FORMING STRATEGIC ALLIANCES: THE ROLE OF SOCIAL COMPATIBILITY

By Gro Ladegård

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Preface

Denne avhandlingen er skrevet på engelsk. Det ble også min høyere avdelings oppgave. Etter seks år med engelsk som arbeidsspråk er mitt behov for å uttrykke meg skriftlig på morsmålet påtrengende. Siden dette forordet ikke er av faglig art, tillater jeg meg å forfatte det på mitt eget språk, som tross stor ordfattigdom i forhold til engelsk inneholder endel vendinger som mer presist kan uttrykke de tanker og følelser som for meg naturlig hører hjemme i et forord.

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Kvaliteten på vitenskapelig arbeid hviler på kollegial kritikk, har jeg lært på Handelshøyskolen. Et slikt imperativ er tidvis en forbannelse, opplevelsen av kritikken er svært avhengig av kildene og settingen, for ikke å snakke om målpersonens generelle selvkritiske holdning. Heldigvis har jeg hatt kolleger med

utstrakte evner til fugleperspektiv og kritisk sans til det bestående - Donatella dePaoli, Laura E.M. Traavik og Irmelin Drake fortjener en stor takk. Mange varme tanker til dem - måtte akademia forstå at det er slike kvinner som trengs. Etter hvert som man sosialiseres, lærer man å sette mer pris på den kollegiale kritikken, det kan til og med gå så langt at en ber om den selv. Og i en slik situasjon har Norges Handelshøyskole et bredt spekter av konstruktive mennesker å tilby. Jeg vil gjerne takke kolleger både i SNF og på Institutt for Organisasjonsfag, som representerer et faglig miljø med mange sterke sider, og som i høy grad har bidratt til en faglig utvikling som forhåpentligvis er representert i avhandlingen. En særlig takk til Torstein Nesheim som har gjennomgått store deler av det jeg har skrevet, for både meget gode kommentarer og en særs oppmuntrende holdning.

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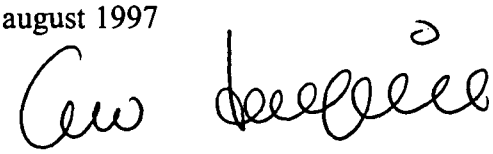
Tross alle gode hjelpere underveis er det jeg som har styrt båten, og alle feil og mangler, skader og hull i skroget hviler på mine skuldre alene.

Oslo, 11. august 1997



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Abstract

This thesis investigates how social compatibility between the parties of strategic alliances in the formation phase affects the ability to realize outcomes from the cooperation. This research question has two sources:

The first is the general development within business relationships, where traditional market mechanisms, which are based on supply and demand, and organizations, which are based on bureaucratic control mechanisms, increasingly are supplanted with long-term, stable relationships between the market actors. One example is outsourcing - where organizations split up and establish long-term relationships as partly independent actors, the other is strategic alliances - where autonome actors establish more mutual dependency through long-term cooperation. The result is an increasing number of «quasi-organizations» operating in the intermediate space between market and hierarchy. This raises the question of what role social processes play in business relationships.

The other source is the line of theory called contracts theory, specifically the part that adresses relational contracts. According to the reasoning within this line of theory, long-term contracts imply a quasi-interdependence between firms, which, put simply, requires more informal, social mechanisms of governance than the market or a traditional organization. Most commonly, these governance mechanisms are conceptualized as relational norms, or trust. My main question vis-a-vis this line of theory is *how* such mechanims are established, as they rarely are the result of some «invisible hand» as in a market, nor unilaterally shaped as in a bureaucratic organization. Underlying the study is the assumption that social governance mechanisms are developed in early phases of a strategic alliance, and that personal interaction plays a major role in this development.

These two sources lead to the question of how a strategic alliance is formed, and particularly what role the social context plays for success during the formation phase. The main proposition put forward in the thesis is that specific aspects of the social relationship between the actors of the alliance - which I have defined as *social compatibility* - is a fundamental condition for the realization of gains through collective efforts. Gains are here defined in relation to the purposes of the alliances, i.e. generally conceptualized as the accomplishment of the goals for which the alliances were formed. From this general assumption, a model is specified for empirical testing. The model is tested on 54 strategic alliances in the formation phase, all members of the Norwegian Business Network Programme. The model specifies three relationships between certain variables, which all are proposed to be conditioned on social compatibility between the parties: To what degree potential gains result in realized gains, to what degree potential gains affect satisfaction with the relationship, and to what degree potential gains make the alliances more sustainable. *The hypotheses predict that for all these relationships, the effects will be stronger in alliances with high levels of social compatibility.* Social compatibility is defined as comprising two dimensions: Social fit and reciprocity. Social fit comprises similarities on certain attributes along two dimensions: Company attributes and personal attributes. Reciprocity is the degree to which the parties restraint from pursuing self-interest on other parties' expenses.

The hypotheses were tested by splitting the sample into two groups, one with alliances with high levels of social compatibility, and one with low levels. Regression analyses were conducted separately in each group for all the three relationships, and the difference between the two groups was computed.

The results are mixed. First, the moderating effects of social compatibility differ largely between types of alliances, i.e. between alliances that have different goals. Second, the effects of the two dimensions of social compatibility - reciprocity and social fit - differ. Third, the results regarding social fit are somewhat inconclusive, as the moderating effects vary according to what grouping criteria is used in the subgroup analysis.

When the results are summed up for all types of gains, they show strong support for the moderating effects of reciprocity, but weak support for social fit. This changes when the analysis is split into different types of alliances. In those who have the goal of increasing sales, it shows that social compatibility does not affect the ability to realize potential gains from these goals if the increase is to be pursued in present markets. Regarding those with the goal of entering into *new* markets, however, there are substantial differences between the alliances with high vs. low degree of social compatibility. Especially reciprocity between the individual parties of the alliances seems to be a condition for the realization of gains from entering into new markets. Social fit does not show an equally strong impact. First, I split the sample into two groups by using the mean value of social fit (which was the splitting method for reciprocity). There are no differences between these groups. I then distinguished the alliances with really low values of social fit from the medium/high levels. With this splitting method, social fit has quite strong moderating effects. This means that only in alliances with very low levels of social fit, the realization of gains is more difficult, and the general hypothesis of social fit is only partially supported.

In the alliances with the goal of increasing power vertically - either through a stronger negotiation position towards their customers or their suppliers - reciprocity between the parties also shows to be a condition for realization of potential gains. Regarding increased power towards suppliers, social fit does not affect the realization of gains, while regarding customers, the results are inconclusive, as the moderating effects again depend on the method for splitting the groups. It seems that social fit has an effect only for very low values - i.e. that this variable is not a general moderator, but can affect the realization of gains in alliances with very low levels of social fit.

In alliances with the goal of product development - either through developing new products themselves, or through broadening their product spectrum through the alliance - the results are also mixed. Reciprocity does not moderate the relationship between potential and realized gains in these alliances, which indicates that product development is an activity that to a larger degree requires independent actions from the parties, and

that collective behavior is less important. Social fit, however, has effects on the realization of gains in these alliances, independent of the splitting method of the groups. The results thus indicate that similarities between the parties is important for the results; however, it is important to note that this holds for similarities on company attributes only, not on personal attributes.

There is no support for the hypotheses that social compatibility moderates the relationship between potential gains and satisfaction, or between potential gains and sustainability. Actually, the results indicate that the higher the potential gains in a strategic alliance, the more dissatisfied the participants are, no matter the degree of social compatibility. The most plausible explanation to this is that high potential gains create high expectations, which are difficult to meet - as degree of satisfaction in general is dependent on initial expectations.

In alliances with high potential gains, the participants are more prone to expect the relationship to last longer if the level of reciprocity is high, which is supportive for the hypothesis. Social fit in general has no effects on expected continuity.

The results have implications for both theory and practice. First, they point to the important issue of interaction between social and economic issues in interorganizational relationships, which actually seem to affect results in many types of alliances. A further theoretical refinement of this topic seems fruitful. Second, the results regarding outcome variables are interesting, as satisfaction and continuity seem to represent different aspects of outcomes than realized gains, and to be determined by different variables. This further underscores the importance of integration of social and economic theories in these types of studies, as well as a further work on definitions of success variables, both in the formation and the operation phase of such relationships.

The focus on the formation phase also provides useful contributions to managerial practices. The strong results regarding reciprocity indicates that managers should place a heavy weight on collective attitudes in early phases of a relationship. They should

also be careful in their enthusiasm towards the positive effects of "personal chemistry" in the creation of results, as social fit does not in general have any strong effects, but rather act to create expectations which might be unrealistic. The results regarding social fit shows that only if the managers and companies are very different, there might be some integration problems, but a large degree of similarity does not necessarily affect results positively.

Chapter 1
Introduction

"I love mankind, it's
people I can't stand"
Linus

Present research on interorganizational relationships (IORs) indicates an increasing tendency to establish quasi-independent relationships between firms, as alternatives to market transaction or vertical and horizontal integration (Heide & John, 1990; Heide & John, 1992). There is also a growing tendency within Norwegian firms to «outsource» activities which traditionally have been produced in-house. From these tendencies follows an increase in new ways to organize business exchange, as different types of «hybrides» between markets and hierarchies. Establishing a long-term cooperative relationship is one solution to the organizing problem when neither market nor hierarchy fit the requirements of the exchange in question. These long-term relationships between firms may have a variety of purposes, forms and contents, and a substantial amount of research has been conducted in order to investigate what kind of structures and governance systems that are suitable for such kinds of exchange (Heide, 1994).

As a result of this development, the question of how to establish successful strategic alliances has become a crucial issue for practitioners as well as researchers in this field. Strategic alliances require adaptation and coordinated responses between the actors, and imply some degree of interdependence between them. Still, the nature of these types of relationships imply that they do not provide the actors with strong, formal coordinating and control mechanisms, as e.g. an internal organization does (Williamson, 1991). This raises new challenges for organizations and their managers, both regarding strategic issues, and, perhaps even more important, the managing of long-term, quasi-independent relationships. The traditional approach to strategic alliances focus on

strategic dispositions, structures and governance (Jarillo, 1988). However, the question can be raised of whether these new forms of organization do not require new managerial competencies, some sort of *social intelligence*. As a strategic alliance to a large degree is based on an *implicit contract* (Rousseau, 1989), the social mechanisms in the relationship are crucial for its success. Recent research has also broadly focused on the role of social processes in long-term cooperative interorganizational relationships (IORs). However, how social aspects of the relationship affect *collective performance* in interfirm cooperation is not yet explored. The present thesis is a contribution to filling this gap.

I investigate how social compatibility between the individual parties affect the realization of gains at the relationship level, through focusing on strategic alliances in the formation phase. The study is based on a differentiation of outcomes between different phases of a strategic alliance, where I conceptualize collective gains at the alliance level as *accomplishment of goals* in the formation phase. For example, alliances which are established for the purpose of entering into new markets, performance at the alliance level is defined as gains from accomplishing this goal, i.e. the aquiring of market shares in the new market. This is thus proposed to be the criteria for performance in early phases of an alliance, while gains at the firm level - e.g. increased profits for each firm from sales in the new market - are ultimate objectives that will be accomplished only at later stages of the cooperation.

The main proposition in the thesis is that social compatibility between the parties is a *condition* for the realization of potential gains at the alliance level. I thus hypothesize that social compatibility is a *moderator* of the relationship between potential and realized gains, which is a different approach than most studies of cooperative IORs, which mainly focus on direct effects of social structures on outcomes.

1.1 Research questions

According to general economic theory, the overall purpose of economic exchange is profits, or gains. Further, general economic reasoning regarding market mechanisms indicate, first, that resources flow to the most efficient areas of the economy, and, second, that inefficient entities (institutions, organizations, alliances) are selected out by the market. If we conceptualize a situation as a market of firms and potential cooperative projects (alliances), we should according to this general reasoning expect the cooperative projects with the highest potential gains to be realized. Thus, we would expect a higher degree of realized gains in alliances with high initial potential gains. Further following this reasoning, the alliances with high potential gains should also have a larger probability of realizing other desired outcomes, as more resources are channeled to these alliances.

The study is thus based on the assumptions that the parties of a strategic alliances are rational actors, which invest resources in a cooperative arrangement with the purpose of realizing some gain potentials. These potentials are created through the collective effort of the participants. I hypothezise that social compatibility is a central condition for their ability to accomplish their rational intentions through these collective efforts.

Researchers stress the importance of social context in economic exchange, and it can be argued that purely economical explanations can be improved through sociological approaches. One argument for this is that economic institutions do not arise automatically as a result of external circumstances, rather, they can be conceived of as "socially constructed" (Granovetter, 1992). In the explanation of economic mechanisms, the actors often act as «black boxes», only described through basic assumptions of preferences (utility maximization) and motives (self-interest seeking). It is precisely through acting on these preferences and motives that the aggregation of individual behavior creates the market mechanisms of efficiency commonly denoted as

«the invisible hand». However, regarding the forming of cooperative IORs, pure economic explanations seem especially insufficient, and the conception of social construction specifically relevant, because it focuses on the social context of economic exchange as an important condition for efficiency. This is also the basis for the development of institutional economics. But how does this social construction come about? And what specific role does the social context play in economic exchange of the type in question? These questions are in this thesis approached through an investigation of the different phases of a strategic alliance, where the formation phase is focused as the specific issue of interest. It is believed that the social mechanisms are expecially crucial at this stage of a relationship, and an explanation of the role of the social relationship between the parties during the formation phase can contribute to our understanding of the importance of social, relative to economic, mechanisms in cooperative IORs. Thus, the present thesis is applying a process model of a cooperative IOR as a framework for understanding, which models such a relationship as different phases, each with its own characteristica and criteria for performance. Through the early stages of a cooperative IOR, the parties meet, negotiate formal and informal agreements, and go through a trial-and-error period before more permanent structures are settled. At this stage, it is necessary to develop mutual understanding and agreements on the substance of the exchange as well as "rules of the game" for the relationship. It can be argued that especially through this phase, the social construction is at the core of the relationship, through the interaction processes and the informal sense making that take place (Ring & Van de Ven, 1994). The parties' interpretations and perceptions of the terms and conditions of the agreements, as well of the other parties of the relationship, will determine how each party manage its part of the relation and the outcomes that the alliance yields, the parties here defined as the managers representing their organizations in the alliance.

The formation phase is thus interesting and important to investigate, both because it lays the ground for the implementation of the contract agreements - the functioning of the relationship in the operation phase is obviously dependent on a thorough preliminary work. But this phase is also interesting because of the specific role that social

integration plays, and it is through investigating this phase we can obtain a better understanding of the social mechanisms inherent in cooperative relationships between firms in general.

Based on this conception of the formation phase in a strategic alliance, the following research questions arise:

- What are the most central criteria for success in the formation phase of a strategic alliance?

- How does the social relationship between the parties affect alliance success in the formation phase, and what is the essence of this social relationship?

- Is the realization of potential gains conditioned upon the social relationship between the individual managers in an alliance?

The present study investigates these questions. The main proposition is that during the formation phase, social compatibility between the parties is a condition for performance in a strategic alliance. This proposition is modeled in figure 1.

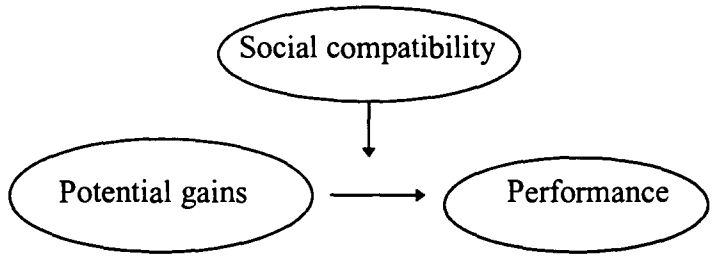

Figure 1: Overall model

The social context as defined here concern specific aspects of the relationship between the parties. This context act as a basis for concrete actions, and is conceptualized as social compatibility in the model. Social compatibility is proposed to moderate the

effects of economic mechanisms, in the way that the realization of gains is conditioned on the degree of social compatibility between the parties of the strategic alliance. The model thus proposes that *during the formation phase of a strategic alliance, the social compatibility between the parties will moderate the effects of potential gains on performance*. If this is true, it might be that strategic alliances with high gain potentials never come into operation, because of a dysfunctional social context. In a similar vein, strategic alliances with low gain potentials - that according to economic theory should not come into operation - might be formed on a social basis only. The question is what role social compatibility play, relative to the economic factors, i.e. potential gains.

In organizational research, the context in general is often defined as intermediate variables, based on the general frame of contingency theory. This is the case for e.g. structural contingency theory (Galbraith,1973) and situational theory of leadership (Yukl, 1981), where structure and the situational factors, respectively, act as conditions for effectiveness. Thus, according to the integrated leadership model of Yukl, situational factors moderate the relationship between leadership behavior and organizational results. The present model adopts this frame of understanding. Similar to these types of models, the social context will here thus be proposed to moderate the relationship between potential gains and the desired outcomes.

1.2 Purpose and contribution

The overall purpose of the study is to gain more knowledge about an almost neglected topic: The social relationship between managers in the formation of long-term cooperative relationships between firms. We know that the social context is important, but little about how it actually affects performance, and what role it actually plays, e.g. relative to economic and strategic issues. Anecdotal evidence indicates that the socalled "personal chemistry" plays an important role in business relationships, and research shows that non-contractual relations are prevalent in business (Macaulay, 1963). One of the largest failures in Norwegian business during the past years, the unsuccessful

aquisition of Skandia by UNI Storebrand, was partly attributed to such informal, interpersonal processes (Ims, 1994). The present research can thus be a contribution to practitioners, through providing more specific knowledge about these social processes. Specifically, it can be helpful in the way it points to the fact that social capability is an important attribute to consider when appointing managers to positions with responsibility for interfirm relationships.

Regarding existing theory on strategic alliances, this thesis can also represent a contribution, both because it outlines a tentative framework for the study of different phases - specifically the formation phase - in strategic alliances, and because it integrates theory from such different fields as marketing, strategy and social psychology. This integration is, in my view, necessary for the ability to understand and explain the complex phenomenon which an interfirm relationship actually is. Thus, a specific purpose is to conduct a critical test of the general economic assumption that the most efficient structual forms will survive - through introducing social context as a critical, moderating factor of the economic mechanisms.

The focus on performance at different stages of a strategic alliance is also a contribution, because it develops a framework for defining different types of performance, which is useful for further studies of success and failure in cooperative IORs.

1.3 Strategic alliances as cooperative IORs

The setting for the present study is strategic alliances, which are one type of cooperative IORs. Cooperative IORs are adressed from different perspectives, and within different fields of research. In general, the settings within the marketing approach are mainly vertical relationships, i.e. cooperation between firms on different levels of the value chain, for example buyer-supplier or manufacturer-distributor relationships (Heide & John, 1990). These are also commonly denoted as marketing channels (e.g. Achrol, 1988; Mohr & Nevin, 1990). Within the strategy literature, on the other hand, the

subjects of analysis are mostly horizontal cooperative arrangements, e.g. joint ventures (Gill & Butler, 1996) or strategic networks (Jarillo, 1988). However, some researchers adress cooperative IORs without specifying the "direction" of cooperation in the value chain, denoting the relationships as e.g. collaborative relationships (Mitchell & Singh, 1996), relational contracts (Borch, 1994), or just cooperative IORs (Ring & Van de Ven, 1994) or networks (Larson, 1992). Some clarification of the concepts used in this thesis relative to the existing literature seems relevant.

First, most of the recent literature on different cooperative arrangements between firms draw on a common field of theory, which might be called the "contracts perspective". The basis for this field is partly transaction costs economics (Williamson, 1991), where a contractual perspective on relationships is integrated (Macneil, 1980). Thus, what distinguishes the different approaches is mostly the application of theories, not the theoretical perspectives.

From this follows that all the different types of strategic alliances, as well as the marketing channels, can be denoted as "relational contracts" or cooperative IORs, since these concepts comprise the theoretical definition of the topic in question. A cooperative IOR can be defined as any long-term (the definition of long-term is not clear-cut) relationship between firms, where some common interests exist. A relational contract has come to be given more specific attributes, such as relational norms, but nevertheless denote general cooperative arrangements irrespective of "direction" in the value chain. A strategic alliance is, as defined here, a special case of cooperative IORs. However, the definition is not limited to horizontal arrangements, but can be of any direction. What makes them a special case, is the strategic purpose, i.e. the relationship is established for some specific, strategic purposes.

This definition of a strategic alliance implies that the setting is somewhat broader defined than in the majority of studies I have reviewed, and the theories of coooperative

IORs are equally relevant. I therefore frequently use the concept cooperative IOR throughout the thesis, when discussing theory and general issues which are relevant not only for strategic alliances, but also other types of cooperative arrangements. It should thus be kept in mind that the only distinction between a cooperative IOR and a strategic alliance, the way I define it, is the existence of some common, strategic purpose for the cooperation in the latter.

1.4 The Norwegian Business Network Programme

The empirical part of this study has been conducted in cooperation with the Norwegian Industrial and Regional Fund (SND), which is in charge of a large governmental programme, the Norwegian Business Network Programme (NBNP). This is a public policy programme established to aid business firms in their establishments of strategic alliances. Underlying the programme is the belief that extended cooperation between firms may enhance competitive strength in a small country with mainly small and medium-sized companies. A theoretical rationale for the programme is the argument put forward in recent theories of economic growth, that positive externalities exist in industries, which can be capitalized through interfirm cooperation (Reve & Mathiesen, 1994, cited in Nesheim, 1996). The programme was started in 1991, and in 1996 it comprised 289 networks (Nesheim & Reve, 1996).

The programme is governed by SND, which grants money and offers professional advices on the basis of formal applications from firms. Specific requirements are made on firms to be eligible for support, but the scope is broad regarding types of businesses. Thus, the programme comprises alliances with a wide variety of purposes and areas of cooperation, which is a great advantage for research purposes. The main targets of the NBNP are small and medium sized firms (5-200 employees) in manufacturing and in tourism, although it also includes e.g. research firms. Further, the networks in the programme are varying in size, most of them have between two and seven members. As there are few limits to the issues of cooperation, the programme comprises both

horizontal as well as vertical alliances, and the objectives range from e.g. competence development to the establishing of joint ventures for entering into new markets. However, a major part of the networks are horizontal, and the core activity of more than half of the networks are related to marketing or sales.

Through SND, I was given access to the particpants of this network programme, which represented a great advantage, both through the preliminary investigations, and through the large number of units of analysis it made accessable, which would otherwise have been difficult to obtain. Thus, the theoretical part of my study concerns strategic alliances in general, and the theory is tested on the specific alliances that are participants in the Network Programme.

1.5 Overview of the thesis

In the next chapter - chapter 2, I review theory relevant for my research questions. Through the first two sections, I discuss the question of distinct phases in cooperative IORs, and develop a framework - the paradigm model - for the study of the formation phase. This model is thus the basis on which I review research on outcomes in cooperative IORs and antecedents to these in the subsequent sections.

In chapter 3, I present the detailed research model, and the hypotheses to test. The choice of research design and data collection methods are presented in chapter 4, where I also discuss the level of analysis, which is the alliance. The measurement of the variables are presented in chapter 5, and in chapter 6, I present the results of the data analysis. Finally, in chapter 7, I dicuss these results and their implications for future research.

Chapter 2
Theoretical perspectives

An extant literature on cooperative IORs exists, and as strategic alliances is one of several types of such relationships, the research on IORs in general is relevant also for this study. However, since the research on the *formation* of IORs is very scarce, it has been necessary to draw also on other fields of theory to elucidate my problem and build the model for empirical testing. Further, the focus on social compatibility also requires a review of theories adressing similar issues. The purpose of this chapter is to present relevant theoretical and empirical works, as well as to position my study within the research field of IORs. The theoretical examination will lead to the development of my research model.

At this point, it should be noted that the present chapter does not follow a straightforward recipe of traditional theory review. This means that a general review of the research on cooperative IORs is not provided[1], because I did not consider this sufficiently relevant for my problem. Rather, the theoretical perspectives are structured around the actual development of the model. The starting point is the general research questions posed in chapter 1, the theories are applied to directly investigate into these questions, and the result of this is the variables presented at the end of the chapter, and the model presented in chapter 3.

First, the confinement of the investigation to the formation phase is based on the assumption that each developmental phase of a cooperative IOR has its own, specific characteristics and its own causal structures. This assumption is derived from a processual approach to IORs, and in sections 2.1 and 2.2, I shall present research that

[1] For an extensive review of these types of relationships, see Rokkan, 1995.

specifically adresses the modelling of developmental phases in IORs. The processual models will be applied in the development of a general model of the logical structure of the formation phase. This general model will, in turn, be the framework for the subsequent work, as it will indicate limitations for the relevance of different issues and variables, and thus also for the theory reviewed.

In section 2.3 outcomes of cooperative IORs are discussed, mainly based on general theories of IORs, particularty marketing and strategy perspectives. Again with the phase model as a framework for understanding, it is argued that performance in the formation phase is an important - and interesting - issue to investigate. The outcomes specifically relevant for the formation phase are presented, and the dependent variables of the present study are defined. The definitions of outcomes relevant for the formation phase are partly derived from general IOR theories, and partly from an earlier empirical study of the NBNP alliances. Antecedents to these outcomes are discussed in section 2.4, and here, broader theoretical perspectives, especially from the social psychological field, are introduced in order to, in general, derive antecedents relevant for performance in the formation phase, and, in particular, to assess the nature and role of social compatibility. The antecedents that will be included in my research model are presented, both the independent and the intermediate variables.

To conclude, the theory review and model development procedures are accomplished simultaneously, through applying the following logic:

a) Defining the formation phase through applying process models and case studies of cooperative IORs (inductive, empirial and theoretical approach),

b) defining outcomes relevant as success indicants in the formation phase, through drawing on relevant theories (deductive, theoretical approach),

c) deriving antecedents to these outcomes, also through applying theory and research that might be relevant for this specific setting (deductive, theoretical approach).

2.1 The phases of a cooperative IOR

The developmental perspective

Most of the literature on cooperative IORs adress structural issues (see Heide, 1994 for a review), specifically focusing on structural properties, their antecedents and effects. The ultimate purpose is often to assess the effectiveness of different organizational forms - mostly conceptualized along the market-hierarchy dimension (Williamson, 1991). The settings of these types of studies are thus IORs in the operating phase, i.e. relationships that have established stable patterns and governance structures. Although this literature provide much knowledge about cooperative IORs in general, it does not adress the issue of phases in a relationship.

As the assumption underlying the present study is that the formation phase of a strategic alliance has its own specific characteristics, I shall draw on the few studies that specifically adress the developmental or processual aspects of cooperative IORs. The first task is to investigate the relevant properties that distinguishes the formation phase from the operation phase, and a processual approach is necessary to identify these properties, as it specifically adresses the different phases and the transition between them.

From the SND records, it is evident that a large amount of the NBNP alliances are dissoluted during early phases, and for very different reasons. It seems reasonable to suppose that this is the case for strategic alliances in general, that the potential partners of an alliance go through costly seach and negotiation processes without reaching any agreement. However, it is evident that in many cases, the most rational decision is to dissolute a relationship or even to not establish one, if there are no potential gains present, or no strategic compatibility between the partners exists. And one of the purposes behind distinguishing between different phases is precisely to establish some ground for the judgement of whether to continue a relationship or not, because the rationale for continuing a relationship will be based on different grounds, depending on what phase the relationship is in. This issue will be further elaborated in the following,

through discussing the different challenges the parties (or potential parties) of a cooperative IOR meet through the different phases of their relationship.

The two most extensive theoretical works on developmental processes in cooperative IORs are done by Ring and Van de Ven (1994) and Dwyer, Schurr and Oh (1987). A case study by Larson (1992) does also model a relational contract as a process of different stages. The studies define different numbers of phases in a relationship, but the elements of the processes described are very similar. Ring and Van de Ven define three phases: Negotiation, commitment and execution. Their model is shown in figure 2.

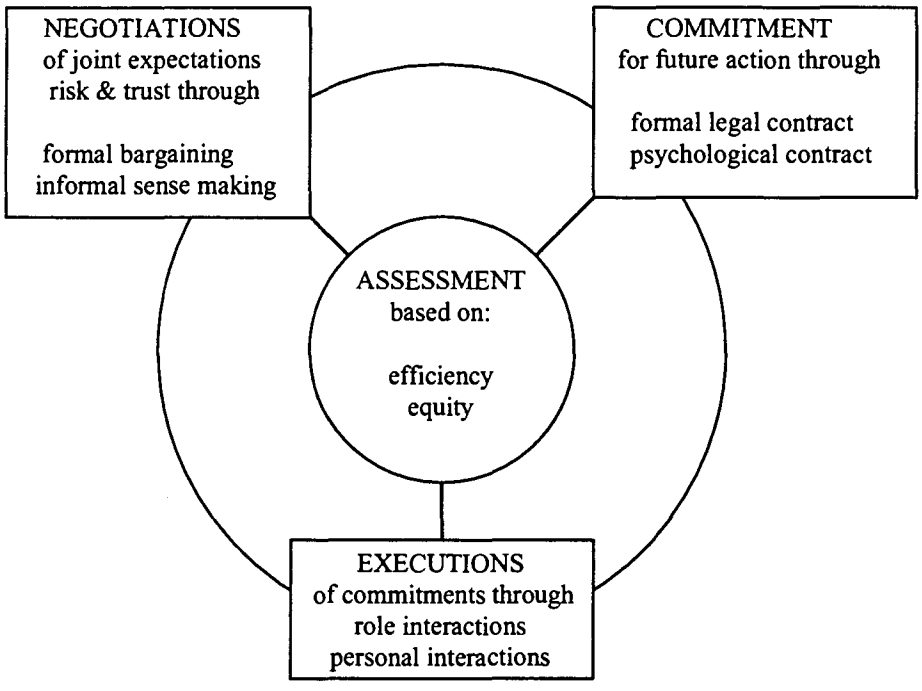

Figure 2: Process framework of the Development of Cooperative IORs (From Ring and Van de Ven, 1994)

The modell is simultaneous, in the sense that the sequences are repetitive, and assessments of outcomes are made continously. This can act as a background for the further discussions of phases. Dwyer, Schurr and Oh (1987), limiting their study to buyer-seller relationships, define four phases: Awareness, exploration, expansion and

commitment. The awareness stage is actually a unilateral search process taking place before interaction has started, and is thus not included in the model of Ring and Van de Ven. The exploration phase is similar to the negotiation phase of Ring and Van de Ven, and the expansion and commitment phases corresponds to the commitment and execution phases of Ring and Van de Ven, though categorized along other dimensions. Larson (1992) defines three phases: Preconditions for exchange, conditions to build, and integration and control. The two models of Larson and Dwyer et al. are most similar, because they depict the process as linear, while Ring and Van de Ven describes repetitive, circular processes. Hence, Ring and Van de Ven model processes that occur *within* each of the stages in the other models, as well as processes that can be used to analyze a relationship's life cycle.

