Risk Management in Strategic Alliance

--- Comparative Study: Danish - Chinese Alliances

Master Thesis
Aarhus School of Business (Winter 2005)
# Table of Contents

1  **Introduction** ............................................................................................................. 1
   1.1 Motivation .................................................................................................................. 1
   1.2 Problem Statement and Purpose .............................................................................. 2
   1.3 Structure of the Thesis ............................................................................................ 6

2  **Lecture Survey** .......................................................................................................... 9
   2.1 The Nature of Strategic Alliance .............................................................................. 9
      2.1.1 Definition ............................................................................................................ 9
      2.1.2 Importance ........................................................................................................ 10
      2.1.3 Development .................................................................................................... 10
      2.1.4 Motivation ....................................................................................................... 11
   2.2 Theoretical Framework ............................................................................................ 13
      2.2.1 Resource-Based View of Strategic Alliance ....................................................... 13
          Risk Types .............................................................................................................. 13
          Resource Types .................................................................................................... 17
          The Relation between Alliance Resources and Risk Types ................................ 18
      2.2.2 Manage Risk in Strategic Alliance by Trust and Control .................................. 20
          Introduction of Key Factors ................................................................................. 20
          Risk Management by Trust and Control in Different Alliance Types .................. 28

3  **Data and Methodology** ............................................................................................. 34
   3.1 Research Method ..................................................................................................... 34
      3.1.1 Data Analysis .................................................................................................... 35
      3.1.2 Case Selection .................................................................................................. 39
      3.1.3 Data Collection ............................................................................................... 40
4 Development of Theoretical Framework

4.1 Figure a: Understanding Risk in Different Alliance Type-Resource Combinations
4.1.1 Alliance Resources with Risks
4.1.2 Alliance Types with Risks
4.1.3 Alliance Type-Resource Combinations with Risks

4.2 Figure b: Methods to Manage Risks
4.2.1 Fb1: Managing Relational Risk
4.2.2 Fb2: Managing Performance Risk

5 Case Study

Step 2: Case Comparison with Model A
Step 3: Modification of Model A
Step 4: Case Comparison with Model B
  Part 1: Alliance Background
  Part 2: Reducing risk by external instruments
  Part 3: Reducing risk by internal management
Step 5: Modification of Model B
Step 6: Recheck Model C
  Danish-Chinese Comparison
  Insufficiency and Suggestions for Model C

6 Conclusion

6.1 Summary of My Model
6.2 The Answers of Problem Statements
6.3 Reflection on the Thesis
List of Figures

Figure 2 – 1: Generic motives for strategic alliances .......................................................12

Figure 2 – 2: Integrated framework of trust, control and risk in strategic alliances ........22

Figure 3 – 1: Model of Understanding ...........................................................................34

Figure 3 – 2: Comparative study method in this thesis ..................................................36

Figure 4 – 1: Alliance resources VS risk .......................................................................44

Figure 4 – 2: Different risk control ability among alliance types ....................................47

Figure 5 – 1: Final Model C: Risk Management in Strategic Alliance .............................82

Figure 5 – 2: Danish-Chinese Alliances Comparison ....................................................84

List of Tables

Table 2 – 1: Strategic Alliances Making Orientations .....................................................18

Table 2 – 2: Risk reductions through trust and control combination ............................28

Table 2 – 3: Trust, control and risk in different alliance types .....................................31

Table 3 – 1: Characteristics of five cases .......................................................................41

Table 4 – 1: Hypothetic Model A: Risk management in the strategic alliance .............43

Table 5 – 1: Advanced Model B: Risk management in strategic alliance ......................66

Table 5 – 2: First part of four case studies .....................................................................68

Table 5 – 3: Second part of four case studies .................................................................75

Table 5 – 4: Third part of four case studies ....................................................................79
ABSTRACT

Managing risk in strategic alliance is more complex in joint venture firms than in individual firms. My attempt in this paper is to establish a comprehensive and integrated framework by extending the existing theories about risk management in strategic alliance. This paper identifies two basic types of risk in inter-firm alliance: relational risk and performance risk. It also introduces three alliance types which are adopted frequently: joint venture; minority equity alliance and non-equity alliance; four kinds of critical resources that are contributed by the partners in the alliance: financial resource, physical resource, technological resource and managerial resource. The combination between different alliance resource and alliance types causes various possibilities of risk distribution (different level of relational risk and performance risk). And to test and find out the effective methods to manage these dangerous risks, this paper uses the comparative analysis method, studies five alliances between partners from the Denmark and China. Finally, the framework about risk management in strategic alliance has been refined with the findings of five case studies, and it includes four stages: understand own risk; managing risk by partner’s characteristics; managing risk by external instruments; and managing risk by internal managements.

Key Words: strategic alliance, relational risk, performance risk, resource, joint venture, minority equity alliance, non-equity alliance, trust, control
INTRODUCTION

1.1 Motivation

In expansion processes, especially cross-border expansions like Merger and Acquisition (M&A) often can not attain their expected targets. Thus companies need to find another way to realize their goals. Recently, international strategic alliance has become a very attractive alternative. These alliances avoid direct acquisition. Instead, many other different procedures are taken; everything that ranges from simple distribution agreement to new separately established incorporations, etc. Consequently, the expansion strategy could be achieved easier with alliance.

Strategic alliance is motivated by various reasons, such as reduced cost, shared technology, better product development, capital acquisition or ease of entering a new market. It is regarded as a cheaper alternative of traditional M&A. It is quite logical that if two or more companies add their resource together, they could achieve their common goals easier and more economic. The advantages of strategic alliances can be testified by the rapid increasing number of cases in which it is being used. Taking USA as example, the alliance activities of top 1000 U.S. firms had an accounted growth of 35 percent of their total revenue from 2002 onwards, from less than 2 percent in 1980 and 21 percent in 1997 (Harbison & Pekar, 1998). The number of alliances has been growing at a rate of 25 percent per year since 1985 (Pekar & Allio, 1994).

Although, strategic alliance is so attractive, its results are not always satisfying. In fact,
Beamish’s (1985) studies showed that the failure rate of alliances can be as high as 50 percent. Many firms have benefited from strategic alliances, but many others are also disappointed by its poor performance. The companies take a great risk when choosing alliance as their expansion strategy, because an individual firm’s effort often is not enough for securing success. Managing firms having strategic alliances is much more complicated and difficult than managing those without; mainly because of the additional factor of managing the partner firms.

As in many other situations, great benefit often comes hand in hand with great risk. Unfortunately, this is also one of the characteristics of strategic alliances. The risk in strategic alliance though, is quite unique. It is therefore in the best interest to analyse how to manage these risks.

1.2 Problem Statement and Purpose

Because of above motivations, the purpose of my research is to construct an integrated model by extending the existing ‘fragmented’ theories about risk management in the strategic alliances, then test and refine the integrated model with the findings of case studies.

However, to do so – developing a useful model, some of the following questions have to be answered.

- What determines the risk level in strategic alliance?
- What characterise the risks in strategic alliances? Why are they special?
- What are the success factors in risk management in strategic alliance?

In my search for answers, the method adopted for my thesis is comparative analysis method. In contrast to enumerative induction, which relies on statistical methods to
generate simple, aggregate, and stable mental rules, comparative analysis study is a method of extending or refining existing theories by constantly comparing them with crucial instances or typical cases (Parkhe, 1993b). The practical procedure in this thesis will be something like this: starting with one case study, the result of this is compared with the theoretical model. Then, I modify the model in view of the findings in the first case. This comparative process was repeated for other cases. Gummesson (2000) highlights the necessity of gathering facts from a broad range of sources so that the researcher is able to exclude the biases. Since I do not have enough resource and experience, quantitative case study is not a possible choice in this research. Instead, I will use qualitative methods to do my cases studies.

