cases, there is most often a frequent dialogue about, for example, quality levels to arrive at a mutually feasible solution. The production manager does not consider it to be explicit learning between the companies.
4.2.3 Coordination

The CEO, Mr. Salomonson regards most activities and transactions running on a daily basis as well coordinated and this has been clearly improved during the years. Forecasts and order processing go hand in hand, where projected orders and a verified order period are determined in the same document.

Mr. Wagner also believes that transactions and the relationship have a good flow. He considers the forecasts provided by GGP as very important, to be able to uphold a good coordination. Forecasts provided by GGP do most often offer an accurate picture of verified future orders, something which is also confirmed by Mr. Salomonson.

The areas where efficiency improvements are to be found are the development of prototypes and product alterations as well as transactions and communication connected to this. The method of communication, regarding these issues, is not standardized and the time frame is sometimes very limited, which can also lead to disturbance in the daily work. A serious concern was also expressed about the financial coordination between the companies, where GGP is stretching the terms of payment. Even though this issue has been discussed on several occasions, these problems keep on occurring. Mr. Salomonson says that the reason for this is the requirement of showing satisfying finances in GGP’s quarterly reports.

Mr. Nilsson also thinks the relationship is well coordinated to a large extent but still there exist clear possibilities to improve. He exemplified an area of improvement on the supplier side to be delivery accuracy and says that there have been some problems with this during the spring, mostly due to raw material shortage that caused large delays in Stoeryd’s production. Mr. Nilsson claims that the sharing of information between the firms has made the relationship more efficient. However, the ordering, development and testing of new products and prototypes, which require high degree of communication, also drags down the efficiency and “destroys” the coordination and flow of other production to some extent. As he puts it “Stoeryd is also falling on the extensive service level”.

There exists improvement potential in the efficiency in transactions and communications between the parties, according to Mr. Salomonson. Both the CEO and Mr. Wagner agree with the remark made by the production manager that the coordination and processes of the serial production are relatively efficient and have been clearly improved during the years. However, the involvement and the “intrusion” of specialized production and new product development are decreasing the general cost efficiency between the two companies. Mr. Wagner exemplifies by saying that when new products are taken into production, incremental changes and improvements are often necessary, which demand a more frequent communication between the firms, which is time consuming. Also changes in product specifications demand a lot of time and coordination. All respondents think that such change processes can become more efficient.

In addition, Mr. Wagner says that the close cooperation is also what lies behind the improvements in efficiency. The ordering of new products demands this close cooperation making the need for collaboration mutual. Mr. Wagner would prefer that Stoeryd became involved earlier in the development process of new products, making use of existing competence and thus avoiding preventable errors, thereby making the development process more efficient.
4.2.4 Benefits and risk sharing

Mr. Salomonson considers the risks and costs in the relationship as fairly shared between the two companies. Concerning the prices on the products provided by Stoeryd AB to GGP, Mr. Salomonson considers Stoeryd to be reasonably paid for sold products, but admits that the company sometimes probably should and could have a higher price level.

Mr. Nilsson states that when GGP chooses Stoeryd AB as a supplier they are not only purchasing a product but also a service. GGP knows what they want and it is up to Stoeryd AB to provide just that. Therefore, Mr. Nilsson implies that these are the premises that business is made on, so there is not much to complain about. The investments made, being the risks of the business are reflected in the price of the products. Mr. Nilsson considers the prices to be fair but as any firm they would like to have better profit margins on their products. However, he understands that the situation is the reversed at the GGP side, as they want to cut their costs to get better profit margins on the products they provide to the market. There is a constant situation of competition and comparison of tender offers and price-focus.

Similarly, Mr. Wagner claims that the prices to GGP are reasonable, but as any business Stoeryd AB strives to get better margins on their products. The same goes for GGP as they of course want lower prices to cut their costs. He describes this as a constant balancing between earnings and staying competitive.

4.2.5 Perceived power

“Do you consider Stoeryd to have the ability to motivate GGP to engage in activities they would not have done otherwise?”

This question based on the definition of power by Moore & Williams (2007), required some reflection by all three respondents due to its somewhat abstract character.

Mr. Wagner chose to answer it in respect to product development. As Stoeryd AB has a lot of experience and competence within their field, GGP listens and also applies the ideas suggested by Stoeryd AB, something which of course has to be beneficial for both parties. The ability of Stoeryd AB to influence the actions of GGP comes from the long and close collaboration that has been ongoing and intensified since 2003.

Mr. Salomonson suspects that Stoeryd has the ability to motivate GGP to engage in activities they would not have done otherwise, foremost in relation to product development on more of a “knowledge-basis”, leading to alterations in construction specifications. One example of how Stoeryd has affected GGP’s way of doing business is the order processing concerning some products groups. In a more general sense, the company’s ability to change the behavior of GGP is regarded as limited.

Mr. Nilsson considers the ability to affect and motivate GGP in their relationship to be in terms of product modifications and scheduling of deliveries. This takes form when new products are to be developed at GGP, and the need for detailed components arises. Mr. Nilsson implies that it is not always so that the blueprints constructed by GGP are the best solution for them, and then Stoeryd AB often suggests changes that will suit the application better, constructing a win-win situation. According to Mr. Nilsson, the cases when Stoeryd can motivate and affect GGP’s actions always results in a win-win situations, which is the reason to why GGP listens to the suggestions made. The long experience and high service level of Stoeryd AB that have built up a trust in the relationship between the firms, add to the possibility to influence. GGP is described as very open to suggestions of modifications.
and improvements, probably because of the awareness of Stoeryd’s knowledge about construction and production.

4.2.6 Negotiations and Contracts

Mr. Salomonson says that no documented agreements or contracts exist for regulating or guiding the business relationship. Mr. Nilsson confirms that there is no documented plan of action between GGP and Stoeryd AB, stating that much is done on routine basis in the thought that “this is the way it has always been done”.

The negotiation process consists of requests from GGP, tender offers from Stoeryd that are accepted or rejected by GGP. Connected to this, negotiations are made about prices and possibly product characteristics or quality requirements. On roughly yearly basis, the companies negotiate about prices on currently supplied products and other terms, such as terms of payment or terms of delivery. In this procedure, much of the changes in prices are determined by the market prices of raw material. Such reasons are accepted motivations for increase of general prices.

Apart from the normal business transactions with tender offers and laid and accepted orders no contracts are negotiated. Mr. Salomonson expresses a concern in respect to this, but stresses that up to this point no problems have been experienced, where having a contract could have helped this problem.

4.3 GGP Sweden AB’s perspective of the relationship

In the following sections results from interviews with respondents Jan-Erik Berglund, purchaser in GGP Sweden AB (2008-12-05), and Jonny Karlsson, purchase planner in GGP Sweden AB (2008-12-08), are presented.

4.3.1 Communication and information sharing

Mr. Berglund says that the relationship with Stoeryd AB is close, but not personal or private. As he has most frequent contact with the CEO of Stoeryd, he points out that it is valued that the CEO has a holistic view of the organization and can answer most queries that arise at GGP in an instant. The fact that one person can answer nearly all questions is quite unique and very appealing for the purchaser. Contact is made between the two several times per week and personal meetings take place around four-five times per year, mostly to discuss new projects.

Mr. Karlsson regards the relationship with Stoeryd as very good and close. He has contact with the company several times per week and describes Stoeryd as the most flexible suppliers GGP has, as he is always met by a “nothing is impossible-attitude”.

Mr. Berglund tells that GGP releases their budget proposition early which gives Stoeryd AB a picture of how much production that is likely to be located at their firm. From this, the collaboration takes off and involves new product development, delivery requests, order handling, material price fluctuation discussions, and currently also discussions of the possible effects of the economical crisis that world presently is facing.

In Jonny Karlsson’s position, the information shared always regards the order demands. When he is involved the product is approved and ready to be ordered, which he does. Other than that, information sharing mostly evolves around the ordering of existing products and the delivery times of such. Forecasts are provided in which an actual ordered period is included. The orders within this period are what GGP is legally obligated to purchase.
Mr. Berglund also states that many projects ordered to Stoeryd AB were initiated when changing suppliers about five years ago. After deciding to bring back some of the, to the Czech Republic outsourced, production to suppliers within Sweden the communication between the two firms was intensified. Mr. Jonny Karlsson confirms that after the outsourcing, the relationship with Stoeryd has become closer and the collaboration has been intensified. Today, Stoeryd is involved already in the development stage of products. The increased capacity of laser-cutting is mentioned as a recent factor further intensifying the relationship.

4.3.2 Coordination

Overall, Mr. Berglund thinks that the relationship with Stoeryd AB is well coordinated in terms of products and lead times that evolve around the daily routines. The lengthy relationship has developed in this direction. However, Mr. Berglund claims that a lot of the administrative work could be made more efficient, such as by implementing an EDI system, as today’s processing of orders is considered old-fashioned. Further, GGP in general gives the suppliers very little time to develop prototypes which might result in less cost efficient solutions than if the supplier would have been given more time, Mr. Berglund states.

Mr. Karlsson regards the relationship as relatively well coordinated in terms of the flow of products and communication. He admits that GGP has some inaccuracy in the forecasts provided to Stoeryd which can cause some trouble. The forecasted and the actual orders can differ quite a bit, particularly in these days of high uncertainty in the market.

Mr. Karlsson experiences that the relationship has become more efficient. The problems experienced have become fewer in general. A factor having negative effect on the efficiency in the relationship is the introduction of new products which requires more or less daily communication. Also the substantial amount of paperwork involved in today’s ordering procedure is not efficient and described as old-fashioned.

4.3.3 Benefits and risk sharing

Mr. Berglund states that GGP has not done anything significant in terms of influencing Stoeryd AB to invest in particular equipment, except pushing them to purchase a device for measurement which is a fairly trivial cost. By Stoeryd to GGP supplied products are of universal character possible to subcontract to several suppliers. Stoeryd may adjust the production preferences and investments to suit GGP but GGP does not support this risk. This is in accordance with how the industry and market for this kind of production works.

According to Mr. Berglund, GGP pays a decent price to Stoeryd AB for the products purchased. Stoeryd AB is considered a normal cost company compared to other companies in about the same size, supplying similar products. Mr. Berglund thinks that Stoeryd could have lower prices on some products but recognizes Stoeryd’s facilities as a shortcoming in supporting cost efficiency. Mr. Berglund states that situations have occurred where alternative suppliers have been able to offer better prices than Stoeryd on the serial production of, by Stoeryd produced, prototypes. Then a dialogue with Stoeryd has taken place to see whether the company has really reached the optimal price.

4.3.4 Perceived power

“Do you consider GGP to have the ability to motivate Stoeryd to engage in activities they would not have done otherwise?”
Mr. Karlsson believes that GGP has affected Stoeryd to act in a way they otherwise may not have done since they call for some quality requirements, concerning for example welding. However, the general idea of both Mr. Karlsson and Mr. Berglund is that Stoeryd runs their own business but might adjust the production preferences to needs of GGP since GGP is a big customer of Stoeryd. Even so, they are certain that GGP does not actively affect Stoeryd’s business idea, main strategies or major investments.

Mr. Berglund continues by saying the GGP probably has the ability to influence Stoeryd AB and push them harder, but since the relationship is valued this is not in the interest of GGP. Another way to possibly influence large investments would be to offer longer term contracts that would require such investments, should it be profitable for also the supplier. Considering the fact that most products supplied to GGP are of general character, GGP does not tie their suppliers on contracts longer than a year, instead constantly evaluating suppliers’ performance. Mr. Berglund experiences that this is the common way to do business with firms like Stoeryd.

4.3.5 Contracts and negotiations

Mr. Berglund tells that there is a written business agreement established with all suppliers of GGP. This is not exercised except if a conflict would arise between GGP and suppliers. It has never been exercised towards Stoeryd and only occasionally towards other suppliers. The contract includes clauses concerning for example quality, delivery times and possible sanctions that will be placed on the supplier if the agreement is not followed. The agreement is said to be a supplemented standard agreement. Mr. Berglund further states that everyone involved knows about this contract. The contract mainly exists to make suppliers prioritize GGP to the largest extent, instead of forcing penalties. If problems of such severe nature would continuously occur, the relationship may be terminated anyway.

Mr. Karlsson explains that there is also a documentation following all forecasts and orders (being in the same document) saying that GGP only commits to buy the actual ordered products and not the ones being forecasted. These documents are the same for all suppliers.