From the studies above, I shall derive a linear interpretation of the life cycle of a relationship. This does not mean that I abandon the circular model of Ring an Van de Ven, but that the continuous processes they describe can take place within the frame of a linear model. Basically, we have three main phases of a cooperative relationship. The first is an exploration or seach phase, where the parties look for alternative partners that can provide the necessary resources for the project in question. The outcome of this phase is an assessment of strategic fit, which mainly means that the parties deciding to cooperate have some common interests and sufficient resources (Niederkofler, 1991). The next phase is the formation or negotiation phase, where the parties meet, interact and agree upon the terms and conditions of the relationship and how it should be governed. The outcomes of this phase are sometimes a formal agreement, the contract, and it always include informal agreements which we may call the psychological contracts (Ring and Van de Ven, 1994). If agreements are reached at this stage, the relationship enters into the operating phase, where the agreements are carried out, the governance system is executed, and the strategies implemented. The outcomes of the operation phase are defined in a number of ways in the literature, and can be conceptualized as goal attainment or effectiveness in the broadest sense.
The Norwegian Business Network Program is also buildt upon the definition of three phases - the search, formation and operation stage. Financial support is granted

specifically for each stage. The applicants must provide concrete plans for each phase, and are obliged to report results from one phase before they are granted support for the next. So even if the transition between phases are not clear-cut in practice, the SND records makes it possible to detect what phase each alliance is in at present. This means that we simplify the complex pattern of developmental processes, which is necessary in order to focus on one phase only. Information from SND indicates that their recording of phases is fairly precise, because their information come from two sources, both from the reports from the alliances, and from their own consultants which are in continuously contact with the participants of the program.

In the next section I shall present different descriptions of the formation phase, derived from the studies mentioned above. I shall then present a general model of this phase which will be used as a foundation for the subsequent theory review.

Defining the formation phase

Ring and Van de Ven (1994) denote this phase as the negotiation stage, consisting of two main processes: Formal bargaining and informal sense making. Through these processes, the ground is laid for a decision on formal commitments, and the activities and outcomes are presented in figure 3.

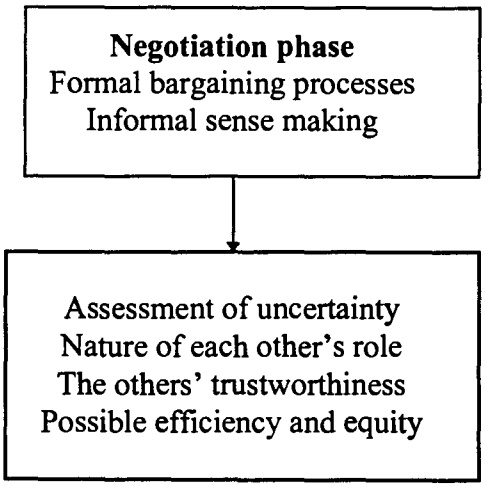

Fig. 3: Model of negotiation phase (From Ring and Van de Ven, 1994)

We see from the model that the first three outcomes of the bargaining process are relationship oriented rather than transaction oriented. The activities are social interaction, and the outcomes are some patterns of stable expectations, both regarding the other parties (each other's role and the others' trustworthiness) as well as the relationship (uncertainty, possible efficiency and equity).

Dwyer, Schurr and Oh (1987) divide the formation phase into two processes that are separate in time: Awareness and exploration. As the awareness phase actually denotes the unilateral search process that takes place before any interaction has occured, this is not relevant for my purposes. The charactertistics of the exploration phase is the following: "Dyadic interaction occurs. A gradual increase in interdependende reflects bilateral testing & probing." (p.21). Referring to Scanzoni (1979) they conceptualize three subprocesses of this phase, and these are depicted in figure 4 below. In the figure, I have revised their original model so that actions and outcomes are separated.

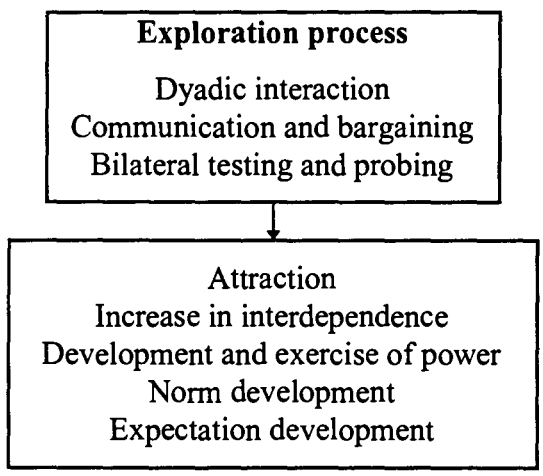

Figure 4: The exploration phase (from Dwyer, Schurr and Oh, 1987)

As the study of Dwyer, Schurr and Oh is limited to buyer-seller relationships, their model is more transaction-oriented than the others. The subprocesses they present refer to are transactional exchange (such as formal bargaining of prices) as well as interpersonal and social processes (attraction and development of norms). Development

of expectations refers to establishing expectations about the other parties' behavior, where trust plays a significant role. Bargaining, or negotiations, is one type of behavior occuring during this phase. Exploration also refer to the trial-and-error processes that characterize the phase, where commitments are made gradually, and the partners continously evaluate each other for potential trustworthiness. As we see, these authors focus to a lesser degree on the informal sense-making processes, but the outcomes are - as in the model of Ring and Van de Ven - both individual and relationship oriented, and comprise both attitudes and beliefs (attraction, expectation and norm development) as well as "objective" attributes (power, interdependence).

A third description of the formation phase of a cooperative IOR is given by Larson (1992). The first phase defined in her study - called preconditions for exchange - has much in common with the "awareness" phase of Dwyer et al., involving little interaction. The "conditions to build" phase is similar to the "exploration" phase in the study of Dwyer et al, and with the negotiation phase in Ring and Van de Ven. A description of this phase is depicted in figure 5.

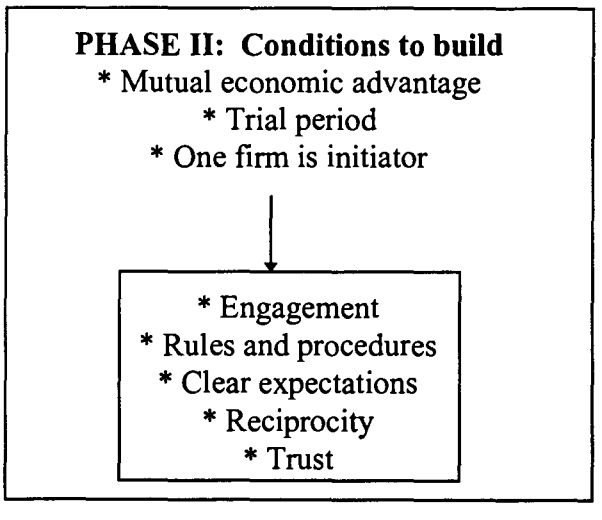

Fig 5: The conditions to build phase (from Larson, 1992)

This model is a result of an analysis of seven cases, and Larson found that in the building phase, social processes played a significant role for the actors. Mutual

economic advantage was not suficcient rationales for the relationship. The author specifically underscores the development of reciprocity norms and trust as central criteria for success during this phase. As we see, the contents of the process is very similar to the other models presented above. The model in figure 5 does not focus on actions in the same way, it rather gives general descriptions of the phase (trial period, one firm is initiator). The outcomes are both individual oriented (reciprocity, trust, engagement) as well as relationship oriented (rules and procedures), and they comprise attitudes/beliefs as well as "objective" attributes.

The studies reviewed above provide us with a range of variables, which all denote important characteristics of the formation phase, although the perspective is slightly different between the studies. All the studies underscore that important objectives for the interaction processes in the formation phase is to reduce uncertainty and establish stable patterns of expectations and behavior for the future exchange. Macneil (1980) defines a contract as "projecting exchange into the future". A cooperative IOR is typically characterized by a high degree of uncertainty, which implies that a large part of the future exchange cannot be specified in the formal contract. Research has also shown that a large part of transactions between firms are governed by informal agreements and underlying norms rather than formal contracts (Macaulay, 1963). Thus, theory actually suggests that in cooperative IORs, the *formation phase is the period through which these informal agreements are developed, and the ground is laid for a governance of the relationship through social mechanisms.* Further, the conditions for a formal contract are buildt through this phase.

I denote the phase in question the formation phase, although none of the authors modeling this phase use this concept. It might seem redundant to use yet another concept for this phase, but I argue that the other concepts used in the literature are not sufficiently relevant for my purposes. "Negotiations" (Ring and Van de Ven, 1994) denotes only behavior - a specific type of behavior - and is therefore too narrow. "Exploration" (Dwyer, Schurr and Oh, 1987) is also too narrow, because the parties do a lot more than just explore, they actually form the basis for a relationship. The

"condition to build"-concept (Larson, 1992) is a broader concept, and therefore more relevant, but still too narrow, because the formation phase is not only comprising conditions to build, it also includes actual building actitivities and the results from these. The concept "formation phase" is broad enough to to comprise the whole phase, including context, behavior and outcomes. Further, it underscores the time perspective - it starts at the point of time where the search for partners is more or less completed, and ends as the implementation starts - the operating phase.

Within the Norwegian Business Network Programme, the formation phase starts when the participants of the alliance are defined, and they have agreed to cooperate on a certain strategic objective, which might be more or less specifically defined. As the conditions for financial support includes a demand for some formal agreement, this formal agreement together with concrete plans for the implementation are the main contents of the report sent to SND at the end of the formation phase (the report which is the condition for support in the operation phase), and at that point, the alliance is considered to exit the formation phase and enter into the operation phase. This definition of the formation phase is sufficient similar to the theoretical one that it can be used in this study.

As the studies above have slightly different perspectives, and they present variables at different levels of specification, I shall integrate the different models of the formation phase into one, general model. In figure 6, I have divided the variables into three groups: Purposes, activities and outcomes. To include purposes is important because they contribute to the differentiation of the phases.

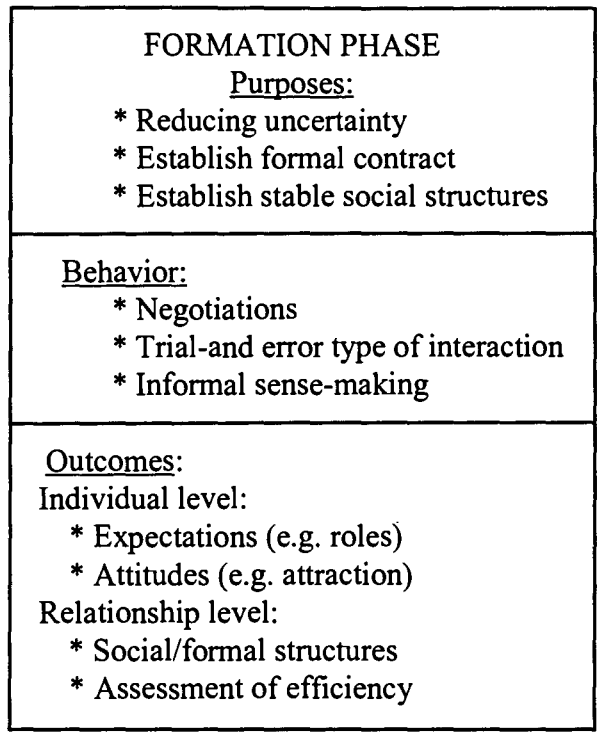

Figure 6: The formation phase - integration of theory

The purposes outlined here underscores the nature of the formation phase - that the objectives are to establish the ground for the operation phase. The behaviors, conceptualized as general as e.g. interaction in some studies, are here specified specifically for the purpose of distinguishing between social and formal aspects. The outcomes in the preceding models are of different types and levels of specifications, I have tried to group them in more general terms.

Conclusions

If we place the above description of the formation phase into a holistic picture of a strategic alliance as it develops over time, we might see some patterns which indicates the role of social context in this picture. First, during the seach phase, the partners are selected on the basis of relevant and/or compatible resources, and on anticipations of their contributions to potential gains. The strategic alliances in the NBNP that are the setting for the present study have specific projects as goals for their alliance formation,

and the potential gains are assessed on the basis of their anticipation of how the selected partners together can accomplish these goals. When the parties have agreed to participate in the project, they enter into the formation phase, where they, through interaction and communication, form the ground on which the implementation of the project shall be conducted. According to theory, it is particularly through this phase that informal social processes play a central role. Intuitively, we could hypothesize that alliances with a good strategic compatibility and high potential gains should have a higher probability of being realized in a formal contract, *but this is - as proposed in the present study - conditioned on how the parties manage the social integration processes in the formation phase.*

The discussion above has outlined the logical structure of the formation phase. The substantive contents of the model - the specific social processes taking place - will be further discussed in the preceding sections. First, through a document analysis of some case-studies, the central variables of this phase are derived on an empirical ground. Thus, from the specific stories told in the case-studies, a general model of the causal structures in the formation phase i developed, which I call the «paradigm model» (Strauss and Corbin, 1990). In section 2.3 and 2.4, I do theory review with this paradigm model as a framework, in order to derive also a theoretical foundation for the specific model that will be tested empirically.

2.2 A paradigm model of the formation phase

After having defined the formation phase, the questions arises of what is the substance of this phase is, what issues play the most central role, and what causal structures can we detect? Several case studies underscore that how the parties manage this phase is crucial to later effectiveness in the relationship. If the parties enter too quickly into the operation phase, heavy adjustments may have to be done at later points of time, which may be more costly and threaten the existence of the relationship (e.g. Niederkofler, 1991, Borch, 1994). The Norwegian Business Network Programme, in its "user manual" for building alliances, describes the formation phase as comprising a long

range of activities, including development of business idea, preliminary agreements, and building of relationships. The purpose of this is to clarify potential conflicts, integrate the partners, and make sure that the parties together are able to accomplish the goals of the alliance. Niederkofler (1991) states that the negotiation process in the cases he investigated often did not ...."sufficiently adress implementation issues. Thus, most relationships started out on a sour note of operating misfit" (p. 243).

All the empirical studies I have found specifically adressing the formation phase in cooperative IORs are case-studies. Thus, the knowledge we have about the substance and processes of this phase, is based on broad descriptions with a long range of variables involved. In the following, I have re-analyzed three case studies (Borch, 1994; Larson, 1992; Niederkofler, 1991), in order to systematize their results and build a paradigm model which integrates the specific findings. As these studies to some degree are in-depth analyses, they can provide a basis for more simplified model-building for empirical testing.

As my purpose of the analysis of the case studies was to generate variables rather than explanations of the process, I first ignored the analyses of the processes given by the authors. I freely analyzed the case stories presented, using the prodecure for generating variables described by Strauss and Corbin (1990), and thereafter compared my analysis with those of the authors.

Grounded theory provides procedures and techiques for theory building, which comprise the defining of concepts, categories of concepts and relationships between them (Strauss & Corbin, 1990). The basis for the present analysis is the sequencial story told in the case studies. The first phase of the analysis is the *open coding* process, were variables found in the stories are grouped into sub-categories and categories, and properties and dimensions of the variables are defined. The next step is *axial coding*, where relationships between the variables/categories of variables are proposed, and the model - the paradigm model - is created. The model proposes relationships which are checked against the text - the stories - and against the analyses provided by the authors. The

result is a model with six elements: 1) *Phenomenon*, which is relationship building, 2) *causal conditions*, which are the exogenous variables affecting behavior, 3) *context*, which is the close context behavior takes place in, 4) *actions*, which are the specific actions taken by the individual managers of the contract, 4) *outcomes*, which are immediate outcomes of actions , and 5) *consequences*, which are more long-term in nature.

The analysis is mainly a grouping of categories using different criteria than the authors did, because my purpose is different. All three authors focused on governance systems, but were process oriented. The social context was stressed in both studies. An important distinction between the studies were that Larson focused on relationships that were successful, while Borch and Niederkofler specifically focused on problems and dysfunctional elements of the process. This variation strengthens the face validity of the paradigm model. The final result of my analysis of the case studies is outlined in figure 7.

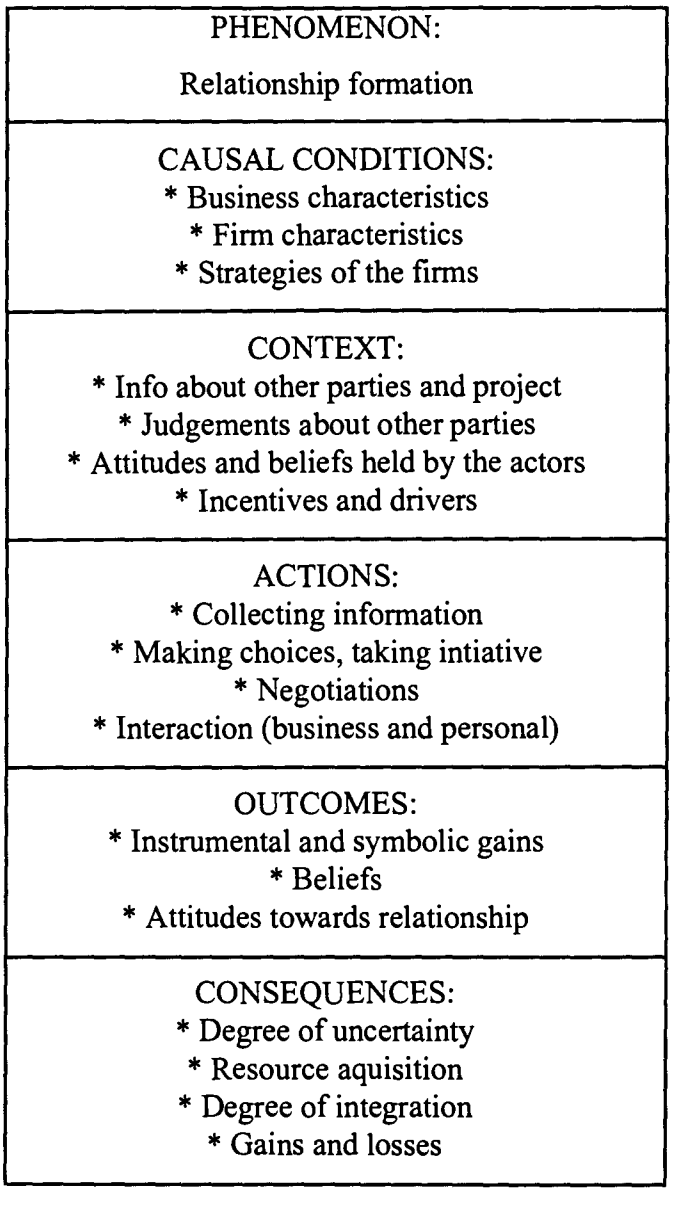

Figure 7: Paradigm model of the formation phase

If we compare this model to the model of the formation phase in figure 6, we see that this is more comprehensive, and gives a broader description of important issues. The causal mechanisms are described as follows: The causal conditions are the basis on which the alliance is formed. Thus, compatible characteristics of firms and businesses, together with strategic dispositions, are the conditions that create *potential gains* for the firms involved, and are the very rationale for an agreement to establish cooperation.

The characteristics of each firm, such as e.g. structure or size, are here considered as exogenous variables, which will not be included in the model. The potential gains created through the combination of different capabilities and resources are regarded as the main causal conditions for the forming of the alliance, as the very rationale for the establishment of a cooperative relationship is the anticipation of possible future gains. Potential gains are thus the independent variables in the present study.

The context category in the model points to important social mechanisms which in my model act as moderating variables. As it is crucial for the parties in early stages of a relationship to reduce internal uncertainty (Berger, 1988), the social context is acting as information source and basis for judgements of the other parties and, hence, uncertainty. This is similar to what has been denoted «embeddedness» (Granovetter, 1985). The actors themselves - here, the individual representatives for each firms' participating in the strategic alliance - are the most important part of this context, and the judgements and integration between them important determinants for actions. This is what I have denoted social compatibility in my model, which refers to the contextual elements «info about other parties and project» as well as «judgements of other parties» and «attitudes and beliefs held by the actors» in the paradigm model.

The consequences as described in the paradigm model underscore the twofold purposes of the formation phase: Both to integrate the firms' capabilities and reduce external uncertainty, and to integrate the parties socially and reduce internal uncertainty. The case studies I have reviewed seem to indicate that the latter is a condition for the former. An intuitive explanation might be that reduced internal uncertainty and the creation of stable expectations is a necessary condition for risk taking and the making of credible commitments.

The dependent variables in my study are related to the outcome variables in the paradigm model; I tried to conceptualize issues that could capture the core of these outcomes. First, the "instrumental and symbolic gains" are conceptualized as *realized*

gains in my model where the gains refer to the areas of business which are the purposes of the formation of the alliances. Second, the attitudes towards the relationship are conceptualized as general *satisfaction* with the cooperation. I also include a third dependent variable, *sustainability*, which is defined both as expectations about future interaction (related to "beliefs" in the paradigm model), as well as actual duration.

The category "consequences" in the paradigm model is not included in my study. This is mainly because one study cannot comprise all aspects of a relationship, but also because I consider some of these consequences to be dependent on time - i.e. consequences mainly arising during the operation phase, and these refer mainly to gains at the firm-level, which are the ultimate objectives of an alliance (Nesheim et al. 1997). These variables could be interesting to include in a repeated study of the same alliances at a later point of time. This is also the case for the social structures (e.g. norms) that are believed to be the results of the formation phase.

Thus, the re-analysis of the case studies mentioned above thus provides an *empirical* basis for the general model in my study. Further, the descriptions of processes in the case studies provides indications of causal structures, which I have used both to identify the specific variables of my study, and to hypothesize relationships between these variables. I shall draw on a broad line of theories which adress similar issues as the one presented in my model. Thus, I use the theory not only to position my study, but also to develop and specify the model further.

In the following sections I shall review existing theory relevant for my study. In order to establish a thorough positioning of the model, I shall discuss the literature that generally adresses causal conditions, context and outcomes in cooperative IORs. I start with the dependent variables, and discuss outcomes in section 2.3. In section 2.4 I shall discuss antecedents to outcomes, including both causal conditions and social context.

2.3 Outcomes

Assessing outcomes from cooperative IORs is not a straightforward matter. Different lines of theory adresses a broad variety of outcomes, and results are measured at different levels, such as the firm, transaction, network or relationship level. In the following I shall present an overview and discussion of different perspectives on outcomes, concluding with the dependent variables of my study.

The research on cooperative IORs can broadly be categorized in three groups. The first group is the transaction costs analysis (TCA), where the main purposes are comparative analyses of different organizational forms (Williamson, 1991). A major part of this research has adressed the socalled "intemediate forms" between market and hierarchies. The TCA aims at predicting the organizational form with the lowest transaction costs, given the characteristica of the transaction. The ultimate outcomes according to transaction costs theory are economic efficiency and, hence, survival. The implicit reasoning underlying these studies - which is not tested, and, actually, not testable - is that through the "invisible hand of the market", only the most efficient organizational forms will survive, and therefore we should expect to find certain combinations of transaction characteristics and organizational forms existing, which also then implicitly are considered as efficient. Two types of empirical testing is common within this approach. The first is to test the existence of the specific combinations of transaction characteristics and organizational forms that are predicted to be the most efficient (e.g. Haugland, 1994). The other is to compare the magnitude of transaction costs between different organizational forms (Noordewier, John & Nevin, 1990; Nygaard, 1992). It is only the latter approach that specifices outcomes that can be regarded as performance indicators for a cooperative IOR.

The second group of studies - which is partly based on similar theories as the TCA perspective - is the contracts perspective, which focuses on how to assess successful relational contracts. This perspective is adressing "internal" issues in a cooperative relationship, i.e. not comparing different organizational forms. This approach is based on definitions of a relational contract as an "ideal type" (Mommsen, 1989), broadly

described as a long-term cooperative relationship, characterized by relational norms (Macneil, 1980; Kaufmann & Dant, 1992). From this broad description of relational contracts, different relationship characteristica are defined as success criteria. For example, part of what distinguishes relational contracts from market exhange, is that the relationship between the parties is regarded as relatively more important than the individual transactions (Kaufmann & Dant, 1992). From this follows that a central criterium for success must be that the parties are able to create and maintain a viable relationship.

A central argument within this approach is that these conditions are not only means to a specific end (e.g. economic efficiency), but they are also goals *per se* for the actors. It could be argued that the ability to do business through building relationships will be a criterion for success in the future - cf. the "virtual company". The ability to aquire resources through building relationships might become (or maybe it already is) a competitive advantage. From this viewpoint, it becomes important to discover how viable relationships can be created and sustained, and some aspect of the social structure actually is the outcome variable of a major part of the studies within the contracts perspective. A substatial body of research on these criteria have been conducted within the contracts perspective - focusing on success criteria in relational contracts.

The literature includes a fairly long range of success criteria. It appears that most are derived from a sociological perspective, of which the political economy framework (Stern & Reve, 1980) is one example. Some studies focus on power/dependency relationships, where e.g. control (Heide & John, 1992), conflict resolution strategies (Dant & Schul, 1992) and use of influence strategies (Frazier & Rody, 1991) are considered as important requirements for viable relationships. Further, as an alternative to the "arms length" bargaining of market contracts, the parties of a relational contract rely on credible commitments and trust in their transactions. Different concepts that might indicate a successful relationship in this respect are e.g. channel cohesion (Haugland & Reve, 1993) commitment (Gundlach, Achrol & Mentzer, 1995), joint action (Heide & John, 1990) and trust (Gulati, 1995; McAllister, 1995). Seeing

coope:ative IORs as repetitive processes of negotiation, commitment and execution, Ring and Van de Ven (1994) argues that equity is a central outcome variable in the ongoing assessments of a relationship.

The third group of studies adressing outcomes from cooperative IORs are also theoretically overlapping with the two former, but are defining these outcomes differently. First, the studies are focusing on internal mechanisms in cooperative IORs, and thus not comparing different forms. Second, success is not defined as relationship properties, but as *end results* - i.e. some kind of ultimate performance or effectiveness. This include both assessments of economic results, such as profits (Nesheim et al., 1997) or perceived productivity (Bucklin & Sengupta, 1993), as well as sales volume (Mohr & Spekman, 1994), performance (Nordewier et al., 1990), and assessments of the relationship, such as satisfaction (Anderson & Narus, 1990; Mohr & Nevin, 1990; Haugland & Reve, 1993). The research above shows that the definition of outcomes is dependent on the purpose of the study. Most of the studies adressing end results are also dyadic vertical relationships in marketing channels, and cannot be directly applied to the present setting.

In table 1, I show an overview of different variables that have been defined as outcomes in the studies I have reviewed. The table shows that very few has adressed end results, and that social outcomes often are implicitly regarded as indicators of success in cooperative IORs.

Table 1: Overview of some outcome variables in studies of IORs

AUTHORS	OUTCOME VARIABLE
	Social variables:
Heide & John, 1992	Control
Dant & Schul, 1992	Conflict resolution strategies
Frazier & Rody, 1991	Use of influence strategies
Haugland & Reve, 1993	Channel cohesion
Gundlach et al., 1995	Commitment
Heide & John, 1990	Joint action
Gulati, 1995	Trust
McAllister, 1995	Trust
Ring and Van de Ven, 1994	Equity
	End result
Nesheim et al. 1997	Firm gains
Mohr & Spekman	Sales volume
Bucklin and Sengupta, 1993	Perceived productivity
Nordewier et al., 1990	Performance
Anderson & Narus, 1990	Satisfaction
Mohr & Nevin, 1990	----"------
Mohr & Spekman, 1994	----"------
Haugland & Reve, 1993	----"------

As I focus on the formation phase of a strategic alliance, some of the outcomes mentioned above will not be relevant. Further, as my model has the character of a critical test of some main assumptions of economic explanations, the outcome variables are defined on a quite specific form. The outcome variables in the following are hence defined on this basis.

Defining performance in the formation phase

In the formation phase, governance structures have not yet been established, and uncertainty reduction and integration are at the core of this phase, as outlined in the paradigm model. I shall relate the three groups of research above to the paradigm

model, in order to derive a relevant basis for the definition of outcome variables in my study.

The transaction costs analysis is, as mentioned, based on the comparison of organizational forms. Although a strategic alliance is considered as a "hybrid" form, there can be a plurality of mechanisms governing it (Bradach & Eccles, 1989). The formation phase is the period through which these governance mechanisms are established, and the transaction costs have not yet reach any "equilibrium" related to a specific form. Transaction costs are hence no relevant performance criteria in the present study.

The relevance of different relationship characteristica as performance criteria is more difficult to assess. Some of these variables are not specifically relevant in the formation phase, such as e.g. commitment, and I would argue that these should be included in studies of the operating phase. This is also underscored in the model of Ring and Van de Ven (1994). Further, it is a question of where to place these types of variables within the causal chain in these studies. This can be illustrated through the circular process model, where outcomes at one point of time are inputs in the further processes. Some researchers would judge these variables as outcome variables; I consider social context as an intermediate variable, and hence also relationship characteristica, and shall therefore adress these types of variables as intermediate variables in the causal chain, referring to the linear interpretation of the process model that I presented in section 2.1.

I want to focus on the types of outcomes that can be characterized as end results. Hence, it is necessary to define the types of results that will serve as performance criteria in the formation phase. Strategic alliances are cooperative IORs with specific strategic purposes, and the success of these alliances should also be related to these purposes. The Norwegian Business Network Programme is confined to alliances that through formalized cooperation will pursue specific objectives or projects (for example, entry into new markets or product development), and hence the success criteria for these

alliances are tied to their specific goals. Finally, the definition of performance in the present study should be compatible with the paradigm model presented earlier.

The first types of outcomes in the paradigm model is "symbolic and instrumental gains". The definition of gains can be defined universally, such as productivity (Bucklin & Sengupta, 1993) or profits (Nesheim et al., 1997). As mentioned, however, I shall tie the gains to the goals for the alliances, and define it as goal accomplishment, which is also in accordance with earlier research on these specific alliances (Nesheim, 1994). It might be argued that economic gains are difficult to obtain as early as in the formation phase. Nesheim et al. (1994), studying antecedents to outcomes in NBNP alliances in the operation phase, define the change in ultimate economic performance for each firm in the alliance as an outcome variable. This economic performance is defined at the firm level. I will argue that in the formation phase, gains at the firm level is difficult to obtain, and that performance must be related to goal accomplishment for the alliance as such, not for each firm. I will define performance as some yields at the alliance level from the goals they are pursuing, and I therefore define it as different degrees of realized gains. The ultimate economic performance of each firm - e.g. increased profits, which is a *consequence* of accomplished goals for the alliance, is considered to be relevant for the operation phase only. The «realized gains» variable is thus related to the substance of the exchange, and concerns the *gains at the alliance level achieved from goal accomplishment.*

Both the paradigm model and the theory reviewed stress that in a cooperative IOR, assessments of the social relationship itself is an important performance criterium. We thus need some indicants of the performance concerning the relationship. A common used variable in the literature is *satisfaction* (Anderson & Narus, 1990; Mohr & Nevin, 1990; Haugland & Reve, 1993). This is an important variable during all phases, because it denotes the parties' attitudes towards the relationship as such. This will thus be the second dependent variable in my study. Nesheim (1994) defines satisfaction with the *momentum* of the cooperation as an outcome variable, but I shall define it as satisfaction with the cooperation as such. The subjective evaluation of the relationship

is an indicator of performance, as we would not expect the parties to be satisfied with a relationship that is unsuccessful. Further, satisfaction is related to expectations, which are highly subjective, and I think it is important to add this aspect to the evaluative assessment of the gains, which is a more objective performance criteria. As mentioned earlier, establishing a strategic alliance may have side-effects, such as aquirement of knowledge and creation of cooperative competence. Realized gains as a performance criterium will not capture these more subjective aspects of the relationship. Thus, it might be that the participants are fairly satisfied with the cooperation even if the realized gains are low, both because they expect gains in the future, and because there are other benefits from participating.