**Theoretical Base of the Thesis**

The risk management framework developed in this thesis is based on the empirical research and ideas mainly generated in issues related to ‘Strategic Alliance Making Orientations’ and ‘Trust, Control and Risk in Different Alliance Types’. **Strategic Alliance Making Orientations** explained the orientations and objectives of the partners in the strategic alliance making process predicated upon two key dimensions- resource and risk, and the alliance making process is examined in terms of the interactive effects of resource and risk on the orientations and objectives of the prospective alliance partners (Das&Teng, 1998b). And in **Trust, Control and Risk in Different alliance Types**, authors believe that trust and control are inextricably interlinked with risk in strategic alliances. Hence, to understand how partner firms can effectively reduce and manage this risk, the author examined the inter-relationships between trust, control and risk and proposed a comprehensive and integrated framework of the three constructs in the context of strategic alliances, contending that trust and control are the two principal antecedents of risk (Das&Teng, 2001b). The first of the two mentioned theories clearly divides the risk into two groups, namely, performance risk and relational risk, in which relational risk is one of the main
characteristics of strategic alliance. This division enhances the “analytic resolution” thereby making it easier to target the problems. In this model, the author describes how different resource contributions can result in different types of risk. Furthermore, suggestions of methods to reduce the different risks are also made, which makes this theory one of the most widely quoted theories in resource-based risk management.

The second theory on the other hand, mainly focuses on how daily management methods as “trust” and “control performance” can be combined and better exploit in order to minimize potential risk (in contrary to many earlier theories, which only focused on one of the methods). Its high practical value makes this theory widely usable. Although these two models differ highly in perspective and approach, they are both highly functional in risk management in strategic alliances. I have also concluded that these theories are not mutual conflicting. In contrary, they ought to be complementary. If these theories can be joining into an integrated model, the risk can be acquainted more completely.

Hence, the new integrated model, which are developed from above two existing theories, will include the following two parts.

1. *Understand and interpret the risk*: Through this process, companies could discover the risks they face, in a clearer and easier way. The management can thereby also focus on the most serious risk.

2. *Manage the risk*. In this part, different resource investors have been suggested different instruments to manage the risks they must face.

**To Establish a General Framework**

To establish a general framework, I consider avoiding two critical limitations.

Many different methods and approaches have been developed in order to analyse strategic alliances for the last decades. There were some common restrictions to
many of the earlier research. 1. Research on international strategic alliance that has examined risk management has primarily focused on alliance created among partners from developed countries. 2. Strategic alliance in developing countries differs significantly from those in industrialised countries. We often see an alliance as a marriage between two or multiple partners. Based on different motives and goals, the meaning of success can be interpreted quite differently among an alliance’s members. Many researches are based on only one company’s perspective. The rate of success is therefore also measured with this company’s criteria only. Especially when studying strategic alliances between international corporations and local companies in developing countries, the international firm’s point of view is far too often the only perspective being considered, thereby totally overlooking the values of the local participant. This kind of research is far from objective, and can not fully explain important problems in strategic alliances, especially its high risk.

To comprehend and overcome the aforesaid problem and gain highest possible objectivity, I have in my study aimed at a deeper understanding of strategic alliance in a developing country, the People’s Republic of China. Hence, in all of my case studies, the Chinese company has an important role and the Chinese market is also the primary target market of the new joint entity. In the five cases, three of them represent Chinese companies and the other two characterize Danish firms. There are two main reasons for choosing China, the first of them being me capable of speaking Chinese, which makes it significantly easier to gather information and thereby making deeper findings in case studies of Chinese companies. Secondly, Although China is a developing country; the rapid growth of the Chinese economy makes her one of the prime choices of partner for many European countries. Therefore, for me, understanding the Chinese market and the thoughts, ideas and values of Chinese businesses and businessmen has highly relevance and importance.
Many studies suggest four kinds of critical resources: financial, technological, physical and managerial resources; and three types of alliances: joint venture, minority equity alliance and non-equity alliance, hence, there are twelve combinations of alliance resource and types. After realising, to my big disappointment, that I, with my few and relatively limited contacts, am not able to study all of twelve combinations. Instead, I have chosen five cases, which come from different industries, and include five different alliance type-resource combinations. It still ensures that my model is a general integrated model.

1.3 Structure of the Thesis

The dissertation has been structured as follows. Chapter 1 consists of motivation, purpose, problem statement and thesis structure; furthermore, elaboration and discussion of the applied methodology and major adopted theories are also included in this chapter.

Chapter 2: lecture survey. This chapter can be divided into two parts. In part one, the nature of strategic alliance, I will introduce some basic knowledge of strategic alliance to reader, which include the definition of strategic alliance, importance of strategic alliance; development of strategic alliance, and the motives for strategic alliance. In second part, theoretical framework, I will explain two major models in depth: Strategic Alliance Making Orientations and Trust, Control, and Risk in Different Alliance Types. In this section, different risk types, alliance types, resource types will be carefully described, in order to equip the reader with good background knowledge and clear overview of this field. It is also the purpose of this chapter to show the relation between alliance types & risk type and resource & risk types. Next, the readers will be introduced to risk reducing methods: risk management through trust-control combination. By using combination of “trust” and “control”, better result than only applying one of them is expected. The effect of “trust and control” can
though vary remarkably, when applied to different kind of risks. This chapter is crucial for understanding of the remaining text.

**Chapter 3** explains the research methodology involved in theoretical and practical methods. This is mostly related to research design, data collection, case selection, and case analysis etc.

**Chapter 4:** Development of theoretical framework. Although the two presented theories are interpretations of how risk and other important factors in strategic alliance are interconnected, they differ remarkably in approach and perspective. One is focusing on resource and the other internal trust and control. I will combine the advantages of the two theories into a new model, which in many ways behaves like a computer firewall. The firewall will warn you if your security is threatened. Depending on which operating system and programs that is running, the risk that your computer faces can be quite different. By analyzing present operating condition, your firewall will tell you the exact security risks that you face, especially highlighting those of alarming level. Based on this information, you are now advised to create certain application rules, in order to limit the risk that the different programs bring. Now imagine your company being the computer, the operating system and running programs being alliance type and major input resources. By determining alliance type and major resource, the model enables your company to quickly find the risks you are facing. Then your will be advised to take certain actions, again according to your resource input. If we go back to our dear computer, some risk negligible while others definitely are not. A good firewall will tell you who is dangerous and who is harmless. Likewise is it in your model. You will get a clear view of your major risk, so that you can be concentrating on reducing these instead of wasting a lot of effort on other less important factors.

**Chapter 5** is the case study, which adopts the comparative study method described in chapter 3. Through six steps, cases will be analyzed in order to check the suggested model. The findings of each cycle of case study will be used to modify the model,
after which a new cycle of case study will begin. Repeating cycles of case study and model modification will lead to a final model. One of the advantages of the comparative study method is that the reader gets a clear view of how the theory is developed improving his\her understanding of the model.

**Chapter 6** conducts conclusion on the empirical research and points out the advantages of my theory; limitation of the study; and future research. In the future research, I list the ideas which I was not able to realize in this thesis. Hopefully they can be implemented in future studies.
Before I formally start my research, I want to introduce some necessary knowledge about the strategic alliance to readers. This chapter can be interpreted as background for the thesis.

2.1 The Nature of Strategic Alliance

2.1.1 Definition

In 1988, Mattsson defined strategic alliances as:

A particular mode of inter-organisational relationship in which the partners make substantial investments in developing a long-term collaborative effort, and common orientation.

Also Professor Root (1987) proposed a number of other characteristics of strategic alliance:

- nationality and degree of inter-firm cooperation
- each company’s contribution from the value chain
- geographical scope and mission (in a value chain sense)
- fiduciary risk and environmental risk exposure
- relative bargaining power and ownership
2.1.2 Importance

Strategic alliances occur in many different industries and among firms of different sizes. They have various purposes and may involve different links between the partners. A great deal of strategic alliances can be found in the chemical, consumer electronic, telecommunication, oil and gas, consumer goods, service, computer, air transport and many other industries.

In a study of 839 collaborative agreements Hergert and Morris (1998) have found that most such agreements were carried out in high-tech industries: automobile (23.7%), aerospace (19.0%), telecommunications (17.2%), computer (14.0%) and other electrical industries (13.0%). They also found some interesting trends regarding types of cooperation. The largest share of the agreements turned out to be joint product development (37.7%). Moreover, the vast majority (71.3%) of these ventures were formed between rivals.

2.1.3 Development

As Professor Chandle (1990) explained in his book, the development of strategic alliance in the West can be characterized by three phases:

First, there was the immediate post-war (Second World War) phase of inherited rigidities from the inter-war period, and the protection of economies ravaged by war.

Second, from the 1950s onwards, came the dramatic growth of the major multinational and of the multi-divisionalized form (M-form) of organization. The M-form of company organization became the dominant means of coordinating the sale and delivery of goods to customers. The
market mechanism was in effect replaced by an internal administrative system within, rather than outside the company.