4.4 Stoeryd AB’s elements of dependence

Once more, results from interviews made in Stoeryd AB, 2008-11-27 are presented below. The respondents are Christer Salomonson, CEO of Stoeryd AB; Ove Nilsson, Production Manager of Stoeryd AB; and Martin Wagner, production planner in Stoeryd AB.

4.4.1 The relationship specific asset dimension

Mr. Salomonson explains that Stoeryd has made substantial investments in machinery because of continuous increase in orders placed by GGP. Such machinery is, however, of general character and can be used to produce alternative products for GGP or different products for other customers. This is confirmed also by the production manager, Ove Nilsson. The specialized machinery equipment and fixtures that is needed to produce the GGP products, which are specific only to the products of GGP, are owned by GGP but held in Stoeryd’s facilities. After GGP had the unsuccessful outsourcing experience in the Czech Republic, Stoeryd was offered to assist the supplying of products. At this time, Stoeryd bought some machinery and equipment specific to the production of GGP products. Some of this equipment has, however, now been sold. The assets in production that are of general character have increased during the last few years but not the assets specific to GGP. Mr. Nilsson says that none of Stoeryd’s assets are transaction specific to GGP, but confirms that
many tools used for the production of GGP products are owned by GGP and can only be used for this specific purpose.

The only significant investments or resources that are specific to the relationship with GGP are the current stock-value of inventory, primarily semi-finished products and products under processing. The value of inventory (finished, semi-finished products and products under processing) was at the time of interviewing approx 1.9 MSEK as compared to the total stock-value for Stoeryd which was approx 8.6 MSEK (GGP’s proportion approx 22% of total stock-value). When considering the finished and semi-finished products in inventory and products under processing, that are specific to GGP, Mr. Nilsson believes that it would be possible for Stoeryd to finish these products and deliver what is in stock, if the relationship with GGP was ended.

The value of human and organizational capital related to GGP’s products is described as substantial. On the other hand, these intangible assets have to a large extent educated staff and can be transferred to the production of other products and can thereby be regarded as general, Mr. Salomonson explains. Mr. Nilsson says that the intangible assets that are more or less specific to GGP’s production today can be regarded as transferable to production of alternative products. One fact brought up in relation to human assets, was that when GGP ended their own production to outsource to Stoeryd AB, among others, Stoeryd AB hired some of the staff that was previously employed in the GGP factory. In this way some of the competences were kept in the process, Mr. Nilsson declares. Today, five previously GGP employed people are working at Stoeryd. However, since this was some years ago the employees still in Stoeryd now have more knowledge also about all production and thus the specificity to GGP production has decreased.

Both the production manager and the CEO regard the transaction specific assets as very low or non-existing and therefore see no risk in relation to this. Likewise, no specific effect from transaction specific assets could be expressed by either of the managers.

### 4.4.2 The resource transaction magnitude dimension

In 2008, 32% of Stoeryd’s total sales were committed to GGP. In connection to this, Mr. Salomonson claims that Stoeryd has become more dependent on GGP during the last years. However, the increase in dependence Mr. Salomonson regards as reciprocal as also GGP has become more dependent on Stoeryd. This, mainly because of GGP utilizing Stoeryd as their “own workshop” in which to, for example, produce prototypes and test alterations in existing products. Mr. Salomonson regards this as positive because of the fact that it improves Stoeryd’s position to GGP and can lead to new orders. It does, however, come with a price taking its form in decreased continuity in production, and high level of personnel cost from processing, planning and altering processes.

If the relationship with GGP would end, Stoeryd would be placed in a serious situation, according to the CEO. Since GGP represents a significant share of sales, the likely scenario would include layoffs and serious concerns due to high fixed costs, which would barely be endurable without a significant increase in orders from present customers or introduction of new customers. Mr. Salomonson says that the speed of the relationship termination would be essential in determining the impact on the company’s status.

Considering the current volume of GGP orders it would be very difficult to find alternatives equivalent to the sales of GGP in a short period of time if the relationship would end. Mr. Salomonson does, however, believe that it would be possible to do it gradually over a
longer period of time. If the relationship would end, there would be a large increase in excessive resources of time, which could be spent on efforts to find new customers.

Mr. Nilsson claims that the products provided to GGP have a large impact on Stoeryd AB since they make up such a large proportion of the total sales. He also estimates that approximately 30-40% of labor resources are spent on the production to GGP. If GGP were to change supplier from Stoeryd AB this would cause Stoeryd AB having to cut down the number of employees, since such a large customer as GGP would take time to replace. Also the fixed costs of made investments the last few years would imply a serious problem. Further, Mr. Nilsson states that it would be no use selling their machinery since the decrease in value is quite extensive the first years, and compares it to the value-drop of new cars as soon as they hit the road. The way to cope with the loss of GGP as a client would be to actively search for new customers.

The CEO believes that the increase of orders from GGP may have increased Stoeryd’s faith that this may continue to increase. Because of this, resources may have been focused on GGP instead of trying to disperse resources and maybe focusing more actively on searching for new market opportunities and new customers.

4.4.3 The resource characteristics dimension

Obviously, the main resource Stoeryd is receiving from GGP is of financial character. As Mr. Nilsson is asked if GGP provides Stoeryd AB with any other resource than of financial character, the spontaneous answer no is given at first. However, after a moment Mr. Nilsson changes his mind and says machinery and tools for the production. He also evolves his answer by saying that the knowledge transfer between the firms has a “learning by doing character”, and that this has developed during the years.

Mr. Salomonson says that GGP provides Stoeryd with knowledge to some extent. Stoeryd has a broad base of contacts in GGP, which is seen as beneficial. Also production equipment to produce the GGP products is lent to Stoeryd, by GGP. Looking back, the contact base within GGP has become extended, as the orders received have increased. The sharing of information between the companies has increased significantly as a result from the increasing sales to GGP.

Reflecting on the products supplied to GGP, Mr. Salomonson regards the complexity of the products provided to GGP equal to other customers’ product requirements. Some of Stoeryd’s customers have higher requirements due to legal regulations on the product specifications (healthcare products), while a customer like GGP instead adds complexity to the production due to the fact that they order many different products. Also the amount of specialized knowledge needed to manufacture GGP’s products is equal to products supplied to other customers. Regarding the production in the development stage, ordered by GGP’s department of research and development, the geographical closeness, the good collaboration between the companies, and Stoeryd’s wide capacity and knowledge are expected reasons to why GGP hires Stoeryd.

4.4.4 The industry dimension

Mr. Nilsson regards the potential to replace the resources provided by GGP as good. He experiences the market opportunities to be good and Stoeryd AB’s flexibility, capacity, and wide range of knowledge and experience make the firm competitive in the market as an attractive supplier. However, it would take quite some time to replace GGP as a customer due to the large volume. Mr. Nilsson considers Stoeryd AB’s prices to be somewhere in the
middle, price is not their main mean to compete with, as there are suppliers on the market with lower but also higher prices. Instead Mr. Nilsson points out that it is the flexibility, high service level and the wide range of capacity that make Stoeryd AB a competitive actor on the market. Further, the production manager states that the service level originates from listening to the customer needs which is valued by the customers but also by Stoeryd AB.

Mr. Nilsson stresses that the strength of Stoeryd AB is being a comprehensive solution for their customers. This is also what he thinks attract GGP to choose Stoeryd AB as one of their suppliers. Still, Mr. Nilsson also thinks that one of the main reasons is the short distance between the firms. Transportation costs can be kept low due to the fact that the firms are located less than a kilometer from each other. Lead times for prototype production, implementation time for alterations and general lead times can be held down for the same reason. Mr. Nilsson continues by telling that there are other customers that have had an extensive growth in terms of volumes supplied by Stoeryd AB over the past five years. Further, the product manager also reflects on the market potential for Stoeryd as being better today compared to five years ago.

The CEO has a positive feeling about the company’s competitiveness and stresses that it is the completeness of the company that is its strength. Prices may not always be the lowest even though he believes that Stoeryd is relatively good in this remark. Short lead times, flexibility, capacity, high service level, and competence are the expressed strengths of the company. The company is not specialized in anything but can do a lot of things and produce both serial larger batches and more complex products in small volumes. Mr. Salomonson believes that Stoeryd is a more attractive supplier today because of a higher capacity, competence, and better organizational structure. The company has also undergone quality and environmental certifications.

As GGP is described to be one of Stoeryd AB’s most important customers, by Mr. Nilsson, this has given them priority in relation to smaller volume customers. The importance of GGP also shows in the amount of communication between the firms. As the number of products and volumes increase in magnitude it requires more frequent contact to be able to maintain a high service level. He regards this to be a mutual phenomenon, as also GGP show more willingness to communicate in the relationship.

A question was also asked to get Stoeryd’s opinion on if it would be easy or difficult for GGP to change supplier for products supplied by Stoeryd. Larger volume products, Mr. Salomonson regards to be easy and not particularly costly for GGP to find alternative suppliers to. However, products being more complex, such as articles to GGP’s professional machines, would be harder to find alternatives to. In general, it would not be hard to find alternative suppliers for GGP. He does, however, believe that it would be difficult to find a supplier with the equivalent service level and capacity in a close location.

On the contrary, Mr. Wagner claims that it would be very costly and troublesome for GGP to change from Stoeryd AB to another supplier, even though he is sure that it would be possible. The reason for the troubles is the wide range of products that Stoeryd AB supplies GGP. To switch supplier always conveys high implementation costs and lower efficiency at first. The instinctive feel that is created though long and close collaboration is lost and it takes time for new suppliers to develop this relation with a new customer.

Further, Mr. Wagner states that the implementation problems induced by a change in supplier also increase with the complexity of the products, implying that the creation of prototypes for example would be very costly to transfer to another supplier. A learning process of trial and error is reality and the more complex the products, the longer the period. Stoeryd
AB also has a very high level of customer service and flexibility that Mr. Wagner says is one of the core strengths of the firm, which would be very hard for GGP to find somewhere else. Mr. Wagner, having a history as an employee in GGP, was very much involved with GGP’s endeavor to outsource parts of the production to Czech Republic, which was very difficult.

Mr. Nilsson again stresses the ability of Stoeryd AB to provide GGP with a wide range of products that would be hard to find elsewhere. However, the products alone can be provided by many actors but the solutions will probably not be as complete as from Stoeryd AB. Also the short distance between the firms is unbeatable. The costs of changing suppliers would probably be high for GGP. Also Mr. Nilsson thinks that the equivalent service level would be difficult to find in an alternative supplier. Nonetheless, he is certain that GGP has possible alternative suppliers and make recurring comparisons.

4.4.5 The information dimension
Stoeryd AB does not actively look for alternative customers, something that would be necessary if the relationship with GGP would terminate. The reason for this passiveness is a satisfactory order-stock level, says Mr. Nilsson.

Mr. Salomonson says that the market opportunities do follow the general business cycles to some extent, especially for the own developed products to windows and the GGP products, where the end customers are private consumers. Today, the active marketing efforts to find new customers are very limited and the firm is more acting as a receiver of orders than a company with active sales activities. Contacts, reputation and relatively passive website marketing are what cause new customers to turn to Stoeryd today.

4.5 GGP Sweden AB’s elements of dependence
The following sections present further results from interviews made with Jan-Erik Berglund, purchaser in GGP Sweden AB (2008-12-05), and Jonny Karlsson, purchase planner in GGP Sweden AB (2008-12-08).

4.5.1 The relationship specific asset dimension
Mr. Berglund explains that GGP has no assets that are specific to the relationship with Stoeryd AB. However, there are tools used at Stoeryd AB for making products to GGP, which are owned by GGP and lent to Stoeryd AB.

4.5.2 The resource transaction magnitude dimension
The total purchases by GGP were in 2007 around 500 MSEK. Of the 500 MSEK, Stoeryd supplied products for the value of approx. 13 MSEK, or 2.6%. The total purchase volume has, according to Mr. Berglund, been ranging between 350 MSEK and 500 MSEK the last five years. Stoeryd does, however, account for approx 18% of the total purchases of goods categorized as similar to those of Stoeryd, i.e. those products that are subcontracted to suppliers similar to Stoeryd. Today, five or six different suppliers are actively supplying similar products to GGP.