Another concept related to relationship performance often used in studies of cooperative IORs, is *sustainability*. The continuation or dissolution of a relationship has e.g. been studied as continuity (Greenhalgh & Chapman, 1996), duration (Haugland, 1994), sustainability (Bucklin & Sengupta, 1993) or dissolution (Seabright, Levinthal & Fichman, 1992). Using these types of variables as criteria for success requires a discussion of the normative contents of the theories used. In general, cooperative IORs are long-term in nature, and a certain degree of sustainability is necessary to carry through the purposes of the relationships. However, duration does not indicate success *per se*, it must be related to other outcomes. In general, exchange relationships are entered in order to procure needed resources from the other parties, and when the costs outweight the returns, the potential gain is zero and the relationship should be dissoluted (Dwyer, Schurr & Oh, 1987). On the other hand, for relationships with a high gain potential, dissolution can imply a loss of future gains.

I have defined two variables related to sustainability which will be indicants of performance in the formation phase. First, the *expected continuity* indicates an important attitude towards the relationship. As the formation phase concerns building the grounds for the implementation of the alliance, the parties' attitudes towards the future relationship will reflect their previous experiences with each other. It can also be argued, as Weber does, that perceptions of future interaction is at the core of the very

definition of a relationship (Weber, 1968). The other variable is *actual duration*. This must be measured over some period of time. I will argue that duration is a success criteria in the *formation phase*. This is partly based on information from SND concerning the NBNP alliances. Dissolution during the formation phase will, for these alliances, imply that they have not been able to establish a formal ageement to implement the project plans they agreed upon during the search phase. Through the search phase, as well as the formation phase, as well as the formation phase, the parties spend considerable costs and efforts in establishing the alliance. If it is dissoluted before the cooperation project is brought into business, it can be considered as a failure because we were never able to assess the the success of the specific project ideas as such. Thus, dissolution through the formation phase can be considered as a failure to establish a business relationship as such, not necessarily as a result of a bad project, because the quality of the latter is not tested.

To sum up, I have concentrated on performance variables related to the purposes of the alliances, and defined realized gains related to these purposes as the most central result of interest. Further, I also include assessments of the relationship, conceptualized as satisfaction and expected continuity. Finally, I include actual duration as a dependent variable.

2.4 Antecedents to outcomes in the formation phase

In this section, I shall adress factors that might affect outcomes as defined in the previous section. The distinction between formation phase and operation phase is important also here. I have - in the discussion of the paradigm model - defined potential gains as the independent variable, mainly based on general economic reasoning and the empirical results of the case studies reviewed. Here, I shall review theory that specifically adresses the effects of potential gains on outcomes, in order to establish a firmer ground for the propositions about relationships between the variables in the model, as well as position this specific variable according to existing theory.

As I already have defined social compatibility as a condition for the realization of outcomes from potential gains, this is actually not a *direct* antecedent, but a moderator. Nevertheless, I include the discussion of this concept in the present section, because together with potential gains, it forms the antecedents of outcomes. I have defined social compatibility as the most important aspect of the contextual factors shown in the paradigm model. However, as this is a novel concept, I place much weight on reviewing theory adressing social issues in cooperative IORs in general throughout this section. The point is, from the general conceptions of social issues in present research, to derive specific definitions of the contents and effects of social compatibility.

Gain potentials

Game-theoretical approaches generally underscore pay-off structure as the central incentive for the choice of cooperative vs. competitive strategies in negotiation games (Rapoport & Chammah, 1965). Although dyadic negotiation in experimental settings hardly can be directly transferred to the present setting, the general results of this research is interesting. First, no doubt the pay-off structure in a relationship is a crucial incentive for cooperation. This is also in line with general economic approaches to IORs, stating that a cooperative relationship between firms will continue as long as the resources gained exceeds the costs, compared to alternatives (Dwyer et al., 1987). The very rationale for establishing an IOR is the potential for some sort of economic gain. The firms searching for cooperating partners operate in a market, and from traditional economic reasoning, we should expect that the relationships having the highest gain potentials should be realized. Thus, potential gains, and pay-off structure, are both antecedents to the choice of parters as well as to the forming of cooperative IORs. In the present study, the initial pay-off structure, which here concerns gains from collective efforts, will be defined as potential gains, because this structure in general is supposed to be favouring cooperative strategies, and the dichotomy between cooperative vs. competitive structures is not relevant.

However, a cooperative strategy implies that a focal party is oriented towards the other, and is willing to take risks regarding the other party's behavior. Transferred to our setting, this implies a willingness to exert effort and commit resources to the relationship, which increases the probability of its success. As the commitment of resources is a necessary condition for potential gains to be realized, the effects of potential gains on realized gains should be positive also according to game theory. The very nature of a strategic alliance implies that at least, the pay-off structure is favoring cooperative strategies. A problem is of course that this is a setting with multiple parties, where free-riding can be a larger problem, no matter the pay-off structure, because we consider not the distribution of gains, but collective gains. This leads directly to the moderation effects of social compatibility, which I shall adress below. The argument here is that the higher the potential gains for an alliance, the more resources and effort will be invested in the alliance, and the probability for success- in the sense of accomplishing goals - will be higher. Hence, the probability for realizing gains from these goals also should be higher.

Large potential gains will also probably make the parties more positive towards the relationship in early phases. Their expectations of future gains is proposed to create positive attitudes. Even if satisfaction in general is determined by a long range of factors, we should thus also expect a positive relationship between gain potentials and satisfaction in early phases of an alliance. Satisfaction stemming from positive anticipations of future gains will be dependent on the phase of a relationship. At later stages, satisfaction will probably be more affected by realized gains at the firm level.

As argued above, a relationship between firms will continue as long as the resources gained exceed the costs. In the formation phase, the argument is somewhat different, because the firms invest resources that will yiels gains in a long term perspective. Thus, it is more reasonable to suggest that sustainability is affected by anticipations of how resources will be paid back in the future. Thus, anticipations of high future gains will probably affect sustainability positively. This argument is further strengthened through

the argument that alliances in which considerable resources and efforts are invested, will probably also be more sustainable, and the investments are dependent on anticipated pay-back in the future.

Social context

The initial pay-off structure is here considered as a potential, which is proposed to be contingent on social efforts to be realized. As the specific purpose of a strategic alliance by definition must be accomplished through cooperative efforts between the participant, we need a broader overview of variables fostering cooperation, including the social context of the relationship. Chapman Moore and Moore (1990) investigate individuals' propensitites to cooperate in a game-theoretical setting, and propose both objective characteristics of the game as well as subjective motives as determinants for cooperation. The factors indicating an increased propensity to cooperate are

* communication possibilities
* beliefs about the other parties' behavioral strategies
* expected future interaction
* group size.

Heide and Miner (1992) investigated the effects of the following variables on degree of cooperation:

* expected continuity of the relationship
* frequency of contact
* ambiguity concerning evaluation of the other parties' behavior.

This study was conducted at the organizational level of analysis, not at the relationship level. It appears that the "shadow of the future" is a central condition for cooperation (Axelrod, 1984). In the present study, I have defined expected continuity as a dependent variable, indicating a reverse relationship. I argue that the expected continuity is an attitude that is determined by the parties evaluation of the cooperation, as a dissolution actually is a choice made by the parties themselves (in most cases). Further, a decision of cooperation has already been made at the point of time I am studying, it is the decision of *further* cooperation which is of interest here, which actually can be indicated by expected continuity.

A central problem that should be dealt with through the formation phase, is the internal uncertainty in the relationship, which specifically concerns beliefs about the other parties' motives, as defined by the variables above, e.g. ambiguity concerning other parties' behavior. Reduction of internal uncertainty is necessary to be able to make commitments to the relationship, and to create trust. Several studies adress this problem directly or indirectly, both studies of IORs (Heide & John, 1990; Noordewier et al., 1990) and of personal relationships (Berger, 1988). In a study of the effects of a range of antecedents on outcomes in NBNP alliances in the operation phase, internal uncertainty had significant effecs on firm gains in the alliances (Nesheim et al., 1997).

One of the factors contributing to reduce uncertainty is experience through interaction. Another is the creation of beliefs through the individual managers' cognitive processes (which belongs to the context category in the paradigm model), as described in theories of social psychology and categorization (Fiske & Taylor, 1991). We thus have two main processes taking place, which can act to reduce uncertainty: *Interaction* provides information through experience, and *cognitive processes* act as guidelines and tools for categorization of the cooperating partners. These are the two main processes through which the social compatibility is created. In the following, I shall investigate further into these two processes, in order to detect the most relevant indicants of social compatibility as a moderating factor.

Reciprocity through personal interaction

Interaction between the parties are confirmed to be important determinants for cooperation in the studies of Chapman Moore and Moore (1990) and of Heide and Miner (1992). This is in line with several other studies stressing the social context of IORs. The establishing of norms, trust and different expectations about the future are accomplished by individual managers, also denoted boundary spanners. Thus, the success of the relationship is obviously conditioned on interpersonal processes. The study of NBNP alliances mentioned above, revealed that personal relationships had significant effects on firm gains. Larson (1992) also underscores the importance of personal relationships in her study, as well as the role of the individual managers as

communicators of honesty, trust and "philosophy of partnership". Dwyer, Schurr and Oh (1987, p. 16) is defining "attraction" as the initiating process of the exploration phase, and proposes that degree of attraction is a result of rewards, that may be rooted in perceived similarities of beliefs, values, or personality. They also contain that explicit bargaining during relationship formation is rare, and that ..."a relationship seems unlikely to form without bilateral communication of want, issues, inputs, and priorities" (Dwyer, Schurr and Oh, 1987, p. 16). The success of the formation process is obviously partly determined by the interpersonal interaction. The question is what the experience from the interaction reveals. Obviously, a positive experience is necessary for this interaction to be functional for the relationship. As some commitments are neccesary for an agreement to be settled, some assessment of the experienced interaction must thus be made. Several researchers indicate that *trust* is the ultimate result of this assessment, representing stable expectations that actually serve as a governance mechanism in the relationship. However, trust is a broad concept, with many connotations (Gulati, 1995; McAllister, 1995). At the core of this concept are some stable expectations about other people in business relationships, and it has been defined as "a type of expectation that alleviates the fear that one's exchange partner will act opportunistically (Bradach & Eccles,1989). This definition of trust captures only a small part of the concept as it is defined and measured elsewhere in the literature (Robinson, Shaver & Wrightsman, 1991), but it captures the substance of relevance here, namely the belief that the other parties will not act opportunistically. The role of trust has been broadly adressed in the literature on IORs, and so has opportunism. According to transaction costs theory opportunism is a fundamental behavioral assumption, while in contracts theory, trust is often treated as a mechanism that can hinder opportunism. However, if trust is the *belief* that the other party will not act opportunistically, it is not logical to define it as a mechanism that can hinder opportunism, because it is based on information that opportunism is not likely to occure. Opportunism is a type of *behavior* - most extremely defined as "self-seeking interest with guile" (Heide, 1994). Trust emerges from information about other actors, and the information can be aquired both through external channels, such as rumours or reports about other people's behavior, even from anticipations of the social status of an individual, or from direct experience (Berger,

1988). What I am interested in here, is *the experiences about concrete behavior in early phases of an alliance, which can contribute to create trust in a longer time perspective.*

Within the relational contracts literature, the absence of opportunism has also been defined as part of the concept of *solidarity*, which is a relational norm (Kaufmann & Dant, 1992; Haugland, 1994; Nesheim et al., 1997). This norm comprises a type of behavior that implies some sort of reciprocity, or fairness in the exchange relationship. According to Kaufmann & Dant (1992), solidarity means long term reciprocity, as opposed to reciprocity in each concrete transaction, in the sense that actions are not expected to be reciprocated for each transaction, but the parties trust each other to do this in the long run. The difference between a discrete and relational contract is thus the time perspective on reciprocation - a long term type of reciprocation involves trust, and is denoted solidarity.

The point here is not to determine whether actions are reciprocated in a long vs. short time frame, but rather to investigate whether reciprocity is a dominant behavior in early phases of an alliance. I thus do not specify any time perspective, and reciprocity is defined as the experience that *none of the participants in an alliance pursue their self interests on the others' expenses.* Reciprocity in early stages of a relationship is considered as a basis for the creation of trust at later stages in the process of exchange. Thus, I consider experiences about reciprocity through direct interaction as a central mechanism for reducing internal uncertainty.

To conclude, uncertainty reduction in early phases of a relationship is mostly about revealing the other parties' motives and creating stable expectations about their action strategies from concrete experiences. Reciprocity between the parties is thus defined as one of the two dimensions of social compatibility, which moderates the relationship between potential gains and the outcome variables. The moderating effects of reciprocity is explained through reciprocity being a *condition* for realization of potential gains. This causal mechanism probably needs some clarification, as most research consider trust as a direct antecedent to desired outcomes. The setting here is an alliance

with multiple parties. The very rationale for the cooperation is that there are some potential gains that can only be realized through collective efforts. However, realization of gains at the alliance level requires specific types of behavior at the individual level, cf. the general problem of collective action. Thus, it is logical to assume this interaction as a condition for realization of gains at the alliance level. The moderating effects are also in line with findings regarding relational norms (Noordewier et al., 1990).

Cognitions and social fit

The results of a successful formation phase is some degree of congruency between the parties, manifested through shared expectations (norms, roles or rules for future interaction) or through formal agreements in a contract, which act as governance mechanisms in the operation phase. Ring and Van de Ven (1994) propose that this congruency is obtained through processes of shared sense-making, where individual cognitive processes play an important part. This sense-making includes communications and clarifying of identities, as well as the establishment of psychological contracts between the parties. The psychological contract can be defined as: ...." an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party" (Rousseau, 1989). The point expressed by Ring and Van de Ven (p. 100) is that the sense-making processes comprise not only the transactions, but also the context and its interpretations. They present two propositions about this issue, which I have contracted in the following citation:

> "Congruent sense making and congruent psychological contracts among parties increase the likelihood of establishing formal commitments to a cooperative IOR".
>
> (Ring and Van de Ven, 1994, p. 101)

The establishing of congruent perceptions can be denoted as an enactment process (Weick, 1969), or as a process of creating "shared meaning" in the relationship. The role of congruency between the individual parties of a contract is also adressed by other authors. Niederkofler (1992), studying the failure and success of strategic alliances,

uses the concept "operating fit" to analyze this phenomenon. According to his study, lack of operating fit is one of the main reasons why the parties of a contract fail to accomplish the initial negotiations and establish a relationship. Operating fit is defined as similarities between the parties on certain characeristics, such as culture, company language and management styles, and operating misfit is denoted as e.g. "culture shock" (Niederkofler, 1992, p. 245). Obviously, operating fit is similar to the congruency concept of Ring and Van de Ven; although it is less psychological in its focus, it indicates some degree of shared interpretation between the parties.

The paradigm model of the formation phase gives indications on what basis the parties interact to create congruency: Through gathering information about other parties and projects, they make judgements of the other parties and possible future commitments; attitudes and beliefs are shaped, and incentives are assessed. Thus, we need to focus more specifically on the interaction between the context and actions (the categories of the paradigm model) in order to explain how the parties come to share common psychological contracts.

As noted by Ring and Van de Ven (1994, p. 101), the empirical evidence for the antecedents and effects of congruent perceptions between the parties in a cooperative IOR is scarce. However, theories of social psychology adress similar issues, and studies of personal relationships as well as of negotiations do provide some relevant knowledge.

Social cognition (Fiske & Taylor, 1991) explains the general process that takes place when people meet, interact, and form a relationship. The individuals entering into a relationship will bring with them their own, internal knowledge structures. These knowledge structures are representations of the world as this is interpreted by the individual actor. There are two main types of knowledge structures: *Schemas*, which are representations of specific stimuli, such as objects, persons and events, the attributes of these events and the relationship between them; *beliefs*, which are propositions (mostly causal) to which the actor ascribes some degree of credibility. As an example, the parties to a contract will possess different representations of the exchange in

question, of the firms and the persons, as well as of the initial search process. Further, each actor have idiosyncratic beliefs about what is important for success, and how success can be obtained, e.g. what type of managers that are major contributors to success in cooperative arrangements.

The knowledge structures are representations of past experiences, which will affect how the actors meet the world and create new experiences. This implies that two or more actors who face the same objective stimulus will perceive and interpret this stimulus in different ways through cognitive processes - as e.g. attention to certain attributes of the other persons, encoding and retrieval of information from memory. This will in turn affect behavior and how they judge the other actors, the context, and the relationship. Berger (1988) utilizes the theory of social cognition to describe and explain how people form personal relationships. People enter into personal relationship to gain some personal outcomes, and there is a substantial amount of uncertainty tied to this outcome. For a personal relationship to develop, information exchange is necessary, of which the purpose is to reduce uncertainty, as explained earlier. Thus, a process of interplay between existing knowledge structures and novel experiences and objective stimuli is started.

The judgements of the other persons, and hence about whether to enter into the relationship or not, is made through e.g. social comparison, cognitive consistency, and similarity in personal constructs (Kelly, 1955). According to these cognitive explanations of uncertainty reduction and relationship formation, cognitive similarities seem to be a central motive for joining a personal relationship (Berger, 1988). This is fully in accordance with the proposition put forward by Ring and Van de Ven above.

A theory of shared meaning between parties of a business relationship is also forwarded by Eden and Vangen (1995). Based on Personal Construct Theory (Kelly, 1955), they propose a conceptual framework which comprises degree of cognitive similarity between actors in a group. The cognitive similarity is proposed to exist to different degrees in the relationship, and is defined along two dimensions: The substance and the

process of the relationship. A relationship is defined through its nodes; nodes are defined as objects, events and concepts pertaining to both substance and process. The similarity is assessed according to what degree the parties have common nodes, and they can have two types of common nodes: *Verbal tags*, which are verbal expressions or language regarding the actual issue in question, and *shared meaning*, which is common interpretations of the issue. Shared meaning is a deeper form of common understanding, and is more similar to the concept of common sense-making, as Ring and Van de Ven is describing it. Thus, the parties can have a common language which do not imply that they share a deeper interpretation of the relationship. Shared meaning is proposed to trigger joint action to a larger degree than the verbal tags. In short, Eden and Vangen (1995) propose that *the more nodes that is shared between the parties, the more likely will joint action - and a relationship - be formed and sustained.*

Within the negotiation field of research, there is an increased focus on intangible outcomes of the negotiations in addition to the objective exhange results. These outcomes are e.g. perceived fairness and relationship continuity (Greenhalgh & Chapman, 1996), interpersonal attraction (Graham, 1987) and equality (Kramer, Pommerenke & Newton, 1993). Accordingly, there is a broad acknowledgement of the importance of the social relationship between the negotiatiors as a determinant of negotiation outcomes. Actually, the negotiation and the relationship is denoted as inseparable by some authors (Greenhalgh & Chapman, 1996). As the formation phase of a strategic alliance partly consists of informal negotiations - implicit or explicit - the negotiation setting is relevant also here. Several researchers have studied the effects of different aspects of the negotiator relationship on outcomes. Earlier personal relationship between the parties are e.g. proposed to affect outcomes (Valley, Neale & Mannix, 1995), a proposition also put forward in the IOR literature. Individual attachment has been shown to decrease the probability of dissolution of a relationship (Seabright et al., 1992). Further, level of group identification is proposed to affect behavior (Polzer, Mannix & Neale, 1995). Attributions of the negotiators are also related to outcomes; according to Graham (1987), the culture or nationality of the actors will affect outcomes such as economic rewards and interpersonal attraction. There is

also some empirical evidence on the similarity hypothesis discussed above. Kramer et al. (1993) found that a high level social identification between the actors - defined as degree of simlarity on several personal attributes - increased the perceptions of equality of outcomes and relative gain. A shared group identity fostered more concern for the other parties' outcomes and thus gave more equal results.

Social fit as similarities

All the literature I have reviewed on social context in the formation of relationships points in the same direction: That some level of similarity between the parties seems to increase the likelihood of concluding a relationship, and thus the ability to exploit potential resources. In the seach phase preceding the formation phase, the "strategic fit" (Niederkofler, 1991) is assessed, and negotiations or interaction between single actors are initiated. In the next phase, the main task is to realize this potential through social processes that leads to stable structures and expectations that can govern the relationship. Referring to the paradigm model, I argue that social fit is a major component of the context category in the model - as it includes the results of cognitive processes as information search and identity assessment, as well as beliefs and attitudes held by the actors. The results of the theory review and the analysis of the case studies indicate that the assessment of social fit is higly subjective.

The theoretical models of the formation phase also indicates that the assessments of personal fit are made along two dimensions. Larson (1992) includes both "personal reputation" and "firm reputation" as sources of information. Ring and Van de Ven (1994) is distinguishing personal relationships and role relationships, and suggest that over time, personal relationships will supplement role relationships. In the very early phases of interaction, the parties will know each other roles as representatives for a company, and as the relationship develops, they will gain experiences about each other as persons. Niederkofler (1991) refers to operating fit as a fit between both company culture and personal styles. It is thus plausible to suggest that the social fit is assessed along two dimensions: A company dimension, mediated through the individuals by their roles as firm representatives, and a personal dimension, which regards the

individual personality. Thus, social fit is *the result of a subjective assessment of similarities on certain attributes between the parties of a contract. The assessment is made along two dimensions: A personal dimension and a company dimension.*

Social fit, similar to reciprocity, act as a condition for the realization of outcomes from potential gains, through facilitating exchange and prompting positive attitudes towards the other parties.

Summary

Throughout the last section, I have shown how social compatibility act as a condition for success in the formation phase. The theory review have revealed two major dimensions of this social compatibility: Social fit and reciprocity. Social fit concerns certain similarities between the individual managers in a relationship, while reciprocity concerns assessments of behaviors as results of interaction. As mentioned in earlier sections, the initial condition for the choice of cooperative partners is the strategic fit between the parties as organizations, and this strategic fit is defined as compatible interests and complementary resources. However, as this strategic fit is assessed, and the parties have entered into the formation phase, social compatibility will act as a main condition for the ability to build an effective cooperative relationship, using the following definition:

> *Social compatibility is the degree of reciprocity and personal fit between the parties of a cooperative IOR. Reciprocity is based on experience from interaction, and personal fit is based on cognitive processes, comprising two dimensions: Judgements of similarities on personal dimensions, and similarities on company dimensions.*

2.5 Summary and conclusions

The starting point for this chapter was the formation phase of a strategic alliance. I used some theoretical works specifically adressing process issues to define this phase and its

contents. Further, I derived central causal conditions, context and outcome variables through re-analyzing empirical work (the case studies) adressing this issue. Finally, I refined the variables and described the relationship between them through reviewing existing theory from different fields. I have shown that this phase has different characteristics than the operating phase, especially because the interpersonal processes play such a central role in forming a relationship. I have also argued that outcomes - or success - in this phase should be assessed according to other criteria than in later phases. Hence, I propose that realized gains related to the relevant goals, satisfaction and sustainability are central criteria that give relevant indications of success in this phase. Further, I have used theories of social cognition and personal relationships to derive the main conditions for the realization of outcomes in the formation phase, challenging the general economic proposition that the "invisible hand" will select out relationships with low economic efficiency. I have proposed social compatibility to be a major moderator of this relationship.

Theoretical positioning in the review

When positioning a study, the most relevant approach is to look at research adressing similar phenomena as the one in question. Thus, I have used literature mainly from the marketing and strategy field for the initial positioning. The approach to the topic in question within these fields of research is most often called a "contracts perspective", which mainly means that the research is founded on the general theory of social contracts of Macneil (1980), combined with transaction costs theory (Williamson, 1985). As I have shown throughout this chapter, my study has a focus different from the majority of these studies, as, first, I focus on the formation phase of a relationship, and, second, as I want to assess the effects of social compatibility on relationship outcomes. Thus, I do not adress governance mechanisms, as I try to discover some social mechanisms that might underly the social structures at later stages of a relationship. Further, the course of explanation is different from the contracts perspective, as I treat social mechanisms as interacting variables, not direct antecedents to outcomes. This gives social factors a different role than in most studies of strategic alliances.

The focus on the formation phase warranted a closer look at processual aspects of cooperative IORs, and I have given this question much attention, in order to get a clear picture of this phase, which is a condition for the creation of a stringent model. As have been shown, research on process is scarce within this field, and the paradigm model I presented in figure 6 is based on few studies. The focus on social context and interaction made it necessary to draw on theory from different other sources. Thus, my final model, which I present in the next chapter, might be considered as an integration of different theoretical diciplines, and I prefer to regard it as a deepening and extension of the contracts perspective.

Chapter 3
Model and hypotheses

This chapter adresses and explaines the detailed model subject to empirical testing, and presents the hypotheses derived from the model. I also present, in the end of the chapter, variables that might affect outcomes that I have not included in the model, but will be controlled for in the empirical study.

3.1 Model

The detailed model is presented in figure 8. From the model, it is evident that the aim of the study is not to explain maximum variance in outcomes. My concern is with *whether, and how, social compatibility affects the relationship between potential gains and outcomes*. As I have shown in the preceding chapters, researchers agree upon the importance of social context in determining outcomes in cooperative IORs. The present model is an attempt to test more specific assumptions about the role of social compatibility, which, as I see it, is a more critical test of this role than simply adding more variables to the explanation of outcomes. This is mainly because the more specified a model is, the more easily it can be subjected to falsification. Further, the model expresses a more critical view to traditional economic models through introducing social variables as *contingencies*.

The main propositions expressed in the interactive model is that the relationship between potential gains and outcomes is conditioned on social compatibility, defined as social fit and reciprocity.

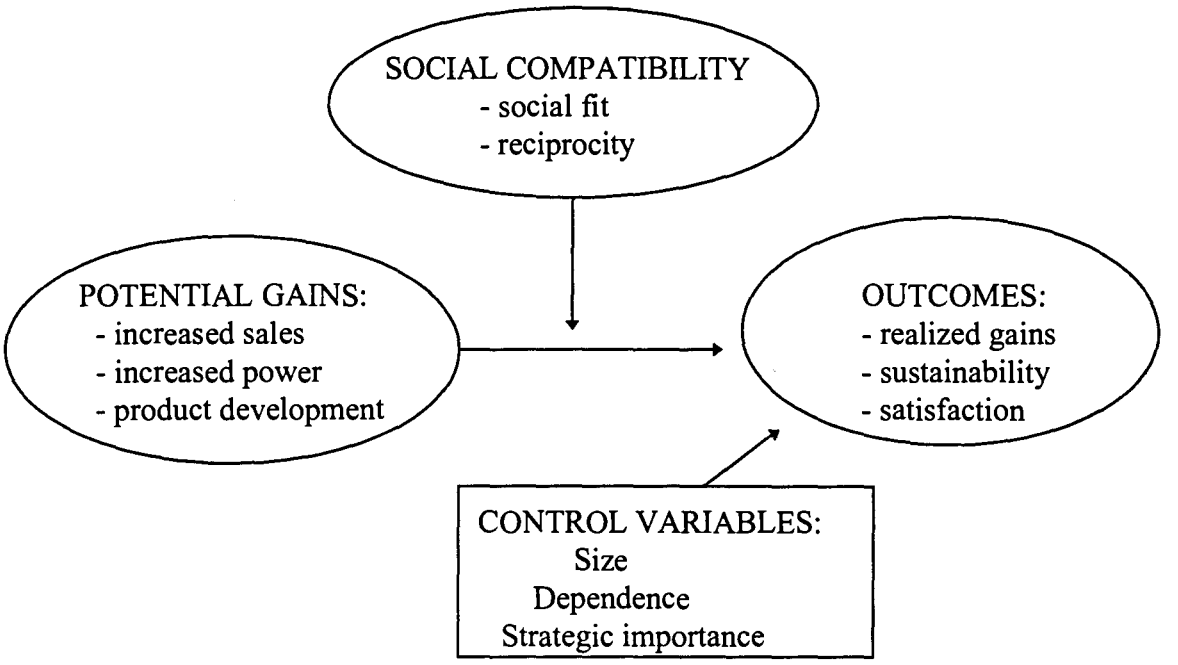

Fig. 8: Detailed model

Perspectives on human motivation

The composition of the model, the inclusion and exclusion of variables, are based on existing theory and empirical work reviewed. However, the focus of the model is also based on an underlying, subjective stand regarding motives for human behavior, which might warrant a short discussion.

Within theories of decision making and rationality, researches take different stands as to what can be considered as rational behavior. One of the subjects discussed are whether decisions based on emotions and normative considerations can be included in a rational model (Elster, 1983; Etzioni, 1988). I shall not include assumptions of rationality in my arguments; as I see it, what is rational can be reduced to mainly a question of definition. Rather, my basic argument is that normative and affective considerations are always inherent in human decisions, and should therefore be studied as independent factors determining behavior rather than deficiencies undermining rational choice.

From this perspective, the question is not *whether* affective and normative motives are present, rather *in what situations* these motives play a central role, and *what role* they actually play compared to e.g. strictly "rational calculations". The forming of a cooperative relationship between firms is no doubt a risky business, especially due to the lack of information as well as formal and legal support. In this situation, strategies to reduce uncertainty and complexity must partly be based on normative and affective categorizations of your cooperating partners as an alternative to other sources of information. Further, my argument is that these kinds of considerations not only function as *alternative* information sources, they also act as *independent* conditions, as they provide information about the potential quality of a relationship, which often might be a goal in its own right.

3.2 Level of analysis

Most organizational phenomena are multi-level in their nature (Rousseau, 1985). The issue of level in organizational research complicates these kinds of studies, and requires careful specifications of levels of analysis and proposed cross-level effects. Underlying the model in figure 2 are assumptions of several cross-level effects, e.g. that individual properties affect outcomes at the relationship level and that organizational level phenomena (as e.g. culture and financial status) affect managers' role behavior. Further, the level of measurement is mostly individual. Still, the model is at the relationship level, which actually is a group of organizations. In the following I shall adress the assumptions I have made in order to justify the theoretical level of analysis of the model.

An IOR can be defined as group of cooperating organizations. Inherent in such a definition is the assumption of an organization as an actor. However, all cooperative efforts between organizations must be carried through by individual managers. These managers act as representatives for their organizations, they act on behalf of the organization. Thus, properties of the organization as an actor relevant for the IOR are proposed to be *mediated through the individual managers*. Some researchers studying IORs define the organization as an actor, including in the study variables at the

relationship level which are aggregates of organizational characteristics, such as power/dependency relations (Heide, 1994), formalization and centralization (Haugland & Reve, 1993), and investments (Heide & John, 1990). In these studies, the individual managers act as key informants, reporting "objective" characteristics at the organization level. However, in studies including variables which are properties that must pertain to *individuals* or groups of individuals, as e.g. level of trust (Anderson & Narus, 1990) or satisfaction (Dwyer, Schurr & Oh, 1987; John, 1984), this approach is more problematic. In these kinds of studies, the managers in charge of the cooperative relationship not only serve as key informants, they are actually constituting the unit of analysis.

These problems concern two questions of correspondence: The correspondence between the organization and the individual, and the correspondence between the individual/organization and the group - the strategic alliance - they constitute. The correspondence between the individual manager and the organization is defined through the role as representatives that the managers play. This role implies, first, that organizational properties are mediated through the individual managers, and second, that these roles also includes personal properties as e.g. attitudes, that necessarily must be parts of the assessments of a relationship. This means e.g. that the managers' satisfaction with the alliance can be regarded as the organizations' satisfaction. The correspondence between the individual/organization and the alliance is more a methodological question of aggregation, most often solved through calculating the group mean of any variable measured at the individual level. The present model is based on these theoretical derived correspondences, still admitting that there is no one-to-one correspondence between a manager and his/her organization.