**Third**, came in the late 1970s and 1980s when the system began to change its nature in response to the pressure resulting from the inflexibilities. This period saw the growth of the venture capital-founded entrepreneurial firm with substantial outsourcing of non-key processes. Thus, activities that had previously been performed within the company were returned to the marketplace. This, of course, showed in many instances the disadvantages of fragmentation and the limitations of inadequate resources particularly in the face of the movement towards the increasing globalization of markets.

There has also been a dramatic growth of strategic alliances between companies over the last decade, particularly in technology and marketing (Faulkner, 1995).

### 2.1.4 Motivation

As Aiken and Hage (1968) summarized, “*Organizations go into joint ventures because of the need for resources, notably money, skill and manpower.*” This represents a most common motivation behind the formation of strategic alliances.

More analytically, Zajac (1990) suggest the four dominant motivations for concluding strategic alliance, and quantized them:

1. **Acquiring a means of distribution and pre-empting competitors (35%)**
2. **Gaining access to new technology and diversifying into new business (25%)**
3. **Obtaining economies of scale and achieving vertical integration (20%)**
4. **Overcoming legal/regulatory barriers (20%)**
Another more detailed way of differentiating the motives of strategic alliances is by looking at the strategic positions of each prospective partner’s position in terms of two dimensions. (Lorange. & Roos, 1993)

**First dimension** concerns the strategic importance of the particular business within which the strategic alliance is being contemplated, and how it fits the overall portfolio of a particular partner. Is this business (with its prospective strategic alliance) part of the core activities of this prospective partner, or can it be seen as somewhat more peripheral.

**Second dimension** regards the firm’s relative position in the business it is in; whether it is a leader or more of a follower. As a leader it would typically have the larger market share, leading technology, or superior quality. It would approach a strategic alliance differently than if it has a small share and is attempting to catch up.

![Figure 2-1 Generic motives for strategic alliances (Lorange. & Roos, 1993)](image)

The authors Lorange and Roos (1993) explained: When the strategy of the strategic alliance is core within the parent firm’s overall portfolio, and the firm enjoys a relative **leadership** in this business, the typical motive to enter into strategic alliance is defensive. Two major rationales for strategic alliances stem from this- access to markets and/or technology and securing resources.

When the business still falls within the core area of a firm’s portfolio, but the firm is more of a
follower in the business segment, the primary motive for strategic alliances is often to catch up. It may be highly critical for a firm to strengthen its competitive position in order to make it viable, and a strategic alliance may be the only realistic option.

When the business plays a relatively peripheral role in the overall portfolio, but where the firm is a leader, the main rationale is to remain. Here one might decide to form a strategic alliance to get the maximum efficiency out of the firm’s position.

If the firm is more of a follower in the business area and if the particular business plays a relatively peripheral role in the parents’ portfolio, the main motive for cooperative strategies is to restructure the business. The goal might also be to restructure the business with an eye toward creating some strength and value which might enable the parent eventually to unload this business.

2.2 Theoretical Framework

2.2.1 Resource-Based View of Strategic Alliance

This part focuses on introducing the ideas of the model: Strategic Alliance Making Orientations (Das & Teng, 1998b), which is the delegate of resource-based risk management studies. In this model, the author describes the interaction between resource and risk. Furthermore, author makes suggestion about how to manage relevant risk according to different resource contributions.

Risk Types

Das and Teng (1998b) divided the risk in strategic alliance into two independent and
yet equally important considerations: relational risk and performance risk, and characterized them as:

**Relational Risk:** is the risk of unsatisfactory inter-firm cooperation. Such as the bad relationships, or the partner does not comply with the spirit of cooperation. It is unique to strategic alliance, and it is unavoidable. The typical source of relational risk is the opportunistic behaviors, such as shirking, obtaining the partner’s sources, distorting information. It is a Firm-Firm interaction

**Performance Risk:** refers to the probability that intended strategic goals of an alliance may not be achieved, even though cooperation between the partners are satisfactory. Their risk sources include environmental factors (policy, war, economic recession); market factors (competition and demand fluctuation) and internal factors (machines, logistic system). Performance risk is part of every strategic decision. It is a Firm-Environment interaction.

After this short introduction of risks, I will now continue by explaining under which circumstances, alliances have to face high-level relational/performance risk.

**A) Relational Risk**

Relational risk refers to the concern that firms may not work towards the mutual interests of the partners, hence, they may not cooperate in a manner specified in the alliance arrangement or as expected by their partners, and the motives of such discordant behavior can be either rational or irrational (Das & Teng, 1996).

**Rational motives** include the self-interest seeking by economic actors, or opportunistic behavior (Williamson, 1981, 1993). It is believed that all partners in inter-firm alliances, given a chance, would tend to maximize their own interests at the cost of the other partners. (Joskow, 1985) But an **irrational motive** for being
uncommitted does not necessarily involve self motivation. It may include a heap of psychological reasons for not liking the potential cooperative relationship (Ouchi 1980).

Das and Teng (1996) listed three classical high-relational risk situations, which issued from above two kinds of motivations. Following, I have listed the details.

1) *The more difficult it is to protect one’s proprietary know-how, the higher will be the relational risk perceived by the partners of inter-firm alliances.*

Alliance members may unintentionally lose control of their technological and managerial know-how through poorly conceived contractual or firm-structural arrangements. As a result, it has been observed that many alliances eventually lead to an unplanned transfer of ownership, a process in which one or more partners take advantage of the other partner or partners (Bleeke and Ernst, 1995).

2) *The higher the pay-off inequity expected by the partners in an inter-firm alliance, the higher will the relational risk perceived by the partners be.*

In strategic alliances, when one party of the alliance expects the payoffs to be unfair, no matter the party itself is over-paid or under-paid, it may start to worry about the future working relationship, and the concern is that sooner or later one partner will be motivated to behave discordantly, notwithstanding its own possible loss.

3) *The greater the number of previous alliances between the partners, the lower will be the relational risk as perceived by the partners.*

If partners have cooperated before, they would know each others better in areas as culture, behaviors methods, etc. Additionally, it is possible that trust had been built during the earlier collaboration. The previous mutual trust offers a better cooperative
environment, which reduces the relational risk.

**B) Performance Risk**

The important distinction between relational risk and performance is that while relational risk is created when forging inter-firm alliances, some performance risk can be shared and mitigated through inter-firm alliances (Brouthers 1995). And same as relational risk, Das and Teng (1996) concluded three main factors that may contribute to a high level of performance risk.

1) *Performance risk will be perceived as higher in inter-firm alliances with a shared R&D component, as compared to other kinds of alliances.*

Because of the unpredictable nature of R&D activities, performance risk in alliances which deal with R&D is much higher than those without R&D components. Like Teece (1992) stated: there is no area in which uncertainty is higher and the need to coordinate greater than in the development and commercialization of new technology.

2) *Higher performance risk is expected in cross-border inter-firm alliances than in domestic alliances.*

Cross-borders, alliances are exposed to so-called 'international risk’, which includes a heap of environmental, industry, and firm-specific risks (Miller, 1992). When a firm does business in a foreign country, it has to deal with a new competitive environment characterized by a different legal system, market structure, consumer behaviour and customs. As a result, the firm feels less able to rely on its knowledge or experience accumulated in its domestic market, and thus perceives a high level of performance risk (Das & Teng, 1996).
5) The more non-recoverable the investment is in an inter-firm alliance, the higher performance risk will be as perceived by the partners.

One important source of performance risk in inter-firm alliances appears to be the non-recoverable investments made in a particular alliance (Parkhe, 1993). These non-recoverable investments cause higher performance risk, since their value will be significantly discounted if employed for purposes other than the initial alliance (Williamson 1985).

Resource Types

Miller and Shamsie (1996) suggest that, based on the notion of barriers to limitability, all resources may be classified into two broad categories: property-based resources and knowledge-based resources. The authors described them as follow.

**Property-based resources** are legal properties owned by firms. These are protected by various laws, such as patent, contract, etc. Owners enjoy clear property rights to these resources or rights to use these resources, so that others cannot take them away without the owners’ permission. More analytically, Das and Teng (1998b) suggested two types of property-based resources: financial resource and physical resource. Financial resource refers to the availability of capital. Physical resource covers raw materials, production capacity, and distribution channels.