Mr. Berglund implies that the purchased volume of goods from Stoeryd AB has increased more than the proportional increase in total amount of purchased goods. This he explains is due to the strengths of Stoeryd AB; the high level of service, the close geographical distance and the flexibility of the company. From GGP’s side the increase comes from extended product lines going from only producing consumer segmented products to more
semi-professional and professional products. Since these products are not sold in large volumes the investment in pressing tools for making components is too large for GGP. The solution is to use alternative techniques such as laser cutting to produce the components. In this type of low volume serial production Stoeryd is a suitable producer. Mr. Berglund continues saying that Stoeryd AB has been able to present prototypes for such products very quickly for a decent price, which have lead to GGP giving a lot of new assignments to Stoeryd AB. The purchaser exemplifies this by telling a story of blueprints being given to Stoeryd AB day one and day two they had already come up with a tender offer and an idea of how to produce the components. Mr. Berglund states that no other supplier react that fast and that these factors have resulted in further orders to Stoeryd. The tight time schedule of GGP’s development of new products requires a rapid service, but may also result in problems for GGP if Stoeryd for some reason could not offer this high service anymore. The result would be having to “accustom someone else”.

4.5.3 The resource characteristics dimension

Mr. Karlsson says that today, the products supplied by Stoeryd are somewhat complex although some products still are very simple. Compared to other suppliers the products’ complexity is rather similar. Also the product quality from Stoeryd AB is comparable with other suppliers. It happens that reclamations are made, like with other suppliers.

Mr. Berglund claims that the products provided by Stoeryd AB are slightly less complex than the average of purchased goods by GGP in the same category. The body of the raiders is the most complex product that GGP is currently purchasing and Stoeryd AB does not have the capacity to produce for example these in their machine park. There is, however, a complexity aligned with supplying such a variety of products that Stoeryd does. What makes the situation more complex is that Stoeryd is involved in GGP’s development. This process often involves a “trial and error” procedure with extensive communication, to reach an optimal solution. Also the products made as prototypes are relatively simple. However, the development requires more from the supplier.

Mr. Berglund considers a high quality to be essential for being a supplier to GGP and says that Stoeryd AB keeps a good standard of quality. The lead times are also followed and the intense communication between the production planners and purchasers at GGP and the planners and the CEO of Stoeryd AB has also helped in building a good relationship.

Mr. Berglund continues saying that there are very few producers that provide such a high service as Stoeryd AB, and the short time that they need to come up with working solutions concerning prototypes therefore make them hard to replace. Mr. Berglund also states that if a firm comes up with a good price offer and a sufficient solution for a prototype, it often means that the firm gets to supply that good for GGP. Mr. Karlsson claims that production of prototypes has increased at Stoeryd and thus has become more important. This is also described to help Stoeryd in getting subsequent routine production.

Mr. Berglund describes Stoeryd to have an “incredible strength” when talking about the ability to offer and present prototypes. When asked directly if serial production was placed at Stoeryd in order to secure the possibility of having such a competent supplier of prototypes the answer was a distinct no. However, Mr. Berglund explained that if drawn to an extreme it might not be possible for GGP to remove orders from Stoeryd, if it would risk the possibility to have them as a prototype supplier.

According to Mr. Karlsson, Stoeryd partly supplies GGP resources other than products. The contribution from Stoeryd is in the shape of production competence, something that is
diminishing from GGP. With the collaboration between GGP’s construction department and Stoeryd AB, the responsibility of having production competence has been transferred from GGP to Stoeryd.

Mr. Berglund says that GGP wishes to work with suppliers that can be considered as competence resources, since confirming that the competence of production is gradually reduced within the firm. He highlights that both companies could improve notably in the attitude towards knowledge sharing. A more active participation and expressed critique about products and construction are things that are desired from all suppliers. Mr. Berglund does also stress the importance of tolerating this kind of interference in order not to kill the creativity. As GGP outsourced their component manufacturing they also decided to try to keep a lot of competence tied to the firm. Therefore, it is preferable if the suppliers invest in education for their employees so that new creative solutions that are more cost efficient can emerge in a close collaboration with the blueprint makers at GGP. In this sense Stoeryd AB has a lot to work on as they are seen as a quite traditional firm with some old fashioned production methods.

Mr. Karlsson considers Stoeryd to have improved in line with increased demands put on suppliers. In his position he has quality and quantity of supplied products as most important measurements, and he believes that Stoeryd has improved in these concerns. Mr. Karlsson describes that last fall Stoeryd had problems in keeping delivery times. He believes the reason for this was that too much orders was placed from GGP while also initiating a number of new projects with Stoeryd, making GGP partly responsible for the delays. Other than this, Stoeryd has a good level of delivery time accuracy.

Mr. Berglund states that Stoeryd AB is a reliable supplier in terms of delivering the right products at the right time in the right quality and much of this comes from the close relationship that has emerged over the years.

4.5.4 The industry dimension

Mr. Berglund and Mr. Karlsson state that GGP is not applying multiple sourcing of components. The reason for this is that the specific tools and fixtures that are required to produce the components are expensive investments for GGP. For GGP’s relatively low volumes of components the costs are higher than the benefits gained from multiple sourcing.

Mr. Berglund thinks that it would be preferable to apply multiple sourcing in order to reduce the risk of component shortage. GGP instead has established a network of potential producers in the case that they would have to switch for one reason or the other. Even if Mr. Berglund says that there are benefits from multiple sourcing he also states that there are benefits in reducing the amount of suppliers. He does, however, stress that the risk is noteworthy. According to Mr. Berglund, GGP is trying to establish long lasting collaborative relationships with all of their suppliers, something which is a time consuming process but pays off. He says that the total costs are always what the decision is utterly based upon on which supplier to choose.

Mr. Karlsson believes that the competition between suppliers like Stoeryd has intensified the last five years because of higher demands from customers on cost efficiency. This concerns both simple metal products and more complex products. Increased competition from abroad has added on to the competition and today GGP buys metal parts from China, Poland, and Czech Republic. Chinese companies supply more simple products while Polish and Czech companies supply more complex, expensive and labor intense products for the professional line of GGP’s products. Despite the fact that quality is not entirely satisfying it
is undoubtedly cheaper for GGP to buy some products abroad. He continues saying that Swedish suppliers are relatively similar in price levels.

GGP needs more of a partnership for the kind of products supplied by Stoeryd, according to Mr. Berglund. There are good relationships today with alternative suppliers, even if the relationship with Stoeryd is described as deeper. One reason for this is Stoeryd’s development of new products and prototypes, which is handled very efficiently. This also provides Stoeryd an advantage, when coming to the ordering of established products. Further, the purchaser states that few firms enjoys solely developing prototypes, since it is quite costly for the suppliers. However, the outcome of a good prototype may lead to that the supplier gets to supply the final product.

Today there are five or six different suppliers that are actively supplying similar products to GGP, besides Stoeryd AB. All companies are described as “having different specialities”. Whenever a new component has to be purchased by GGP the task to come up with an offer is given to about three possible suppliers. The number of suppliers considered increases with the complexity of the product requested. Mr. Berglund says that the standard components purchased by GGP are not hard to outsource to another supplier than Stoeryd AB if the cost could be reduced. GGP is benchmarking all purchases against other producers to ensure that the price paid is reasonable and this is re-evaluated continuously.

Mr. Berglund declares that it would not be that hard to replace Stoeryd AB as a supplier if the collaboration would end since the competences that Stoeryd AB possesses are not unique in any way. However, he continues by saying that Stoeryd AB has a tremendous advantage over other similar firms in being geographically close and having a very active communication. Transport costs and lead-times can be kept low, and the degree of service provided by Stoeryd AB is rare. The service level is described as “better than good”. The companies have close contact and problems arising are solved efficiently, rarely conveying any major negative consequence. A frequent area of communication is production planning in order for it to suit both parties. Mr. Berglund says that it would be possible to find an equal supplier with similar level of service level although it would probably require a decent search effort. In the close area, there are a few companies with similar pre-requisites. GGP is currently doing some research on the matter even though Mr. Berglund thinks that more research should be done.

If the relationship with Stoeryd would end, possibilities be to find new suppliers will always exist, also according to Mr. Karlsson. GPP has relationships with a number of suppliers that makes similar products. There would, however, be problems in the transition period when changing supplier. Stoeryd is described to have a great advantage due to the geographical closeness and the involvement in development. Mr. Karlsson says that “the development department can take the bike to Stoeryd” should there be any concerns. Mr. Karlsson, having a lot of experience of changing suppliers, says that it is always troublesome to change provider. Changing from Stoeryd would imply problems but would not at all be impossible for the serial production since they produce nothing that is unique. The development function that Stoeryd has today would, however, be more difficult to direct to another supplier.

Mr. Karlsson says that despite the increasing competition and relative easiness to change supplier, the relationship with Stoeryd has worked out just fine. He sees only positive effects from these facts regarding the relationship.
4.5.5 The information dimension

Mr. Berglund explains that GGP has a good idea of the possible suppliers within the near surroundings and their capacity. Benchmarking is done continuously after a product has become “stable” (after the initial period of alterations, usually one year) to assure that the total costs are evaluated and that the prices provided by the current suppliers are still competitive. Some extra research would be preferable when it comes to finding alternatives that could satisfy GGP’s needs of competence regarding construction and the prototype processing.

Jonny Karlsson also thinks that GGP has good information about alternative suppliers available. Further, GGP always asks for tender offers from multiple sources laying grounds for this awareness of costs of supplying firms’ costs.
5 Analysis

This chapter consists of, first, a joint analysis of the elements of dependence identified in the separate dependence investigations at both case companies, categorized in line with the theoretically derived dimensions of dependence. This joint analysis of the perspectives of both companies regarding the elements of dependence will answer the second research question, namely, how the elements of dependence are constituted in the case relationship. The following section presents the analysis aiming to answer the third and final research question; how dependence influences the relationship between Stoeryd AB and GGP Sweden AB. In the final section of this chapter the tentative framework used as a base for this investigation is discussed and revised.

5.1 Relationship specific asset dimension

An investment made that cannot be used in a context other than a specific business relationship is transaction specific. The assets from an investment made have a high degree of asset specificity if the risk of sacrificing value is high, if the relationship is terminated (Williamson, 1985).

Assets with high specificity make it more difficult to replace the exchange partner leading to dependence (Proven & Gassenheimer, 1994). In the relationship between Stoeryd AB and GGP Sweden AB, there exists a low degree, if any, of relationship specific assets as expressed by both companies. In Stoeryd, the production manager and the CEO thus see no risk or outcomes in relation to this. GGP owns tools for production which is specific to the production of Stoeryd that are held and used by Stoeryd but these are movable and possible to transfer if GGP would change supplier. The fact that GGP bears the investment specific to the products manufactured by Stoeryd could be seen as sharing the cost or risk of production (as opposed to Stoeryd making the investment themselves) but this do not change Stoeryd's dependence, or their “need to maintain the relationship in order to achieve desired goals” (Frazier, 1983, p. 71).

All investments made because of increasing ordering of GGP are of general character and can be used for alternative customers and production. However, Stoeryd has made substantial investments that are in accordance with the GGP needs and orders, which, if the relationship would end, would imply high fixed costs that would be hard to cope with. Assets specific to a relationship can also take the form of human assets (Williamson, 1985). Also the value of human capital in accordance with needs of GGP is substantial, even if the knowledge can be used to alternative customers, as explained by Stoeryd’s representatives.

Even if these resources or assets are not specific only to the production they may not be perfectly applicable to the needs of a new customer. The statements by Mr. Nilsson that the fixed costs would imply a serious problem if the relationship would end and that selling the machinery would be of no use, imply that there is a risk connected to these assets. Frazier (1984) says that the higher the value expected in the relationship compared to those of alternative relationships, the higher a company’s dependence. Even if the prospects to find new customers if this one would disappear are described as good, which can be seen as factors lowering the risk and dependence of made investments, the value of using the investments would likely be significantly higher if the relationship is kept, implying a higher degree of dependence. The expressed fact from Stoeryd that it would be very difficult to find alternatives corresponding to the sales of GGP in a short period of time supports the reasoning. This reasoning implies that apart from the level of transaction specific resources, also the level to which investments have been made in accordance with the needs of a specific
customer affects dependence on this customer. These investments, tangible or intangible, can lead to having “relationship-designed” assets or resources, which could be specific assets or resources possessed or the actual combination of possessed resources and assets. At the same time, the reflection of the possible alternative sources of value from utilizing these assets or resources is necessary in order to determine how significant these resources affect the inter-organizational dependence. In the GGP-Stoeryd relationship, the fact that the investments made can be used in other production opportunities would decrease dependence. The fact that selling the machines would be clearly negative in terms of value can, however, be seen as a factor increasing dependence of these relationship-designed assets or resources.