3.3 Hypotheses

The model comprises three groups of variables: Potential gains, social compatibility and outcomes. Potential gains are decomposed into three main types of gains, related to the purposes of the alliance: Increased sales, increased power and product development. The variables are proposed to be mutually independent, and to have similar - positive -

effects on outcomes. Social compatibility is also decomposed into two variables: Social fit and reciprocity. These dimensions are also proposed to be independent, and have similar effects. The outcome variable is decomposed into three types of outcomes: Realized gains, which refer to the same types of gains defined as potential gains; sustainability, which is defined as both expected continuity and actual duration, and satisfaction, which is the parties' subjective attitudes towards the cooperative relationship.

3.3.1 Moderating effects of social compatibility on the relationship between potential gains and realized gains

These hypotheses are based on general arguments about the role of social compatibility in the determination of relationship efficiency. In a market, potential gains are supposed to be realized through the "invisible hand" which secures efficiency; in strategic alliances, which can be characterized as a hybrid between market and organization, the realization of gains must be done through social interaction and organizing (Williamson, 1991). Some market mechanisms are assumed to be working, but their functioning is conditioned on social mechanisms (Bradach & Eccles, 1989). In the formation phase of an IOR, the most important condition for social mechanisms to function is here believed to be social compatibility.

Social compatibility are proposed to act as "lubrication" of the social machinery, to reduce transaction costs, and create trust, a necessary condition for relationship efficiency (Larson, 1992; Dwyer et al., 1987).

The general hypothesis is that during the formation phase, social compatibility in strategic alliances will have a moderating effect on the relationship between gain potentials and realized gains, in such a way that potential gains will to a larger degree be realized in alliances with a high social compatibility.

This general hypothesis comprises all types of gains as specified in the model:

Hypothesis 1: Potential gains will to a larger degree be realized in alliances with high social compatibility than in alliances with low social compatibililty.

In the next three hypotheses, the gains are decomposed into one for each type of gain. Thus,

Hypothesis 2:

Potential gains from increased sales will to a larger extent be realized in strategic alliances with high social compatibility (both similarity and reciprocity) than in alliances with low social compatibility.

Hypothesis 3:

Potential gains from increased power will to a larger extent be realized in strategic alliances with high social compatibility than in alliances with low social compatibility.

Hypothesis 4:

Potential gains from product development will to a larger extent be realized in strategic alliances with high social compatibility than in alliances with low social compatibility.

3.3.2 Moderating effects of social compatibility on the relationship between gain potential and satisfaction

According to Barnard (1968, p. 57, cited in Jarillo, 1988, p. 36),..."the efficiency of a cooperative system is its capacity to maintain itself by the individual satisfactions it affords", and it can be argued that this argument can be directly translated to interorganizational relationships (Jarillo, 1988).

The hypothesis on satisfaction is based on the argument that the process outcomes are central for the parties of a strategic alliance, not only the economic results. High potential gains are, in principal, a factor that should contribute to the overall satisfaction of the parties to a cooperative relationship. However, satisfaction is to a high degree related to affective and normative factors (Dwyer et al., 1987; Haugland & Reve, 1993;

John, 1984), and it is proposed here that in order for high gain potentials to be satisfactory for the parties, some social compatibility must exist. Thus,

Hypotesis 5:

During the formation phase, social compatibility in strategic alliances will have a moderating effect on the relationship between gain potentials and satisfaction, in such a way that the parties of an IOR with a high gain potentials (regarding either of the types of gains) will to a greater extent be satisfied with the relationship if the social compatibility is high than if it is low.

3.3.3 Moderating effects of social compatibility on the relationship between gain potential and sustainability

The underlying motive for firms to enter into a cooperative relationship is some sort of economic gains, and the relationships are proposed to sustain as long as it produces surplus, compared to alternatives (Anderson & Narus, 1990). The following hypotheses suggest that even in relationships with a high gain potential, the parties can dissolute the relationship if the social compatibility is low. This is partly because they may perceive a lack of ability to realize these economic potentials, which will result in low expectancies concerning continuity; partly because even if the economic potential is perceived to be high, the parties also value the social relationship - and if this is weak, the cooperation might be brought to an end. Lack of social compatibility might also actually result in conflicts and disabilities to create the commitments necessary to develop the relationship, and hence to dissolution. Thus,

Hypothesis 6:

During the formation phase, social compatibility (both social fit and reciprocity) in strategic alliances will have a moderating effect on the relationship between gain potentials and expected continuity, in such a way that high gain potentials (regarding either of the types of gains) will be related to high expected continuity to a greater

extent in alliances with high social compatibility than in alliances with low social compatibility.

Hypothesis 7:
During the formation phase, social compatibility in strategic alliances will have a moderating effect on the relationship between gain potentials and duration, in such a way that alliances with a high gain potentials (regarding either of the types of gains) will have a higher probability to endure if the social compatibility is high than if it is low.

3.4 Control variables

In developing the model, I have placed a large weight on simplicity. In this, I agree with Lave and March (1975, p. 61): A beautiful model is simple. However, using a simple model also implies omitting several factors that might affect the outcomes in the model. The literature on IORs do provide a broad range of variables proposed to affect cooperative outcomes, and I shall controll for the most relevant of these in my study.

Most studies of IORs focus on established, formalized contracts, where structures and norms are in function. Thus, some antecedents shown to have impact on outcomes are factors not relevant in the formation phase. This applies to e.g. degree of bureaucratization, and relational norms (Haugland, 1994; Haugland & Reve, 1993; John, 1984).

From the literature I have reviewed, some variables are shown to have specific impact on outcomes, which also are relevant for the formation phase. According to game theoretical approaches, the size of the group is the most evident variables which has shown to affect cooperation in addition to the social factors that I have included in the

study. The reasoning behind this is that in large groups, social loafing is easier, because the costs are divided between more parties. Further, integration in general is more difficult in large groups than in small. Thus, *size* is included as a control variable.

The strategic importance of the alliance for the firms involved is also shown to have effects on outcomes (Nesheim et al., 1997). The more important the cooperation is for the firms' survival, the more effort they will put into the cooperation, which again will increase the probability of obtaining the desired outcomes. Thus, *strategic importance* is included as the second control variable.

The contracts perspective, which is influenced by sociological approaches, also place a large weight on power and dependency relationships. Specifically, degree of dependence is considered to be one of the main reasons underlying some firms' decisions to form strategic alliances instead of the «arms length bargaining» (Williamson, 1985). Firms with a high degree of dependence are more prone to put effort into the relationship, because they are less able to accomplish the relevant purposes outside the alliance. The argument is thus similar to that for strategic importance. *Dependence* is thus included as the third control variable.

Chapter 4
Design and methods

The choice of research design and data collection methods are essential for the ability to make inferences about the phenomenon in question. The quality of the empirical data are conditioned on several factors, such as the available methods and tools, the nature of the phenomenon in question, and the researcher's ability to choose the proper methods and to fulfill requirements for using the different methods. In this chapter I shall explain the different choices I have made regarding the empirical part of the thesis, and comment on the strengths and weaknesses connected to these choices.

First, I shall present the basis for my choices, which are some beliefs about the relationships between theory, empirical data and the phenomenon in question. Requirements for a strong design are adressed, and the choice of a cross-sectional, non-experimental design is discussed on the background of requirements and limitations. The population, sample and unit of analysis is adressed in section 4.2. In order to improve measurement and design of questionnaire, I conducted a small pilot study, and this is reported in section 4.3. Finally, the data collection method through mailed questionnares is reported in section 4.4.

4.1 Design

The relationship between theory and empirical data

A main distinction regarding this question can be drawn between the "Context of Discovery" vs. "Context of Justification". Within the Context of Discovery, we find phenomena about which we have very scarce - or practically no - knowledge. According to traditional reasoning, an inductive approach to these phenomena are

warranted, in order to create theories. The Context of Justification refers to phenomena on which substantial theories exist, and the task here is to verify/falsify the theory. My point of view is that over the time, the relationship between theory and empirical data is interactive, in the way that theories seldom are totally rejected on the basis of single empirical studies, rather, they are modified through further investigations. In a similar vein, inductive and deductive methods supply each other. Data from theory testing might reveal surprising findings that needs further investigations through e.g. inductive approaches. And, theory buildt through inductive methods are tested through deductive methods. In this way, theories develop and are reshaped through time.

The main reasons for these processes is that empirical data do not perfectly mirror the "reality", and are neither perfect tests of the truth in a theory (Troye, 1994), as the theory itself is an imperfect image of the presumed "reality". Thus, there are two main challenges in a research study: The building of a theory that approaches "reality" in the best possible way, and the collecting of data that are close to the "reality" of the phenomenon. The present study was conducted through using a combination of inductive and deductive approaches in building the theoretical model, and a deductive approach in the testing of this model. As there is little theory about the formation phase of strategic alliances, an inductive approach was applied to generate the paradigm model. This method was further supplied with standard theory review procedures, through reviewing general theory on cooperative IORs and comparing this to the results of the pilot study.

The relevance of the theory must thus be assessed through logical reasoning and earlier research. As an empirical test strictly spoken is only a test of the correspondence between the obtained data and the assumptions in the theory, a discussion of *how* the data are obtained is neccessary in order to assess whether they are suitable for the drawing of conclusions regarding the phenomenon in question. This assessment is mainly based on evaluations of methods and statistics, together with measurement issues. The theoretical model here is tested through standard, hypothesis-testing tecniques. The relevance of this choice of techniques is based on a judgement of

whether the theoretical foundation for the model is solid enough to be able to infer hypotheses about the relationship between variables in the model. The preceding chapters have provided this foundation. However, as my model includes a novel concept - social compatibility - that has not been tested empirically before, I have place much weight on the measuring and validity testing of this concept.

Causality and the choice of design

The model is buildt on implicit assumptions of causality. Although an empirical test never can prove a causal relationship, most researchers using deductive approaches try to establish the best possible ground for inferring causality. Many studies of social cognition have been conducted in experimental laboratory settings, with this goal in mind. However, I consider the present model not suitable for experimental design, because the relevant social setting of a cooperative relationship hardly can be constructed in a laboratory. Thus, a field study is most appropriate for my purposes.

Field settings do not allow for experimental designs, but a range of quasi-experimental approaches can be applied in order to approach the criteria for inferring causality. These criteria can be defined as follows: 1) Covariation between the presumed cause and effect, 2) the temporal precedence of the cause, and 3) the need for control - mainly secured through randomization (Cook & Campbell, 1979). The criterium of covariation can, and will in this study, be established through correlation design and statistical control. The temporal precedence of the cause is difficult to establish, as this requires more time and resources than is available, and the arguments for temporal precedence are mainly based on logical reasoning. However, one dimension of one of the dependent variables - duration - is measured 10 months after the first data collection. The time perspective in cooperative IORs are in most cases fairly long, which makes it difficult to cover the life time of a relationship in one study. The differentiation between phases is one solution to this problem, where studies of different phases can be compared.

Randomization is neither feasible in the present study, as potential gains are not manipulable, and the units of analysis do not assign themselves to potential gains randomly or naturally. The argument for randomization is to control for third variables or spurious effects. This is done through statistical control for third variables. Further, as will be explained in the next section, the whole sampling population is included in the study, so randomization is not of actual relevance.

I have thus chosen a cross-sectional statistical control design, because this gives the best possible utilization of the information source I got access to through the NBNP. Further, since the number of alliances in the programme is of limited size, I wanted to include them all in my study.

4.2 Population, sample and units of analysis

Theoretical vs. sampling population

The theoretical population - the population to which my theoretical model applies, comprises strategic alliances in general. The sampling population, the alliances on which I test the hypotheses of the model, are the members of the Norwegian Business Network Programme. Hence, a comparison between these two populations is necessary, in order to assess the possible theoretical generalizability of the results. In principle, a statistical generalization can only be done to the population from which the sample is drawn. However, based on close comparisons between the theoretical and the sampling population, theoretical generalizations can to some degree be made. In most cases, the theory applies to more general populations than the sampling population. For example, a theory of marketing relationships is tested on specific manufacturer-supplier relationships (Heide & John, 1992), hypotheses about marketing channels are tested on retailer-supplier relationships (Achrol & Stern, 1988), on relationships between manufacturers and exporters (Haugland & Reve, 1993) or on relationships between sales agencies and their principals (Anderson, Lodish & Weitz, 1987).

I the present study, the alliances of the NBNP are highly relevant for the test of my model. First, the theory is not limited to specific industries or businesses, and the NBNP includes a broad variety of industries, as well as both horizontal and vertical relationships with several different purposes. Second, the NBNP alliances are all cooperative, established with the intention to accomplish some (more or less) predefined strategic objectives, similar to the theoretical conception of strategic alliances. The broad variety in types and purposes makes the NBNP not only relevant for this study, but also very interesting to study, as it may make the results more generalizable. However, these alliances also carry specific attributes that distinguish them from the theoretical population, and thus might treaten the validity of the study. In the following I dicuss these attributes, and their possible effects on results.

Distinguishing features of the NBNP alliances

The main difference between the NBNP alliances and the theoretical definition of a strategic alliance in general, is that the former are participants in a governmental programme, which give them specific characteristics. This concerns particularly two questions: The question of selection mechanisms for programme participation, and the question of whether participants included in the programme have developed specific characteristics that might have confounding effects on results (Spector, 1981). According to SND, only applicants with some minimum of gain potentials (as judged by SND) are granted support. If we consider the judgement of SND as valid, applicants with very low gain potentials are excluded. This obviously limits the population variance regarding the independent variable, and we would expect that the alliances participating in the programme would have a higher mean gain potential than a general population of strategic alliances. At the same time, the financial support is considered to be a substantial incentive for firms to establish alliances[1], which should increase the number of high-risk projects in the programme. Thus, the financial support act as an additional incentive to potential gains, and as an opposite force to the bureaucratic selection mechanisms of SND, implying that the participants in the NBNP would have a

[1] SND finances 50% of the development costs of a network, including the consultant. Support is also available during the operation phase.

lower mean gain potential than the "external" population of strategic alliances. Discussions with the SND consultants in charge of the funding applications revealed that the first argument above is relevant, i.e. that a large proportion of the applications are refused, based on the considerations that either, the firms are not considered as able to accomplish the projects in question, or, that the potential gains are too small to justify the investments necessary. How strong the funding possibilities affect the motives of the firms to form an alliance is difficult to assess, but the thorough procedures of SND indicate that the conditions for support might outweight these effects. Thus, I shall assume that the distribution of the variable gain potentials between the NBNP alliances is approximately equal to strategic alliances in general. Since we have no information about the fate of the refused applicants, however, we must keep the possibility open that there could be differences not accounted for here.

Participation in the NBNP also imposes other requirements on the alliances, implying that they have common features that may infect the empirical results. The first is that all the alliances should apply an external consultant or network broker. This broker plays an important role, especially through the search and formation phases, as initiator, mediator and field executive. The consultant is hired by the firms themselves, but SND demands that he or she should be independent - i.e. not previously connected to any specific firm in the actual alliance. This consultant may obviously be a source of spurious effects. The tasks of the consultants vary from network to network; some do mainly market analysis, some are more process oriented. The nature of the programme implies that SND is an additional stakeholder in each alliance - since they have granted money - and the role of the consultants was intended to increase the success rate of the alliances in the programme. The evaluation of the network programme (Nesheim, 1994, p. 74) revealed that in general, the participating firms considered the consultant as a contributor to the development of the alliance. However, he or she was not considered as a crucial factor. On a scale ranging the importance of the consultant from 1 (no importance) to 7 (of great importance), different process aspects of the relationship were assessed, and only one of these aspects (planning and follow-up) received a score above the middle (4). Further, most of the alliances reported that the consultant had not been a

driving force in their work. This indicates that the consultant is not *the* central factor, but still affects the relationship. Nesheim (1994) found no effects of the consultant on ultimate results. Still, the consultants represent a potential spurious effect, which cannot be controlled for in the present study. The plausible effect would thus be that the NBNP alliances are more successful than other alliances outside the programme. The evaluation report states that there are large variation in results between the alliances in the programme, the number of alliances reporting high performance is actually equal to the number reporting low performance (Nesheim, 1994, p. 127).

The other distinguishing attribute of the NBNP alliances that might affect results is that each alliance is obliged to have an administrator, which is one of the firms in the alliance. The administrator is responsible for contact with the programme governor as well as for initiatives regarding the development of the networks. I do not know whether some kind of administrator is common in general strategic alliances, but Larson (1991) mentiones as a success criteria in the formation phase that one firms is initiator, thus having a similar role. Thus, such a role is at least not uncommon. The role of the administrator in the NBNP networks vary substantially between the alliances (according to SND), but the main task is to document the process and communicate to SND. The effect of the administrator on results is not detectable in this study, and must be left for future investigations. However, the intentions from SND is that the administrator should contribute to the enhancement of results, similar to the consultants. As mentioned above, the performance vary substantially between the alliances, and there are no indications that the members of the NBNP perform better than other strategic alliances[2].

Definition of formation phase

Although researchers agree that strategic alliances go through different phases, these phases may be difficult to distinguish in practice. The transition between phases is probably not clear-cut, and the actors themselves will probably have different

[2] The variation in results among the alliances in the network programme concerns end results. The evaluation study also reveals that a majority of the firms involved report that they have aquired increased *competence* through participating in the programme, which is considered as a side-effect (Nesheim, 1994).

interpretations of the contents of each phase. In the NBNP, however, the financial support is related to different phases, and these are therefore very specifically defined. One of the most basic requirements for participation in the NBNP is that the cooperation should be concluded in a formal business agreement in each alliance. The financial support is provided in sequences, based on the development of the relationships and reports from the networks. The sequences are defined as phases, and a report from one phase is required to receive grants for the next phase. There are three phases defined: The search phase (selecting partners and clarifying of intent), the formation phase (negotiations, establishing formal agreements) and the operating phase (implementation of joint actions), and the activities in each phase that the participants have to accomplish, are specified by SND. The results of the formation phase should be formalization of a contract, and this formalization is a condition for support in the operating phase. Thus, SND keeps records of the status quo of the alliances through all phases[3], and through these records, it it possible to select the units of analysis for the study. Since the time spent on each phase varies between the alliances, this is a more accurate method to assess the actual phase than e.g. their age.

Thus, the formation phase is the period *after* the parties have decided who is going to be members of their alliance, and have agreed upon intentions to cooperate on some level, and *before* or up to the formal business agreement is concluded. The sampling population was defined on this basis. The SND records provide information both at the alliance and the firm level and they reported 82 alliances in this phase, comprising 280 firms.

Sample and units of analysis

As the population is at this low size, no sampling is done, and the whole sampling population is included in the stud. The units of analysis are the alliances. As described in chapter 3, a strategic alliance is actually a group of organizations, but here it is operationalized as a group of managers, representing their organizations. As all

[3] SND gives quite specific guidelines on the contents of each phase, and these are presented in their "network manual", which is available on request.

members in each NBNP networks are registered by SND, the managers comprising the group were easy to detect. Through the collection of units of analysis in the SND records, it showed that some alliances were reported to have only one member[4], and these were excluded before the population was defined. Thus, the units of analysis are the alliances in the NBNP, being in the formation phase, whith two or more members.

4.3 Pilot study

The choice of data collection method implies a balance between the ideal and the feasible. One basic criteria for this choice is the need for in-depth knowledge vs. scope. In-depth knowledge mostly requires qualitative methods, such as observation and interviews. These methods are time-consuming, and implies that the data collection must be limited to few respondents. The quantitative methods, such as surveys, allows for large numbers of respondents, which is neccessary to be able to conduct statistical analyses. However, surveys do not imply contact between the researcher and the respondents, and concepts and questions can be very differently interpreted by respondents, and are therefore less valid. Hence, the measurement of concepts and design of questionnaire will to a great extent determine the quality of the data.

An important task when designing a questionnaire is thus that the wording is similarly interpreted across respondents. A common method to increase this inter-subjective interpretation, is, first, to conduct a pilot study, and, second, to pre-test the questionnaires. I did both, and in this section I report on the pilot study. In the next section, I describe how I tested the questionnaire, and, finally, how I conducted the survey.

The objectives of the pilot study were the following:

* To obtain more detailed insight into the processes of cooperation in an IOR, and become aquaintanced with the language and concepts used.

[4] According to the SND consultants, some alliances have only one member for a shorter period, because other former members have exited, and a new search phase is necessary.

* To discover the managers' opinions about important success criteria for their relationships, as well as criteria for failure.
* To obtain more knowledge about the social relationships between the managers in a relationship.
* Specifically investigate into the concept of social fit - the relevance and content of the concept.

The purpose of this was to obtain a basis for measuring different concepts, as well as for the design of the questionnaire. I wanted to secure that I used concepts that were familiar to the respondents.

I selected three networks as subjects for the pilot study. These networks were originally parts of the population, so I excluded those from the survey (they are thus not included in the population of 280 firms). In one of the networks, I interviewed four managers from all the three firms comprising this network, and in addition the consultant. In the remaining two networks, I interviewed the manager of the administrator firm in the networks. All the managers I interviewed were reported to be firm representatives, responsible for the network cooperation. With this method, I could compare answers between different persons in one network, as well as between different networks. I did not define the number of interviews initially, I decided to continue with new interviews as long as they produced new results. All the interviews were semi-structured, conducted according to an interview guide based on the paradigm model described in chapter 2, and lasted between 1 and 1,5 hours.

The three networks differed in purpose and type. Two of them were vertical, i.e. the firms represented different stages of the value chain, and one were horizontal, comprising firms formerly being competitors. The purposes were different, one network cooperated on the establishing of a joint venture. They were manufacturers who wanted to establish a chain of retail stores to sell their products. The two others did product development, one of a completely new product, the other of a product already in the

market. The latter wanted to reduce their dependency on a supplier who was also a competitor through producing the product themselves.
The interviews revealed very similar results, and I decided that five would be sufficient. I shall not report details here, as they are integrated in the further work, but point to a few typical findings.

* Strategic fit, defined as complementary resources and compatible interests, was a condition for starting cooperation at all. One of the networks had not yet been able to find all the necessary partners (resources), and were not able to start specific negotiations.

* One of the most frequent success criteria mentioned, was what they called "personal chemistry", referring to concepts similar to the definition of social compatibility, i.e. similarity and reciprocity. This is further explained in the measurement chapter.

* Strategic fit and social compatibility are partly independent concepts, i.e. a network with high strategic fit may fail because of low social compatibility.

In sum, the results from the interviews gave indications of support for the theoretical foundation of my study. They further provided me with a foundation for the translation of my theoretical variables into questions in the questionnaire.

4.4 Survey

Pretest of questionnaire

I pretested the questionnaire using four of the respondents that had participated in the pilot study. I sent them the questionnaires asking them to fill out the answers in an ordinary way. A few day later, I called them and went through their answers by telephone. They reported their answers (excluding questions with sensitive information), and commented on the meaning of each answer. They were also asked to comment on items that were difficult to understand, or badly formulated. It turned out

that questions about social compatibility was too difficult to answer, mainly because each question required an answer along two dimensions of the relationship, so I had to simplify this. Apart from this, I found that the questions were interpreted according to my intentions.

Respondents

The respondents were all managers reported to be in charge of the network project, each representing their firm. The names of these managers were provided by SND, who also gave me access to their data base of all the networks in their program, with adresses and telephone numbers. A common procedure in studies of interorganizational relationships is to use key informants, which poses some methodological questions to be discussed. The question of validity and reliability of key informant data has been adressed (John & Reve, 1982; Phillips, 1981), discussing the use of one single informant per unit of analysis. As all the parties of a NBNP network are respondents in my study, this question is not relevant here. Still, the respondents in the present study report on organizational characteristics, as they are representatives for their organization. They thus serve as key informants, not on network characteristics, but on organizational characteristics. The respondents are selected not only because they have special knowledge of their organization, but because they actually carry through the cooperation. This implies that even if there might be some deviance between the managers' and other organizational members' perceptions of their organization, this is not regarded as a validity threat because it is the mediation of the organizational traits through the individual managers that affects the relationship.

Survey

The questionnaire was sent to all the 280 respondents by mail. I anticipated that a recommendation from SND - their funding agency - would increase the response rate, so this was included in the cover letter. A project assistant administrated the mailing, and assisted on the follow-ups. After three weeks, follow-ups were done by telephone, and a second questionnaire was sent to repondents who had lost the first one. Three weeks after this, a second follow-up by phone was done. This resulted in 176 responses, a

response rate of 63%, which must be considered to be satisfactory. The 176 responses were from 76 alliances, and at the alliance level, this is a response rate of 93%.
The response rate is important for the validity of the data. In this case, the response rate *within* each alliance also affects validity. The response rate at the firm level is much lower than at the network level, which indicates that from many alliances, few of the members have responded. Actually, from 12 of the alliances, I only received responses from one member. In principle, single informants can provide valid data at the relationship level, particularly in dyads (John & Reve, 1982). However, this concerns data at a global level. As several of the variables in my study are composite measures (see next chapter), where data at the organization level are aggregated to the alliance level, single informants cannot be included. Thus, I excluded the 12 single-respondent alliances of my sample.

From 10 of the alliances, the respondents reported that they had dissoluted their relationship. Obviously, it takes some time from this decision is made and until the information reaches SND. This raised the problem of whether include these in the analysis or not. On the one hand, excluding them might bias the study, because they represent non-successful relationships. On the other hand, the population is defined as alliances that are in the formation phase, and those that were dissoluted *before* the survey was conducted are not part of this population. After a discussion with SND, I concluded that I should exclude them from the analysis. This is mainly because the bias probably is small - SND reports that during any period, a small amount of alliances are dissoluted. This means that, since I collected data on dissolution or duration 10 months after the survey, I got the alliances that were dissoluted through those 10 months in my sample. Including the 10 that were dissoluted before the survey, would overestimate the proportion of non-successful alliances in my sample. After this exclusion, the sample consisted of 54 alliances, comprising 154 firms. This still leaves us with more than half of the firms in the population, and 66% of the alliances. The average size of the alliances in the sample is 2,8 members, which is quite close to that of the population, which is 3,4.

4.6 Summary

I have in this chapter outlined the design of my empirical study, which is a cross-sectional correlation design. As this type of design in principle is not very suitable for inferring causality, arguments for causal effects will mainly be based on logical reasoning. I have also described the NBNP networks, which is constituting my sample. As the whole sampling population is my sample, statistical generalizations and, hence, significance, will not be of great interest in the analysis. The main question is the type and size of effects.

I have also described the procedures used in the making of the questionnaire, through a pilot study and pretest, which should faily well ground the validity of the questionnaire as a measuring instrument. In the next chapter, I shall present the measurement procedures and the measures used in the study.

Chapter 5
Measurement

Measurement is the attempt to establish a maximum correspondence between theoretical constructs and empirical indicants of these constructs. Abstract theoretical constructs can have a wide variety of meanings; many constructs are open to an almost indefinitely number of interpretations, and empirical indicants will never be able to fully represent them (Zeller & Carmines, 1980). A main task is thus, through thorough procedures, to develop indicants that in a best possible way *approximate the meaning most relevant for the present setting*, and to secure that this specific meaning is inter-subjectively shared. This is the question of construct validity, which is also a crucial condition for the establishment of correspondence between theoretical and empirically generated relationships between variables.

This chapter will adress the operationalization of the variables in the model and the measurement method. Since the level of analysis is a higher-order level - the cooperative relationship - and most of the data are collected at the individual level, a discussion of how to measure concepts at this level is warranted. This is done in section 5.1. Section 5.2 describes the operationalization procedures, and presents the measures used for each variable.

5.1 Measuring constructs at the relationship level

Most studies of IORs include constructs which are attributes of higher-order levels, as organization characteristica, properties of a relationship, or even attributes of networks of organizations. At the same time, data are frequently collected at the individual level. Many of the constructs included in these studies cannot directly be decomposed to individuals, because they posess properties in their own right, such as e.g. power

structure and degree of formalization. This fact might obscure the actual unit of analysis (Rousseau, 1985), and to establish a correspondence between the theoretical constructs and their empirical incidents requires a more complex procedure, with the risk of including several biases. The measurement procedure should be designed on the basis of theoretical assumptions about the nature of the theoretical constructs, and in the following I shall describe how I dealt with this problem when developing the measures.

The first question is the choice of individual vs. group level of measurement. It has long been acknowledged that individual measures in groups may be inflated with group effects (Florin et al., 1990; Kenny and La Voie, 1985), and several studies have been conducted in order to separate these types of effects. Further, it has been argued that group constructs are not merely aggregates of individual constructs - also due to group effects -, and a researcher must justify the methods of aggregation when measuring group constructs using individual level data (Rousseau, 1985). All the concepts included in the analysis here are at the group level. This is mainly because the group level - the alliance - is the subject of interest. I want to look at success for the alliances as such, each single firm is not of main interest. One of the reasons for this is the time perspective, that in early phases, outcomes for the alliance as such - goal accomplishment - is more important than ultimate performance criteria as e.g. increased profits or other firm level outcomes. Outcomes at the firm level is more interesting at later stages of an alliance, because it takes time. Thus, the variance in e.g. outcomes may be quite large between the firms within an alliance at early stages, and it can be hypothesized that this will equal out over some time. Thus, gains at the alliance level are most relevant to measure here, because this will equal out some individual variance in the early stages of "trial-and-error".

The reasoning above indicates that the relationships between the variables are different on the individual vs. the group level. In discussing fallacies associated with using aggregated data, Ostroff (1993) states that the fallacy of the wrong level occurs when correlations at a more macro level are used to make inferences about individuals, or vice versa (Ostroff, 1993, p. 570). Thus, relationships between variables at the group level

are not necessarily representing the same relationship at the individual level. This is the case when e.g. individual responses reflects attributes for other persons in the group than the focal person, which is the case for many of the variables used here.

The second question is about how to measure constructs at the group level. Heide and John (1991) adress the measurement problems in studies of IORs, and outline two main approaches to measuring relationship properties: A composite approach, and a global approach. The choice of approach should, according to the authors, be determined by the nature of the construct in question. *Composite* approaches implies aggregation of individual measures, and can be used to measure variables that are defined as aggregates, e.g. a joint utility function between two parties (Heide & John, 1991, p. 5). A composite approach can also be used when more complex types of aggregation is necessary, e.g. when measuring norms. As norms are defined as shared expectations, individual expectations towards different behavioral issues can be measured, and come kind of measure of convergence between the individual expectations - e.g. correlation or average standard deviation (Eisenhardt and Bourgeois, 1993) - can be computed. The other approach is the *global*, and includes two alternative data sources: The use of content analysis, and the use of key informants. Both methods are used to create global measures of constructs, but since content analysis is of no relevance here, I shall concentrate on the discussion of key informants; the two methods are based on similar theoretical assumptions about the nature of the constructs in question.

The use of key informants have been discussed by several researchers, adressing validity problems with this method. I have commented on this discussion elsewhere in this thesis, the point to make here is that key informants provide data directly at the relationship level. This method is the most frequent in studies of IORs, and can be examplified with the measuring of norms. The global approach is applied through asking respondents to report directly on the degree to which common expectations exist in the relationship, regarding e.g. mutuality and reciprocity. It can be argued that global measures through key informants is the "easy way out" when measuring complex constructs, and it no doubt requires less effort than the composite approach. On the

other hand, it is an efficient method to measure constructs of a global nature, which concerns e.g. social compatibility in the present study. I have, for the global measures in my model, used multiple key informants, which should increase the stability of the measures substantially compared to using single key informants.