**Knowledge-based resources** refer to a firm’s intangible know-how and skills. Compared with property-based resources, knowledge-based resources are easier to be transferred informal. Das and Teng (1998b) distinguished the knowledge-based resources into two types: technological resource and managerial resource. Technological resource includes all “secret know-how” and superior R&D capability. Examples of managerial resource can be high level employers or the skills necessary
for effectively running a business organization.

Based on above analysis, this paper submits Das and Teng’s suggestion by classifying the resource into four categories: Financial resource; Technological resource; Physical resource and Managerial resource.

**The Relation between Risk Types and Alliance Resource**

Since each firm wants to maximize the return on its invest resources and minimize the risk it has to face, serious considerations have to be made. The table, strategic alliance making orientations, by Das and Teng (1998b) offers a guideline for entering alliances.

<table>
<thead>
<tr>
<th>Alliance Resource</th>
<th>Risk Type</th>
<th>Objective</th>
<th>Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Relational Risk</td>
<td>Cell 1</td>
<td>Share of Equity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cell 2</td>
<td>Exit Provisions</td>
</tr>
<tr>
<td></td>
<td>High Performance Risk</td>
<td>Cell 3</td>
<td>Patent Safeguards</td>
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<td>Cell 4</td>
<td>Licensing</td>
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<td>Embedded ness</td>
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<td>Cell 6</td>
<td>Recurrent Contracts</td>
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<td></td>
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<td>Cell 7</td>
<td>Key Positions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cell 8</td>
<td>Alliance Managers</td>
</tr>
</tbody>
</table>

Table 2-1: Strategic Alliance Making Orientations (Das & Teng, 1998b)

This table includes eight possibilities, and authors think a particular member would fall into one of them, depending on their resource contribution and major risk of the deal. The brief explanations of table 2-1 have been listed as follow.
Cell 1: In alliances with high relational risk, the partners who contribute financial resources will prefer controlling equity ownership for themselves, and substantial equity ownership by other parties.

Cell 2: In alliances with high performance risk, the partners who contribute financial resources will demand explicit exit provisions in the contract.

Cell 3: In alliances with high relational risk, the partners who contribute technological resources will focus on protecting their technologies from unauthorized transfer; usually through limiting exposure to patented technologies.

Cell 4: In alliances with high performance risk, the partners who contribute technological resource will prefer to license the technology to multiple partners.

Cell 5: In alliances with high relational risk, the partners who contribute physical resources will strive to embed the partners deeply in the alliance, usually through longer alliance duration, tighter integration, and shared equity ownership.

Cell 6: In alliances with high performance risk, the partners who contribute physical resources will be interested in providing for recurrent contacts.

Cell 7: In alliances with high relational risk, the partners who contribute managerial resources will focus on placing their own people in key positions of the alliance.

Cell 8: In alliances with high performance risk, the partners who contribute managerial resources will focus on improving managerial efficiency by committing their best managers, and for extended tenures in the alliance.
2.2.2 Manage Risk in Strategic Alliance by Trust and Control

There are a lot of theories describing how to manage risk in the strategic alliance, some are trust-based theories; others are control-based theories; and some third are culture-based. Risk can therefore be reduced through various methods which all seem very convincing. However, the common drawback of many of these theories is that they only approach risk manage from one point of view. I believe that single approach solutions are far too weak and limited to give a complete cover of risk management. This is why I in this paper will primarily use the model published by T. K. Das & Bing-Sheng Teng in 2001--Trust, Control, and Risk in Different Alliance Types. This is a comprehensive framework of trust, control and risk in strategic alliance. The framework suggests that trust and control are two separate routes to risk reduction in alliances. While trust can be seen as a more intrinsic source for lowering the perception of risk, control may be viewed as a more overt and active way of reducing risk. The two can and should be combined in specific ways for best risk management results.

Now, let’s get familiar with this theory.

Introduction of Key Factors

A) Trust

Trust is a multilevel phenomenon that exists at the personal, organizational, inter-organizational, and even international levels (Das & Teng 2001b). At the inter-firm level, researchers believe that trust is a key element in cooperative relationships (Sydow 1998). Boon and Holmes (1991) defined trust in this manner:
trust is about positive expectations regarding the other in a risky situation; and they think the trust is effective in lessening concerns about opportunistic behavior, better integrating the partners, and reducing formal contracting.

Notteboom’s theory (1996) which also will be used suggests that trust is based on positive expectations regarding goodwill and competence; and that it reduces the perceived risk in a relationship. Based on this, he divided trust more analytically, as follow:

- **Competence trust:** Trust may concern a partner’s *ability* to perform according to agreements

- **Goodwill trust:** partner’s *intentions* to perform according to agreements.

### B) Control

Control is a regulatory process by which the elements of a system are made more predictable through the establishment of standards in the pursuit of some desired objective or state (Leifer & Mills, 1996).

Control plays the role of checking and making sure that activities are being carried out according to plan, and in alliances, control can be achieved through governance structures, contractual specifications, managerial arrangements, and other more informal mechanisms (Das & Teng, 2001b). Therefore, effective control serves as a key determinant of perfect alliance performance.

There are three control modes which have been widely accepted in the literatures (Ouchi 1979, Eisenhardt, 1985).
Behavior control: measuring behaviors is to ensure that the process is appropriate.

Output control: measuring outcomes is to rely on an accurate and reliable assessment of members’ performance.

Social control: often refer to the idea of clan control. Clan control is exercised when organizations do not specify task-related behaviors and outputs. Instead, the focus is on developing shared values, beliefs, and goals among members so that appropriate behaviors will be reinforced and rewarded.

C) The Interrelation among Trust, Control and Risk

In the last section, I introduced the definition and characters of the key elements, now I would like to explain the relation between the key elements.

Figure 2-2: Integrated framework of trust, control, and risk in strategic alliances (Das & Teng, 2001b)
1. **goodwill trust and risk**

*Goodwill trust:* is about one’s good faith, good intentions, and integrity, and it is about whether a firm has a reputation for dealing fairly and caring about its partner firm’s welfare in alliance (Nooeboom 1996). A good reputation is an assurance of “no opportunistic behaviors”, which practically means low relational risk.

However, goodwill trust’s influence only limits to the management of the relational risk. The level of performance risk however is unaffected, since goodwill trust only presents a partner as willing to try his best to make things work, but cannot in any way guaranty good results. In fact, goodwill trust offers almost no help to lower the perceived performance risk.

**Conclusion 1:** A firm’s goodwill trust will reduce its perceived relational risk not performance risk.

2. **competence trust and risk**

*Competence:* is based on the various resources and capabilities of a firm such as capital, human resources, physical properties, market power, technology, etc (Das & Teng 2001b). It is a natural thought that a firm can be better trusted to accomplish its tasks when it is equipped with high level of resources and capabilities. In other words, competence trust reduces the likelihood of failure; hence it will also reduce the level of performance risk.

However, differing from goodwill trust, competence trust only assures a firm’s ability to accomplish works, but says nothing about if it intends to do so. That’s why competence trust is not associated to the perceived relational risk. Thus:
Conclusion 2: Competence trust in its partner firm will help reducing its perceived performance not the relational risk.

3. behavior control and risk

Behavior control is also called as process control, since it focuses on the process which turns appropriate behavior into desirable output, and the measurement is of the behavior itself rather than the final output (Das & Teng 2001b). Through behavior control, the managers will achieve better understanding of the alliance cooperation process. More importantly, it will make managers capable of monitoring the staffs, thereby avoiding opportunistic behaviours, which in turn will lower the relational risk.

Conclusion 3: Behaviour control will effectively reduce perceived relational risk in an alliance.

4. output control and risk

Compared with relational risk, performance risk is closely connected to working results. Generally, performance risk is caused by failure to achieve pre-set objectives. However, one of the main characteristics of output control is its ability to measure output and thereby monitor the performance. This in turn will be crucial for securing successful execution of strategies. Additionally, output control serves as an alarm, which reminds the managers when the level of performance risk rises to dangerous levels. Hence: the output control is very relevant for managing performance risk.

Conclusion 4: Output control will effectively reduce perceived performance risk in an alliance.
5. **social control and risk**

*Social control* aims at reducing the discrepancies in goal preferences of organizational members through the establishment of common culture and values (Kirsch 1996). Through a socialization and consensus-making process, members become more committed to the organization, and shared views serve to influence strongly the behavior of the members (Das & Teng 2001).