GGP has no relationship specific resources and thus no implications on GGP’s dependence on Stoeryd can be seen from it. However, Gulati and Sytch (2007) are open for the possibility that a supplier’s relationship specific resources can increase the dependence also of the buyer, because of possible increased switching costs of the buyer towards other suppliers and an increased value generation because of the supplier’s investments made. It has already been determined that the level of relationship specific assets is low, also for Stoeryd. However, since concluding the importance of considering also investments made in accordance with needs of GGP, in relation to the point made by Gulati & Sytch (2007), it is interesting to question whether or not such investments also add on to the dependence of GGP.

It would be reasonable to believe that also an increased level of “non-relationship-specific” but “relationship-designed” assets made by a supplier can add on to the need to maintain the relationship [dependence] of buyers in general, since it can increase the expected value from the relationship compared to alternative buyers, again with reference to Frazier (1983). However, considering these alternative relationships in our case, GGP has a number of alternative suppliers already that could supply them with products, if the relationship with Stoeryd would end. Even if Stoeryd today is used as a competence resource, Mr. Berglund from GGP describes the competences Stoeryd AB possesses as not being unique in any way. Considering the low uniqueness of Stoeryd’s “relationship-designed” assets the possible dependence deducted from these assets is considered relatively low. Also the mobility of tools specific for producing by Stoeryd supplied products make it easier for GGP to change supplier thus making their need to maintain this specific relationship lower, decreasing their dependence on Stoeryd.

### 5.2 The resource transaction magnitude dimension

A number of factors have been expressed as reasons for why GGP has increased their purchase volume from Stoeryd more than the change in total purchases. High service, suitable location, high flexibility from Stoeryd, and GGP product line extensions with Stoeryd as suitable supplier, are reasons for this. A recently by Stoeryd installed laser cutting machine is an investment making Stoeryd suitable as a supplier also to new product lines. Even so, Stoeryd accounted for is as little as 2-3% of total GGP purchases in 2007.

If only considering products categorized as similar to by Stoeryd supplied products, Stoeryd accounts for approx. 18% of the total purchases of this category which may imply a higher need from GGP towards keeping Stoeryd as a supplier. Since interviewed representatives from GGP are only involved in handling these products, taking this perspective may be more in line with the other points expressed about the relationship. The presented numbers do, however, still not tell us much about GGP’s need to maintain the relationship [dependence] if not looking at alternative suppliers of resources. Pfeffer & Salancik (1978) claims that it is the degree of resource concentration and the importance of the resource that creates dependence. The term importance stands for; the proportion of business committed
to one another; availability of alternatives to the resource; and a firm’s ability to function without the resource. A high resource concentration means having control over resources that few competitors also have control over (Pfeffer & Salancik, 1978). Not only must one thus look at alternative providers but also at the characteristics of products and accompanying services to make sense of the dependence situation in regard to transaction magnitude. Taking the figures 2.3% or 18% into account, the fact is still that today five or six different suppliers are actively supplying similar products to GGP, having similar competences as Stoeryd, and several are continuously benchmarked and asked for tender offers about products. The resource concentration is thus not particularly high. Even though no substitute products exists and GGP would likely not be able to function without the products supplied by Stoeryd (which both could have affected GGP’s dependence to increase) since production is directly subcontracted from GGP, production could be sourced to a number of other suppliers. This implies that the need for specifically Stoeryd as a supplier is seen as relatively limited, only looking at these aspects. The increase in purchases from Stoeryd is, nonetheless, a fact and there are reasons for why purchases have increased - those initially stated in the section and Stoeryd’s forthcomings in terms of being a developer and prototype supplier, further discussed in the next section.

GGP accounted for 32% of Stoeryd’s total sales in 2008. The CEO of Stoeryd, Mr Salomonson describes this as a significant share which would get serious consequences for Stoeryd if the relationship with GGP would be terminated, with high fixed costs and layoffs as results. Stoeryd may cope with loosing such a significant share of sales, but it would take time and the fixed costs of made investment would imply severe problems. Reflecting on this, it is intuitively seen that in Stoeryd’s case the magnitude of the transactions and received resources, in terms of money, notably influence the company’s dependence on GGP.

The expressed outcomes in relation to these facts are that Stoeryd has become more dependent on GGP as a customer and the establishment of a faith that sales to GGP will keep on increasing. The result of this has been that Stoeryd’s investments have been made to suit the GGP production. The faith from Stoeryd is however, also that GGP has become more dependent on Stoeryd because of the fact that GGP uses Stoeryd as their “own workshop”.

### 5.3 The resource characteristics dimension

The resources that Stoeryd receives from GGP are foremost financial, in a significant magnitude. Money is not differentiated, complex, and is not likely to be of any different quality. Thus the influence of the characteristics of these resources on dependence can be disregarded. The ability for Stoeryd to function without the financial resources provided can be discussed, but this is more an outcome of the magnitude of transaction instead of the characteristics of the resource.

The tools provided from GGP to Stoeryd can be seen as resources but these have been discussed in section 5.1 and the implication of these resources is more in terms of shared risks instead of affecting Stoeryd’s dependence situation. Mr. Salomonson says that GGP provide Stoeryd with knowledge to some extent. That this knowledge transfer would affect Stoeryd’s need to maintain the relationship in order to achieve goals in any greater way is unlikely. The impression given by the two firms is instead that rather it is Stoeryd’s knowledge that is used as a resource nowadays, since GGP’s production competence is diminishing after having outsourced the steel production.

If instead looking at the resources received by GGP, the elements in this dimension are of higher interest to discuss. Since products are subcontracted and based on design from
GGP, they must be seen as undifferentiated. It can however be concluded that Stoeryd as a supplier differentiates itself, but this will elaborated later on. Also the level of complexity of the products supplied by Stoeryd is relatively low. Mr. Berglund, from GGP, says that products are similar or slightly less complex than average purchased goods in the same category and Mr. Karlsson says that complexity is varying among the products but is relatively similar to those of other suppliers. Also the items produced as prototypes have relatively simple specifications. Increasing complexity of products imply that products can be bought from fewer suppliers and therefore, the dependence on the supplying company will increase (Hallén et al., 1991). This is thus closely related to what have been discussed previously and will be further elaborated in the industry dimension (section 5.4) – discussing alternative suppliers of the resource. In this relationship there are a number of alternative suppliers. Adding to that the fact that products are similar or simpler than products from comparable suppliers, it can be determined that the degree of GGP dependence derived from the tangible product characteristics is limited. When discussing the resource criticality, i.e. the ability to function without the resource (Pfeffer & Salancik, 1978), the availability of alternative suppliers also makes criticality lower. Since there is no direct substitute products (products being designed by GGP) and the tools for production exists in one copy, changing supplier may be troublesome and costly, but still the possibility is there.

However, looking at the total offering from Stoeryd AB, it becomes apparent that other qualities than tangible product characteristics keep the GGP and Stoeryd relationship intact. The elements perceived quality of the offerings (including service level) and its effect on the financial results of the buyer help us account and weight in the importance of the more augmented attributes of the transaction in the relationship. Gassenheimer et al. (1996) see these elements as causing dependence while also more incorporating the behavioral side of the exchange process, something which several researchers have pointed out as important in order to understand dependence (Rosenberg & Stern, 1970; Gassenheimer et al., 1996; Stern and Reve, 1980). Apart from being a generally reliable supplier in terms of quality and delivery accuracy, Stoeryd also has the function of a prototype and product developer. The competence is diminishing from GGP and Stoeryd has, in line with their business idea of being flexible and service-minded, taken advantage of this fact.

Mr. Berglund form GGP says that few suppliers have such high service as Stoeryd. In connection to the prototype development the company is seen as very effective in coming up with working solutions, something which Mr. Berglund says make them hard to replace. Mr. Karlsson has confirmed that Stoeryd’s prototype production has increased and has become increasingly important for GGP because of Stoeryd handling it very efficiently. Stoeryd is described to have an incredible strength when it comes to developing and presenting prototypes. The powerful statement from Mr. Berglund saying that, if drawn to an extreme, GGP might have to keep laying serial production to Stoeryd in order to keep their function as a prototype supplier emphasize a feature of the relationship that show GGP’s dependence towards Stoeryd as a supplier. This statement also highlights the importance of looking at the whole offering when evaluating the dependence situation in a relationship. The relationship between Stoeryd and GGP verifies researchers’ concerns about also accounting for intangibles, whether calling them perceived quality of the offering, customer service, or behavioral characteristics of the relationships. Reflecting on the elements of the tentative framework provided in this thesis, one can argue that these “intangibles” could be included as a way to differentiate the products (or services). Having both product differentiation and perceived quality of the offering included in the resource characteristics dimension does, however, more explicitly demonstrate also the behavioral side of the total offer.
The perceived quality of the offer, particularly in terms of customer service and accompanying production competence, is high and the expressed importance of keeping Stoeryd as a supplier instead of turning to another relationship, are signs of a need to maintain the relationship. When relating Stoeryd AB to other similar firms Mr. Berglund says that Stoeryd has a great advantage in being geographically close and having a very active communication, supporting the upholding of such a high service level. Expressed results of Stoeryd being a strong prototype supplier is that the relationship has become more complex with extensive communication between the firms. Mr. Karlsson states that the relationship with Stoeryd today is deeper, because of this fact. Both GGP representatives declare that a successful prototype production also often leads to that a supplier gets an initial serial production of the good, something which can further increase the transaction magnitude in the relationship. The perceived quality’s effect on the financial result of the impact on dependence can also be discussed. Even if prototype production as such is likely to have a relatively small effect on the financial result of GGP in the short run it is a factor that can lead to significant positive effects in the longer run. GGP is selling consumer products and product alterations or new product lines, needing prototype production are factors that may lead to competitiveness in the market. Having a producer that can provide high service in terms of development can be a great determinant of success in the long term perspective.

The strengths that GGP ascribes Stoeryd in terms of high customer service level and flexibility, the people in Stoeryd are aware of that the company possesses. Mr. Wagner calls these the core strengths of the company.

Both Mr. Berglund from GGP and Mr. Nilsson from Stoeryd say that there is increasing complexity in the relationship due to the fact that Stoeryd is supplying GGP such a variety of products. This could be thought to increase the complexity in changing supplier. Reflecting back on Frazier’s (1983) definition it may not affect GGP’s need to specifically keep the Stoeryd relationship. However, the higher the value expected in the relationship compared to those of other relationships, the higher the dependence (Frazier, 1983). Higher complexity in changing supplier may imply higher switching costs of changing supplier and can thereby mean a lower value expected from an alternative relationship and a higher dependence in the current relationship. Therefore, also the complexity in terms of variety of products should be added as an element affecting inter-organizational dependence. The reasoning can be supported from the case by Mr. Wagner, having a history in GGP but now working in Stoeryd, who believes that it would be very costly for GGP to change supplier and the prime reason is the fact that Stoeryd makes a wide range of products for GGP.

5.4 The industry dimension

It has already been determined that the products supplied to GGP by Stoeryd are not unique in the sense that they can be manufactured by other suppliers. Neither are Stoeryd’s production competences unique in character. There are five to six suppliers in GGP’s network that could produce the products, should for some reason the relationship with Stoeryd end. If a firm controls resources that few alternative suppliers have, the dependence on this firm will increase (Crook & Combs, 2006). Several alternatives exist so therefore there is no reason to believe that GGP would be highly dependent on Stoeryd as a result of industry characteristics at a first glance. On the other hand, several of the respondents in the companies have brought forward how the features of Stoeryd’s high service, active communication and their close location would be difficult find in an alternative supplier. These have, however, been reflected over previously and can be seen as more internal elements of the relationship.
There are however some interesting things to reflect upon concerning the external environment, or industry as we call it, of the relationship. Mr. Karlsson from GGP says that competition has intensified among providers such as Stoeryd, partly because of pressure from global suppliers. Swedish suppliers are, however, described as relatively similar in terms of price-level. If despite this fact choosing to outsource to domestic providers, it can be assumed that the feasibility among domestic suppliers also is determined on grounds other than price. Mr. Berglund says that the total costs always decide which supplier to use. If prices are similar and total costs always decide, the switching costs of changing supplier may be seen as relatively more important since it would be straightforward to believe that it would take a higher price difference among suppliers in order to change supplier, compared to if prices would not have been similar. If Stoeryd gets to supply a prototype for a product line they are likely to get an offering of serial production, as mentioned before. Getting such an offer plus the fact that Swedish suppliers are similar in price can then benefit the company since the switching costs of changing supplier could be steep obstacles to overcome. Taking the actual step of changing supplier after once assigning it to Stoeryd, may therefore be less likely. A similar price level among suppliers may also imply that other ways to differentiate, for example by providing a superb customer service, then can be regarded as more important of determining which supplier to use. In reflection to this, Stoeryd beneficially profiles itself by being flexible and strongly focused on service level.