The choice of measurement method described in the next section has been made according to the considerations above, and I shall comment on the choices for each variable. It concerns two types of choices:

- the choice of composite vs. global measure
- method of aggregation.

In table 2, the types of measures are outlined for each variable.

VARIABLE	TYPE OF MEASURE
Potential gains	Composite
Social compatibility	Global
Realized gains	Global
Satisfaction	Composite
Expected continuity	Global
Actual duration	Global
Size	Global
Strategic importance	Composite
Dependence	Composite

Figure 2: Types of measures

5.2 Operationalization and measurement

Procedure

A general approach to the procedure of operationalization of variables is provided by Churchill (1979), and is presented below. It includes the following recommendations:

i) Develop a pool of usable items for each construct, based on

- theory
- operational definitions
- previous empirical studies

- the context-specific meaning and content of theoretical constructs and words

ii) Test these items, using

- experts/colleagues
- pilot study

iii) Develop a multi-measure instrument

iv) Test the instrument within a validation-sample

v) Develop a final multi-item instrument

I used these recommendations as a guide to the measurement procedures. The measures of some of the concepts in the model were developed by going through most of the steps above, while some measures are taken more or less directly from other empirical studies. Due to the small size of the sampling population, a validation-sample could not be drawn, and I limited the test of the questionnaire to four respondents.

The procedure was as follows:

i) From review of theory and empirical studies, I derived definitions of the variables in the model (described in chapter 2). These definitions were discussed with colleagues, and a interview guide was developed.

ii) Items were developed based on this review, and on the pilot study (described in chapter 4), through interviewing four managers. The interviews were focused on obtaining several items, as well as on finding specific definitions and items that were similarly interpreted across respondents and networks. The broad variation in central characteristics of the networks in the pilot study secured variation; at the same time the intersubjective interpretations became more valid.

iii) The questionnaire was developed, with multi-items measures for most of the variables, but not for all - depending on how well the concepts were defined and tested in earlier studies, and on the nature of the constructs. Some constructs are pretty straighforward and one-dimensional in the context-specific setting we are referring to.

iv) The questionnare was tested through

- discussions with colleagues
- responds from four managers in the sampling population.

The test respondents were the same as in the pilot study. This might decrease the strength of the results - due to some kind of testing effect (Cook & Campbell, 1979). However, there were substantial differences between the interviews and the questionnaires, so I consider this effect to be very small. Further, the sample was so small that a further decrease in number of respondents was not advisable. The test respondents were excluded from the sample population.

v) The final questionnaire was developed (is enclosed in Appendix..)

I comment on more specific parts of the procedure in the following, where I adress the measure of each variable in turn.

Potential gains

With the risk of bias from "social desirability", I decided not to measure potential gains by asking directly. Realized gains were asked for directly, and I considered it as very likely that "post-rationalization" could lead the respondents to adjust their perceptions of potential gains to their answers about realized gains. Hence, I put the questions about potential gains first in the questionnare, and realized gains at the end. The respondents were given a list of areas or goals (as increased sales, product development etc.), asking them to assess how *important* each goal was for their *initial* decision to enter into the alliance. I anticipated that if a goal was very important for their decision to enter into the alliance, they must also have expected gains from this goal.

The measure of potential gains is thus indirect. As it concerns each firms motive to enter into the alliance, I considered a composite measure as most relevant. Then it is the question of aggregation: Is potential gains for the alliance equal to a mere aggregate of the anticipated potential gains for each firm? First, each particpating firm might have several goals, and some of the goals might differ between the firms within an alliance. In summing up the scores and dividing them by the number of respondents in each

alliance, "outliers" are averaged out, and the score at the alliance level will reflect the goals that there are most agreement upon, which I consider as important. This also accounts for some group effects. If one of the respondents in an alliance consideres one of the goals as highly important (e.g. access to new markets), but none of the other participants think this is important, the gain potentials from this goal is probably small. And - through the aggregation procedure, this goal will not be given a high value at the alliance level. Thus, the stronger the importance and the higher the agreement regarding a goal, the higher score on potential gains.

What are the contents of these gains? From a thorough evaluation report of the Norwegian Business Network Programme done in 1994 (Nesheim, 1994), as well as the "network manual" published by SND, I have derived three main goals for the firms: Increased sales, increased power, and product development. Thus, potential gains will be related to these three main areas.

The questions were asked as follows:
"Below is a list of goals that might be relevant for cooperation between firms. How important were these factors to your firm for the initial decision to enter into the cooperative relationship?"
The factors listed were the following (parantheses indicate question numbers, and variable names in the statistics programme):

Increased sales

- increased sales in present market (M12 A)
- access to new markets (M12 B)

Increased power

- More negotiator power towards customers (M12 C)
- More negotiator power towards suppliers (M12 D)

Product development

- Development of new products (M12 D)
- A broader product spectrum to offer in a market (M12 E)

Other (Open question)

The answers were to be recorded on a 7-points Likert-type scale for each item, ranging from 1=not of importance, to 7=of very great importance. A "not relevant"- option was also available. The respondents were to rate the importance for every single item, except from the "other" option.

I computed network level variables for each item, and for the total gains. For each item, the sum of scores were divided by number of respondents in each network, which produced the mean gains for each item per network. Then I summed the scores on each item and divided them by number of items, within each networks. Thus, the final variables are both *total potential gains* for each network, as well as *gains on each item* for the networks. The higher the importance of each item, and the more items that were considered as important, the higher the total score of potential gains for each network.

Outcomes

There are three types of outcomes in the model: Realized gains, sustainability and satisfaction. The realized gains are defined as gains realized through accomplishing the goals mentioned above, and are categorized in the same way. The sustainability variable has been measured in different ways in studies of IORs, both as expected continuity (Heide & John, 1990), and as actual duration (Haugland, 1994). I shall adopt both these definitions.

Realized gains

Realized gains is one way of interpreting performance. Performance has been measured in different ways in earlier studies, mainly in one of two ways: Either as "objective" data gathered from secondary sources, such as company records, measuring e.g. sales and gross margins (Buchanan, 1992), or as perceived performance, such as perceived effectiveness (Bucklin & Sengupta, 1993). Other suggestions of performance measures have also been put forward, such as perceptions of equity, productivity or profitability (Mohr & Nevin, 1990). Noordewier et al. (1990) measured performance through the respondents' reports of different costs, such as aquisition costs. Thus, performance can

be assessed relative to goals, or in a more global manner, using general indicators of results, such as perceived effectiveness or productivity.

Realized gains in strategic alliances can also be defined to be both at the alliance and at the firm level. Ultimate gains, as e.g. profits, are at the firm level, while goal accomplishment, such as e.g. the creation of a product package, is at the alliance level. As the construct "realized gains" is tied to the accomplishment of specific goals for the alliance, I found a global measure to be most relevant. Thus, the respondents are asked whether the alliance had obtained gains from any of the areas or goals listed in the question (e.g. from increased sales, from product development). The types of goals were identical for those measuring potential gains. This measure obviously contains group effects, because each respondent (manager) will account for the other actors' gains as well as their own. The measure is aggregated through summing up the score on each type of gain for each respondent, dividing the total sum on the number of respondents in each alliance. As this is a global measure, the measure is a type of "multi key informant", where the computing of the mean increases the representativeness of the data (Rousseau, 1985). As the measure is subjective, this is a relevant way to average out individual differences in responses.

The questions are posed as follows: "Below are listed different areas which might yield outcomes for the network (alliance). On what areas do you think you will obtain any gains in the future? *Or*, have you already obtained any gains in some of the areas?"
The following areas were listed:

- Increased sales (in present market as well as new markets, M33A and M33B)
- Increased power (over customers as well as suppliers, M33D and M33E)
- Product development (through developing new products, as well as a broader spectrum of products, M33C and M33F)
- Other areas (open question)

The options for answers to each item were the following: Whether they already had obtained any gains, whether they expected to obtain gains in the future, or not relevant. This variable is computed as a dichotomy, whether they have already obtained gains or

not. This is as mentioned a global measure, and the data are aggregated through first computing the network mean for each item, and then the total network mean across all items.

Sustainability

Perceptual indicators, such as long-term orientation (Ganesan, 1994) or expectations of continuity (Heide & John, 1990) has been used to measure sustainability. Some researchers have also collected data at different points of time, in order to compare IORs that were dissoluted with those who were sustained during specific periods of time (Haugland, 1994), (Seabright, Levinthal & Fichman, 1992). These two types of indicators measure different aspects of sustainability, both attitudes towards the future (expected continuity) and the actual duration of a relationship, and I therefore included both in my study.

The expected continuity is a measure of individual beliefs about how long they expect the relationship to continue, while actual duration is measured at the network level through the SND records. The measuring of persistence at the network level raises the question of whether a network can be considered as persisting even if one of its members leaves. In the SND records, a network is considered as persisting as long as *the initial project is continued and the administrator of the network is active.* Thus, single firms can leave and enter, but the network may persist. I shall adopt this definition also here. Expected continuity was measured as *for how long time the participants planned the relationship to exist* (3.4 B). This is thus a global measure, and the aggregation is done through computing the average time expected in each network. The alternatives for reply were: i) less than one year, ii) between 1 and 2 years, iii) from 3 to 5 years, and iv) more than 5 years. The aggregation was done through computing the mean for each network.

Actual duration was measured 10 months after the main data collection. This is a short period, and hardly enough time to be able to draw any firm conclusions about sustainability. However, it is interesting to compare the networks that were dissoluted

throughout this period with those who were not, because it might give some *indications* of important criteria for "survival" for the networks. Dissolution in the present setting is defined as being excluded from the network program, which in practice means that the firms *did not succeed in accomplishing the project for which they were granted support.* Consequently, the firms comprising an excluded network might still have contact and plan further efforts to realize new projects, but the specific project that made them enter into the network programme is cancelled. The variable is dichotome - the networks are reported as either active or dissoluted, and the data is provided through SND, who through their network consultants keep records of the development of each network.

Satisfaction

Satisfaction reflects an affective evaluation of different aspects of a relationship (Anderson & Narus, 1990). It has been measured as *one of several items* indicating general relationship performance (Bucklin & Sengupta, 1993). Satisfaction can also refer to the evaluation of *specific aspects* of the relationship, such as satisfaction with goal attainment (Nesheim, 1996), or product satisfaction (Haugland & Reve, 1993). Finally, satisfaction has been measured as an attitude towards the *overall* relationship (John, 1984; Anderson & Narus, 1990).

I found it most relevant to measure a general attitude towards the relationship, since this will capture outcome aspects not covered in the other dependent variables (e.g., goal attainment is defined as realized gains). Satisfaction is thus measured as *the overall satisfaction with the cooperation*, indended to indicate the affective dimension of outcomes. It is a single-item construct, and is measured through the composite approach, as satisfaction is an attitudinal property. Thus, the question of aggregation is more crucial than for global measures. One might say that attitudes at the individual level are attitudes, at the group level it is a norm (Rousseau, 1985), but mere aggregation does not justify this. On the one hand, aggregation through computing the mean may reduce perceptual biases or cognitive limitations through creating a more stable measure. On the other hand, this is dependent on whether the individual differences are systematic or not - the homogeneity of within-group variance. To

validate the relevance of using the mean as a measure, I did a one-way analysis of variance for the satisfaction variable. This tests whether the variance between alliances is larger than within alliances. The test gave a F-value of 4,26 (p=,00), which indicates that the variance within each alliance is smaller than between the alliances.

Thus, the satisfaction measure aggregated through summing up the scores for all the respondents of each network, dividing it by the number of respondents.. The item was measured by a 7-points Likert-type scale, following the statement: *«I am very satisfied with the cooperation so far»,* were the answering options ranged from 1=completely disagree, to 7=completely agree (3.2 H).

Social Compatibility

Social compatibility is proposed to have two dimensions, reciprocity and social fit. This is thus defined as a formative measure. The most common method for analysis when using formative measures, is to compute the mean of the dimensions of the concepts. However, I want to analyze the two dimensions of social compatibility separately, in order to detect possible differences in the strenght of effects. The measures below are thus based on a formative definition of social compatibility.

Reciprocity

As mentioned in chapter 2, reciprocity is mostly defined as inherent in the relational norm of solidarity, defined both as a "spirit of fairness", which is a positive definition, and as absence of opportunism, which is a negative definition (Kaufmann & Dant, 1992; Rokkan, 1995). I have adopted the operational definition from an earlier study of the SND networks by Nesheim et al. (1997), and the definition is that *noone pursues their self-interest at the expenses of others*[1]. Through the interviews in the pilot study, this specific issue was underscored by several managers, and seemed to be well understood across alliances. I used a single item measuring general reciprocity. The question was posed as a statement: *"In this network, noone pursues his/her self-interest at the other*

[1] Nesheim et al. actually denote the concept as solidarity, but as solidarity refers to the relational norm of long-term reciprocity (see the discussion in chapter 2), I find it more adequate to use it as a measure of reicprocity.

parties' expenses" (3.2 J). The response alternatives ranged from 1=not true at all to 7=perfectly true. This is a global measure, where the individual responses are aggregated through the mean of scores of the respondents in each network.

The measuring of a concept through only one item might represent a weakness, because the interpretation of the question might vary systematically between respondents. However, the meaning of the question posed seemed commonly understood as reported through the test of the questionnaire. Further, aggregating through the mean of a global measure decreases the error variance in responses. Still, some additional validation would increase the stability of the construct, so i did a one-way analysis of variance, to test whether the variance was larger between alliances than within each alliance. A larger variance between than within groups indicate a more stable measure. The analysis gave an F-value of 2,70 (p=0,03), which is significant at the 0,05-level.

Social fit

No studies reporting on measures of this specific concept have been found. However, social similarity has been measured, e.g. as similarities on demographic attributes (Tsui et al., 1992), as career background (Belliveau et al., 1996) or as similarity on certain attitudes, e.g. towards different political questions (Golightly et al., 1972). Personal similarities have also been measured as cultural similarities, using countries as the dimension (Dant & Schul, 1992). I found similarities on issues directly relevant for the present setting - forming an alliance - to be most appropriate, of which I found no earlier measures. I thus derived the relevant concepts (attributes on which similarity is important) from theory and the case studies reviewed. Further, the pilot study was aimed at obtaining items for the measurement of this construct. All the respondents in the pilot study reported that "personal chemistry" - meaning some sort of similarity - was an important success factor, and through the interviews I made them define this concept more concretely. The items I used to measure social similarity was both tested through using colleagues, as well as through the pre-test of the questionnaire, where I specifically asked the respondents to comment on the meaning of these items. Further,

the items reported to be important through the interviews where very similar to those reported in earlier case studies (Niederkofler, 1991; Larson, 1992).

The construct is measured through 11 items, each proposed to be in one of two categories, company dimension or personal dimension. The questions were posed as follows:

* *Company dimension*: "We want to know your opinion about on what areas the companies are different/similar. Please indicate how different or similar you think you are through circling one of the numbers for each question". The items were:

- Similarities/differences on financial situation (2.1 A, FINSIT)
- Similarities/differences on market expansiveness (2.1 B, EXPAND)
- Similarities/differences on sharing of contributions and burdens (2.1 C, CONTR)
- Similarities/differences on company culture (2.1 D, CULTURE)

* *Personal dimension* measured through seven items, asking the same introductory question:

- Similarities/differences on risk aversion (2.2 A, RISK)
- Similarities/differences on action orientation (2.2 B, ACTION)
- Similarities/differences on management style (2.2 C, MANSTYLE)
- Similarities/differences on language (2.2 D, LANGUAGE)
- Similarities/differences on dominating behavior (2.2 E, DOMINATE)
- Similarities/differences on openness in discussions and meetings (2.2 F, OPEN)
- Similarities/differences regarding listening skills (2.2 G, LISTEN)

The response alternatives were 7 points on a Likert-type scale, ranging from 1=we are very similar, to 7=we are very different. The answers were reversed. Mean score for each network were computed for each item.

It might be argued that e.g. demographic differences could also be of importance, especially since these have been found to affect behavior (Tsui et al, 1992). However, from the interviews, I got the impression that demographic variables might contribute to the social fit, e.g. that young managers had a different management style and attitude towards the market than the older ones. Thus, in measuring attitudes and behavior, I include the effect of demography.

Factor analysis of social fit

Since this concept to my knowledge is a novel one, I conducted several analyses to establish a firm ground for its validity. *All the following analyses were conducted at the network level, i.e. after each item was aggregated.* First, a parwise correlation was done, for a preliminary investigation of the relationships between the items of the construct. The correlation matrix is reported in table 3.

Table 3: Correlation matrix of social fit items

	FINSIT	EXPAND	CONTR	CULTURE	RISK	IMPAT
1. FINSIT						
2. EXPAND	.23***					
3. CONTR	.37***	.31***				
4. CULTURE	.31***	.38***	.38***			
5. RISK	.21***	.38***	.40***	.44***		
6.ACTION	.28***	.43***	.41***	.37***	.49***	
7. MANSTYLE	.20**	.34***	.27***	.49***	.40***	.24***
8. LANGUAGE	.28***	.33***	.41***	.49***	.43***	.40***
9. DOMINATE	.16**	.18**	.25***	.32***	.25***	.28***
10. OPEN	.10	.22***	.22***	.48***	.39***	.28***
11. LISTEN	.14*	.18**	.13	.33***	.21**	.22***

* p<.10 **p<.05 ***p<.01 (N=54)

Table 3 (cont.): Correlation matrix of social fit items

	MANSTYL	LANGUAG	DOMINAT	OPEN
8. LANGUAGE	.41***			

9. DOMINATE	.40***	.40***		
10. OPEN	.42***	.45***	.38***	
11. LISTEN	.37***	.47***	.40***	.47***

*p<.10 **p<.05 ***p<.01 (N=54)

An indication of a two-dimensional construct would be higher coeffisients between the first four variables, and between the last seven, with lower correlations among the two groups. There are no distinct pattern here. However, the two correlations that are non-significant concerns pairs of items predicted to belong to different dimension.

To further investigate the dimensionality, I conducted a factor analysis. Since almost all the items are highly correlated, a obligue rotation method was chosen (direct oblimin). The pattern matrix is shown in table 4.

Table 4: Two-factor solution for social fit items

	FACTOR 1	FACTOR 2
MANSTYLE	.78026	-.03378
OPEN	.77930	.00830
DOMINATE	.77374	.08251
LISTEN	.74696	.04881
CULTURE	.59247	.29264
LANGUAGE	.53625	.49046
FINSIT	-.25069	.84626
CONTR	.00600	.75152
ACTION	.22345	.74096
EXPAND	.14195	.67635
RISK	.19626	.66823

The pattern matrix shows a two-factor solution, with large factor loadings. However, the pattern is not as predicted. Two items predicted to belong to the personal dimension actually group together with the company dimension: Risk and action. This is quite interpretable, as risk aversion is an attitude that probably must involve the company when it comes to actions; action orientation might also involve the company. One of the

items predicted to belong to the company dimension was grouped with the personal items: Company culture. Despite these deviation from the predicted pattern, the factors are theoretically interpretable. Factor 1 includes items pertaining mostly to personal communication, excluding "business types" of behavior such as risk, while factor 2 includes both economic and more "business type" of behavior, which probably involves the firms when actions are taken.

How strong is the dimensionality? Table 5 shows the final statistics for the analysis.

Table 5: Final statistics for the two-factor solution

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum pct
FINSIT	.59764	1	5.28347	48.0	48.0
EXPAND	.55968	2	1.46075	13.3	61.3
CONTR	.56868				
CULTURE	.58489				
RISK	.59716				
ACTION	.74051				
MANSTYLE	.58741				
LANGUAGE	.75295				
DOMINATE	.55091				
OPEN	.61291				
LISTEN	.59150				

The results show that the eigenvalue is dramatically reduced for the second factor, and this indicates that social fit can be interpreted as one-dimensional. To test this, I carried out a factor analysis with one-factor solution. The result of this analysis is shown in table 6.

Table 6: Factor matrix for one-factor solution for social fit

	FACTOR 1
FINSIT	.49531
EXPAND	.68746
CONTR	.63462
CULTURE	.74983
RISK	.72692
ACTION	.81101
MANSTYLE	.63637

LANGUAGE	.86763
DOMINATE	.59000
OPEN	.67080
LISTEN	.67718

This result shows high factor loadings on all items, and the concept of social fit can be interpreted as one-dimensional. In order to assess the internal consistency of this construct, I computed Cronbach's Alpha for these items. The Alpha indicates the items-of-same-construct divergence and reliability. The result of this analysis was an Alpha of .89, which must be considered as very high.

Whether to use two or one dimensions in the further analysis, is thus a question of discretion. To use only one construct simplify the analysis, but then important information about variance between the dimensions could be lost. It is, after all, interesting to see if e.g. pure personal communication similarities affect economic results. I therefore chose to use both solutions, i.e. to conduct the analyses both for social fit as one construct, as well as for factor 1, the personal style dimension (PERSTYLE), and factor 2, the company style dimension (COMSTYLE).

In figure 9, I show how I have defined the different components of social fit, as the basis for the measurement.

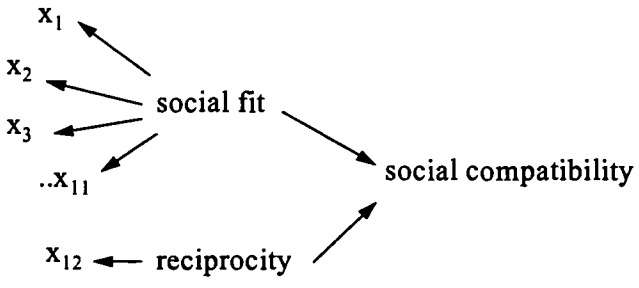

Figure 9: Measure of social compatibility

Control variables

Size

The size of each network was provided by SND, who keeps records of each firm and the alliance to which it belongs.

Strategic importance

This variable has been measures in earlier studies (Nesheim, 1994; Haugland, 1994), and was measured through one item, making the statement: «This alliance is of great strategic importance for our firm», where the responses were ranged from 1=not true at all, to 7= perfectly true. The measure was aggregated through computing the mean score for each alliance.

Dependence

Power/dependence structure has mostly been measured according to the definition by Emerson (Emerson, 1962), as an inverse relationship between power and dependence (Heide & John, 1988; Dant & Schul, 1992; Buchanan, 1992). One of the most important aspect of dependence, is availability of alternatives. This definition was used here, and the following question was asked: «If this network is dissoluted, my firm can accomplish the same goal through cooperating with other firms». This was reversed.
The respond options for the item were from 1=not true at all, to 7=perfectly true. The measure was aggregated through computing the mean score for each alliance.

Chapter 6
Analysis and results

In this chapter, I present the results of the different analyses I conducted to test the hypotheses. First, some properties of the variables are shown, in order to examine their suitability for regression analysis. In section 6.2, I discuss the question of what techiques to use when testing for moderating effects, and present the procedures used here. The results of the hypothesis testing is presented in section 6.3.

6.1 Inspection of variables

Since all multivariate analysis techniques are based on several assumptions about the distribution of variables, I shall here present some properties of the variables in the model.

Table 7 shows the means, standard deviations, kurtosis and skewness of all the variables, included the control variables. The table shows that for some of the variables, the distribution is somewhat skewed. Several of the realized gains variables are skewed to the left, while one of the potential gains variables is skewed to the right. This indicates that gains are difficult to realize, which is not surprising, since the alliances in the analysis all are in the formation stage.

Table 7: Descriptive statistics

Variable	Mean	Std	Kurtosis	Skewness
Potential gains:				
Increased sales	3,97	1,60	- ,28	-,58
Access new markets	5,71	1,08	1,39	-1,10
Negotiation power-customers	4,49	1,38	,42	-,46
Negotiation power - suppliers	4,77	1,45	-,17	-,37
Development new products	3,21	1,81	-,93	,01
Broader product spectrum	4,81	1,42	1,18	-,95
Total potential gains	4,62	,69	1,76	-,50
Reciprocity	5,39	1,21	1,01	-1,18
Social fit	,00	1,00	,36	-,56
Personal style	,00	1,00	,25	-,53
Company style	,00	1,00	,39	-,57
Realized gains:				
Increased sales	,24	,30	,50	1,12
Access new markets	,28	,26	-,70	,34
Negotiation power-customers	,15	,24	1,99	1,57
Negotiation power - suppliers	,31	,31	-,10	,80
Development new products	,17	,24	1,26	1,29
Broader product spectrum	,27	,32	,30	1,05
Total realized gains	,23	,16	,80	,59
Satisfaction	5,03	1,18	1,59	-,93
Expected continuity	3,01	,72	,04	-,53
Duration				
Control variables:				
Dependence	3,99	1,48	-,75	,02
Strategic importance	4,29	1,09	-,27	-,46
Size	2,85	1,07	1,39	1,36

Regarding other types of gains - the open categories, only 16 alliances reported other types of potential gains, and 7 reported other realized gains. These numbers were too small to conduct any analysis of the model regarding these variables, so the variables were excluded from the analysis.

In table 8, the correlation matrix of all the variables, including the control variables, is presented. The potential and realized gains are presented at the aggregated level. A correlation matrix including potential gains and realized gains at the level of specific types of gains is provided in appendix 2, for space reasons. The correlation matrix is useful to get some indications of have the variables "behave", and it will be referred to throughout the analysis, when commenting the results. In the present study, multicollinearity is not a problem, because we have only one independent variable, potential gains. When these gains are split into the different specific types, they are analyzed separately.

It is worth noting that none of the dependent variables (realized gains, continuity and satisfaction) are correlated. This indicates that these variables captures independent dimensions of the outcomes. It is also interesting to note that the control variables do not correlate to all the dependent variables. Size is not correlated to any of them, dependence correlates only with satisfaction. Strategic importance seems to be the most relevant control variable, it is correlated with both satisfaction and continuity; however, none of the control variables are correlated with realized gains.

Table 8: Correlation matrix
(N=54; for duration, N=52)

	POTGAIN	SOCIFIT	RECIPRO	REALGAIN	SATISF	CONT
SOCIFIT	-,0922 P= ,507					
RECIPRO	,1350 P= ,330	,5167 P= ,000				
REALGAIN	,2462 P= ,073	,1380 P= ,320	-,0846 P= ,543			
SATISF	-,0844 P= ,544	,6451 P= ,000	,5521 P= ,000	,2133 P= ,122	P= ,	
CONT	,0984 P= ,479	,2170 P= ,115	-,1492 P= ,282	,3453 P= ,011	,1834 P= ,184	
SIZE	-,0458 P= ,742	,0064 P= ,963	,0217 P= ,876	,0406 P= ,770	-,0232 P= ,868	,1296 P= ,350

	POTGAIN	SOCIFIT	RECIPRO	REALGAIN	SATISF	CONT
DEPEND	-,1123 P= ,419	,2136 P= ,121	,0390 P= ,779	,0315 P= ,821	,2264 P= ,100	,0942 P= ,498
STRATIMP	,2901 P= ,033	,1992 P= ,149	,0355 P= ,799	,1971 P= ,153	,2574 P= ,060	,4179 P= ,002
DURATION	,0442 P= ,756	-,0074 P= ,959	,1206 P= ,395	,1606 P= ,255	,0731 P= ,606	,0301 P= ,832
PERSTYLE	-,2047 P= ,138	,8519 P= ,000	,5019 P= ,000	-,0265 P= ,849	,6152 P=,000	,0959 P= ,490
COMSTYLE	,0544 P= ,696	,8376 P= ,000	,3685 P= ,006	,2658 P= ,052	,4719 P= ,000	,2745 P=,045

Table 8 (cont.): Correlation matrix

	SIZE	DEPEND	STRAT	DURATION	PERSTYLE
DEPEND	-,0503 P= ,718				
STRATIMP	-,1121 P= ,420	-,1044 P= ,452			
DURATION	,0846 P= ,551	,1542 P= ,275	,2172 P= ,122		
PERSTYLE	,0198 P= ,887	,1996 P= ,148	,0505 P= ,717	,1513 P= ,284	
COMSTYLE	-,0095 P= ,945	,1605 P= ,246	,2912 P= ,033	,0494 P= ,728	,4274 P= ,001

It is also worth noting the strong correlations between the different dimensions of social compatibility. Social fit is highly correlated to reciprocity, which indicates that these two dimensions could have been combined to form one variable. I still want to do the analyses separately, to see if the moderating effects are different. We also see that perstyle and comstyle, the two dimensions of social fit, are differently correlated to reciprocity, the coefficient for comstyle is stronger than for perstyle.

6.2 Procedure for detecting moderator effects

Moderator effects have been interpreted and tested in different ways by different authors. Since the testing procedure will determine what types of effects that can be detected, I shall present the approach I have used here.

There are mainly two methods that are used: The Moderated Regression Analysis, which tests for interaction effects, and Subgroup Analysis, which compares different groups with different values on the predicted moderator variable. The Moderated Regression Analysis enables one to assess all types of effects that the predicted moderator has on the other variables in the model, i.e. also direct effects on the independent variable, which might be an advantage (Sharma et al., 1981) when explanation of the nomological network is important. However, this technique does only detect *whether* there are such effects, it does not discriminate between different values of the moderator, i.e. if the effects are different for different values.

The present hypotheses predict not only that social compatibility is a moderator, but also that for high levels of social compatibility, the relationship between the independent and dependent variables will be *stronger* than for low levels. In order to test this, a Subgroup Analysis is most suitable. This analysis implies splitting the sample into subgroups (usually two), with different levels of social compatibility, and to conduct separate regression analyses on each group. The regression coefficients of each group are then compared to see if this differ between the groups with small and large values of the moderator.

Splitting the sample into subgroups

As the analyses here are conducted to test differences between groups of low vs. high levels of social compatibility, the point is to obtain one subgroup with large and one with small values of the moderator. If the moderator variable is a categorical variable, the splitting procedure is unproblematic, the categories are given. In the present case, the variables are continuous, so the "cut-off-point" is not so obvious. The result - the

ability to detect moderator effects - is dependent on the distance between the two groups - i.e. the existence of extreme values at both ends (McClelland and Judd, 1993).

Both the variables constituting social compatibility - reciprocity and social fit - are negatively skewed, meaning that there are relatively few small values. That is, most of the alliances have medium or high levels of social compatibility. This is in line with earlier research, which indicates that some level of trust, or relational aspects, is present in most relational contracts (Rokkan, 1995). According to theory, there are no reasons to believe that there should be large differences between alliances with medium and high levels of social compatibility. For example, if all the participant of an alliance are similar on absolutely all attributes, this does not necessarily create better results (regarding realized gains) than in alliances where most of the participants are similar on a majority of the attributes. The hypotheses thus do not predict the moderating function to be linear for all values of social compatibility, only that there are differences between low and high levels. In line with the arguing above, it could then be plausible to suggest that the moderating function is steeper for low levels than for high levels of social compatibility. This is illustrated in figure 10.