Social control unifies partners’ motivations by creating the common goals for the partners; thereby tightening the partners’ benefits together. This reduces the need to behave opportunistic remarkably (lowers relational risk).

In addition to lowering relational risk, social control does also prove to be successful on reducing performance risk. The establishment of appropriate common goals and shared values are examples of methods that suppress performance risk as they both improve the cooperation among the partners. Therefore,

**Conclusion 5:** When social control is used properly, it has the potential of dealing with relational risk and performance risk simultaneously.

6. **the effects of control on trust**

Lot of theories (Argyris 1952; Sitkin 1995) have argued that behaviour control and output control may undermine trust, because the employment of strict rules and objectives means that members do not have the autonomy to decide what works best.

An example of detailed behaviour control and output control can be that partners have to operate according to a pre-designed process, followed step by step, after which the working result is regularly rechecked. Hence, members’ goodwill and competence are thrown in doubt. As a result, an atmosphere of mistrust is created.
Conclusion 6.1: Goodwill trust and competences trust will be damaged with behaviour control and output control.

Social control, on the other hand, influences people’s behaviour through creating shared goals and norms. This process increases mutual understanding—thus trust-breeding.

Empirically, Aulakh et al. (1996) found positive relationships between social control and goodwill, competence trust in alliance. The Author mentioned that in social control, no specific behaviors are prescribed, nor are rigid outcome measures employed. Partners influence each other’s behavior through frequent meetings and communications, culture blending, and socialization. Thus, a sense of confidence in each other’s goodwill is implied in social control. At the same time, developing shared norms means, in part, those partners are trusted in terms of their competence. Since trust is reciprocal, more competence trust by one party often leads to more competence trust between all partners. In addition, when partners engage in social control, they interact with each other more and develop an agreeable approach collectively. This consensus-making process increases understanding between partners, and provides a foundation for competence trust.

Conclusion 6.2: Both goodwill trust and competence trust will be improved by effective social control.

7. the effects of trust on control

To perform effective control, a certain level trust is needed (Das & Teng 1998a). Trust is the good foundation for long-term cooperation. Partners can collaborate more honestly and confidentially in a mutual trusting environment, further, they will be more willing to follow behavior processes and to accept output measurements. Also, when achieving a certain level of trust, partner firms will no longer question each
Conclusion 7: Trust will increase the effectiveness of all control modes in an alliance.

The above description of inter-reaction between trust, control and risk verifies the fact that risk reduction cannot be relied on one single approach. Both trust and control are effective in reducing risks, but neither of them covers the entire spectrum of risk types. A combinatory usage of trust and control can not only make up their individual shortages, but the risk reducing power will also be sufficiently enforced. The effect of combining trust and control is therefore far greater than just additive. This is why I have good reasons to believe that Das and Teng’s framework will result in much more efficient risk management.

D) Functions of Trust-Control Combination

It has been explained in the previous section that trust and control can be used separately to reduce sensible risks. They can also be used jointly for enhanced risk reduction. But this does not mean that all combinations of trust and control are evenly efficient. A particular combination does not have the same effect when aimed on different target risks. (Some combinations are even self destructive resulting in net effect of zero). The following figure can be used to illustrate the effect of different combinations applied on different risks.
Das and Teng (2001b) assume that perceived risk levels (both relational and performance) will be high if there is neither trust nor control in an alliance. The risk levels may be reduced to ‘Moderate’ or ‘low’ by a combination of trust and control.

For example, a combination of goodwill trust and behaviour control will result in low level of relational risk and high level of performance risk, since both goodwill trust and behaviour control reduces relational risk rather than performance risk. The overlapping effect causes the relational risk to decrease two levels while the performance risk is unaffected and thus still stays high. The combination of competence trust and behaviour on the other hand could manage both relational risk and performance risk to moderate level, since competence trust reduces performance risk, while behaviour control lowers the level of relational risk. The overlapping effect is in this case not present thereby keeping both risk levels to moderate, not low. The rest of the cells in table 2-2 follow the same logic.

**Risk Management by Trust and Control in Different Alliance Types**

Alliance structure and alliance type influence the functioning of alliances, including their strategic motivation (Glaister & Buckley 1996). In addition, the type of an alliance has also significant implications for the roles of trust and control (Birnbirg...
In this section, I will further examine the roles of trust, control and risk in diverse alliance types.

Most studies on alliance structural choice have been based on the dichotomy of equity alliance VS non-equity alliances (Gulati, 1995; Osborn & Baughn, 1990; Tallman & Shenkar, 1990). Equity alliances involve the creation of new entities, or ownership transfer of existing entities and non-equity alliances refer to all other cooperative arrangements that do not involve equity exchange. Killing (1988), Yoshino and Rangan (1995) differentiate equity alliances into two types: minority equity alliances, and joint ventures. Concluding from previous text, I will divide alliance into three major types in this paper, namely: 1. Joint ventures; 2. Minority equity alliances; 3. Non-equity alliances. The next section will include the definitions and the individual characters of these alliance types and their special connections to relational and performance risks.

A) Alliance Types

Joint Ventures

Definition: Joint ventures are the cooperation of two or more individuals or business-each agreeing to share profit, loss and control- in a specific enterprise.¹

Hamel (1991) described the joint venture as: Joint ventures are separate entities in which the partners literally work together, but one key problem in joint venture is that firms may be opportunistic in maximizing their own particular interests, to the detriment of their partners. Hence, when the partners work shoulder to shoulder in the same entity for an extended period, it becomes difficult to keep others from accessing one’s tacit know-how (Hamel, 1991). From this short description, we can already

sense that joint venture is very ineffective in controlling relational risk in the alliance.

**Minority Equity Alliances**

**Definition:** Minority equity alliances involve an acquisition of equity shares by one or more partners. Both minority equity alliances and non-equity alliances may embody various configurations, such as co-marketing, joint R&D, licensing, and so on. The difference lies in whether partner firms become partial owners of each other. (Das & Teng, 2001b) Since minority equity alliance involves the creation of new entities, or ownership transfer of existing entities, they are more like hierarchies (Gulati, 1995).

Das and Teng (2001b) argue that shared ownership helps to control opportunistic behaviours. Since equity arrangements are rather complicated to implement as well as to dissolve, they usually exist for longer time periods compared to alliances without equity investments. A long duration for an alliance is good motivation for partners to behave honestly and thus limits opportunistic behaviours. Hence, minority equity alliance provides the effective control to protect partners from high relational risk.

**Non-Equity Alliances**

**Definition:** Non-equity alliances refer to all other cooperative arrangements that do not involve equity exchange. They are more like market-based contracts rather than hierarchies. (Mowery et al. 1996)

Compared with equity alliance, the advantage of non-equity alliance is the effective control of the performance risk. Since in non-equity alliances, the alliance-special investments are limited, the partners can quit whenever they want; and it is not necessary to create new joint entity, so the entity’s governance cost will be reduced to a low level. These factors all suggest that the performance risk will be well under the control. Hence, non-equity alliance is able to protect the partners from high
performance risk.

**B) Effects of Trust and Control in different Alliance Types**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Joint Ventures</th>
<th>Minority equity alliance</th>
<th>Non-equity alliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill trust</td>
<td>High for both firms</td>
<td>High for recipient firm</td>
<td>Moderate for both firms</td>
</tr>
<tr>
<td>Competence trust</td>
<td>High for both firms</td>
<td>High for investing firm</td>
<td>High for both firms</td>
</tr>
<tr>
<td>Behaviour control</td>
<td>High for both firms</td>
<td>High for both firms</td>
<td>Moderate for both firms</td>
</tr>
<tr>
<td>Output control</td>
<td>High for both firms (more convergent measures for partner firms)</td>
<td>High for both firms (often different measures for partner firms)</td>
<td>High for both firms (often different measures for partner firms)</td>
</tr>
<tr>
<td>Social control</td>
<td>High for both firms</td>
<td>High for both firms</td>
<td>High for both firms</td>
</tr>
</tbody>
</table>

*P.S. High=highly necessary; Moderate= moderate level of requirement*

Table 2-3: Trust, Control, and Risk in Different Alliance Types (Das & Teng, 2001)