Changing supplier does bring a transition period of problems, as described by GGP’s Mr. Karlsson, which likely is troublesome to assign a value. Further, if Stoeryd’s supplying of prototypes leads to an initial serial production, the switching costs (being problematic to accurately determine) may make GGP hesitant to change. Frazier (1983) says that the need to maintain the relationship in order to achieve desired goals reflects the dependence and the higher the value expected in the relationship compared to those of alternative relationships, the higher a company’s dependence. The conclusion of this reasoning is that it may be so that despite the relative simplicity in Stoeryd’s competences and the alternative suppliers available, the switching costs in changing supplier are barriers to taking the step to change supplier and also therefore the value expected from the relationship with Stoeryd is higher than the ones of other suppliers. This kind of reasoning confirms the relevance of seeing industry elements as alternative suppliers and switching costs as elements affecting inter-organisational dependence, at least for the buyer. Thus, the characteristics of the offering, being products, resources and service offering, seen in relation to the industry and the availability of alternative suppliers affects the dependence situation and switching costs of the buyer.

The elements in this dimension have been derived from theory regarding the buyer and may therefore be less suitable for investigating the supplier. The dimension has nonetheless been applied also on the supplier side to the best ability. Since the resource provided by GGP is financial, looking at the alternative suppliers of resources for Stoeryd would mean looking at alternative suppliers of resources, i.e. other customers and new market opportunities. The representatives from Stoeryd regard the market opportunities and the possibilities to replace the sales from GGP as good, even if it would be troublesome and take time. Today, not much funding is spent on marketing but the company’s strengths in terms of flexibility, capacity, good production competence, and high service level make the firm an attractive supplier. Clear improvements in capacity, competence, and organizational structure along with the company’s growth have resulted in this positive view about alternative resources to GGP. It feels reasonable to believe that also the element of alternative resources can be applicable to the supplier, since having a positive belief about the alternative market possibilities may decrease at least the perceived dependence on a buyer. Investigating possi-
ble market opportunities does, however, become very much a discussion of perceptions and beliefs. Stoeryd’s representatives state that the way to cope with the loss of GGP as a client would be to actively search for new customers. Then considering how little effort is being made by Stoeryd on actually finding out the market potentials by active marketing research, the discussion becomes even more arbitrary. Therefore, it can be difficult to say if alternative resources in terms of market opportunities for Stoeryd really make up an element that affects the dependence between GGP and Stoeryd. If instead Stoeryd would have performed massive marketing research thus getting information about possible market opportunities it might have been of relevance discussing and reflecting on what outcomes this may have had on the inter-organizational dependence between Stoeryd and GGP.

Reflecting on alternative current customers as potential suppliers (in the “industry”), they too have had an extensive growth in terms of volumes supplied by Stoeryd AB the last few years, having resulted in that sales to GGP represents a relatively lower proportion than if this had not been the case. Nevertheless, GGP is described as one of Stoeryd’s most important customers and the outcome is that they have been prioritized towards compared to smaller customers. Reflecting on Stoeryd’s other customers and GGP’s relative importance to them verify that alternative current customers is linked to that of importance and the actions taken to keep GGP satisfied, possibly to ensure that the need to uphold the relationship is secured. This could, however, be seen as similar to the discussion about proportion of sales (transaction magnitude dimension) and the dependence arising from this element, since it reflects the sales in relation to the total chunk of other customers. Yet, reflecting also over other current customers can thus explicitly make a firm reflect on the actual outcomes that the connection between these individual “alternatives” and the specific buyer in focus has.

5.5 The information dimension

The information element has been touched upon in the previous section. GGP has good information about alternative suppliers and the capacity they possess, because of constant benchmarking. Even though Mr. Berglund in GGP thinks that more information about suppliers should be gathered, they have a good idea about suppliers and market prices in the industry. The fact that GGP knows about alternatives to Stoeryd is likely to result in that GGP is aware of the risk of using Stoeryd as a supplier and since alternatives exist, their need to maintain the relationship [dependence] with the company is lowered. Thus at least GGP’s perceived dependence is likely lower than would they have no knowledge of supplying industry. However, it can be assumed that in regard to this discussion also the fact that GGP has information about alternative suppliers provides awareness about in which relationship the value expected in the relationship is highest. Since the higher the value expected in the relationship compared to those of alternative relationships, the higher a company’s dependence (Frazier, 1983), one can also question if awareness and information about Stoeryd and other suppliers does in fact decrease GGP’s dependence. If having this information companies would know in which relationship they expect to have the highest payoff. Being in that relationship where highest value is expected and knowing that so is the fact may instead increase dependence, or at least the perceived dependence. The information about the industry and alternative providers could therefore be an element affecting dependence but should rather be seen alongside the industry and the actual accessibility of alternative suppliers of the resource.

Porter (1980) says that if the buyer has complete information of the market concerning for example demand, market prices, or supplier costs the buyer’s bargaining power is higher. In reflection to Hallén et al. (1991) saying that bargaining power can be seen as opposing par-
ty’s dependence, the fact that GGP has fairly good information about alternative supplier should increase Stoeryd’s dependence on GGP. This reasoning can be regarded as fairly far-fetched and this connection cannot be made in our case. Nevertheless, having information about the industry and its alternative providers of resources may affect the perceived dependence of the buyer and possibly also the supplier. If flipping the coin to Stoeryd’s perspective it becomes even more far-fetched since information of alternative providers of resources (i.e. customers) should then affect GGP’s dependence on Stoeryd since Stoeryd’s bargaining power should be strengthened. With these reflections it can be questioned whether the element of information as such should be seen as an element of dependence and instead it is proposed that it should be considered in connection to the alternative providers of resources in the industry dimension of the tentative framework.

5.6 Implications on the relationship

This study has not aimed at quantifying any information found about the relationship. However, the findings indicate that the elements of dependence are of larger and smaller importance when placed in the context of the relationship in which they take place. Several factors affecting dependency were found in the dimensional analysis of the relationship investigated. When looking at the transaction specific assets it is clear that the amount is low but the level of relationship designed assets is larger. Stoeryd has made investments in machinery that would have not been made if it were not for the relationship with GGP. These would, in case of termination of the relationship, cause problems for Stoeryd adding on to their dependence. Even so, investments are not specific to the relationship as they can be used to fulfill needs of other potential customers. The level of Stoeryd’s sales allocated to GGP makes up 32 percent of the annual sales of the company, being the single most evident element showing Stoeryd’s dependence on GGP. In contrast, GGP rate of procured parts from Stoeryd is merely 2-3 percent. On top of that there are several suppliers supplying similar goods to GGP besides Stoeryd. The products that Stoeryd produces to GGP are none differentiated and fairly simple, and there are several actors with the capacity to produce the same products. It would imply switching costs for GGP to change supplier, even if it would not be hard to do so. However, the strengths of Stoeryd, acknowledged by both parties, are the high service level, good quality and flexibility and the statement that GGP could consider placing production at Stoeryd in order only to secure the company’s high service level and flexibility in the prototyping process indicates a noteworthy dependence from the GGP side.

When looking at above aspects it is rather straightforward to conclude that Stoeryd is more dependent on GGP than GGP is on Stoeryd. GGP is, however, also dependent on Stoeryd, most evidently because of the behavioral aspects shown in relation to prototype processing. This concludes the dependence situation between the two companies. However, in order to determine the implications that these dependencies have on the management of the relationship we must turn towards the collaborative nature of the relationship. As per definition by Frazier (1983, p. 71), inter-organizational dependencies are contextual to the relationship in which they occur.

Dependence and collaboration are related to each other either saying that a higher degree of dependence is related to more collaboration (Skinner et al., 1992; Maloni, 1997) or the more intense collaboration, the more dependent parties (Cox et al., 2002). In the investigated relationship, the cooperative characteristics are apparent and clearly shown in the intense communication and the amount of information that is shared between the firms. Mentzer et al. (2001) and Bäckström (1997) view communication and openness as enablers of cooperation. Forecasts provided by GGP and extensive communication clearly increase
the coordination and efficiency regarding the serial produced products flowing between the firms. Information sharing, increased coordination and following efficiency are elements of collaboration (Lee et al., 1997). The sharing of information also increases when new products are developed in the Stoeryd and GGP relationship. The prototyping process also involves factors of information and knowledge sharing, which requires for the firms to be open towards each other. Indications of a significant level of cooperation in the relationship are clear. Both parties regard the costs and prices to be fair, even though decision synchronization or incentive alignment have not been identified to a larger extent. Decision making and incentive alignment make up key collaborative elements which can have several possible effects of the relationship (Simatupang & Sridharan, 2008).

It has previously been determined that a significant reason for why GGP should be dependent on Stoeryd is because of the good service provided in relation to the prototype production. It can thus be made fairly evident that increased collaboration that the process requires is connected to an increased dependence at both parties. Stoeryd is viewed as being very fast in presenting working solutions to GGP, which is one reason why much production has been placed at Stoeryd. Without this strength it is possible that the proportion of sales to GGP would be significantly lower, which also indicates that it is a market where the buyer has most control over the initial stages of settling a business agreement.

The prototyping process is usually done by Stoeryd after blue-prints have been provided by GGP. However, GGP is a demanding customer and the prototypes are often revised after input from both parties is assessed. The intense communication does, however, also decrease the efficiency and coordination during stages of product development. This effect is described from both parties but the impact is likely larger on the supplier, having to make changes and revisions in a short time frame. Hallén et al. (1991) have determined that having a large share of another firm’s business (a factor connected to higher dependence) has an effect on the degree of adaptation behavior in the relationship. In relation to this, it can be argued that Stoeryd are adaptive in their behavior when adapting to the requirements of GGP, even though it is decreasing the overall operational efficiency. Nevertheless, adapting in this way may imply that the company gets to supply the final product so it may just be a strategic move to further increase the sales to GGP. Gassenheimer and Calantone (1994) say that financial dependency increase obedience in a relationship, but instead of taking it that far it can be more appropriate to talk about adaptation, since nothing that indicates coercive behavior from GGP has been found. Carr et al. (2008) link participation in the purchasing firm’s product development to dependence and this link is evidently seen also in this relationship. According to Gassenheimer et al. (2002) among others, dependence also gives firms larger incentives to cooperate. It is not farfetched to say that it may be Stoeryd’s dependence on GGP that could work as an incentive to collaborate, shown in the willingness to uphold a high service level to satisfy their largest customers, even if it really cannot be verified.

Dependence generates vulnerability to which firms take actions (Laamanen, 2004). Izquierido and Cillán (2001) suggest that connected to economic exchange is the question of how to control it towards becoming too dependent. A firm within a relationship has a “hybrid structure” partly dependent and partly controlling. As for most firms, this also holds for the Stoeryd and GGP relationship and below is a discussion about in which ways this is shown in the relationship.

Even though being quite dependent on GGP little is done on Stoeryd’s behalf to control this dependence. At Stoeryd, it was expressed that there were no long-term contracts between the firms and that no other legal contract exists to control the exchange. However,
the GGP representatives gave a slightly different view as they stated that there is a business agreement established between GGP and all of their suppliers. The contract regulates, for example, delivery times, financial flow, and quality standards and it contains possible sanctions if set requirements are not met. Even if Stoeryd does not seem to be aware of the standard agreement that GGP representatives claim that all suppliers have signed it would, either way, only control the exchange in a way that benefits GGP.

Laamanen (2004) suggests that in relationships with complex transactions it can be hard to establish ideal contracts to eliminate the possibility to behave opportunistically; instead he suggests that in these cases trust can help minimize the risk of one party taking advantage of the other. Further, Laamanen (2004) states that cooperative behavior between firms can enable trust to be built up between the parties. In the case of Stoeryd and GGP it is evident that Stoeryd has a high level of trust rooted in the good and relatively extensive collaboration in the relationship. A sense of security and trust from Stoeryd may be the reason for the absence of established contracts that in any way control the dependence of Stoeryd. Further, nothing has been found that GGP would trust Stoeryd any less, even though the contract exists. The contract has rarely been proclaimed towards any supplier, and never against Stoeryd. The relationships may cause Stoeryd’s dependencies but the trusting relationship itself seems also to control the transaction for them.