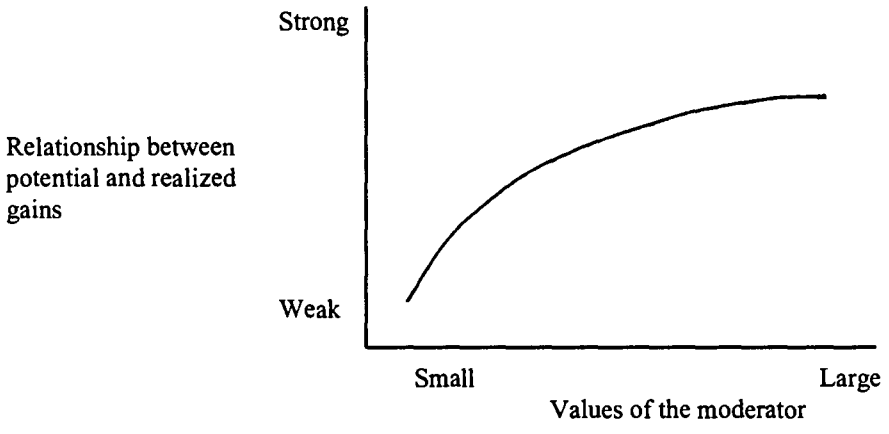

Figure 10: Possible moderator function

So, the point here is to be able to distinguish between small and large values. Since both reciprocity and social fit are negatively skewed, this implies that the group with small values should be smaller than the one with large values. There are no general

rules for how to decide the "cut-off point" of the variables, so the dividing into groups must be based on logical reasoning. The most common method, however, is to split the groups by the mean (e.g. in Dwyer, Schurr and Oh, 1987). Another method, which would enable us to compare the extreme values, could be a split into three groups - for low, medium and high values on the variable, where the group with medium values are excluded from the analysis, and the two other compared. Due to the small sample size, this in unfeasable in this study. I therefore split the subgroups by the mean, both for social fit and reciprocity. This resulted in one group with 18 (low values) and one with 36 (high) cases on the reciprocity variable. For the social fit variable, it resulted in a 23/31 grouping, with low and high values, respectively.

In general, moderator effects are difficult to detect statistically (McClelland and Judd, 1993). Surely, the splitting method also will affect the ability to detect such effects in subgroup analyses. I therefore decided to do an additional split, in order to investigate whether the results were different for different cut-of points. Since social fit is a factor score variable, the distribution of this variable is more unstable than for the directly measured variable reciprocity. A factor score represents the degree to which each individual scores high on the group of items that load high on a factor. I also anticipated that the 23/31 split did not sort out the really low values. In addition, preliminary regression analyses showed very small differences between the 23/31 groups of social fit. Hence, the social fit variable was also split into supgroups with 16 and 38 cases, with low and medium/high values, respectively. I found this cut-off point through the frequency distribution, which showed a "jump" in values between the 16th and 17th respondent. By using this cut-off point, we can detect whether the effects are different between very low and medium/high values, which also gives additional information about the role of social fit.

The results in the next section show that there are partly large differences in results between the two splitting methods. For the 23/31 groups (split by the mean), no moderator effects were found for most of the hypotheses, while for the 16/38 groups, the

effects were partly quite strong. I discuss this result in connection with each hypothesis test.

Comparing the groups

The groups are compared through running separate regression analyses between the independent and dependent variables for each subgroup, and then looking at the difference between the regression coefficients. Normally, two regression equations are compared by using a T-test of the difference between the two beta-coefficients (Bornstedt and Knoke, 1994). However, a T-test only tests the probability that the results in a sample is valid for the population from which the sample is drawn. As the present analysis includes the whole sampling population, such a generalization is not relevant. I shall therefore mainly look at the *relative differences* between the groups, comparing the different equations. However, the T-values are also reported, as they give indications of what values that would be significant *if the sample had been randomized from a population*, which might provide some additional information, especially when comparing the results between different models. The T-values are computed according to the procedures described by Bornstedt and Knoke (1994, p. 225).

6.3 Hypothesis testing

In this section, I test all the hypotheses through using the procedure described. The anaysis is ordered according to the dependent variables: First, I test the hypotheses regarding realized gains, second, I adress satisfaction, then continuity, and, finally, duration.

The tables present the *regression coefficient between the independent variable and dependent variable*, controlled for size, dependence and strategic importance, for the two groups of high and low levels of social fit, personal style, company style, and reciprocity. The numbers in parantheses are the T-values (stud.T) for each coefficient, and the rows called T-diff. is the T-value for the computed difference between the coefficients in the two groups. For the results to be more easily interpretable, and the

tables manageable, I do not present the regression coefficients for the control variables. Thus, the following tables do only show the "net" regression coefficients. The complete regression results, including control variables, is included in appendix 3.

All the hypotheses predict that the regression coefficient between the independent and dependent variable will *be higher in groups with high levels of social compatibility than in those with low levels.*

6.3.1 Moderating effects of social compatibility on the relationship between potential gains and realized gains.

In this section, I test the hypotheses predicting the moderating effects of social compatibility on the relationship between potential and realized gains. These are the hypotheses 1 to 4.

Table 9 shows the results regarding hypothesis 1, which is for total gains. Before I did the subgroup analysis, I conducted a regression analysis of the relationship between total potential and realized gains, as a background for the discussion of results. This revealed a regression coefficient of 0,21 - with a T-value of ,14 - which shows that the «bivariate» relationship (controlled for size, dependence and strategic importance) between total potential and realized gains is positive.

Table 9: Moderation effects of social compatibility on the relationship between total potential gains and total realized gains.

Dependent variable: Total realized gains
Independent variable: Total potential gains

Moderating variable	Low	High	T-diff
Social fit (23/31)	,19 (,43)	,18 (,36)	
Social fit (16/38)	-,06 (,79)	,25 (,16)	1,03
Perstyle (16/38)	-,08 (,79)	,28 (,10)	1,89
Comstyle (16/38)	,10 (,73)	,16 (,36)	0,17
Reciprocity	-,36 (,12)	,41 (,02)	2,08

First, we note that there is a large difference in results between the two splitting methods of social fit. Between the 16/38 groups, the difference is quite large, while in the 23/31 groups, there are no differences. Thus, no firm conclusions about hypothesis support can be drawn for this variable, the effects are dependent on the cut-off point of the social fit variable. However, the difference between the very low and medium/high levels is quite large, indicating that the relationship between potential and realized gains are positive for medium and high levels of social fit, but this relationship disappears when these is a very low level of social fit in a strategic alliance. Considering the lack of difference between the 23/31 groups, I did not compute the T-value here.

Further, when doing separate analyses for the personal and company style dimension of social fit, I anticipated that the best way to detect differences between these two dimensions, was to use the 16/38 groups - as the point in doing separate analyses for each dimension is to detect possible differences in effects. *Thus, through all the further analyses, these two dimensions are tested on the 16/38 groups.*

The regression coefficient for low levels reciprocity is negative, while for high levels it is positive and quite strong (actually stronger than in the "bivariate" case). This is supportive for hypothesis 1 regarding reciprocity.

When the analysis of social fit is split into the personal and company dimension (perstyle and comstyle), we see that the personal dimension is a stronger moderator than the company dimension. The results thus indicate that social compatibility to some degree is a moderator of the relationship between potential and realized gains. Strategic alliances with low social compatibility will have difficulties in realizing their intentions of aquiring collective gains from their coordinated actions. For high levels of social compatibility, however, the probability of realizing these goals is quite high. It should also be noted that due to the method used for splitting the sample into subgroups, there are reasons to suggest that also alliances with medium levels of social compatiblity will be successful regarding the realization of gains. It is alliances with significantly low levels of social compatibility that are problematic.

It is also interesting to note that regarding total gains, the personal dimension of social fit is more important than the company dimension, indicating that social mechanisms serving as facilitators for the realization of gains are person dependent. This difference in effects between the personal and company dimension was not specifically predicted in the hypotheses, but the results are intriguing. It means that the communication style of each personal manager actually is important for the economic results of the alliance, and might be even more important than similarities in company behavior.

The results above are for total gains in each alliance, summed up for all gains. This aggregation implies that some variation is lost. It is plausible to assume that the effects differ between types of gains, as some gains have been shown to be more difficult to realize than others (Nesheim, 1995). Further, for some alliances, several types of gains are not relevant, and this might affect their total score, if they concentrate on only one type of gains. In the following, I present the results regarding the specific gains, testing the hypotheses 2-4. Table 10a and 10b shows the results regarding gains from increased sales. The independent variable is potential gains from increased sales.

Table 10a and 10b: Moderation effects of social compatibility on the relationship between potential gains from increased sales and realized gains from increased sales.

Table 10a:
Dependent variable: Realized gains from increased sales in present markets (M33A)
Independent variable: Potential gains from increased sales in present markets (M12A)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	,31 (,16)	,30 (,10)	
Social fit (16/38)	,36 (,13)	,33 (,05)	0,08
Perstyle	,17 (,47)	,31 (,06)	0,69
Comstyle	,38 (,19)	,32 (,05)	0,26
Reciprocity	,38 (,13)	,31 (,08)	1,05

Table 10b:
Dependent variable: Realized gains from increased sales in new markets (M33B)
Independent variable: Potential gains from increased sales in new markets (M12B)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	,20 (,42)	,33(,07)	
Social fit (16/38)	-,11(,69)	,32 (,03)	1,95
Perstyle	,19 (,52)	,30 (,06)	0,9
Comstyle	,18 (,63)	,29 (,07)	0,4
Reciprocity	-,15 (,55)	,43 (,01)	2,5

From table 10a, we see that the effects of both social fit and reciprocity are in the opposite direction as predicted, although the differences between the coefficients are very small and far from significant. We must conclude that there are no moderating effects from social compatibility regarding gains from increased sales in present markets. Despite this, the direction of the effects is worth discussing, as it is in the opposite direction as predicted. Increased sales in present markets imply, in general, more market power. From the SND records, it seems that the alliances with this purpose are mostly horizontal, formed by firms that are former competitors which cooperate to increase this power. This type of cooperation does not necessarily require a strong integration, as each firm continue to supply their own products, without having to change their internal organization. Thus, diversity and self-serving does not neccessarily harm the other parties to a degree that affects the overall results. It might thus be that in these types of alliances, the parties are to a large degree independent, and pursuing their own interests is functional because it strengthens the market position of the product in question. This might also affect the strength of the other products of the alliance positively, as they are marketed as a group. This implies that e.g. being former competitors, continuing to expose their individual goals, is not an obstacle to the realization of gains from common efforts to increase the market share in existing markets.

However, looking at the differences between the two dimensions of social fit, we see that the personal dimension shows a positive tendency. This indicates that even though

social compatibility is not a condition for realization of gains, some personal fit might affect the ability to accomplish common goals positively.

Contrary to the predictions, the results are different in the alliances with the goals of entering into new markets. For the 23/31 groups of social fit, the change from low to high levels is small, but positive. For the 16/38 groups, however, the change is quite large. This again implies that the results are somewhat inconclusive regarding the hypothesis. There is an effect of social fit only for very low values of this variable. The effect of reciprocity is much stronger, in sum indicating partly support to hypothesis 2.

Why the difference in results between increased market share in present vs. new markets? Entering into new markets are considerably more risky than increasing sales in present markets. Because new markets also implies that the parties have less information about the task at hand, more contacts have to be established, and more integration between the parties is probably necessary. Since none of the firms are known by the customers in the new market, they do not profit from previous reputation of each firm, and the common marketing becomes more crucial. Thus, there is more external uncertainty, which according to transaction costs theory increases the need for internal governance regulations (Williamson, 1985). Further, the internal uncertainty is, due to the nature of the task, larger and more important to reduce. In this case, social compatibility is a more important issue, because the parties are more interdependent, and egoistic behavior from one party might harm the whole project.

Thus, for alliances who want to enter into new markets, some degree of social compatibility is a condition for accomplishing the goals of increased outcomes from common efforts. The results also show that there are no differences in effects between the two dimensions of social fit, perstyle and comstyle. Actually, each of these dimensions seems to have no effect separately, both the personal and company dimension must be present for social fit to have any effect.

In table 11a and 11b, hypothesis 3 is tested, which concerns gains from increased power.

Tabell 11a and 11b: Moderation effects of social compatibility on the relationship between potential gains from increased power and realized gains from increased power.

Table 11a:
Dependent variable: Realized gains from increased power over customers (M33C)
Independent variable: Potential gains from increased power over customers (M12C)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	,12 (,63)	,35 (,11)	
Social fit (16/38)	-,12 (,69)	,38 (,06)	2,89
Perstyle	-,02 (,95)	,31 (,11)	1,7
Comstyle	-,10 (,76)	,41 (,03)	2,8
Reciprocity	-,07 (,82)	,28 (,20)	1,72

Table 11b:
Dependent variable: Realized gains from increased power over suppliers (M33D)
Independent variable: Potential gains from increased power over suppliers (M12D)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	,31 (,20)	,25 (,23)	
Social fit (16/38)	,29 (,35)	,28 (,12)	0,04
Perstyle	,01 (,99)	,37 (,03)	1,1
Comstyle	,15 (,60)	,20 (,29)	0,14
Reciprocity	,08 (,80)	,33 (,06)	1,28

We see that the effects differ between the two types of goals - power over customers vs. over suppliers, and they must be interpreted separately. Table 11a shows support for the hypothesis, and here, the effects of social fit in the 16/38 groups are stronger than those of reciprocity. The results for the 23/31 groups are also in the hypothesized direction, although much weaker than for the 16/38 groups. Again, it seems that social fit has effect only for very low levels. Still, in general, some degree of similarity between the individual actors seems to be more important than collective oriented behavior in these types of alliances.

Looking at the differences between the two dimensions of social fit in table 11a, we see that the effect of company style is stronger than for personal style. In order to interpret these results, we must consider the task at hand for the alliances in question, which is to increase power over customers. These types of alliances are e.g. small subcontractors which establish a common system for marketing and negotiation with customers, where they marketing each other towards large customers. They may also give each other provisions of large contracts that have been established. Further, some of these alliances are "sub-suppliers" which together deliver product packages, which requires a substantial degree of coordination between the actors. (Source: SND). The nature of these types of alliances indicates low formalization of structures, the outcomes are based on the actors' willingness to let the other parties profit from own actions, believing that these will be reciprocated in the long run. It thus seem intuitively logical that social compatibility plays a large role in the realization of gains in such alliances.

The results regarding increased power over suppliers, table 11b, are different. Here, social fit is not a moderator, but the effects of reciprocity are in the predicted direction. However, when separate analyses are done for the personal and the company dimension of social fit, we see that perstyle has a quite strong moderating effect - which only holds for very low levels of social fit. Thus, the hypothesis regarding increased power over suppliers is supported for reciprocity, but inconclusive for social fit. The alliances pursuing this goal are mainly firms that cooperate to reduce purchasing costs. It might be argued that these types of activities are more straightforward, where simple formal agreements can be made, requiring a fairly small amount of coordinated action. Thus, it is plausible to conclude that social compatibility has less effects than is the case for power over customers. However, similarities in personal style and reciprocity seem to do affect their ability to accomplish the task of increased power over suppliers to some degree.

In table 12a and 12b, the results regarding hypothesis 4 is shown.

Table 12a and 12b: Moderation effects of social compatibility on the relationship between potential gains and realized gains from product development.

Table 12a:
Dependent variable: Realized gains from development of new products (M33E)
Independent variable: Potential gains from development of new products (M12E)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	-,04 (,85)	,23 (,27)	
Social fit (16/38)	-,04 (,89)	,20 (,27)	1,2
Perstyle	,23 (,40)	,12 (,51)	0,45
Comstyle	-,17 (,57)	,22 (,22)	1,44
Reciprocity	,33 (,27)	,14 (,44)	0,71

Table 12b:
Dependent variable: Realized gains from broader product spectrum (M33F)
Independent variable: Potential gains from broader product spectrum (M12F)

Moderating variable	Low	High	T-diff.
Social fit (23/31)	-,02 (,93)	,16 (,43)	
Social fit (16/38)	-,16 (,52)	,21 (,23)	1,76
Perstyle	,31 (,36)	,14 (,41)	0,89
Comstyle	-,17 (,51)	,17 (,32)	1,42
Reciprocity	,30 (,26)	,04 (,81)	1,47

We see that the effects of reciprocity are in the *opposite direction* as predicted, while the effects of social fit are in the predicted direction. This implies that in alliances with high reciprocity, potential gains from product development are to a lesser degree realized than in alliances with low reciprocity. Here, the difference in results between the two splitting methods of social fit is less than in the previous results. These tendencies are different from the other types of gains, and might be explained through looking more closer into what product development really is. Obviously, realizing gains from product development requires different processes than the other types of gains.

The two dimensions of social fit have different effects. Personal style has no - or weak but negative - moderating effects, while company style has a positive effect, although the differences are not significant. The lack of support for perstyle is probably due to

the fact that the product development activities do not take place within the group of managers responsible for the alliance, but inside the respective organizations, and are carried through by other actors than the managers. Thus, personal communication between the managers are less important for the results, which actually is the products offered. On the other hand, similar attitudes between the companies seem important. This is supportive for the hypothesis, and indicates that product development involves the organizations as such to a larger degree than several other types of gains. Company style is about the companies' attitudes e.g. towards risk and expansiveness in the market, which is less about the operative actions involved in the concrete product development process.

At the same time, product development is a creative process, which might imply that the operative actors are quite independent of each other during the process. Thus, pursuing own interests does not harm the relationship or results, rather, it might increase creativity. Regarding a broader product spectrum, the argument is similar, although the task is different. The product spectrum consists of different products from different organizations, where e.g. a strong market position for one of the products will benefit the others.

Summary of results regarding potential and realized gains.

In the following, a short summary of the results so far is presented. First, in table 13, the results regarding the hypotheses are presented, and below some main points are highlighted.

Table 13: Overview over results regarding realized gains

Types of gains	Reciprocity	Social fit	Perstyle/comstyle
Total gains	Support	Part. support	Stronger for perstyle
Increased sales, present markets	No support*	No support*	Perstyle pred. direct.
Increased sales, new markets	Support	Part. support	No effects
Power over customers	Support	Part. support	Stronger for comstyle
Power over suppliers	Support	No support*	Support for perstyle
Development of new products	No support*	Support	Support for comstyle
Broader product spectrum	No support*	Support	Support for comstyle

* The effects are in the opposite direction as predicted.

- The first hypothesis, regarding total gains, is supported. But - it is interesting that the results vary substantially between types of gains. This means that the requirements regarding social processes are very different according to the tasks and goals at hand. Further, the results for social fit are dependent on the cut-off point of the variable, which actually means they are inconclusive. The moderating effects seem to be only valid for very low levels of social fit. No moderating effects (except regarding product development) are found in the 23/31 groups, i.e. when the variable is split by the mean.

- Increased sales in new markets and increased power over customers were the two types of gains that showed the strongest support regarding the moderating effects of reciprocity. The types of alliances pursuing these goals probably face quite complex tasks, where a substantial degree of integration is needed. Further, these goals imply that the gains are more "collective" in nature than the other types. Thus, I suggest that degree of integration requirements, together with pay-off structure, are main factors that can explain the differences in effects between the types of gains.

- Realization of gains from increased sales in present markets was not affected by social compatibility in general, although there were weak directional support for moderation effects of the personal dimension of social fit. I suggest that this has a similar

explanation as above, that this task is very simple to coordinate, and do not require strong integration.

- Reciprocity and social fit had opposite effects on both gains from development of new products as well as from broader product spectrum. I interpret this mainly as an effect of the task. Similarities of attitudes between the companies are important, while the more operative aspects of social compatibility - personal style and reciprocity - is less important, because the operative work takes place inside the organizations. The non-support for reciprocity regarding gains from broader product spectrum can be explained through the pay-off structure - i.e. that gains for one actor will also be favourable for the the others, so that pursuit of self-interest might actually yield collective gains.

- In some types of alliances there are differences in effects between the two dimensions of social fit, perstyle and comstyle. I have attributed also this to differences in tasks. I believe that the individual managers are more or less involved in the operational activities of the alliances, and this will affect the importance of personal similarities.

I have suggested explanations for the non-findings above, attributing the effects mainly to the nature of the task and the goals at hand. It is possible to see a pattern in the results regarding gains. This pattern can be explained through looking at two dimensions of the task:

a) The pay-off structure - i.e. the individual vs. the collective nature of the gains, and

b) The requirements for operative involvement and integration of the managers in charge of the alliance.

Regarding pay-off structure, there are reasons to assume that some types of gains are collective in nature, i.e. that gains for one of the actors more or less automatically will benefit the others. This is the case for e.g. product development. On the other hand, there are gains which are purely individual, where benefits for the alliance as a whole depend totally on the goodwill - or long-term orientation of reciprocity - of each actor. This is the case for e.g. increased power over customers, where the benefits have the

character of "if I give you a part of my contract, you owe me one". One example is an alliance where the participants are small technology firms which have agreed to marketing each other towards their customers. They also cooperate when negotiating large contracts with a customer, giving each other provisions of contracts that are closed.

The other main explanatory factors I have suggested are the degree to which operative involvement and integration of the managers is required. Personal similarities might not play any role if the operative work is done by other people in their respective organization. This is the case for e.g. product development. Further, if the task is very "straightforward" and does not require extensive coordination efforts, social compatibility might not be important, as is the case for increased sales in present markets.

In the next section, I present the results regarding the effects of potential gains on satisfaction.

6.3.2 Moderating effects of social compatibility on the relationship between potential gains and satisfaction.

Table 14 shows the results regarding hypothesis 5.

Table 14: Moderation effects of social compatibility on the relationship between total potential gains and satisfaction.

Dependent variable: Satisfaction
Independent variable: Total potential gains

Moderating variable	Low	High	T-diff.
Social fit (23/31)	-,10 (,64)	-,05 (,80)	
Social fit (16/38)	-,26 (,24)	-,04 (,82)	4,4
Perstyle	-,08 (,82)	-,24 (,13)	3,26
Comstyle	-,38 (,11)	-,04 (,81)	8,25
Reciprocity	-,22 (,39)	-,25 (,17)	0,61

First, we note that all the coefficients depicted in the table are negative. This means that whatever the level of social compatibility in an alliance, the respondents are more dissatisfied the higher the potential gains. The "bivariate" regression coefficient between potential gains and satisfaction is also negative, -,15 (t=,28), (controlled for size, strategic importance and dependence). However, there is a large and significant difference between the groups with high and low social fit in the 16/38 groups, indicating that social fit is a moderator of the relationship between potential gains and satisfaction only for very low values of social fit. This is not the case for reciprocity, where the difference between the two groups is nearly zero, although it is in the predicted direction.

From the correlation matrix, we see that reciprocity is strongly correlated to satisfaction. I would suggest that this might indicate that satisfaction and realized gains are two types of outcomes that are quite independent. It seems that high potential gains create dissatisfaction, and this might be explained by high initial expectations that are created by the anticipations of future gains. The higher the expectations for gains, the more difficult to meet these expectations, and the more the actors are prone to become dissatisfied. And, reciprocity does not affect this relationship. Satisfaction is a very general concept, and quite poorly measured here, too, so there are several other variables that might affect the relationship, e.g. realized gains, or other intermediate outcomes.

The results regarding social fit is also quite surprising, since the effects of perstyle and comstyle are in opposite direction of each other, and the moderation effects are quite strong for both. For social fit as a whole, the effects are in the predicted direction, meaning that in alliances with high potential gains, the actors are less dissatisfied if the social fit is medium or high. But this is the case only for the company style dimension. For the personal style dimension, the members of an alliance is actually more dissatisfied if they are similar on personal style. This might also have something to do with expectations. If high potential gains create superficially high expectations, personal similarities might strenghten these expectations even more, and hence increase

the probabilities of being dissappointed. This is in accordance with my impressions through the interviews, that some of the managers who perceive the "personal chemistry" as good, are prone to believe that the alliance will be successful, disregarding other important criteria for success. This implies that even if a high social fit is a condition for the realization of gains, managers should take care to avoid an overbelief in personal chemistry as a main tool to obtain results.

6.3.3 Moderating effects of social compatiblity on the relationship between potential gains and sustainability

This analysis is divided into two parts. The first is the results regarding expected continuity - hypothesis 6, which is presented in table 15, the second is regarding actual duration - hypothesis 7.

Table 15: Moderation effects of social compatibility on the relationship between total potential gains and expected continuity.

Dependent variable: Expected continuity
Independent variable: Potential gains

Moderating variable	Low	High	T-diff.
Social fit (23/31)	,00 (,98)	,01 (,95)	
Social fit (16/38)	-,04 (,89)	-,08 (,61)	0,5
Perstyle	,21 (,50)	-,01 (,97)	3,14
Comstyle	,01 (,97)	,00 (-)	0,01
Reciprocity	-,10 (,61)	,05 (,76)	2,1

First, we note that several of the coefficients are negative, contrary to the initial assumptions of the study. The "bivariate" coefficient between potential gains and continuity (controlled for size, strategic importance and dependency) is close to zero (see appendix), which also is the case in the groups with high levels of all the dimensions of social compatibility. Thus, high (or medium) levels of social compatibility do not strengthen the relationship between potential gains and expected continuity.

We also see that the effects of social fit and reciprocity differ. For reciprocity, the difference between the groups is in the predicted direction, and the T-value is high. This indicates support for this part of hypothesis 6. The alliances with high gain potentials are relatively less likely to expect the relationship to last for a long time if the reciprocity between the parties is low than if it is high. It also indicates that reciprocity is important for low levels, but medium and high levels are less important. This means that in alliances with high levels of reciprocity, high potential gains does not make the actors expect the alliance to last longer, but when the level of reciprocity is low, the participants loose their belief that the alliance will last for a long time.

Regarding social fit, the difference between the groups are close to zero, indicating that social fit is not a moderator of this relationship. However, this changes when the analysis is split on the two dimensions of social fit. Comstyle shows no moderator effect, but perstyle has a strong effect in the *opposite* direction as predicted. This means that in alliances with high gain potentials, the respondents are more prone to think that the relationship will last for a long time if they are low on personal similarities. These results regarding personal style similarities is similar to those for satisfaction, but more difficult to interpret.

In general, high potential gains do not make the members of an alliance expect the relationship to last longer. Hence, there are other variables affecting this expectation. A plausible explanation could be that it is based on perceived results, either social outcomes or realized gains. Further, degree of strategic importance and dependency are probably variables that affect expected continuity. However, this does not provide an explanation to why the relationship between potential gains and expected continuity is strong and positive for low levels of personal similarities, and zero for high levels. It might be that in alliances where the individual managers are very different in personal style, the potential gains have to be very high for them to perceive that this is a relationship worth continuing. This implies that potential gains is somewhat complementary to social fit as a basis for the judgements of future interaction.

Regarding actual duration, it showed up that after a 10 months period, only 9 alliances were dissoluted. Originally, I had planned to do logistic regression on the duration variable. However, since the group of dissoluted alliances are only 9, this seems as an unadequate method. Instead, I did some crosstabulation and compared the means between the dissoluted and sustained alliances on the variables in the model. The crosstabulations for social fit and reciprocity subgroups are shown in tables 16 and 17.

Since the results above have shown little support for moderating effects of social fit in the 23/31 subgroups, I anticipated this to be the case also for actual duration. I hence conducted the following comparisons only for the 16/38 subgroups. Note also that N=52 for these analyses, as I was not able do obtain data fram two of the alliances on this variable. Thus, the subgroups for social fit are 15/37, and for reciprocity 18/34.

Table 16: Crosstab of duration by social fit (N=52)

		SOCIFIT		
		Low	High	Row Total
DURATION	Dissoluted	3	6	9 17,3 %
	Sustained	12	31	43 82,7 %
	Column Total	15 28,8%	37 71,2 %	52 100,0

Table 17: Crosstab of duration by reciprocity (N=52)

		RECIPROCITY		
		Low	High	Row Total
DURATION	Dissoluted	4	5	9
				17,3 %
	Sustained	14	29	43
				82,7 %
	Column	18	34	52
	Total	34,6 %	65,4%	100,0

Wee see that these results do not indicate any systematic relationship between social compatibility and duration. Further, the correlation between potential gains and duration (the bivariate case) is only ,04. In table 18, I compare the means of the independent, moderating and control variables between the dissoluted and sustained alliances.

Table 18: Comparisons of means between dissoluted and sustained alliances

	DISSOLUTED	SUSTAINED
	Mean	Mean
Social fit	-,27	,05
Reciprocity	5,39	5,37
Potential gains	4,54	4,62
Size	2,67	2,90
Dependence	3,52	4,12
Strategic importance	3,78	4,4

We see that the dissoluted and sustained alliances do not differ substantially on any of the variables included in the model. There is a difference for social fit, however, the dissoluted alliances have substantially lower social fit than the sustained once. I did a t-test of the difference in mean for social fit, but it was not significant (F=,019, p=,89).

With the small sample, this is no surprise. Although it seems that the dissoluted alliances might have a lower social fit, dissolution in general must be explained by other factors than my model can.

During my discussions with the SND consultants, it appeared that some alliances are dissoluted because of circumstances out of their control, such as take-overs of some of the participating organizations, bankrupcy, or other fundamental changes in the conditions for the alliances. I think the results are partly interpretable on this ground, but I also attribute the lack of results for duration to the small subsample. It would be surprising if the ability to sustain the alliance were not affected by neither the potential gains nor social compatibility. This question, however, must regretably be left to future studies.

6.4 Summary of results

In table 19, I summarize the results of the analyses for each specific dependent variable. Regarding what can be considered as support for the hypotheses, there are no absolute values for which a limit is drawn. As I have commented on in the above sections, the differences in coefficients are analyzed as relative, and as concerning degrees. Thus, "support" in the table must not be interpreted as statistically significant, as significance is of low relevance in the present study. It should rather be conceived of as some strength of directional support. The T-values are only implicitly used as comparison to my judgements, and comparing of effects between different relationships of variables.

The results regarding social fit are somewhat inconclusive, because the effects are dependent on the cut-off point of the variable. Mostly, there are no effects in the 23/31 grouping, while there are moderating effects in the 16/38 grouping. For the hypoteses where this is the results, I denote this as partial support.

TABLE 19: Summary of results

	Reciprocity	Social fit	Perstyle/comstyle
Total gains	Support	Partial support	Stronger for perstyle
Increased sales:			
In present markets	No support	No support	Perstyle pred. direct.
Access new markets	Support	Partial support	No effects
Increased power:			
Towards customers	Support	Partial support	Stronger for comstyle
Towards suppliers	Support	No support	Support for perstyle
Product development:			
New products	No support	Partial support	Support for comstyle
Broader spectrum	No support	Partial support	Support for comstyle
Satisfaction	No support	Partial support	Perstyle opposite dir., comstyle as predicted
Continuity	Support	No support	Perstyle opposite dir.
Duration	No support	No support	

At this point, it is important to note that the results should be interpreted with caution. First, the strength of the moderator effects are dependent on the splitting criteria of the subgroups. This means that social fit is not a moderator for all values, the results are valid *only for a comparison between the lowest values and the rest.* With this limitation in mind, I summarize the main points in the findings below. There are three patterns in the overall results that I find especially interesting, and will comment on in the following.

First, it is the unexpected results regarding gains from product development. Obviously, the alliances with this purpose are of a different type than all the others. I have interpreted this as that the task of product development involve other processes than the other types; it is possible that it is also involving *other persons* from the organizations to

a larger degree, not only the managers in charge of the alliance. It also might require more independent actions on the part of each participant in the alliance.

Second, it is the difference in results between realized gains and the other dependent variables - especially the results which show opposite effects than expected of social compatibility. It seems that the result variables I have chosen do comprise substantially different aspects. Regarding satisfaction, I have suggested that the explanation for these results is the effect of high expectations, which is due to an interaction effect between potential gains and social compatibility. This clearly points to the two «faces» of social compatibility: On the one hand, it is partly a condition for the realization of gains; on the other hand, it interacts with potential gains to create falsily high expectations about results, and that might result in dissatisfaction with the relationship. This is despite the fact that the parties of alliances with high social compatibility in general are more satisfied.