**Goodwill Trust**

The joint venture can be regarded as a single firm, in which partners are working shoulder to shoulder. Goodwill trust is important in the joint venture, since the intention to make things work is shared by all the partners. But in the minority equity alliance, the recipient firm tends to need more goodwill trust regarding its partner. Since the recipient firm have to secure that the investing partner is going to follow the rules of the game after they acquire an equity position. In non-equity alliances on other hand, partners are working according to the clear legal contract, hence, the importance of goodwill trust are not as critical as in equity alliances.
**Competence Trust**

In both joint venture and non-equity alliance, the partners are equally dependent to each other. Since partners must rely on each other to accomplish every task, their mutual competence trust is highly necessary. By comparison, competence trust is less important for the recipient firm in the minority equity alliance, because, generally the recipient firm require the capital support from investing firm rather than their competence help. The investing firms, on the other hand, have to make sure their financial investment will be used in the right way by the recipient firms, so, the partner’s competence trust is important for the investing firms,

**Behaviour Control**

Non-equity alliances rely heavily on the reputations of partners, and it is often contract-based which limits the partners’ behaviours with clear legal agreements. Thus, behaviour control is less important in non-equity alliances. On other hand, both joint venture and minority equity alliance rely greatly on behaviour control. As mentioned before, limiting opportunistic behaviours is critical for successful joint ventures and minority equity alliances. Behaviour control forces the partners to work more closely with each other following a specific process control, thus, the opportunistic behaviours are curbed and objectives are easier achieved.

**Output Control**

In the non-equity alliance, partners do not tend to regulate each other’s behaviour, the standard products and services are more critical for them. Hence, to remain a successful cooperation, output controls are necessary. However, non-equity alliances are not the only case in which output control is important. Also in the joint venture and minority equity alliance, output control is widely applied to ensure the success of long-term cooperation. The only difference is the nature of the output measurements.
In joint ventures, all the partners are evaluated with financial and market-based measures. In minority equity alliances, the investing partners use the return on investment or stock prices to measure the alliances’ output, while the recipient partner measures by the market share, etc. The output measures are even more complicated in non-equity alliance since a great variety of different methods can be applied depending on the content of the agreements.

**Social Control**

Das and Teng (2001) suggest that joint ventures are the most relevant sites for social control, as they consist of individual entities in which partner firms work very closely together. The authors also explained, when personnel from different partner firms work in one entity, a clan-like environment is possible, hence, in joint-ventures, it is important to employ social control mechanisms such as socialization, interaction, and training. On the other hand, these mechanisms are less feasible in minority equity alliances and non-equity alliances, since they lack the common and free-standing entity that would facilitate an enduring consensus-building process.

Now, I finished the introduction of the existing theories, the next chapter will focus on the study methods, used to formulate, test and refine my integrated model.
CHAPTER 3

DATA AND METHODOLOGY

3.1 Research Method

Usually in a research process, each of the conducted steps or actions solves a particular problem. The entire process can then be simplified to three steps: finding a problem, understanding the problem, solving the problem. This obviously adopts the same logic as described by Arbnor and Bjerke (1997): Model of Understanding. In practice, we often discover that solving a problem is not necessary the end of that problem. It may lead to the discovery of a new and more challenging problem, following which, a new round of problem understanding and solving starts. A research is then a never ending process of in-depth investigation and exploration. (As expressed in figure 3-1)

![Figure 3 – 1: Model of Understanding (Arbnor and Bjerke, 1997)](image)

This thesis adopts a qualitative case-oriented methodology, which uses post-positivist approach as the main scientific theory selection, thus capturing as much of reality as possible in a structured way (Vlosky & Wilson, 1997).
3.1.1 Data Analysis

The data analysis is a central aspect in the research design. There are many possible procedures of data analysis. However, I will choose the one that ought to suit best with my overall research method – ‘pre-understanding, understanding, and after-understanding.’

The goal of this study is to build a model for risk management in strategic alliance, which can be useful for a large spectrum of different companies. This however requires multiple cases as we need insights about the relationship between risk and strategic alliance in many different situations and industries. In the multiple cases, I will be looking after similarities and differences between the managers’ way of thinking in a risk managing perspective. It is expected that such search often results in many comparisons and evaluations, which makes it quite natural for me to select comparative method as data analysis procedure. Comparative analysis method is a repeating procedure of refinements and adjustments, which proves to be very successful in theory development. In contrast to many other methods that purely concentrates on case justifications of hypothetic theories, the comparative method more focuses on comparing practice with theory. By using the finding of the comparison, the theory is modified and then compared again to another case, and re-modify etc. In addition to give theories higher practical value, the spirit of the comparative analysis method also agrees well with the previous description of problem solving: never ending process of in depth investigation and exploration. Parkhe (1993b) argued that the comparative case method is particularly appropriate for the study of joint ventures, given the need for rigorous theory development on the topic.

More analytically, Cressey (1953) summed up the process of comparative analysis as:
First, a rough definition of the phenomenon to be explained is formulated. Second, a hypothetical explanation of that phenomenon is formulated. Third, one case is studied...with the objective of determining whether the hypothesis fits the facts in that case, Fourth, if the hypothesis does not fit the facts, either the hypothesis is reformulated or the phenomenon to be explained is re-defined, so that the case is excluded...Fifth, practical certainty may be attained after a small number of cases has been examined....Sixth, this procedure...is continued until a universal relationship is established, each negative case calling for a redefinition or a reformulation. Seventh, for purposes of proof, cases outside the area circumscribed by the definition are examined to determine whether or not the final hypothesis applies to them.

Hence, my comparative method consists of six steps illustrated by the following figure:

![Figure 3-2: Comparative study method in this thesis](image)

- 36 -
Below I will elaborate each of the six steps:

**Step 1: Formulate hypothetical Model A**

Based on the existing theories discussed in chapter 2, a hypothetical model, named Model A, will be formulated in chapter 4. Many have earlier proposed methods to reduce risk in strategic alliances. Difference in approach, often results in different target situations. It is therefore a painful process to select a theory that suits your company; this requires often good background knowledge of all the models. Detailed investigation to find the most advantageous model is usually time consuming and confusing. I have therefore extracted ingredients from the most interesting existing models and cocktailed it into a new combination - Model A. Because the fundamentals of Model A are existing, well tested theories, using it as starting point for case study should also be reasonable. This step can be regarded as a pre-understanding process.

**Step 2: First case study with company A.**

This step is an understanding process of risk management in strategic alliances. Model A is a proposed combination of existing models and therefore never been justified. This process has thus in addition to testing the model also includes the purpose to understand and refine it. To meet this goal, one on one comparison is very helpful. The shortages and insufficiency of the model can easily be discovered by studying a mature and successful company, after which the result is compared with the model. Company A is the first interviewed corporation. The reason for choosing it as starting point of the analysis is its relative mature strategic alliance experience.

**Step 3: To modify Model A due to the findings in the first case - getting a more advanced model, Model B.**

This is an after-understanding process using the earlier obtained understandings to
modify Model A. But it has to be made clear that this modification can be very one-sided as all new assumptions are referred to only one company (and thereby also one alliance type only). A satisfactory model for more general usage will require a wider range of verification. This is why I will in the next step (step 4) start a new round of case study to examine Model B by comparing it to other practical experiences. Step 3 can therefore in addition to an after-understanding process of first level of investigation, also be seen as a pre-understanding process of the next level of investigation (level 2).

**Step 4: Based on the result and experience from the first case study, four other companies are interviewed in more detail.**

Following the same track, this step can be understood as an understanding process of second level of investigation of risk management in strategic alliance. The four companies that I will study are distributed among a wide range of different industries. The alliance type and choice of partner of the four firms also differs remarkably. This means that the four cases all have individual specific characteristics that the other cases do not fulfil. Their way of reducing risk and enforcing cooperation has therefore representative status for their respective industry and alliance type. A careful study of these cases will hence greatly improve the overall value of the model. So I regard these four cases as one group, and compare them with Model B. Its correctness is checked and the missing is found.

**Step 5: Model B is modified in view of the findings in the last four cases resulting in the final model, Model C.**

Continuing with the same phrasing as earlier, this step can be best described as an after-understanding process of level 2 investigation of risk in strategic alliance. Based on the various findings from the previous step (understanding process of level 2), Model B is readjusted and developed into Model C. Model C cannot be interpreted as
the final ultimate model, but again only the substrate (pre-understanding) of the next level of investigation.