The establishment of contracts can also be seen as an important factor of relationships, as it indirectly guides to a code of conduct of how the parties are expected to behave. The current contracts that are established between the firms only regulates what has to be fulfilled by the supplier, leaving Stoeryd with no contractual security, which in turn indicates that GGP has the greatest control of the relationship in that sense. However, as Stoeryd does not seem to be aware of the contractual obligations placed upon them, yet are fulfilling the high demands that GGP place upon them, it is unlikely that they were to behave any different if they were aware of the contract. It is also likely that GGP has successfully communicated the requirements stated in the contract to Stoeryd by other means. However, it was found that Stoeryd was not pushing GGP to establish any form of sales contract to secure an income for a given period of time. Laamanen (2004) has suggested that dependency of a firm yields a higher vulnerability that make firms try to assure the accessibility of resources or in any other way try to reduce the dependency. This behavior from Stoeryd possibly indicates that they do not perceive themselves as being as dependent on GGP as could be expected.

Apart from trust and self-perception, the explanation to Stoeryd’s behavior in terms of being dependent may be found in the perceptions that the company has of its customer. In relation to that Stoeryd has become more dependent on GGP, Stoeryd perceives GGP to have become more dependent on them. The outcome of this perception, whether or not GGP acts or feels the same way, can be that Stoeryd’s net dependence in the relationship will be perceived as lower, leading to Stoeryd not acting as being highly dependent on GGP. Such a perception could also affect the governance; Stoeryd acts and controls the company’s activities as would they not be as highly dependent as they are. On the other hand, there are informal arrangements of behavior as well as acknowledged industry practice also controlling the relationship to a higher or lower degree.

Supplier-buyer relationships today are more focused on relationships rather than pure transactions (Sharma & Sheth, 1997). This indicates a reduction of the amount of sources in the procurement process of the buying firm. Further, deepened supplier relations can uphold mutual commitment to the relationship, which in turn can yield a competitive advantage. GGP has chosen not to use multiple sourcing, and instead incorporate fewer and
long-lasting supplier relationships to the firm. Even if some of them are supplying similar goods as Stoeryd, having fewer suppliers will increase the reliance and dependence on the remaining ones. Not using multiple sourcing and applying lean production where goods supplied are going straight to the assembly line increase reliance on suppliers. Relying also on external parties for production knowledge and involvement in product development may, as in this case, increase the reliance on the supplying party. Stoeryd has made large investments in machinery that would imply heavy costs if the relationship should end and is, to a large extent, dependent on the financial resources supplied from GGP. These corresponding dependence, or interdependence, can also create a sense of security of both parties since it is unlikely that any of the parties would end the relationship in the short-run due to lost profits as a result.

5.7 Dependence and power

Another important aspect connected to dependence is the concept of power. Researchers imply that power is built on dependencies (Emerson, 1962) or the difference in dependence between firms (Caniëls & Gelderman, 2005). Both companies recognize their ability to affect the other company in different ways. Stoeryd believes that they can influence GGP because of the previous fruitful collaboration and because of their capability of improving the win-win outcome. GGP believes that influence is carried out to some extent and that the possibility to put pressure on their supplier exists. The expressed desire is, however, not to do so because of valuing the relationship not being willing to risk deteriorating it. Provan and Gassenheimer (1994) concluded that the relationship between dependence and exercised coercive power is affected by the level of long-term commitment and trust between the parties. This implies that not all dependencies lead to exercised, whether coercive or non-coercive, power by the party with the highest control over the relationship. In the relationship investigated, several collaborative elements have been identified along with a relative long-term orientation towards the relationship. Even if there are factors pointing to Stoeryd being more dependent on GGP, nothing was found that indicated that GGP was trying to exercise any form of coercive power. It has been expressed that GGP’s long-term orientation is what is keeping them from pushing suppliers. The significant level of trust between the firms is also apparent. The conservative statement that dependencies can indicate the likeliness of asserting influence over another firm (Provan & Gassenheimer, 1994) thus can be supported, however, firmly stressing that the influence in this case is not of coercive nature.

What can be concluded is that both firms’ perceived power situation is more or less in line with the dependence situation derived from the dimensional analysis. Stoeryd’s previously determined relatively higher dependence corresponds to them seeing themselves as having relatively limited ability to assert power influence on GGP. GGP’s acknowledged possibility to influence Stoeryd corresponds to Stoeryd’s relatively higher dependence determined. If the difference in dependence between firms make up power between firms (Caniëls & Gelderman, 2005), this confirms the notion that perceptions of own power position can be appropriate measurements of power (El-Ansary & Stern, 1972).

5.8 Revising the dimensional framework

From the investigation and analysis made in this study so far, the conclusion has been reached that when investigating elements of dependence one must look at several elements and relating elements in question against other elements. By support from the analysis of empirical material an obvious need to revise the tentative framework (table 1) presented in section 2.5.2 has been recognized. It becomes most evident discussing the availability of al-
ternative sources of resources, which has been included in all the other dimensions of analysis and related to elements in those dimensions. Because of this, the authors highlight the importance of analyzing elements in relation to other elements while questioning also the accuracy of having only one or few of the elements as determinant or antecedent of dependence. As the definition and thoughts of Frazier (1983) have been applied, saying that the higher the value expected from the relationship compared to that from alternative relationships, the higher the dependence, it becomes natural to reflect the elements investigated against the accessibility of alternative sources of resources. This standpoint has laid ground for the decision to transform the initial framework of the dependence dimensions to instead create a model integrating the different dimensions and their elements.

Several researchers brought up in this study (Pfeffer & Salancik, 1978; Williamson, 1985; Proven & Gassenheimer, 1994; Gassenheimer et al., 1996) describe dependence as a concept having a number of elements, thus also acknowledging the need of investigating several elements. The framework derived from the theoretical discussion make up the tool of the empirical investigation of this study and is thus also the starting point when formulating the model. The attempt to highlight various elements of dependence in separate dimensions is kept but the categorizations are, after following modifications, included in a model integrating the various dimensions. The finalized model can be found in figure 1. The frame surrounding the model represents the inter-organizational dependence, which is made up by the elements within it. The elements of dependence are elements affecting dependence and therefore are relevant to include in a framework by which to investigate and analyse inter-organisational dependence.

![Figure 1 - Inter-organizational dependence](image)

Taking the starting point in the tentative framework presented in table 1, the first change in the dimensions is the decision to take away the information dimension as a separate di-
mension. As stated in section 5.5, having information about alternative sources of resources and supplying industry can affect dependence but should better be seen along with the actual alternatives in the industry. The choice of removing it as a separate dimension is also because of the less intuitive way to apply it on the supplying side in the relationship. The industry dimension will therefore include alternative suppliers of the resource and possession and access to information about the supplying industry. The second change will be to change the element of switching costs of the buyer to being a separate element outside of the other dimensions. The reason for this is that switching costs are determined also by product characteristics apart from element connected to the industry (i.e. accessibility of suppliers). Gulati & Sytch (2007) make clear that also the level of transaction specific assets can influence the switching costs of changing supplier. The switching costs of the buyer is therefore seen as being determined (shown as dotted arrows in the model) by the industry dimension, the resource characteristics dimension, and the relationship specific asset dimension while affecting the inter-organizational dependence. In the industry dimension, providers of resources represent both buyer and supplier not to be confused with the meaning of a provider as solely the supplying side of the relationship. The element switching costs is aimed only for buyers since it is clearly unintuitive talking about switching costs for a supplier which would be the costs of finding new market opportunities and switching to new customers. The model is not divided into one for the buyer and supplier, simply because of the wish to present the framework in a holistic manner allowing investigation and analysis of inter-organizational dependence with the same framework on both parties in the relationship. Dependence is mutually constructed and therefore both parties must be considered (Caniëls & Gelderman, 2005). Most points can be applied on both parties even if some are not as straightforwardly used when investigating the supplier’s position.

In the relationship specific asset dimension one modification has been made. The investigated case made clear that investments had been made in accordance with needs of the buyer, which implies an increased dependence on the specific customer to which needs investments have been designed. Therefore an element called relationship designed assets/resources has been included, which could be specific assets or resources possessed or a combination of several assets/resources that are designed for a specific relationship. Both the relationship specific assets/resources and relationship designed assets/resources must obviously be considered in relation to the industry and the possibility to create value from such resources in alternative relationships in order to determine whether being relationship specific or relationship designed at all. Therefore, the relationship specific resource dimension and the industry dimension are connected, shown by a two-way arrow in the model.

The discussion in section 5.2 explains that in order to grasp the effect on dependence from proportion of business firms commit to each other, one should also regard the magnitude of transaction in relation to both the availability of alternative suppliers and the ability for a firm to function without the resource, which is mainly determined by the characteristics of the resource. The transaction magnitude dimension, the industry dimension and the resource characteristics dimension have therefore been connected with two-way arrows, representing this requirement of simultaneous analysis. What can be seen in the case is that the proportion of business a firm commits to another may give an indication of the dependence situation but must be seen in relation to what resources is being transferred and how, while seeing this in the light of the alternatives in other relationships. Our reasoning is close to that of Pfeffer & Salancik (1978) saying that dependence is determined by the concentration of resource control and the importance of the resource transferred, where importance consists of both the transfer magnitude and the ability for a firm to function without the resource.
In the resource characteristics dimension most elements of dependence remain the same. What has been highlighted from the relationship between Stoeryd and GGP, is the importance of also investigating the more perceptual sides of the resource characteristics. The high service level of Stoeryd has been concluded to be a strong reason to why the relationship is strong and shown also to affect GGP’s dependence on Stoeryd. Hence, the need to include the factors from the distribution management perspective, the perceived quality of the offering and the perceived effect of the quality on financial results, is verified. Gassenheimer et al. (1996) say that such element more incorporates the behavioral side of inter-org dependence creation. The more intangible elements of resource characteristics in the model clarify and make visible such behavioral sides. Also the investigation made on the relationship in terms of collaboration has provided a thorough explanation which has assisted a deeper understanding of the context, the relationship and the inter-organizational dependence.

The only alteration made in the dimension is to include also the element variety of products provided since it has been shown in the relationship investigated that such a factor increases the complexity in changing supplier, raise the barrier to changing supplier and thus make the value and need of upholding the current relationship higher. As mentioned above, a connective link is made between the resource characteristics dimension, transaction magnitude dimension, and the industry dimension, because of the need to investigate and analyze these dimensions in relation to each other. Further, the characteristics of the offering, being products, resources and service offering, seen in relation to the industry and its availability of alternative suppliers determines switching costs of the buyer and affects the inter-organisational dependence situation.

5.8.1 Power in relation to the model

The case study in this research has been focused upon dependence between firms, but also touched upon the topic of power. Even if the study’s focus on power as such was limited the findings show that the dependence situation between the firms also reflects the companies’ own perception of power position reasonably accurate. If accepting that perceptions of power position can be appropriate estimates of actual power position (El-Ansary & Stern, 1972) one could argue that the model may also be seen as reflecting the power position between firms. Supporting such proposition is also Cox et al. (2002) when claiming that the way a dependence situation is viewed is to be equated to the perceived power position. Important to stress is, however, that in this study the discussion of power is based upon the definition of Moore and Williams (2007) saying that power is the ability to motivate others to engage in activities they otherwise would not have done. This is important since power has many facets and because power position striving from dependence is not the same as assertion or usage of power (Provan & Gassenheimer, 1994). Power, in this thesis, thus stands for the ability and not the power pressure or usage. The model, and an application of it on an inter-firm relationship, can thus be regarded to mirror the power position of a company being the firm’s ability to motivate the other firm to engage in activities they otherwise would not have done.
6 Conclusion

The final chapter of this report concludes the study. First, the main findings of the investigation made are presented as answers to the purpose of this study. Following, is a reflecting discussion on inter-organizational dependence. Third, the theoretical and managerial implications of the findings will be discussed to reflect upon the contributions of the findings. The final section of this report presents some propositions of further research to be done on the subject.

The purpose of this study is to investigate which elements constitute inter-organizational dependence and how inter-organizational dependence influences the relationship between GGP Sweden AB and Stoeryd AB.

The investigated case has provided the rich context which was sought for when initiating this study. The empirical gathering and analysis of the relationship and elements of dependence have also allowed the presentation of a rich picture in which to make sense and reflect any statements made.