The third pattern in the results is the difference in effects between social fit and reciprocity. In some of the cases, the effects are similar, and in some they are actually in the opposite direction. A general explanation of this fact might give more knowlegde about the role of social context in strategic alliances. I have suggested that the unique variance in the two variables points to the fact that social fit is pertaining to attitudes towards the persons in the alliance, while reciprocity concerns more a type of organizational behavior, which can be denoted as collective vs. individual. I have also suggested that collective behavior is a condition for realization of gains in some types of alliances, while individual, self-interest-seeking behavior can be functional in others, depending on the task. A conclusion to this discussion would be that social fit is a «pure social variable», affecting satisfaction indirectly, while reciprocity is a variable that is more related to the economic processes of the alliances, and actually a condition for realization of gains.

From these results, we might draw the conclusion that to create social fit between the individual partners might be considered as subjectively important, but it does not

substantially affect the ability to realize gains. It might further be a possible peril, because of the high expectations a good social fit creates, which makes the parties believe that the alliance is successful, and further to be dissappointed, when it comes to «hard results». Reciprocity, however, which involves the organization to a larger degree, is a condition for the realization of most of the gains, so some sort of social compatibility should be present in order to enhance results.

I have also suggested a possible «second order» interaction effect of social fit, indicating that social fit might affect reciprocity positively, an assumption that is supported by the strong positive correlation between the two concepts.

Chapter 7
Discussion and implications

In this chapter, I shall discuss the implications of the findings, both for theory and practice. But first, I shall discuss some validity questions of the study, in light of the findings. When interpreting results, much weight is commonly placed on the explanation of non-expected findings. The question is often whether the non-findings are due to the theory not being true, or whether the method used was insufficient to detect real effects. To my view, the overall results are interpretable according to theory, and I mainly consider the study as valid. However, a critical discussion of the results in light of some of the weaknesses regarding method is warranted. I do this in section 7.1.

First, I discuss statistical conclusion validity and internal validity, in order to judge whether the findings regarding the effects are valid. I then adress whether the findings are generalizable to other strategic alliances than those included in the study. Since the sample here actually was identical to the sampling population, a possible generalization is done mainly on theoretical grounds.

Then, in section 7.2, I discuss implications of the findings, both for theory and practice. Finally, in section 7.3, I adress some issues regarding future research.

7.1 Validity issues

7.1.1 Internal validity

This concerns whether the study is robust enough to infer causal relationships between the variables. As the hypotheses in the present study were predicting causal relationship, internal validity is important. Traditionally it is believed that the best way

to obtain internal validity is to conduct a controlled experiment, because this rules out third variables. However, this decreases the external validity. As external validity was important for this study, it was conducted in a field setting, and, hence, several threats to internal validity is present.

Non-respondents and excluded cases

First, it is the question of non-respondents. At the alliance level, the initial sample included 82 alliances, we got responds from 76, but due to low respond rates in 12 of the alliances, the final sample included only 54 cases. Thus, we lack data from 28 alliances in the population. Further, is is the question of response rate within each alliance. The average number of responds in each alliance in the study is 2,85, while the average size of the initial sample population is 3,4. Thus, on average, we lack data from "half a person" in each alliance, and the data should be fairly representative at this level. Regarding the excluded alliances, it might be that they have properties that systematically distinquish them from the ones included, on variables that would have affected the results. This we do not know. However, according to information from SND, there are no indications that the excluded alliances have special attributes of some sort, but we still cannot rule out this potential validity threat. As the sample size is very small, the study is also very sensitive to this problem.

Third variables

A major threat to interal validity is that the effects detected might be dure du third variables not included in the study. The present study was not designed for the purpose of explaining maximum variance in the dependent variable. However, in order to decrease the risk of spurious effects, I controlled for three variables which theoretically and empirically have shown to affect outcomes in cooperative IORs. The results showed that size did not correlate with any of the dependent variables, dependence correlated only with satisfaction, and strategic importance correlated with only satisfaction and continuity. Thus, there are many factors not included in the study that probably affect the dependent variables of the study, especially realized gains. The

question is whether these exogenous variables would have affected the results. If the results are spurious, this implies that one or more third variables not only affect the dependent variables, but also the relationships between the variables in the model. Probably, some conditions external to the alliance would show to have such effects - e.g. market conditions and business structure. However, as I see it, this would not threaten the main conclusions of the present study, that there are moderating effects of social compatibility on the realization of gains. Still, an inclusion of more relevant control variables would probably have strenghtened the study.

Measurements

The validity of the results also depend on the validity and reliability of the measures used. The pilot study was conducted in order to create concepts which were equally understood across respondents and alliances, but this does not secure that the actual measure of the concept is reliable - i.e. consistent across persons and time. Regarding social compatibility, I spendt much effort in validating the social fit-construct, as one method to secure validity is the use of multi-items and repeated tests. However, some of the constructs are weaker.

Potential gains were measured as "the importance of different factors (the types of gains) for the initial decision to enter into the alliance". The question is retrospective, which might threaten the reliability of the concept. It might be that the same measure would have yielded different results if measured at the actual point of time when the respondents entered into the alliance. It might be that actual experiences with the different types of factors would affect the answers, such that in alliances where some goals had failed, they would downgrade the initial importance of this specific goal. However, as all the alliances have to state their purposes towards SND when they apply for financial support, these goals are quite explicit, which reduces this effect. Regarding potential gains, there is also a question of validity, i.e. of whether the measures actual measure what they intend to. I did not want to ask for potential gains directly, because this would probably increase the risk of retrospective biases, and reasoned that the importance of certain factors - such as e.g. increased sales - would indicate expected

gains from these factors. Thus, the potential gains are not measured directly or objectively, and might be inflated with errors. Realized gains, however, were asked for directly, and measured subjectively. The question is clear-cut, and probably interpreted similarly across respondents. But the definition of gains are left to the respondents, and there might be variations in what they consider as gains. Thus, the subjective aspect might create a less stable measure, as well as lower validity. The aggregation of gains to the alliance level, however, reduces the variance and hence increases the stability. The possibility that the responses regarding potential gains are affected by perceptions of realized gains were mainly reduced by placing the questions in different ends of the questionnaire, and further by asking the questions differently. I think the results show that the potential and realized gains are not affected by each other, as there are very different effects between the different types of gains, some are actually in the opposite direction, so no systematic measurement error regarding this seems to be present.

The other concepts in the model were measured through one-item constructs only. This obviously weakens the stability of the results, as it increases the variance. Multi-item measures create aggregates, which mostly are more stable. However, if the measures are very clear and well-defined and understood, the unstability decreases. Reciprocity is measured as the degree to which the participants pursue their self interests on the other parties' expenses, which is quite simple and clear. The one-way analysis of variance also indicated some stability of the measure. Still, it might be unstable because of different interpretations across respondents, and a multi-item construct would have been more desirable. The last concept I shall mention as a possible candidate for validity weaknesses, is satisfaction. I chose to measure overall satisfaction with the cooperation, and hence lost information about what they actually are satisfied with. In a study where one of the major purposes is to detect the relationship between social and economic aspects of a relationship, this is obviously a weakness. Research on satisfaction has shown that it is a multi-faceted concept, and the present responds may represent very different aspects of the relationship.

Group vs. individual measures

The data were collected at the individual level, and aggregated to the alliance level. This raises the question of construct validity of group-level constructs. Obviously, we loose variance and, hence, information, when aggregating data to the group level. Construct validity of the group-level constructs is a question of the nature of the construct, and *how* the aggregation is done. The crucial issue regarding this question is whether the individual variance affect the group variance of - and between - the constructs. As mentioned in the measurement chapter, some of the constructs exist only at an aggregated level, such as reciprocity and social fit. Further, I have used mostly global measures. The question regarding these types of variables is how to obtain valid measures of such constructs through collecting data from individuals, instead of collecting them at the group level, e.g. by observation. I measured these as global constructs, and computed the mean for each variable. The individual variance would in these cases apply to variance regarding how they perceive the group on the attributes in question. Computing the mean here is fairly relevant since it is a global measure. Regarding the composite measures, however, the question is more difficult to consider. This is the case for satisfaction, expected continuity and the control variables. Group level phenomena are not merely aggregates of individual phenomena, so the composite measures are somewhat reductionistic. The question is how this affects the validity of the study. First, it affects the concepts through reducing the variance, which migh affect results, since each group is very small and sensitive to individual differences. Further, there might be group effects not accounted for. The best solution to the problem of measuring group level variables, is to have some information at the group level, e.g. from observation, that can act as control and support information. I attended only two group meetings in one alliance, which is too little to obtain any solid picture of how the individual variance affect the group level variance.

7.1.2 Generalizability

According to Cook and Campbell (1979) this is the question of generalizability both to particular persons, settings, and time, and across types of persons, settings and time. The first question here is whether the results of the present study can be judged as

representative for the NBNP alliances in the formation phase. Since the whole sampling population here actually is included in the study, this type of generalization depends on the properties of the non-respondents. Since I have little information about the alliances excluded from the study, no firm conclusions can be made. However, about two thirds of the alliances in question are included in the study, so even though some of the excluded alliances are different from these, I would argue that the results are representative. The requirements for participating in the NBNP programme (which I have commented on in chapter 1 and 4) also secure vital similarities between all the alliances, which increases this type of generalizability.

The generalizability across persons, settings and time is more difficult to assess. How relevant are the present study for strategic alliances in general? Can the results also apply for other types of cooperative IORs - and at other times? There are several strategices one can follow in order to increase the external validity of a study, and one is deliberate sampling for heterogeniety. If the subjects of the study varies on central properties, the generalizability increases. How special are the NBNP alliances? I discussed this in section 4.2, and the main conclusion is that the participants in the NBNP programme are very heterogeneous, e.g. regarding purpose, size and the form of the alliance. The factors which distinquish them from strategic alliances in general, are the requirements for participation in the programme, the most important being some sort of gains potential, that the cooperation must be formalized, a specific purpose must be defined. Regarding gains potential, the data here shows that it varies substantially, so I will argue that this is not an evident distinguishing factor. Further, the question of formalization and purpose is also a question of how to define a strategic alliance. At least, they are cooperative IORs with strategic purposes, but how specific these purposes are, is difficult to define. I would also assume that the degree of formalization will vary substantially between strategic alliances in general. This is also the case in the NBNP alliances, the requirements for a formalized contract do not necessarily imply a very high degree of formalization, only that some sort of business agreement is formalized. Thus, I would argue that the sample here is sufficiently heterogeneous regarding initial

properties to be theoretically generalizable to strategic alliances in general, provided a definition of strategic alliances as formalized cooperation with strategic purposes.

However, the participation in the NBNP programme might influence the alliances over time, so they develop properties less relevant for other strategic alliances. Specifically, the outside consultant and the administrator might affect the process - presumably to be more structured and efficient. Further, the financial support is conditioned on reports from the alliances, which also probably enhances the structuring of the alliances. The evaluation report (Nesheim, 1994) of the programme showed that there were large differences in the success rate of the participating alliances. Whether the success rate was larger than for strategic alliances in general, is difficult to assess, but still the large variance indicates that in the NBNP programme, all types of alliances are represented. So, my impression - from the present study, the interviews I did, and the evaluation report, is that the NBNP alliances are very heterogenous, that the properties that are similar across them are not so fundamental that they would affect the present results to a substantial degree. So I would argue that the results are generalizable to strategic alliances in general - at least those with some structure and objectives for their cooperation. This conclusion is furthered strenghtened by the fact that all types of alliances go through a formation phase, facing similar tasks as the ones studied here, although the formation phase might be less structured than it is in the NBNP alliances. Thus, I believe that both the theory regarding formation phase, the definition of successcriteria for this phase, as well as the results regarding social compatibility as a moderator of the realization of gains are relevant for the types of strategic alliances which are formed for specific purposes, such as the ones described in this thesis.

7.2 Implications of the study

Since I have applied a broad range of theories to develop the hypotheses, the present study is not simply a test of one specific theory. First, I apply theory of psychology and social phsychology in a busniness setting, which is fairly novel. Further, the study might represent a development and extension of the theory of relational contracts, as I

bring in more specific theory about social influences than contracts theory does. In the following, I shall adress possible implications of my study for these theories. I then adress implications for practice, regarding the management of strategic alliances.

7.2.1 Implications for theory

In his book "The Moral Dimension", Amitai Etzioni (1988) states that:

> " Once one recognizes that it is productive to treat moral commitments as a factor separate from the quest for pleasure, the next stept is to ask what the relationship is between these two factors. It seems that *while both affect behavior, they also affect one another.* And these *effects flow both ways*, rather than moral factors only affecting economic factors or vice versa. (Italics original)"

Although Etzioni mainly discusses *motives* for behavior, the statement points to some of the underlying beliefs that has guided this study. And I think the results supports the assumption that moral and economic dimensions of life are intertwined. The realization of potential gains have been shown to partly be conditioned on some degree of social compatibility between the parties. Thus, it might be time for a more close integration of theories of social psychology and economic theories of the firms, also at a middle range level of theory.

Social psychological issues as social similarity, identity and categorization of individuals have been adressed in internal organizational settings (e.g. in Kramer, 1991; Ashforth & Humphrey, 1995; Belliveau et al., 1996). The results of the present study indicates that these types of theories are applicable also in interfirm relationships. As the development of relations in business seems to move towards more use of external, long-term relationships as an alternative to internal organization, we need theory to adress these relationships. I think that applying the lines of theory I have used here is a fruitful approach, and it implies an extension of the scope of these theories.

The theories commonly used to study relational contracts are transaction costs theory and contracts theory, which have been further developed to fit the setting of interorganizational relationships. I believe that my study points to the relevance of also applying other lines of theory in explaining relational contracts. First, the results support the assumption that some sort of social compatibility is present in most strategic alliances. This might also be the case for relational norms, which can explain some of the non-findings regarding norms; when we talk about relational contracts, we talk about the "good guys network". But, in some of these relationship, the social compatibility is very small, and here we see large differences in the ability to realize gains. If the results regarding social compatibility is relevant also for social norms, it can imply that relational norms should be modelled and measured differently - because a high degree of social compatibility does not necessarily contribute to success, but the absence of social compatibility severly decreases the ability to realize potential gains.

Another interesting finding of the present study is that, contrary to most present research (with an exception of the study of Noordewier et al., 1990), is that it does not model social compatibility as antecedent to results, but as a moderator. The lack of covariance between social compatibility and realized gains indicates that there are no direct effects. This might also contribute to an explanation of why few effects of social structures on results have been found (Nesheim, 1994). Thus, instead of adding social variables to the general explanation of success in interorganizational relationships, it could be fruitful to model these as moderators. This might enable researchers to better establish and validate the relationship between social and economic variables in models of interfirm cooperation.

The development of a specific model for the formation phase in strategic alliances also have implications for theory. Specifically, the definition of gains in this phase can be useful. As the accomplishment of goals at the alliance level is required before gains - economic gains - can be obtained at the firm level, the present study can contribute to a clarification of what we should define as success or performance in strategic alliances. It can also hopefully inspire researchers to focus more on performance in

interorganizational relationships, an issue that is fairly neglected within this line of theory, especially the tying of performance to social processes. The present results show e.g. that satisfaction - an outcome variable often used in studies of cooperative IORs - is a substantially different type of outcomes than realized gains, and it has other determinants. This further underscores the importance of an extended investigation of the relationship between social and economic outcomes within these theories.

In sum, the present study to my view represents a theoretical contribution through an extension of the theoretical tools used to analyze interfirm cooperation, and it also represents a differentiation of the theory, through focusing on the formation phase, as well as performance criteria. Methodologically, I think that the modeling of moderator effects is very fruitful, and can represent a novel approach to these types of studies.

7.2.2 Implications for practice

I believe that the focus on the formation phase in the present study is useful for managers. Many studies provide normative guidelines about what governance mechanisms that are effective in strategic alliances, but few adress the process of how to establish these mechanisms. The results regarding social compatibility clearly has implications as guidelines to what to focus on in this important phase. The role of reciprocity indicates that managers must place great weight on collective interests through this phase. Business ethics have come to be adressed more explicitly in discussions about business education and practice, and the present results further underscores the importance of this issue. A central point is that ethics should not be considered as an additional side-factor when conducting business, but rather as a foundation for economic effectiveness.

Further, the results point to a possible pitfall in the management of strategic alliances. During the interviews in the pilot study, the managers placed great weight on the socalled «personal chemistry» as a condition for success. The results here indicate that social fit is a condition for realization of gains in some alliances. However, it is important to point to the fact that the main differences are between alliances with low

levels of social fit and medum/high levels. The results regarding satisfaction is also important to note. A strong social fit might create falsily high expectations about gains, which again may lead to disappointment. Thus, managers should be aware that the realization of collective gains in a strategic alliance is enhanced if the participating managers share some personal and company attributes, but also that strong similarities may create a false feeling of success. The lack of direct relationship between social compatibility and realized gains points to this as well. During the formation phase, social fit and reciprocity seem important as foundations for the mechanisms which can translate individual efforts into collective gains, but social compatibility does not create gains by itself.

These results points both to the composition of the managing group of an alliance, as well as managerial behavior in the alliance. The knowledge derived from these results might thus be useful for organizations when appointing managers to be responsible for their external relationships, as well as for the managers actually in charge of alliances.

7.3 Suggestions for future research

In this thesis, I have tried to conceptualize important aspects of the social context of strategic alliances, in line with the notion of "social embeddedness of economic exchange". This is still a fairly unexplored area, especially in empirical research, and more theoretical work is also needed. The social aspect of a strategic alliance is of course complex and difficult to model, and there is a need for a development of a nomological network that can tie the social and economic aspects of such relationships together. Much of the research on interorganizational relationship, especially within the marketing perspective, is inspired by neo-classical economics, which surely needs to be fertiled with other lines of theory. Thus, integration of different perspectives is necessary in order to explain a phenomenon that actually is a mixture of a social and economic exchange. It is my hope that future research on interorganizational relationships will be more bold regarding the use and integration of theory.

Regarding the specific phenomenon studied here, the formation phase of strategic alliances, this is also fairly unexplored. Especially, further knowledge about the success criteria of this phase is needed. The present study did not provide sufficient explanations of the duration of the alliances, and it would be very interesting to discover the factors that determine dissolution of the relationship through this phase. Further, the question of whether duration actually is a success criteria, is left unexplored. A more relevant attitudinal measure of success than satisfaction would also be interesting to develop. How important is actually the outcomes regarding the relationship relative to the economic outcomes? The evaluation study of Nesheim (1994) revealed that as a side-effect, a large number of the alliances had developed increased competence in different fields through the participation in the alliance. How important are these outcomes for the further success of such relationships?

Yet another issue to focus on in future research would be the relationship between the formation and operation phase in strategic alliances. Are the patterns regarding social and economic aspects similar or different between the two phases? Do social factors play a more important role during the formation phase than in later phases? I have argued that it does, based on the assumption that a low degree of formalization, which is the case during the formation phase, requires smoother social mechanisms for the relationship to function. Maybe this is not true, maybe the social factors are as important, but are of different kinds at later stages. Then it would also be interesting to investigate whether social compatibility at the formation stage has any effects on performance in the operation phase, as well as the establishing of trust and social governance mechanisms. An underlying assumption in the present study is that social compatibility is a foundation for trust, and a study of varying degrees of trust in the SND alliances at later points of time would be very relevant.

The important role of reciprocity that the present study reveals, also calls for a further discussion of the role of trust. Looking at how trust has been defined in different studies, the definitions vary according to the setting, which to my view is appropriate. However, different definitions are also used within the same fields of research.

Reciprocity as it is defined here, is highly relevant for a further discussion of the role of trust, as it concerns evaluation of behavior, which presumably is one source of information used in the judgement of other peoples' trustworthiness. Evidently, it is a fruitful concept, since it is shown to have large effects on the realization of gains. However, the definition of reciprocity used here is also close to the opposite of some definitions of opportunism, also a concept widely used, but seldom measured, within the field of organizational economics. I think that a more unified definition of trust as well as opportunism in business relationships would be at place, which also could help to further refine the concept of reciprocity and the nomological network to which it is related.

I also think that the role social fit seems to play, indicates that economic actors do use different types of information as a basis for their judgements. It might be that in settings where collective action is required, decision criteria traditionally defined as unrational "biases" (e.g. interpersonal attraction, categorization) actually are very relevant, and can be very rational at a collective level. This also calls for future investigation of interpersonal relationships in business, it might be that social processes play a more important role for economic success than we traditionally believe.

As a conclusion, I would say that the field of research on interorganizational relationships could profit from more theoretical work regarding concepts and models. Most notably, a further integration of perspectives different than the contractual could prove to be very fruitful.

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Appendix 1

Questionnaire

0. I hvilken fase er nettverket i dag?

Vi er i forfasen ❑
Vi er i planleggingsfasen ❑
Vi har etablert en forretningsenhet ❑
Vi har startet forretningsdrift ❑
Nettverket «ligger på is» ❑
Vi har avsluttet samarbeidet ❑

1. OM BEDRIFTEN

1.1 Generelle opplysninger om bedriften du representerer

A. Bedriftens navn: .....

B. Bransje: .....

C. Antall ansatte: .....

D. Omsetning (eks mva) 1995: .....

1.2 Mål for samarbeidet

Nedenfor er det listet opp en rekke mål for bedriftssamarbeid. Hvor viktige var disse faktorene for deres beslutning om å delta i nettverket?
Angi hvor viktig hvert mål var ved å sette ring rundt det tallet som representerer ditt svar for hvert av punktene.

	Ikke aktuelt	Lite viktig						Svært viktig
A. Økt salg i nåværende marked	0	1	2	3	4	5	6	7
B. Tilgang til nye markeder	0	1	2	3	4	5	6	7
C. Utvikling av nye produkter	0	1	2	3	4	5	6	7
D. Bedret forhandlingsposisjon overfor kundene	0	1	2	3	4	5	6	7
E. Bedret forhandlingsposisjon overfor leverandørene	0	1	2	3	4	5	6	7

	Ikke aktuelt	Lite viktig						Svært viktig
F. Bedre produkttilbud	0	1	2	3	4	5	6	7
G. Annet *(spesifisèr)*:.....								
.....	0	1	2	3	4	5	6	7

	Ikke særlig kritisk						Helt avgjøre for overleve
1.3 Hvor avgjørende er de ovennevnte faktorene for din bedrift i fremtiden?	1	2	3	4	5	6	7

2. OM FORHOLDET MELLOM DEG/DIN BEDRIFT OG DE ANDRE I NETTVERKET

2.1 Forskjeller og likheter mellom bedriftene

Her ønsker vi å få vite på hvilke områder du mener bedriftene i nettverket er forskjellige. Vennligst sett ring rundt ett av tallene for hvert spørsmål. *Setter du ring rundt 1-tallet, mener du at bedriftene er svært like, mens ring rundt 7-tallet betyr at bedriftene er svært forskjellige.*

A: Hvor forskjellige er dere når det gjelder bedriftenes økonomiske situasjon, dvs. hvor bra dere gjør det?

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

B: Hvor forskjellige er dere når det gjelder å være ekspansive i markedet?

Vi er svært like						Vi er svært forskjellige
1	2	3	4	5	6	7

C: Hvor forskjellige er dere når det gjelder å dra sin del av lasset i nettverket?

Vi er svært like						Vi er svært forskjellige
1	2	3	4	5	6	7

D: Hvor forskjellig bedriftskultur har dere - dvs. normer for hvordan man skal opptre og være i bedriftene?

Vi er svært like						Vi er svært forskjellige
1	2	3	4	5	6	7

2.2 Forskjeller og likheter mellom personene

Her ønsker vi en vurdering av hvor lik eller forskjellig du som samarbeidspartner og person er fra representantene fra de andre bedriftene du samarbeider med i nettverket.

A: Hvor risikovillige dere er

Vi er svært like						Vi er svært forskjellige
1	2	3	4	5	6	7

B: Hvor utålmodige dere er for å få ting gjort

Vi er svært like						Vi er svært forskjellige
1	2	3	4	5	6	7

C: Lederstil i egen bedrift - hvor mye dere bestemmer selv i forhold til hvor mye dere delegerer til andre

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

D: I hvilken grad dere snakker «samme språk»

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

E: Hvor dominerende dere er på møter og i diskusjoner

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

F: Hvor åpent og direkte dere kommuniserer på møter og i diskusjoner

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

G: Hvor mye dere lytter til andre

Vi er svært like						Vi er svært for-skjellige
1	2	3	4	5	6	7

2.3 Er det enkeltdeltakere som skiller seg ut fra de andre i nettverket?

Ikke i det hele tatt	Ikke noe særlig	Ja, i noen grad	Ja, i stor grad
❑	❑	❑	❑

3. OM NETTVERKET

3.1 Hvor lenge er det siden dere hadde første møte i nettverket? *Angi antall måneder, evt. også år.* .....år, ...mnd.

3.2 Nedenfor følger endel utsagn om nettverket og deltakerne. I hvilken grad mener du disse utsagnene stemmer? *Sett ring rundt det svaralternativet som er mest i samsvar med din oppfatning.*

	Stemmer ikke i det hele tatt						Stemmer helt
A: Bedriftene i dette nettverket har alle samme formål med å delta	1	2	3	4	5	6	7
B: Bedriftene i nettverket har tilstrekkelig med tid, penger og personell til å realisere målene for samarbeidet	1	2	3	4	5	6	7
C: Deltakerne i nettverket har tilstrekkelig kompetanse til å løse de oppgaver som kreves for å nå målene	1	2	3	4	5	6	7
D: Hvis dette nettverket ikke lykkes, kan vår bedrift realisere det samme formålet ved å samarbeide med andre bedrifter	1	2	3	4	5	6	7
E: Dette samarbeidet er av stor strategisk betydning for vår bedrifts fremtidige utvikling	1	2	3	4	5	6	7
F: I dette nettverket har alle omtrent like mye makt	1	2	3	4	5	6	7
G: Vi har uoverensstemmelser som hemmer samarbeidet mye	1	2	3	4	5	6	7
H: Jeg er svært fornøyd med samarbeidet så langt	1	2	3	4	5	6	7

I: Personlig liker jeg de andre deltakerne i nettverket	1	2	3	4	5	6	7
J: I dette nettverket er det ingen som meler sin egen kake på bekostning av andre	1	2	3	4	5	6	7

3.3 Gevinster hittil og i framtiden

Nedenfor er ulike områder nettverket kan få gevinster fra, listet opp. På hvilke områder mener du dere vil få gevinster i framtiden? Evt.- har dere allerede oppnådd gevinst på noen områder? *Hvis aktuelt, sett ring ett eller to steder på hvert punkt.*

	Mener jeg vi vil oppnå gevinst på i framtiden	Har vi allerede oppnådd gevinst på	Ikke aktuelt
A. Økt salg i nåværende marked	❑	❑	❑
B. Tilgang til nye markeder	❑	❑	❑
C. Utvikling av nye produkter	❑	❑	❑
D. Bedret forhandlingsposisjon overfor kundene	❑	❑	❑
E. Bedret forhandlingsposisjon overfor leverandørene	❑	❑	❑
F. Bedre produkttilbud	❑	❑	❑
G. Annet (*spesifisèr)*:.....			
.....	❑	❑	❑

3.4 Framtidig samarbeid

A: Hvis dere på nåværende tidspunkt ennå ikke har startet forretningsdrift i nettverket, hvor lang tid antar du det vil ta før dette skjer?

0-3 mnd ❑
4-8 mnd ❑
9-12 mnd ❑
over 1 år ❑
det er svært usikkert ❑

B: Hvor langt tidsperspektiv har dere planlagt for nettverket?

Mindre enn 1 år ❑
1 til 2 år ❑
3 til 5 år ❑
lenger enn 5 år ❑

4. OM DEG SELV

A: Alder: .....år

B: Kjønn: Mann ❑ Kvinne ❑

C: Utdanning utover 9-årig grunnskole: .....år

D: Antall år i høyere utdanning (høyskole/universitet): .....år

E: Viktigste fagområde i utdanningen:

Teknisk ❑
Økonomisk ❑
Juridisk ❑
Annet ❑ Spesifisèr:.....

F: Ansiennitet i egen bedrift: .....år

Takk for hjelpen!