**Step 6: To continue this analytic induction, Model C is rechecked with the five cases.**

This time, the cases are separated into two groups, according to their nationalities (one is Chinese group and the other one is Danish group). The two groups are then compared and analyzed based on the Model C. The aim of the last study is to suggest improvements of Model C, and discovering the difference between the Chinese and Danish companies, and thereby presenting some explanations of high level risk in strategic alliance are also relevant issues here. The attentive readers might have probably guessed that I will call this step the understanding process of level 3 investigation. The cycles of processes can continue further followed by the post-understanding of level 3 and so on. As a result of lack of time and resource, I will have to stop this study at step 6. (Although the perfect model can only be found by going to infinite steps.)

### 3.1.2 Case Selection

Researchers have called for rigorous case studies of international joint ventures (Parkhe 1993). In this study, I have conducted case analyses of five alliances. Table 3-1 summarizes the major characteristics of these partnerships. (Detailed descriptions of each alliance are available in Chapter 6: case study)

I have considered several factors when selecting my cases. 1, the selected cases are wide representation of Foreign-China strategic alliance operating in various industrial sectors. In fact, the five alliances included in this study all come from different
industries. Additionally, all five alliances operate in China, and they all have a Chinese partner, therefore, the external environment is almost the same. 2, most studies differentiate alliance into three types: joint ventures, minority equity alliance, and non-equity alliance, the five cases cover all these three alliance types. 3, Miller and Shamsie (1996) supposed that four kinds of resource are frequently contributed in alliance; the resource contribution of the five studied companies is well spread among these. 4, the alliance has to be in operation for a period of time so that data on their performance were available. 5, I need at least one part from each partnership to agree to participate in my study, which was not always easy. This therefore limits my choices remarkably.

3.1.3 Data Collection

I have collected data for this study from interviews, companies’ homepages and other informative sites on internet. The interviews were conducted with executives of one partner in each alliance following a pre-designed questionnaire. Some of the interviews were made over telephone, others were by mail. Most of my interviewees had personally participated in the alliance’s management. Each interview lasted an average of two hours; some interviewees were interviewed more than once. All the interviews were conducted between June 2005 and September 2005. In addition to interviews, approximately 5 pages of archival data were collected for each partnership, including the alliances’ and the parents’ organizational charts, corporate magazine and annual reports, published case descriptions, and internet reports about the partnership.
<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Parent Company</th>
<th>Alliance Type</th>
<th>Contributed Resource</th>
<th>Duty</th>
<th>Partner Company</th>
<th>Contributed Resource</th>
<th>Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>SVA Information (have 60% equity)</td>
<td>Joint Venture</td>
<td>Financial resource (60% equity)</td>
<td>Administration Human resource Financial monitor</td>
<td>Accton Technology Corporation, Taiwan</td>
<td>Physical (main) Financial (have 40% equity)</td>
<td>Product Logistics Sales</td>
</tr>
<tr>
<td>Company B</td>
<td>Guangzhou Motors Group Company (have 50% equity)</td>
<td>Joint Venture</td>
<td>Physical resource (main) Financial</td>
<td>Human Resource Financial management Safety management</td>
<td>Honda motor, LTD, Japan</td>
<td>Technological resource (main) Financial (have 50% equity)</td>
<td>Product Technology development Sales Quality control</td>
</tr>
<tr>
<td>Company C</td>
<td>Hand Enterprise Solutions Company LTD.</td>
<td>Minority-Equity Alliance</td>
<td>Technological resource</td>
<td>ERP system development Consultation Marketing</td>
<td>Twinwood, Singapore</td>
<td>Financial resource</td>
<td>Partly financial support Market assist</td>
</tr>
<tr>
<td>Company D</td>
<td>Møller &amp; Grønborg Architects and Planners A/S</td>
<td>Non-Equity Alliance</td>
<td>Physical resource (main) Financial resource</td>
<td>Architectural design Urban planning Landscape architectural and design</td>
<td>East China Construction Planning Institute, China</td>
<td>Managerial resource</td>
<td>Construction Engineering Customer communication</td>
</tr>
<tr>
<td>Company E</td>
<td>V. Guldmann A/S</td>
<td>Non-Equity Alliance</td>
<td>Technological resource (main) Physical resource</td>
<td>Lift instruments (specialized for rehabilitation usage) Design &amp; Product Consultation</td>
<td>Partner E* China</td>
<td>Physical resource</td>
<td>Customer communication Distribute Sale Service</td>
</tr>
</tbody>
</table>

P.S.  I don’t know the name of Company E’s Chinese partners, hence it is only given the name partner E*

Table 3-1: Characteristics of five cases
DEVELOPMENT OF THEORETICAL FRAMEWORK

I have in the chapter 2 presented some of the most representative theories, which all have irreplaceable value in risk management in strategic alliance. However, it is quite regrettable that there is yet no correlation among these theories. I believe that a more general model can be formed by organising these separate theories, which may give a better overall solution to the conflicts in risk management. It is therefore my wish to create such a model. Additionally, this chapter is also the first step of my comparative study, which has been introduced in chapter 3.

We can conclude from the above theory section that all risks in strategic alliances origins in the partners resource input. The goal of companies forming an alliance is usually to unite the forces, profit from each other’s strengths and cover own weaknesses. This means that the competition advantage of your partner is often your company’s shortage. In more straight forward formulation: they are good at something that you aren’t. It is a common thought that cooperation with your partner is a good opportunity to learn and improve. Although this may seem innocent, it is often this mentality that leads to most of the opportunistic behaviours in an alliance process. I assume that the risk results from the resource input, it should then be agreeable that good understanding and control of resource is the critical point in risk management in strategic alliance. Next, I will introduce my model, Model A, which summarizes the advantages of the previous mentioned theories and therefore is better designed to meet the purpose of risk management in strategic alliance. Model A can be divided into two sections. The first aspect enables the user to understand their resource contribution and the resource related risks, where the second aspect has the purpose to provide suggestions for control of the actual risks.
By presenting the model as a flowchart, a rather systematic and chronological overview of the entire risk management process in strategic alliances going from arisen through understanding to control and management of the risk is obtained. I will hereby give a detailed explanation of the chart.
4.1 Figure a: Understanding Risk in Different Alliance Type - Resource Combinations

I have repeatedly explained that resource is the origin of all risks in an alliance. The diversity of characteristics among the many resources leads to a wide variety of different risks (relational risk or performance risk). At the same time, different alliance type (joint venture, minority equity or non-equity alliance), company structure and many other relations also results in difference in level of restrictive power on the actual risk. Joint venture and non-equity alliance have for example not the same effect on financial resource and its related risks. Therefore, by combining alliance resource and alliance type, twelve different possibilities of risk distribution will be given. Figure A enables the companies to quickly identify the risks they will face and their respective levels. Knowing the level of each potential risk is especially crucial as it makes the company capable of recognizing their major targets of risk management process, so that no effort is wasted on negligible risk types. Before going to more detailed discussions, let us quick review the special characteristics of the different alliance type and resource.

4.1.1 Alliance Resources with Risks

![Figure 4-1: Alliance Resources VS Risks](image-url)
As described in Chapter 2, physical and financial investments are non-recoverable resources, which will cause a higher level of performance risk in an alliance, since the potential loss from failing the alliance are higher. Technological and managerial resources on the second hand do not acquire this characteristic. For instance, when a firm which devotes managerial resource to the alliance, it will orient itself to obtain managerial authority in the alliance and this authority will be used to control the activities of the joint entity. As the result, the performance risk would be rather limited for them.

Relational risk on contrary behaves quite differently. Logically, the more difficult it is to protect one’s proprietary know-how; the higher will the relational risk be. Both technological and managerial resources consist mainly of competence and know-how. Naturally, their level of relational risk will be higher compared with financial and physical resources which are property-based. These resources are not easily obtainable as they are legally protected through property rights, hence, leading to lower level of relational risk.

**Conclusion 1:** For physical and financial resource investors, performance risk will be higher than relational risk, in contrast, when contributing technological and managerial resources, relational risk will be highest of the two.