In the case relationship Stoeryd AB has made substantial investments that are designed to fit the relationship to GGP, even if not having any assets that are specific only to the GGP relationship. Stoeryd supplies only a fraction of total purchased value of GGP, while GGP purchases represent a significant one third of Stoeryd's total sales. These are the elements most profoundly affecting Stoeryd to be dependent on GGP. Products provided by Stoeryd are not rare and can also be found elsewhere. GGP is dependent not because of large investments specifically made in Stoeryd or because of the criticality of resources supplied to them. Foremost their dependence strives from the high service and flexibility that is combined with Stoeryd's relatively strong features, which, however are easily accessible from competitors to Stoeryd, already being partners of GGP.

This situation of asymmetrical inter-dependence has provided the possibility to assess the tentative framework of elements of dependence, previously derived from theory. After revising the framework, elements of dependence have been determined by formulating a model of four dimensions consisting of elements affecting dependence in an inter-organizational relationship. The model presented (figure 1) answers the first part of our purpose – identifying elements that constitute inter-organizational dependence. The elements verified as significantly affecting dependence, in addition to the ones derived from theory, are variety of products provided and relationship designed assets or resources.

The most evident finding, permeating the whole analysis, is that the different elements must be seen in relation to other elements in order to give any meaningful insight to the dependence situation in a relationship. Further, even if inter-organizational dependence is created within the relationship in question, all elements must be seen in relation to potential external relationships to really be able to evaluate the dependence internal to the relationship. Therefore, the dimensions in the revised model are signified by connecting links representing the reflection by which an assessment of respective dimension and elements of dependence must be made, towards elements in other dimensions.

To the current dependence situation in the relationship between GGP Sweden AB and Stoeryd AB, the following characteristics have been connected. A significant level of cooperation in the Stoeryd and GGP relationship is apparent. Trust, commitment and mutual
interest in the relationship is evident. What previous research many times have stated, the
connection between higher level of dependence and increased collaboration, thus also holds
in this relationship.

Stoeryd AB’s higher dependence has also been connected to a high degree of adaptation behav-
ior in the relationship. Stoeryd is adapting to the requirements of GGP, even though it
may decrease the overall operational efficiency and profitability, in a short term perspective.

GGP has a contract which can secure the vulnerability following dependence connected to
having fewer, closer relationships with supplying partners, which is their current supply
strategy. Stoeryd, being the most dependent party, however, do not formally control the re-
lationship in any way or have contracts to secure the essential stream of financial resources
from GGP. One the other hand, trust and mutual commitment are factors clearly identi-
ified that may help to control the relationship from the risks of dependence. That Stoeryd’s
perceived dependence is lower than it actually is, can be another explanation.

The corresponding party’s dependence, or inter-dependence, can also create a sense of secu-
rity and mutual reliance of both parties leading to, in this case most evidently Stoeryd, to
act less dependent than they actually are. Both parties evidently value the relationship and
wish not to perform actions that may deteriorate the relationship. GGP does influence
Stoeryd but no power pressure, possibly striving from dependence, has been identified.
GGP’s long-term orientation and possibly trust are keeping the company from asserting
power over their supplier.

The perceived power situation of both companies reflects the dependence situation derived.
Indications have also been found that perceptions of own power position can reflect actual
power position. These two conclusions supports previous research claiming that power is
based on dependencies. Such conclusions also support the proposition that the model pro-
vided in this study (figure 1) can also be regarded to indirectly reflect the power position of
firms in an inter-organizational relationship.

6.1 Discussion
The first issue to be discussed is the main findings of this study, namely the presentation of
elements of dependence and following framework. Even though previous researchers from
various perspectives have regarded various elements to be sources, indicators, or maybe even
results of dependence we wish to make clear that the elements derived in this study have
been treated, and should be seen, as factors affecting dependence.

Even though the generated model can have a relatively wide usage potential, it is derived
from a case study and thus the model is most appropriately assessed when having access to
the context of the relationship to reflect upon. From this, an assessment of inter-
organizational can then be done with productive results.

Although some of the elements and issues discussed in this thesis are tangible and measura-
ble, most of them are not. Apart from the transaction magnitude and possibly transaction
specific assets, being expressed in financial value, the elements of dependence are deter-
mained by feelings and perceptions as well as the level of information accessible and perhaps
even the perceived level of information available. This obviously also is the case for much of
the material gathered in the interviews made. We thus question whether it is perceived de-
pendence or actual dependence that is regarded in general or if there really is a difference.
Separating the measurable elements from the intangible ones neither give more insight or a
solution since many of the tangible elements, as proven by this study, must be seen in the
reflection of less tangible ones in order to be meaningfully evaluated. Dependence and perceived dependence, be there any difference, can possibly be seen as the same concept, according to us.

Another issue that caused some trouble was whether to treat inter-organizational dependence as one concept or if it, in this case, should be divided as two parties dependence within a relationship and be treated as such. A separation has not been made because of apparent difficulty of doing so. Since dependence is created within a relationship and that a party’s dependence may be, at least partly, determined by the respective side’s dependence made a separation or some kind of break down difficult and felt less intuitive. The possible affect on one’s dependence from the other party’s dependence is a dimension not addressed in this study, something which is left to research more focused on interdependence.

Finally, the implications discussed cannot be determined to, in any way, be caused by dependence. It may even be harsh to use the term influence which has been used in the purpose of our study. The analysis and conclusion have though been done keeping this important aspect in mind, not to mislead readers. Any implications found and discussed are handled, and should be regarded, as more of correlations to the dependence situation instead of being results from it.

6.2 Managerial Implications

The general managerial implications derived from this investigation are not so numerous. The fact that this is a case study makes the managerial suggestions from it relatively restricted to this specific case or firms in similar situations. The main general implication is, however, that a model has been produced which can very well be used for analysis of most supplier-buyer relationships of varied collaborative character. The model can possibly also be applied on other business relationships with value flowing between parties like, for instance, horizontal alliances. The model also visualizes another general implication, that an assessment of dependence elements should be done in relation to other elements and most importantly, alternative relationships.

Reflecting on the possible implications that can be found relating to the companies specific to the case, a number of suggestions will be made. Stoeryd has been found to be quite dependent on GGP, mostly due to the high level of sales located to GGP and the presence of competitors. Yet, Stoeryd has not instigated any contracts to secure sales to GGP. The contracts established today only include the duties that Stoeryd has towards GGP. Trust and contracts must not be seen as opposites instead detailed contracts where both parties agree on what is expected of them could gain both parties. Even if thing are peaceful today, contracts can help avoiding potential legal disputes if ever a disagreement were to arise. A thorough consideration regarding this is thereby suggested to Stoeryd.

Other suggestions not directly connected to the dependence situation have also been generated. The relationship is of collaborative character, and both firms state that there is heavy communication between the firms and both information and knowledge are exchanged. This is, however, an area that has been found to have improvement potential since both firms have indicated that the heavy communication is also making the relationship management inefficient. One reason for this is the lack of standardized procedures for the communication and the procurement process for prototypes, which should be implemented. This may allow GGP to state their needs more explicitly, as it has been found that there may be somewhat of a gap between the message communicated and the message received. This would also contribute to the efficiency in the new product development and
possibly also decrease the number of changes required for creating the final product. Further, it seems possible to improve the communication also in a wider perspective. Stoeryd has many different contacts in GGP and to manage this communication in a more efficient and possibly more systematic way can increase visibility of the overall relationship, gaining both parties. GGP wants education and production method development of their suppliers which could be more suitably initiated if needs are communicated clearer. GGP can possibly also provide Stoeryd incentives that could make Stoeryd more likely to make such investments in education, machinery and technology that GGP is requesting, possibly also with investment assistance.

Even though information and knowledge are shared to a large extent the aspect of decision alignment could provide the firms with potential benefits. The experienced feeling is that a common strategic platform for, for example, the procurement process decision can gain both companies. The firms have a good communication but they could reflect on the possibility to further strengthen the relationship by formulating some common strategy with mutual goals which also could further improve communication and collaboration.

Finally, today most of the competence transfer in the relationship is done on learning by doing basis. This is not necessarily wrong; instead a lot of competence and experience is acquired this way. However, taking it to an explicit level trying to articulate, communicate and transfer with more awareness when doing so, may highlight the particular needs of both the companies. Thus learning and knowledge transfer can also be focused where it is most needed.

### 6.3 Theoretical implications

The tentative framework in table 1 is the product of the theoretical study and the following empirical investigation and represents the elements of inter-organizational dependence. The need to recognize several elements for assessing the complex concept of dependence has been concluded. The elements verified from this study make up the model which is regarded to be a contribution in terms of being a suitable model in assessing dependence in business relationships. The investigation and analysis made in this study have also come to the conclusion that when investigating elements of dependence one must reflect elements in question against other factors. Therefore, the presented model also visualizes the need for seeing these elements in relation to other elements. It is thereby a more integrating and realistic framework to use when analyzing dependence situation between firms. The model originates from the perspectives of transaction cost economics, strategic management, and distribution management, which is regarded as a strength. The various sources give the model broader applicability and the theoretical foundation increases credibility since validating the original elements.

Investigating the case relationship between of Stoeryd AB and GGP Sweden AB has also recognized the significance of acknowledging the intangible factors of a relationship to understand the dependence between firms. The behavioral or relational characteristics did, in this case, show to be a major element affecting dependence in terms of experiences, service level, and communicative character of the relationship. Hence, accounting for economical, behavioral and factors reflecting the offering internal to a relationship, in relation to alternative relationships is the only way to grasp inter-organizational dependence in an acceptable way.

Seeing the dependence situation in its context has given a cohesive picture and better understanding of the phenomenon. Investigating the relationship and its collaborative charac-
ter has created a context in which to investigate dependence, which has also helped strengthening and verifying points made about the dependencies in the relationship. On the other hand, a more thorough investigation with a more narrow theoretical focus may have provided more depth to our study. Nevertheless, the authors feel that there has been a theoretical contribution from this study. New insights and reflections about dependence in this specific context have been presented. A model by which to investigate the phenomena has been generated, simplifying the obvious complexity of doing so.

### 6.4 Further research

The authors believe it is important to continue the research efforts on dependence and inter-dependence since a general trend towards companies becoming more long-term and collaborative in supplier relations is evident. Previously touched upon, this case study identifies an asymmetric yet mutual inter-dependence in the relationship. Situations of business inter-dependence are also an area where academics previously have sought for more research efforts.

The model of inter-organizational dependence presented in this report would most certainly benefit from being tested by further research, in order to become more generally applicable to inter-firm relationships. Preferably this can be done using multiple case studies in various business contexts. Power is a topic addressed as secondary in this thesis. Therefore the proposition made that the model presented (figure 1) can also be seen as reflecting the power position of firms can benefit from being further studied and thus strengthened, accepted, or revised.

Inter-firm relationships are changing and evolving and therefore it would be beneficial to perform a longitudinal study similar to this one on the topic. This can give further insight to inter-organizational dependence and to a larger extent study changes in dependence structure and thereby also possible cause and effect relationships.
References


Stoeryd AB. (2008c). *Stoeryd AB: Mekanisk Produktion [Presentation material]*. Tranås: Stoeryd AB.


Appendix 1 – Interview guide English

Supplier Questions

Interviewee facts

Name:
Number of years employed at Stoeryd AB:
Title:
Work description:

Relationship questions

How do you experience the relationship, in general?
In what ways do you share information between the organizations?
Are your transactions and relationship well coordinated?
Do you have any agreement documented on the coordination of the relationship?
What do you share between the organizations?
Have information sharing and coordination made your relationship and transactions efficient?
Would you say that you share risks and costs in your relationship between you?
  - Is GGP’s contribution fair? (for example investments made in the relationship)
  - Is Stoeryd’s contribution fair? (for example investments made in the relationship)
Would you say that you share the benefits of your relationship between you?
  - Are you reasonably paid for your sold products?

Product questions

Please describe the products that Stoeryd supply to GGP
  - Product groups
  - Specifications

How complex are the products purchased by GGP as compared to other products sold by Stoeryd?
Does the manufacturing of these products require a high degree of specialized knowledge?

Negotiation of contracts

What type of contracts is there established between Stoeryd AB and GGP?
How long-term are the contract that you sign with GGP/Stoeryd?
What do the contract terms include?

**Questions concerning the dependence situation**

**Transaction specific asset dimension**
To what extent does Stoeryd possess assets that are specific to the relationship with GGP, i.e. which would be of little or no value, should the relationship end?

*Tangible*
- Machinery
- Equipment
- Products under processing

*Intangible – Human capital*
- Process knowledge
- Capabilities
- Technical/Special knowledge

Do you see any risk with this?

How does the fact that you have/do not have transaction specific assets affect the relationship with GGP?