Appendix 2

Full correlation matrix

- - Correlation Coefficients - -

	M12A	M12B	M12E	M12C	M12D	M12F
M12A	1,0000	-,2021	,0398	,2170	,5235	,0491
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,	P= ,143	P= ,775	P= ,115	P= ,000	P= ,725
M12B	-,2021	1,0000	-,1912	,0026	-,3592	,0418
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,143	P= ,	P= ,166	P= ,985	P= ,008	P= ,764
M12E	,0398	-,1912	1,0000	-,1778	,1384	,3866
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,775	P= ,166	P= ,	P= ,198	P= ,318	P= ,004
M12C	,2170	,0026	-,1778	1,0000	,3027	,1030
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,115	P= ,985	P= ,198	P= ,	P= ,026	P= ,459
M12D	,5235	-,3592	,1384	,3027	1,0000	,1765
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,008	P= ,318	P= ,026	P= ,	P= ,202
M12F	,0491	,0418	,3866	,1030	,1765	1,0000
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,725	P= ,764	P= ,004	P= ,459	P= ,202	P= ,
POTGAIN	,4802	-,0072	,4479	,3359	,5488	,6668
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,959	P= ,001	P= ,013	P= ,000	P= ,000
SOCIFIT	-,0960	-,0295	-,3119	-,0191	,0757	-,2254
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,490	P= ,832	P= ,022	P= ,891	P= ,586	P= ,101
RECIPRO	,1472	-,1008	-,0948	-,1821	,2523	-,0012
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,288	P= ,468	P= ,495	P= ,188	P= ,066	P= ,993
M33A	,3302	-,0226	,1156	,2571	,4090	,0858
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,015	P= ,871	P= ,405	P= ,061	P= ,002	P= ,537
M33B	,0073	,3178	-,0788	,2312	,0718	-,0259
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,958	P= ,019	P= ,571	P= ,093	P= ,606	P= ,852

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	M12A	M12B	M12E	M12C	M12D	M12F
M33E	-,1779	-,0747	,1453	-,0241	-,1123	,0224
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,198	P= ,592	P= ,295	P= ,863	P= ,419	P= ,872
M33C	,1124	,2206	-,1631	,2670	-,0054	,0755
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,418	P= ,109	P= ,239	P= ,051	P= ,969	P= ,587
M33D	,2987	-,1064	-,0329	,2802	,3370	,1498
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,028	P= ,444	P= ,813	P= ,040	P= ,013	P= ,280
M33F	-,0093	-,0426	-,1675	,2698	,0145	,1617
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,947	P= ,760	P= ,226	P= ,049	P= ,917	P= ,243
REALGAIN	,1672	,0894	-,0638	,3759	,2038	,1383
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,227	P= ,520	P= ,647	P= ,005	P= ,139	P= ,319
SATISF	-,0475	-,1716	-,1390	-,0055	,1684	-,2131
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,733	P= ,215	P= ,316	P= ,968	P= ,223	P= ,122
CONT	-,0119	,0090	,1692	,2654	,0370	-,0835
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,932	P= ,948	P= ,221	P= ,052	P= ,791	P= ,548
SIZE	,0398	-,1099	,0012	,0548	,1404	-,1536
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,775	P= ,429	P= ,993	P= ,694	P= ,311	P= ,268
DEPEND	,0151	-,1184	,1237	-,1622	-,1192	,0237
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,914	P= ,394	P= ,373	P= ,241	P= ,390	P= ,865
STRATIMP	,1011	-,0664	-,0481	,3444	,3422	,1985
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,467	P= ,633	P= ,730	P= ,011	P= ,011	P= ,150
DURATION	-,0031	,0544	-,1661	,0201	,2096	,1253
	(52)	(52)	(52)	(52)	(52)	(52)
	P= ,983	P= ,702	P= ,239	P= ,887	P= ,136	P= ,376

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	POTGAIN	SOCIFIT	RECIPRO	M33A	M33B	M33E
M12A	,4802	-,0960	,1472	,3302	,0073	-,1779
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,490	P= ,288	P= ,015	P= ,958	P= ,198
M12B	-,0072	-,0295	-,1008	-,0226	,3178	-,0747
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,959	P= ,832	P= ,468	P= ,871	P= ,019	P= ,592
M12E	,4479	-,3119	-,0948	,1156	-,0788	,1453
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,001	P= ,022	P= ,495	P= ,405	P= ,571	P= ,295
M12C	,3359	-,0191	-,1821	,2571	,2312	-,0241
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,013	P= ,891	P= ,188	P= ,061	P= ,093	P= ,863
M12D	,5488	,0757	,2523	,4090	,0718	-,1123
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,586	P= ,066	P= ,002	P= ,606	P= ,419
M12F	,6668	-,2254	-,0012	,0858	-,0259	,0224
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,101	P= ,993	P= ,537	P= ,852	P= ,872
POTGAIN	1,0000	-,0922	,1350	,3471	,1151	-,0006
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,	P= ,507	P= ,330	P= ,010	P= ,407	P= ,997
SOCIFIT	-,0922	1,0000	,5167	,1354	,0547	-,0244
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,507	P= ,	P= ,000	P= ,329	P= ,695	P= ,861
RECIPRO	,1350	,5167	1,0000	,1026	-,1930	,1017
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,330	P= ,000	P= ,	P= ,460	P= ,162	P= ,464
M33A	,3471	,1354	,1026	1,0000	,3755	-,1988
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,010	P= ,329	P= ,460	P= ,	P= ,005	P= ,149
M33B	,1151	,0547	-,1930	,3755	1,0000	,0237
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,407	P= ,695	P= ,162	P= ,005	P= ,	P= ,865

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	POTGAIN	SOCIFIT	RECIPRO	M33A	M33B	M33E
M33E	-,0006	-,0244	,1017	-,1988	,0237	1,0000
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,997	P= ,861	P= ,464	P= ,149	P= ,865	P= ,
M33C	,0496	,0581	-,2647	,3234	,5458	-,1632
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,722	P= ,677	P= ,053	P= ,017	P= ,000	P= ,238
M33D	,3467	,1557	-,0607	,2899	,0697	-,1577
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,010	P= ,261	P= ,663	P= ,033	P= ,616	P= ,255
M33F	,0243	,0956	,0283	,3236	,4807	,0367
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,861	P= ,492	P= ,839	P= ,017	P= ,000	P= ,792
REALGAIN	,2462	,1380	-,0846	,6403	,7325	,1090
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,073	P= ,320	P= ,543	P= ,000	P= ,000	P= ,433
SATISF	-,0844	,6451	,5521	,2924	,1519	,0830
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,544	P= ,000	P= ,000	P= ,032	P= ,273	P= ,551
CONT	,0984	,2170	-,1492	,3141	,2052	-,0611
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,479	P= ,115	P= ,282	P= ,021	P= ,137	P= ,660
SIZE	-,0458	,0064	,0217	,0191	-,1122	,0119
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,742	P= ,963	P= ,876	P= ,891	P= ,419	P= ,932
DEPEND	-,1123	,2136	,0390	,1628	-,1484	,0486
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,419	P= ,121	P= ,779	P= ,240	P= ,284	P= ,727
STRATIMP	,2901	,1992	,0355	,1923	,2093	-,1181
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,033	P= ,149	P= ,799	P= ,164	P= ,129	P= ,395
DURATION	,0442	,1206	-,0074	,1543	-,0331	-,0032
	(52)	(52)	(52)	(52)	(52)	(52)
	P= ,756	P= ,395	P= ,959	P= ,275	P= ,816	P= ,982

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	M33C	M33D	M33F	REALGAIN	SATISF	CONT
M12A	,1124	,2987	-,0093	,1672	-,0475	-,0119
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,418	P= ,028	P= ,947	P= ,227	P= ,733	P= ,932
M12B	,2206	-,1064	-,0426	,0894	-,1716	,0090
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,109	P= ,444	P= ,760	P= ,520	P= ,215	P= ,948
M12E	-,1631	-,0329	-,1675	-,0638	-,1390	,1692
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,239	P= ,813	P= ,226	P= ,647	P= ,316	P= ,221
M12C	,2670	,2802	,2698	,3759	-,0055	,2654
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,051	P= ,040	P= ,049	P= ,005	P= ,968	P= ,052
M12D	-,0054	,3370	,0145	,2038	,1684	,0370
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,969	P= ,013	P= ,917	P= ,139	P= ,223	P= ,791
M12F	,0755	,1498	,1617	,1383	-,2131	-,0835
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,587	P= ,280	P= ,243	P= ,319	P= ,122	P= ,548
POTGAIN	,0496	,3467	,0243	,2462	-,0844	,0984
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,722	P= ,010	P= ,861	P= ,073	P= ,544	P= ,479
SOCIFIT	,0581	,1557	,0956	,1380	,6451	,2170
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,677	P= ,261	P= ,492	P= ,320	P= ,000	P= ,115
RECIPRO	-,2647	-,0607	,0283	-,0846	,5521	-,1492
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,053	P= ,663	P= ,839	P= ,543	P= ,000	P= ,282
M33A	,3234	,2899	,3236	,6403	,2924	,3141
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,017	P= ,033	P= ,017	P= ,000	P= ,032	P= ,021
M33B	,5458	,0697	,4807	,7325	,1519	,2052
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,616	P= ,000	P= ,000	P= ,273	P= ,137

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	M33C	M33D	M33F	REALGAIN	SATISF	CONT
M33E	-,1632	-,1577	,0367	,1090	,0830	-,0611
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,238	P= ,255	P= ,792	P= ,433	P= ,551	P= ,660
M33C	1,0000	,3631	,4428	,7568	,0518	,2666
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,	P= ,007	P= ,001	P= ,000	P= ,710	P= ,051
M33D	,3631	1,0000	,0494	,4461	-,0404	,2667
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,007	P= ,	P= ,723	P= ,001	P= ,772	P= ,051
M33F	,4428	,0494	1,0000	,7129	,1714	,1798
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,001	P= ,723	P= ,	P= ,000	P= ,215	P= ,193
REALGAIN	,7568	,4461	,7129	1,0000	,2133	,3453
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,000	P= ,001	P= ,000	P= ,	P= ,122	P= ,011
SATISF	,0518	-,0404	,1714	,2133	1,0000	,1834
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,710	P= ,772	P= ,215	P= ,122	P= ,	P= ,184
CONT	,2666	,2667	,1798	,3453	,1834	1,0000
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,051	P= ,051	P= ,193	P= ,011	P= ,184	P= ,
SIZE	,1022	,1567	-,0303	,0406	-,0232	,1296
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,462	P= ,258	P= ,828	P= ,770	P= ,868	P= ,350
DEPEND	-,0151	,0376	,0111	,0315	,2264	,0942
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,914	P= ,787	P= ,936	P= ,821	P= ,100	P= ,498
STRATIMP	,0488	,1969	,1473	,1971	,2574	,4179
	(54)	(54)	(54)	(54)	(54)	(54)
	P= ,726	P= ,154	P= ,288	P= ,153	P= ,060	P= ,002
DURATION	,0032	,2975	,1481	,1606	,0731	,0301
	(52)	(52)	(52)	(52)	(52)	(52)
	P= ,982	P= ,032	P= ,295	P= ,255	P= ,606	P= ,832

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	SIZE	DEPEND	STRATIMP	DURATION
M12A	,0398	,0151	,1011	-,0031
	(54)	(54)	(54)	(52)
	P= ,775	P= ,914	P= ,467	P= ,983
M12B	-,1099	-,1184	-,0664	,0544
	(54)	(54)	(54)	(52)
	P= ,429	P= ,394	P= ,633	P= ,702
M12E	,0012	,1237	-,0481	-,1661
	(54)	(54)	(54)	(52)
	P= ,993	P= ,373	P= ,730	P= ,239
M12C	,0548	-,1622	,3444	,0201
	(54)	(54)	(54)	(52)
	P= ,694	P= ,241	P= ,011	P= ,887
M12D	,1404	-,1192	,3422	,2096
	(54)	(54)	(54)	(52)
	P= ,311	P= ,390	P= ,011	P= ,136
M12F	-,1536	,0237	,1985	,1253
	(54)	(54)	(54)	(52)
	P= ,268	P= ,865	P= ,150	P= ,376
POTGAIN	-,0458	-,1123	,2901	,0442
	(54)	(54)	(54)	(52)
	P= ,742	P= ,419	P= ,033	P= ,756
SOCIFIT	,0064	,2136	,1992	,1206
	(54)	(54)	(54)	(52)
	P= ,963	P= ,121	P= ,149	P= ,395
RECIPRO	,0217	,0390	,0355	-,0074
	(54)	(54)	(54)	(52)
	P= ,876	P= ,779	P= ,799	P= ,959
M33A	,0191	,1628	,1923	,1543
	(54)	(54)	(54)	(52)
	P= ,891	P= ,240	P= ,164	P= ,275
M33B	-,1122	-,1484	,2093	-,0331
	(54)	(54)	(54)	(52)
	P= ,419	P= ,284	P= ,129	P= ,816

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	SIZE	DEPEND	STRATIMP	DURATION
M33E	,0119	,0486	-,1181	-,0032
	(54)	(54)	(54)	(52)
	P= ,932	P= ,727	P= ,395	P= ,982
M33C	,1022	-,0151	,0488	,0032
	(54)	(54)	(54)	(52)
	P= ,462	P= ,914	P= ,726	P= ,982
M33D	,1567	,0376	,1969	,2975
	(54)	(54)	(54)	(52)
	P= ,258	P= ,787	P= ,154	P= ,032
M33F	-,0303	,0111	,1473	,1481
	(54)	(54)	(54)	(52)
	P= ,828	P= ,936	P= ,288	P= ,295
REALGAIN	,0406	,0315	,1971	,1606
	(54)	(54)	(54)	(52)
	P= ,770	P= ,821	P= ,153	P= ,255
SATISF	-,0232	,2264	,2574	,0731
	(54)	(54)	(54)	(52)
	P= ,868	P= ,100	P= ,060	P= ,606
CONT	,1296	,0942	,4179	,0301
	(54)	(54)	(54)	(52)
	P= ,350	P= ,498	P= ,002	P= ,832
SIZE	1,0000	-,0503	-,1121	,0846
	(54)	(54)	(54)	(52)
	P= ,	P= ,718	P= ,420	P= ,551
DEPEND	-,0503	1,0000	-,1044	,1542
	(54)	(54)	(54)	(52)
	P= ,718	P= ,	P= ,452	P= ,275
STRATIMP	-,1121	-,1044	1,0000	,2172
	(54)	(54)	(54)	(52)
	P= ,420	P= ,452	P= ,	P= ,122
DURATION	,0846	,1542	,2172	1,0000
	(52)	(52)	(52)	(52)
	P= ,551	P= ,275	P= ,122	P= ,

(Coefficient / (Cases) / 2-tailed Significance)

" , " is printed if a coefficient cannot be computed

Appendix 3

Complete regression analysis

APPENDIX 3A: RESULTS FOR RECIPROCITY - COMPLETE REGRESSION ANALYSIS

****

Dependent Variable.. REALIZED GAINS
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,004809	,024455	,040927	,197	,8471
DEPEND	,052061	,023374	,528617	2,227	,0442
STRATIMP	,002018	,026320	,018780	,077	,9401
POTGAIN	-,084251	,051118	-,362456	-1,648	,1233
(Constant)	,415105	,249748		1,662	,1204

Dependent Variable.. REALIZED GAINS
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,001320	,027144	,007958	,049	,9615
DEPEND	-7,25546E-04	,019552	-,006446	-,037	,9706
STRATIMP	,023091	,030620	,136005	,754	,4565
POTGAIN	,096882	,039447	,407354	2,456	,0199
(Constant)	-,339219	,258122		-1,314	,1984

****

Dependent Variable.. M33A Gevinst av økt salg i nåværende marked
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,056610	,047425	,277333	1,194	,2539
DEPEND	,038583	,044038	,225540	,876	,3969
STRATIMP	,039486	,047710	,211564	,828	,4228
M12A	,056102	,034356	,376421	1,633	,1265
(Constant)	-,467017	,284042		-1,644	,1241

Dependent variable.. M33A Gevinst av økt salg i nåværende marked
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,015198	,055167	-,047726	-,275	,7848
DEPEND	,034989	,039361	,161983	,889	,3809
STRATIMP	,053298	,060458	,163566	,882	,3848
M12A	,064493	,035303	,312263	1,827	,0774
(Constant)	-,346585	,420050		-,825	,4156

Dependent Variable.. M33B Gevinst tilgang nye markeder
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,028828	,046240	-,149138	-,623	,5438
DEPEND	,086828	,043555	,535973	1,994	,0676
STRATIMP	-9,62922E-04	,048117	-,005448	-,020	,9843
M12B	-,027191	,044355	-,150861	-,613	,5504
(Constant)	,264820	,379964		,697	,4981

Dependent Variable.. M33B Gevinst tilgang nye markeder
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,033105	,038215	-,130895	-,866	,3930
DEPEND	-,038554	,027979	-,224731	-1,378	,1781
STRATIMP	,033667	,041469	,130092	,812	,4231
M12B	,112046	,038950	,431611	2,877	,0072
(Constant)	-,299105	,400715		-,746	,4610

****

Dependent Variable.. M33C Gevinst bedret forhandlingsposisjon kunder
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,039921	,079698	-,136149	-,501	,6248
DEPEND	,102626	,075690	,417625	1,356	,1982
STRATIMP	-,036027	,079187	-,134382	-,455	,6566
M12C	-,019738	,085083	-,065101	-,232	,8202
(Constant)	,407127	,612853		,664	,5181

Dependent Variable.. M33C Gevinst bedret forhandlingsposisjon kunder
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,028515	,049641	,103754	,574	,5698
DEPEND	-,014527	,034715	-,077926	-,418	,6785
STRATIMP	-,013269	,062566	-,047182	-,212	,8334
M12C	,051302	,039163	,276281	1,310	,1998
(Constant)	,041065	,371445		,111	,9127

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,030819	,045067	-,172801	-,684	,5061
DEPEND	,061223	,044344	,409593	1,381	,1907
STRATIMP	,009823	,058280	,060237	,169	,8687
M12D	,010931	,041855	,083675	,261	,7981
(Constant)	-,071359	,224277		-,318	,7554

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,055806	,040826	,230586	1,367	,1815
DEPEND	,008982	,028711	,054716	,313	,7565
STRATIMP	,032787	,044521	,132395	,736	,4670
M12D	,045234	,023189	,330207	1,951	,0602
(Constant)	-,316774	,307408		-1,030	,3108

****

Dependent Variable.. M33E Gevinst utvikling nye produkter
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,012597	,049057	,066129	,257	,8014
DEPEND	,048563	,049500	,304199	,981	,3445
STRATIMP	-,081195	,052615	-,466190	-1,543	,1468
M12E	,053023	,045820	,327465	1,157	,2680
(Constant)	-,022833	,305054		-,075	,9415

Dependent Variable.. M33E Gevinst utvikling nye produkter
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,007826	,043449	-,032898	-,180	,8582
DEPEND	-,001286	,032024	-,007968	-,040	,9682
STRATIMP	-,013865	,047456	-,056959	-,292	,7721
M12E	,025589	,033013	,143049	,775	,4441
(Constant)	,134486	,361136		,372	,7121

Dependent Variable.. M33F Gevinst bedret produkttilbud
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,067433	,075843	,222722	,889	,3901
DEPEND	,078895	,072254	,310931	1,092	,2947
STRATIMP	-,064414	,077992	-,232687	-,826	,4238
M12F	,076645	,065754	,295057	1,166	,2647
(Constant)	-,305435	,498808		-,612	,5509

Dependent Variable.. M33F Gevinst bedret produkttilbud
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,039702	,051216	-,136236	-,775	,4441
DEPEND	,004090	,037008	,020691	,111	,9127
STRATIMP	,081320	,057566	,272708	1,413	,1677
M12F	,009161	,037254	,044140	,246	,8074
(Constant)	-,062147	,406044		-,153	,8793

****

Dependent Variable.. SATISFACTION
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,289298	,318464	,216714	,908	,3802
DEPEND	,153747	,304386	,137425	,505	,6219
STRATIMP	,462447	,342746	,378876	1,349	,2003
POTGAIN	-,588854	,665666	-,223008	-,885	,3924
(Constant)	3,572753	3,252277		1,099	,2919

Dependent Variable.. SATISFACTION
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,091001	,134260	-,116830	-,678	,5029
DEPEND	,111614	,096711	,211251	1,154	,2573
STRATIMP	,171508	,151452	,215184	1,132	,2661
POTGAIN	-,277449	,195116	-,248503	-1,422	,1650
(Constant)	5,747052	1,276731		4,501	,0001

Dependent Variable.. CONTINUITY
Low reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,064240	,112803	-,105875	-,569	,5787
DEPEND	,226326	,107816	,445081	2,099	,0559
STRATIMP	,245843	,121404	,443138	2,025	,0639
POTGAIN	-,123086	,235785	-,102557	-,522	,6104
(Constant)	1,970072	1,151986		1,710	,1110

Dependent Variable.. CONTINUITY
High reciprocity

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,188634	,116270	,267907	1,622	,1148
DEPEND	,049452	,083752	,103542	,590	,5592
STRATIMP	,304358	,131158	,422440	2,321	,0271
POTGAIN	,050895	,168972	,050429	,301	,7653
(Constant)	,655186	1,105654		,593	,5578

APPENDIX 3B: RESULTS FOR SOCIAL FIT - COMPLETE REGRESSION ANALYSIS
N FOR SUBGROUPS = 16/38
****

Dependent Variable.. REALIZED GAINS
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,071132	,044865	,380922	1,585	,1412
DEPEND	,032915	,025984	,302402	1,267	,2314
STRATIMP	-,039397	,030729	-,299652	-1,282	,2262
POTGAIN	-,013983	,050750	-,064045	-,276	,7880
(Constant)	,117778	,295303		,399	,6976

Dependent Variable.. REALIZED GAINS
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,002392	,023192	-,016450	-,103	,9185
DEPEND	-6,75304E-04	,017774	-,006104	-,038	,9699
STRATIMP	,045862	,027667	,286115	1,658	,1069
POTGAIN	,059110	,040916	,245111	1,445	,1580
(Constant)	-,224956	,232027		-,970	,3393

****

Dependent Variable.. M33A Gevinst av økt salg i nåværende marked
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,172786	,067144	,586998	2,573	,0259
DEPEND	,013891	,038808	,080964	,358	,7272
STRATIMP	,004063	,046518	,019606	,087	,9320
M12A	,051810	,032070	,361462	1,616	,1345
(Constant)	-,514835	,303864		-1,694	,1183

Dependent... M33A Gevinst av økt salg i nåværende marked
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,016352	,045437	-,057590	-,360	,7212
DEPEND	,038006	,034624	,175954	1,098	,2803
STRATIMP	,076618	,050385	,244808	1,521	,1379
M12A	,067614	,032493	,325786	2,081	,0453
(Constant)	-,466510	,357195		-1,306	,2006

Dependent Variable.. M33B Gevinst tilgang nye markeder
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,051970	,081245	,171061	,640	,5355
DEPEND	,065592	,046840	,370399	1,400	,1890
STRATIMP	-,064267	,059571	-,300442	-1,079	,3038
M12B	-,037521	,092951	-,112615	-,404	,6942
(Constant)	,357190	,698676		,511	,6193

Dependent Variable.. M33B Gevinst tilgang nye markeder
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,033866	,032651	-,149063	-1,037	,3072
DEPEND	-,042119	,024962	-,243706	-1,687	,1010
STRATIMP	,082455	,035741	,329268	2,307	,0275
M12B	,071005	,031501	,319800	2,254	,0310
(Constant)	-,220114	,325319		-,677	,5034

****

Dependent variable...M33C Gevinst bedret forhandlingsposisjon kunder
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,127841	,130174	,285526	,982	,3472
DEPEND	,033878	,074810	,129812	,453	,6595
STRATIMP	-,059524	,091972	-,188819	-,647	,5308
M12C	-,040618	,097943	-,121999	-,415	,6863
(Constant)	,271469	,749636		,362	,7241

Dependent Variable.. M33C Gevinst bedret forhandlingsposisjon kunder
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,005885	,042843	,022904	,137	,8916
DEPEND	-,003099	,032840	-,015857	-,094	,9254
STRATIMP	-,007595	,055853	-,026818	-,136	,8927
M12C	,071152	,037072	,376523	1,919	,0636
(Constant)	-,010987	,326475		-,034	,9734

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,019130	,070876	-,077206	-,270	,7922
DEPEND	,038793	,041130	,268597	,943	,3658
STRATIMP	5,98502E-04	,051853	,003431	,012	,9910
M12D	,032275	,033274	,287028	,970	,3529
(Constant)	-,044423	,303740		-,146	,8864

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,038485	,036323	,176562	1,060	,2971
DEPEND	,012759	,027477	,076949	,464	,6455
STRATIMP	,040592	,041450	,168958	,979	,3346
M12D	,038885	,024360	,275849	1,596	,1200
(Constant)	-,300291	,270967		-1,108	,2758

****

Dependent Variable.. M33E Gevinst utvikling nye produkter
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,018769	,074959	,070094	,250	,8069
DEPEND	-,003339	,043556	-,021392	-,077	,9403
STRATIMP	-,083777	,053746	-,444379	-1,559	,1473
M12E	-,007341	,050383	-,041481	-,146	,8868
(Constant)	,437984	,465256		,941	,3667

Dependent Variable.. M33E Gevinst utvikling nye produkter
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,008940	,037346	-,041942	-,239	,8123
DEPEND	-5,35097E-04	,029347	-,003300	-,018	,9856
STRATIMP	-,014467	,041769	-,061580	-,346	,7313
M12E	,035087	,031004	,200309	1,132	,2659
(Constant)	,104056	,289519		,359	,7216

Dependent variable M33F Gevinst bedret produkttilbud
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,071685	,072525	,244314	,988	,3442
DEPEND	,045467	,039758	,265847	1,144	,2771
STRATIMP	-,084477	,047560	-,408916	-1,776	,1033
M12F	-,037899	,057424	-,162500	-,660	,5228
(Constant)	,387748	,445199		,871	,4024

Dependent variable... M33F Gevinst bedret produkttilbud
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,021495	,048915	-,072595	-,439	,6632
DEPEND	-,013051	,037576	-,057942	-,347	,7306
STRATIMP	,078452	,056020	,240388	1,400	,1707
M12F	,045736	,037292	,205703	1,226	,2287
(Constant)	-,165769	,384269		-,431	,6690

****

Dependent Variable.. SATISFACTION
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,136466	,360146	,083617	,379	,7120
DEPEND	,462603	,208584	,486294	2,218	,0485
STRATIMP	,485331	,246674	,422365	1,967	,0749
POTGAIN	-,503066	,407386	-,263633	-1,235	,2426
(Constant)	2,402664	2,370484		1,014	,3326

Dependent Variable.. SATISFACTION
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,129553	,136814	-,165613	-,947	,3506
DEPEND	,034383	,104856	,057779	,328	,7451
STRATIMP	,048582	,163212	,056344	,298	,7678
POTGAIN	-,056709	,241376	-,043717	-,235	,8157
(Constant)	5,691803	1,368784		4,158	,0002

Dependent Variable.. CONTINUITY
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,156080	,251980	,181251	,619	,5483
DEPEND	,129747	,145938	,258493	,889	,3930
STRATIMP	-,020278	,172588	-,033445	-,117	,9086
POTGAIN	-,043400	,285031	-,043105	-,152	,8817
(Constant)	2,227924	1,658532		1,343	,2062

Dependent Variable.. CONTINUITY
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,125080	,087004	,198506	1,438	,1600
DEPEND	,069998	,066681	,146034	1,050	,3015
STRATIMP	,465137	,103791	,669723	4,481	,0001
POTGAIN	-,079031	,153499	-,075635	-,515	,6101
(Constant)	,723086	,870452		,831	,4121

APPENDIX 3C: RESULTS FOR SOCIAL FIT - COMPLETE REGRESSION ANALYSIS
N FOR SUBGROUPS = 23/31
****

Dependent Variable.. REALIZED GAINS
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,047468	,033038	,320500	1,437	,1679
DEPEND	-,004862	,025539	-,044868	-,190	,8511
STRATIMP	-,001741	,029543	-,013972	-,059	,9537
POTGAIN	,041501	,051734	,187002	,802	,4329
(Constant)	-,074616	,291764		-,256	,8011

Dependent Variable.. REALIZED GAINS
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,002804	,030526	-,018119	-,092	,9275
DEPEND	,009327	,021164	,082179	,441	,6630
STRATIMP	,038300	,037325	,212954	1,026	,3143
POTGAIN	,045257	,048782	,183200	,928	,3621
(Constant)	-,174191	,286953		-,607	,5491

****

Dependent Variable.. M33A Gevinst av økt salg i nåværende marked
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,078283	,048898	,330225	1,601	,1268
DEPEND	-,018101	,036966	-,104356	-,490	,6303
STRATIMP	,029583	,043925	,148366	,673	,5092
M12A	,047029	,031904	,307696	1,474	,1577
(Constant)	-,223226	,287149		-,777	,4470

Dependent Variable.. M33A Gevinst av økt salg i nåværende marked
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,022235	,058117	-,071921	-,383	,7051
DEPEND	,061322	,040406	,270399	1,518	,1412
STRATIMP	,045537	,066487	,126720	,685	,4995
M12A	,064316	,037935	,300495	1,695	,1019
(Constant)	-,408782	,448875		-,911	,3708

Dependent Variable.. M33B Gevinst tilgang nye markeder
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,020232	,057248	,084726	,353	,7279
DEPEND	,006211	,043191	,035549	,144	,8872
STRATIMP	,027135	,050118	,135101	,541	,5949
M12B	,065602	,078996	,199634	,830	,4172
(Constant)	-,284290	,584337		-,487	,6325

Dependent Variable.. M33B Gevinst tilgang nye markeder
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,030145	,044108	-,125643	-,683	,5004
DEPEND	-,034158	,029837	-,194085	-1,145	,2627
STRATIMP	,077396	,049324	,277527	1,569	,1287
M12B	,069282	,036557	,327261	1,895	,0692
(Constant)	-,240495	,430842		-,558	,5815

****

Dependent Variable.. M33C Gevinst bedret forhandlingsposisjon kunder
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,072572	,075219	,232717	,965	,3474
DEPEND	-,007281	,056197	-,031909	-,130	,8984
STRATIMP	-,016743	,063460	-,063832	-,264	,7949
M12C	,030436	,062182	,119938	,489	,6304
(Constant)	,087354	,468596		,186	,8542

Dependent Variable.. M33C Gevinst bedret forhandlingsposisjon kunder
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,007628	,055476	,027277	,138	,8917
DEPEND	,013909	,038623	,067801	,360	,7217
STRATIMP	-,002473	,071875	-,007608	-,034	,9728
M12C	,068490	,041694	,346690	1,643	,1125
(Constant)	-,123029	,427832		-,288	,7760

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,002227	,043907	-,010940	-,051	,9601
DEPEND	,021016	,033232	,141124	,632	,5351
STRATIMP	,043422	,041397	,253646	1,049	,3081
M12D	,033255	,025009	,305452	1,330	,2002
(Constant)	-,210454	,240397		-,875	,3929

Dependent Variable.. M33D Gevinst bedret forhandlingspos. leverandører
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,044595	,048889	,192773	,912	,3701
DEPEND	,013476	,031416	,079414	,429	,6715
STRATIMP	,018383	,057527	,068367	,320	,7519
M12D	,037254	,030491	,254661	1,222	,2327
(Constant)	-,200127	,352317		-,568	,5749

****

Dependent Variable.. M33E Gevinst utvikling nye produkter
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,041260	,041524	,207734	,994	,3336
DEPEND	-,008085	,031468	-,055631	-,257	,8002
STRATIMP	-,086462	,038977	-,517556	-2,218	,0396
M12E	-,007215	,038584	-,041026	-,187	,8538
(Constant)	,397441	,330376		1,203	,2446

Dependent Variable.. M33E Gevinst utvikling nye produkter
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,015443	,047861	-,066621	-,323	,7495
DEPEND	-,013409	,033885	-,078860	-,396	,6955
STRATIMP	-,010819	,057105	-,040151	-,189	,8512
M12E	,040161	,035700	,229862	1,125	,2709
(Constant)	,156898	,365116		,430	,6709

Dependent Variable.. M33F Gevinst bedret produkttilbud
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,077156	,061312	,291610	1,258	,2243
DEPEND	-,031478	,046415	-,162602	-,678	,5063
STRATIMP	-,007288	,055300	-,032748	-,132	,8966
M12F	-,006111	,070825	-,020854	-,086	,9322
(Constant)	,224775	,486556		,462	,6496

Dependent Variable.. M33F Gevinst bedret produkttilbud
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,030562	,062501	-,098063	-,489	,6290
DEPEND	,009640	,043897	,042166	,220	,8279
STRATIMP	,056646	,073998	,156370	,766	,4509
M12F	,033366	,041920	,157670	,796	,4333
(Constant)	-,096379	,486953		-,198	,8446

****

Dependent Variable.. SATISFACTION
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,109614	,250601	,088860	,437	,6670
DEPEND	,427774	,193718	,473951	2,208	,0404
STRATIMP	,383364	,224089	,369493	1,711	,1043
POTGAIN	-,186466	,392412	-,100878	-,475	,6404
(Constant)	1,935863	2,213090		,875	,3932

Dependent Variable.. SATISFACTION
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	-,133009	,177662	-,153331	-,749	,4608
DEPEND	-,008978	,123172	-,014108	-,073	,9425
STRATIMP	,131139	,217230	,130059	,604	,5513
POTGAIN	-,072899	,283914	-,052636	-,257	,7994
(Constant)	5,579995	1,670075		3,341	,0025

Dependent Variable.. CONTINUITY
Low social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,246826	,158844	,339094	1,554	,1376
DEPEND	,038218	,122789	,071758	,311	,7592
STRATIMP	,134457	,142039	,219618	,947	,3564
POTGAIN	,005731	,248732	,005254	,023	,9819
(Constant)	1,330887	1,402775		,949	,3553

Dependent Variable.. CONTINUITY
High social fit

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SIZE	,094154	,103501	,161987	,910	,3713
DEPEND	,038747	,071757	,090877	,540	,5938
STRATIMP	,374934	,126553	,554952	2,963	,0064
POTGAIN	,009582	,165401	,010326	,058	,9542
(Constant)	1,042038	,972944		1,071	,2940