Have the GGP transactions specific assets changed during the last five years?

**Resource characteristics dimension**
How critical are the resources provided to you from GGP (in terms of financial resources), i.e. what is Stoeryd’s ability to function without the resource?

Do you receive other resources from GGP?

How does this affect the relationship with GGP?

How has this changed during the last five years?

**Resource transaction magnitude dimension**
How large proportion of Stoeryd’s total sales is committed to GGP?

How does this affect the relationship with GGP?

How has this changed during the last five years?

**Industry dimension**
To what extent would it be possible for Stoeryd to replace the resources provided by GGP,
should the relationship end?

How are the market prospects for Stoeryd?

How do you look at Stoeryd’s competitiveness?

Considering the alternative sources of resources, how does this affect your relationship with GGP?

How has the market opportunities for Stoeryd (alternatives to GGP) changed during the last five years?

Do you believe it would be difficult/costly for GGP to change supplier the products today?

**Information dimension**

To what extent do you have information about alternative market opportunities for Stoeryd?

**Perceived power question**

Do you consider Stoeryd to have the ability to motivate others to engage in activities they would not have done otherwise?

- How?
- To what extent?
- Why/Why not?
Buyer Questions

Interviewee facts
Name:
Number of years employed at GGP Sweden AB:
Title:
Work description:

Relationship questions
How do you experience the relationship, in general?
In what ways do you share information between the organizations?
Are your transactions and relationship well coordinated?
Do you have any agreement documented on the coordination of the relationship?
What do you share between the organizations?
Have information sharing and coordination made your relationship and transactions efficient?
Would you say that you share risks and costs in your relationship between you?
  - Is GGP’s contribution fair? (for example investments made in the relationship)
  - Is Stoeryd’s contribution fair? (for example investments made in the relationship)
Would you say that you share the benefits of your relationship between you?
  - GGP: Are prices of purchased products fair?

Product questions
Please describe the products that Stoeryd supply to GGP.
  - Product groups
  - Specifications
How complex are the products as compared to other products sold by Stoeryd?
Does the manufacturing of these products require a high degree of specialized knowledge?

Negotiation of contracts
What type of contracts is there established between Stoeryd AB and GGP?
How long-term are the contract that you sign with GGP/Stoeryd?
What do the contract terms include?
Questions concerning the dependence situation

Transaction specific asset dimension

To what extent does GGP possess assets that are specific to the relationship with Stoeryd, i.e. which would be of little or no value, should the relationship end?

Tangible
- Machinery
- Equipment
- Products under processing

Intangible – Human capital
- Process knowledge
- Capabilities
- Technical/Special knowledge

Do you see any risk with this?

How does the fact that you have/have not transaction specific assets affect the relationship with Stoeryd?

Have the Stoeryd transactions specific assets changed during the last five years?

Resource transaction magnitude dimension

How large proportion of GGP’s total purchases is made from Stoeryd?

How does this affect the relationship with Stoeryd?

How has this changed during the last five years?

Resource characteristics dimension

How critical are the resources provided to you from Stoeryd, i.e. what is GGP’s ability to function without the resource?

Are the products provided from Stoeryd technically complex? Differentiated?

How do you regard the quality of the products?

Do you receive other resources from Stoeryd?

Reflecting on the general importance of the resources provided by Stoeryd, how does this affect the relationship with GGP?
- Prototypes
- Routine based purchases

How has the importance of resources provided by Stoeryd changed during the last five
years?

**Industry dimension**

How difficult would it be for GGP to replace the resources provided by Stoeryd, should the relationship end?

Are there many alternative suppliers?

Would it be costly to change supplier?

Reflecting on the possibility to change supplier for the products supplied by Stoeryd, how does this affect your relationship to Stoeryd?

Do you contract any other suppliers to provide you with products similar to the once provided by Stoeryd AB?

- in that case, to what extent and why?

Has the situation regarding alternative suppliers changed during the last five years?

How important are Stoeryd AB to GGP in terms of developing prototypes?

- Compared to other actors on the market?

**Information dimension**

To what extent do you have information about alternative suppliers to Stoeryd?

- Price level of alternative suppliers?

- Capacity of alternative suppliers?

**Perceived power question**

Do you consider Stoeryd to have the ability to motivate others to engage in activities they would not have done otherwise?

- How?

- To what extent?

- Why/Why not?
Appendix 2 – Interview guide Swedish

Leverantörsfrågor

Fakta om den intervjuade

Namn:
Antal år på Stoeryd AB:
Titel:
Beskrivning av tjänsten:

Relationsfrågor

Hur upplever du ert förhållande till GGP generellt?
På vilka sätt delar ni information mellan organisationerna?
Är erna transaktioner och relation välkoordinerade?
Har ni någon dokumenterad överenskommelse över hanteringen av relationen?
Vad delar ni mellan organisationerna?
Har informationsdelning och koordination gjort ert förhållande mer effektivt?
Skulle du säga att Stoeryd och GGP delar på riskerna och kostnaderna för relationen mellan varandra?
   - Är GGP:s insats/bidrag rättvist? (investeringar som gjorts för relationen)
   - Är Stoeryds insats/bidrag rättvist? (investeringar som gjorts för relationen)
Skulle du vilja säga att ni delar fördelarna av relationen mellan er?
   - Får ni skäligt betalt för era sålda produkter?

Produktfrågor

Var snäll o beskriv produkterna Stoeryd tillhandahåller GGP
   - Produkt grupper
   - Specifikationer

Hur komplexa är de produkter som säljs till GGP i förhållande till övriga produktsortimentet?
Kräver tillverkningen av dessa produkter en hög grad av specialiserad kunskap?

Förhandling av kontrakt

Vilka typer av kontrakt finns upprättade mellan Stoeryd AB och GGP?
Över hur lång tid sträcker sig kontakten upprättade mellan GGP och Stoeryd?
Vad inkluderas i kontrakten?

**Frågor angående beroendeförhållandet**

**Dimensionen av transaktionsspecifika tillgångar**

Till vilket utsträckning har Stoeryd AB tillgångar som är specifika i förhållande till GGP, som skulle ha litet eller inget värde efter ett avslutat samarbete.

*Gripbara*
- Maskiner
- Utrustning
- Produkter under arbete

*Ogripbara – Humant capital*
- Process kunskap
- Förmågor
- Teknisk/specialiserad kunskap

Ser ni någon risk med detta?

Hur påverkar det faktum att ni har/inte har transaktionsspecifika tillgångar er relation till GGP?

Har era transaktions-specifika tillgångar gentemot GGP förändrats under de senaste 5 åren?

**Dimensionen av resursernas karaktär**

Hur kritiska är resurserna GGP förser er med (i finansiella termer), dvs. vad är Stoeryds förmåga att fortsätta verksamheten utan denna resurs?

Förser GGP er med andra typer av resurser?

Hur påverkar detta ert förhållande till GGP?

Hur har detta förändrats under de senaste 5 åren?

**Dimensionen av transaktionsmagnituden**

Hur stor andel av Stoeryds totala försäljning utgörs av produkter till GGP?

Hur påverkar detta faktum er relation till GGP?

Hur har detta förändrats under de senaste 5 åren?

**Industridimensionen**
Till vilken utsträckning skulle det vara möjligt för Stoeryd att ersätta de resurser försedda av GGP, om relationen skulle upphöra?

Hur ser marknadsmöjligheterna ut för Stoeryd AB?

Hur ser du på Stoeryds konkurrenskraftighet?

Med de alternativa inkomstkällorna tagna i beaktning, hur påverkar detta ert förhållande till GGP?

Hur har Stoeryds marknadsmöjligheter förändrats under de senaste 5 åren?

Tror du att det skulle innebära en hög kostnad/ skulle vara svårt för GGP att byta leverantör av produkterna Stoeryd förser dem med?

**Informationsdimensionen**

Till vilken utsträckning har du information/vetskap av alternativa marknadsmöjligheter

**Fråga på det upplevda makt förhållandet**

Anser du Stoeryd ha förmågan att motivera och påverka GGP att agera på ett sätt de annars inte hade gjort?

- Hur?

- Till vilken utsträckning?

- Varför/varför inte?
Kundfrågor

Fakta om den intervjuade

Namn:
Antal år på GGP:
Titel:
Beskrivning av tjänsten:

Relationsfrågor

Hur upplever du ert förhållande till Stoeryd AB generellt?
På vilka sätt delar ni information mellan organisationerna?
Är era transaktioner och relation välkoordinerade?
Har ni någon dokumenterad överenskommelse över hanteringen av relationen?
Vad delar ni mellan organisationerna?
Har informationsdelning och koordination gjort ert förhållande mer effektivt?
Skulle du säga att Stoeryd och GGP delar på riskerna och kostnaderna för relationen mellan varandra?
  - Är GGPs insats/bidrag rättvist? (investeringar som gjorts för relationen)
  - Är Stoeryds insats/bidrag rättvist? (investeringar som gjorts för relationen)

Skulle du vilja säga att ni delar fördelarna av relationen mellan er?
  - GGP: Är priserna på Stoeryds produkter skäliga?

Produktfrågor

Var snäll o beskriv produkterna Stoeryd tillhandahåller GGP
  - Produkt grupper
  - Specifikationer

Hur komplexa är de produkter som säljs till GGP i förhållande till övriga produktsortimentet?
Kräver tillverkningen av dessa produkter en hög grad av specialiserad kunskap?

Förhandling av kontrakt

Vilka typer av kontrakt finns upprättade mellan GGP och Stoeryd AB?
Över hur lång tid sträcker sig kontakten upprättade mellan GGP och Stoeryd?
Vad inkluderas i kontrakten?

**Frågor angående beroendeförhållande**

**Dimension av transaktions specifika tillgångar**

Till vilket utsträckning har GGP tillgångar som är specifika i sitt förhållande till Stoeryd AB, som skulle ha litet eller inget värde efter ett avslutat samarbete.

**Gripbara**

- Maskiner
- Utrustning
- Produkter under arbete

**Ogripbara – Humant capital**

- Process kunskap
- Förmågor
- Teknisk/specialiserad kunskap

Ser ni någon risk med detta?

Har era transaktions-specifika tillgångar gentemot Stoeryd AB förändrats under de senaste 5 åren?

**Dimensionen av vidden på transaktionerna**

Hur stor andel av GGP’s totala inköp kommer från Stoeryd AB?

Hur påverkar detta er relation till Stoeryd AB?

Hur har detta förändrats de senaste 5 åren?

**Dimensionen av resursernas karakter**

Hur kritiska är de resurser som Stoeryd AB förser er med dvs. vad är er förmåga att fortlöpa utan denna resurs?

Är produkterna försedda av Stoeryd AB tekniskt komplexa? Differentierade?

Hur ser ni på kvalitén på produkterna?

- Servicenivån (leveranssäkerhet, flexibilitet, kund service)?

- Är kvalitén/service -nivån viktig för GGP:s verksamhet?

Vilka av produkter som Stoeryd AB förser er med är viktigast för er.

- Prototyper
- Rutinmässiga inköp

Förser Stoeryd AB, GGP med andra typer av resurser?

Generellt sett, med hänsyn till de resurser Stoeryd AB förser er med, hur påverkar det er relation till Stoeryd AB?

Sett på en 5 års period, har resurserna från Stoeryd AB förändrats i betydelse?

**Industridimensionen**

Till vilken utsträckning skulle det vara möjligt för GGP att ersätta de resurser försedda av Stoeryd AB, om relationen skulle upphöra?

Finns det alternativa leverantörer?

Anlitar ni flera leverantörer er för att förse er med produkter liknande de från Stoeryd AB?

- I så fall, hur många och varför?

Skulle det vara kostsamt att byta leverantör?

Med möjligheten av att byta leverantör i beaktning, hur påverkar detta er relation till Stoeryd AB?

Har möjligheterna att byta leverantör förändrats de senaste 5 åren?

Hur viktiga är Stoeryd AB för er i hänseende till att ta fram nya prototyper?

- i förhållande till andra aktörer på marknaden?

**Informationsdimensionen**

Till vilken utsträckning har ni information av alternativa leverantörer utöver Stoeryd AB?

- Prisbilden hos andra leverantörer?

- Kapaciteten hos alternativa leverantörer?

**Fråga på upplevda maktförhållande**

Anser du GGP ha förmågan att motivera och påverka Stoeryd AB att agera på ett sätt de annars inte hade gjort?

- Hur?

- Till vilken utsträckning?

- Varför/varför inte?