### 4.1.2 Alliance Types with Risks

The level of relational risk is usually decided by the probability of opportunistic behaviors and the gravity of their resulting effects. When comparing the three alliance types’ restrictive power on relational risk, we are actually measuring their relative ability to avoid opportunistic behaviors. In equity alliance, the company adopts a hierarchical structure. The incidence of opportunistic behaviour is usually less within hierarchies, primarily because transactions tend to take place in formalized ways (Gulati, 1995). Thus, equity alliance is more effective in controlling relational risk than non-equity alliance. However, both joint venture and minority equity alliance belong to equity alliance, but joint venture has weaker ability to limit opportunistic
behaviours than minority equity alliance. The reason for this is the higher level of exposure of know-how since partners in a joint venture work under the same roof. By comparison, the lack of shared ownership in non-equity alliances significantly increases the difficulty of managing the relational risk, since in this kind of alliance partners often do not share interests and values, which make behaviour control even more difficult.

**Conclusion 2:** Minority equity alliance has the best ability to control relational risk followed by joint venture and non-equity alliance.

The level of performance risk is determined by 3 factors: Alliance-specific investments; the level of embedded; and governance cost of new joint entity.

1. Alliance-specific investments will increase the potential loss among investors.

2. Gulati (1995) explained that in order to get the partner’s complementary skills or assets, partners in equity alliances have to carry a heavier equity burden. Given these additional investments that are needed to create the new entity, an equity alliance involves ‘very high exit costs’ Structural embeddedness results from the loss of liquidity due to equity acquisition.

3. Governance cost is another evaluation criterion of performance risk. Higher governance cost will result in greater performance risk. In equity alliances for example, creating separate entities is often required. This will lead to increased governance costs and therefore also increased performance risk. In addition, the decision-making process in equity alliance is also more complicated as result of shared ownership. Each company has its own unique organizational culture. When partners make decision together, crashes can arise. This complicates the decision-making process which in turn adds additional cost of governance (and higher performance risk).

If our three alliance types are to be evaluated by these criterions, we find that joint venture offers the poorest control and management of performance risk. First, it
engages higher quantities of alliance-specific investments than other alliance types. This results in increased potential loss in case of failure. Secondly, for the same reason, it is also usually more difficult and expensive to quit from a joint ventures agreement. Thirdly, the establishment of a new, separately incorporated firm is required thereby resulting in greater governance cost. Minority equity alliances on the other hand offer moderate level of control of performance risk, as they include less the alliance-specific investments and structural embedded ness than joint venture. At last, we have non-equity alliance. This alliance form has the best ability to limit the performance risk since it contains minimal alliance-specific investment and none transfer of equity nor extra governance cost.

**Conclusion 3:** The most effective control of performance risk is offered by non-equity alliance. The next in the succession is minority equity alliance. Joint venture proves to be the worst choice.

<table>
<thead>
<tr>
<th>The Ability to Control Relation Risk</th>
<th>Minority Equity alliance &gt; Joint Venture &gt; Non-Equity Alliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ability to Control Performance Risk</td>
<td>Non-Equity Alliance &gt; Minority Equity alliance &gt; Joint Venture</td>
</tr>
</tbody>
</table>

Figure 4-2: Different risk control ability among alliance types

### 4.1.3 Alliance Type-Resource Combinations with Risks

Combining the analysis in 4.1.1 and 4.1.2, I have constructed figure a: Understanding risk in different alliance type-resource combinations. Now let’s take an example, when firm A provides financial resources in a joint venture, it will perceive a low level relational risk and high level performance risk. This is explained by the fact that contributions of financial resource increase the performance risk to high level, while the level of relational risk is not significantly affected. And since joint venture offers weak control ability of performance risk; the high risk level (performance) will not
been reduced. On contrary, the low-level-relational risk can be further limited by the joint venture as it supplies with moderate control ability of relational risk. Consequently, the relational risk kept at a low level while the performance risk stays high.

However, if the same firm contributes its financial resources into a non-equity alliance, the risk levels will be quite different. Same as above, the contributions of financial resource bring high-level performance risk, and low-level relational risk. But as explained earlier, non-equity alliance offers the best help for managing the performance risk thereby reducing the high-level performance risk to a moderate level. Nevertheless, the non-equity alliance has no control effect on relational risk which means that nothing will limit it from growing in the future. Hence, even if the original level is low, the relational risk is set to the moderate level as it potentially can grow. Thus, in the non-equity alliance, the performance risk is equally serious as relational risk (both at moderate level). The rest of the cells in Figure a can be explained by same manners.

So far, I have presented the basic framework of alliance types, alliance resources, and risk. In the next section, I will explore their roles in different control-trust models.

### 4.2 Figure b: Methods to Manage Risks

Hopefully, by using figure a, companies are able to identify the risk types they will face and their respective levels. Next, we have to target and limit these spotted risks. For example, in a joint venture, financial resource contributors have a more serious performance risk than relational risk. Hence, the sets of “control & trust” must be applied in the company’s future management in order to reduce these existing risks (the effects of the different controls and trust have been previously described.). Figure b lists possible external actions that can be taken. Fb1 is used when managing relational risk is of higher priority while Fb2 is chosen when performance risk is greater.
4.2.1 Fb1: Managing Relational Risk

Fb1 presents different methods to manage relational risk for each resource investor. (financial investor, technological investor, physical investor, and managerial investor).

**Financial investor:** When a financial resource contributor wishes to manage relational risk of the alliance, it often means that the firm invests money in the alliance, but does not fully trust its partner; high level of concerns about its financial resources being used inappropriately is present. Getting the majority share of the control power is therefore a useful instrument to save them from fear. Hennart (1988) has pointed out that in joint ventures the investing partner often relies on hierarchical control as the means to reduce risk. Thus, financial investment and high relational risk stimulate higher need for control power. To obtain this, the investing partner is likely to insist on a majority equity share. After all, equity position represents the power to influence the direction of the joint entity (Koot, 1988; Sobe, 1994). When the equity position is secured, reducing relational risk can be achieved by the effective behaviour control and social control.

In addition, encouraging the partners to share parts of the investments is also helpful to reduce the relational risk. Significant equity investment by both partners helps align their interests, because then the investing partners become mutual hostages, deterring opportunistic behaviour (Gulati, 1995).

Finally, as described earlier, the establishment of goodwill trust between alliance partners can be very useful to relieve the distrust crisis in the alliance relationship, thereby reducing the relational risk to lower levels.

*Proposition 1:* To manage relational risk, the partners who contribute financial resources will prefer to 1. Take a major equity position to confirm its control power. 2. Ensure that other partners share the risk by shared invest 3. Establish goodwill trust among partners.
**Technological investor:** For technology resource contributors, managing relational risk shifts toward safety, i.e., protecting its technology and know-how from opportunistic behaviours. Hamel et al (1989) have urged firms in such situations to “develop safeguards against unintended, informal transfer of information.” The same author also suggests that one of the main safeguards a firm can rely on is protection through the patent system, since informal transfers of patents is not possible. In addition, effective control including behaviour control and social control is also necessary to prevent lost of competitive advantages. Hence:

**Proposition 2:** To reduce high relational risk, technology resource contributors ought to protect its technology with patent systems and effective control methods.

**Physical investor:** For firms contributing physical resource, a solution can be to embed the partners deeply in an alliance so that they are less likely to behave opportunistically (Provan, 1993). This can be done by extending the duration of alliance (provan, 1993); formalizing the relationship as much as they can (Dyer 1995); obtaining equity investment to increase the embedded ness of the partners (Williamson, 1983). In addition, social controls are also suitable for raising mutual trust and curbing possible opportunistic behaviour, thereby impelling the alliance toward stability and low relational risk.

**Proposition 3:** To reduce relational risk, the partners who contribute physical resources should focus on keeping a stable relationship with social controls, and strive to embed the partners deeply in the alliance, with longer alliance duration, tighter integration, and shared equity ownership.

**Managerial investor:** To manage relational risk, a firm which devotes managerial resource to the alliance will orient itself to acquire managerial authority in the alliance. Schaan and Beamish (1986) have reported that hierarchical authority is a key mechanism used by the parent companies to control the activities of the joint venture. Thus, to hold managerial authority, the firm must try to put its people in key positions of the joint entity, such as the board of directors, the executive committee of the venture or of the partner (Yan & Gray, 1994). Additionally, the firms should also build goodwill trust for better future cooperation. Goodwill trust will not only aid to
reduce opportunistic behaviours, but can also guard its key personnel from being recruited by the partner. Since managerial resource of a firm mostly resides in its key personnel, a firm possible loss of these personnel should be concerned, especially when relational risk is high (Das & Teng, 1998b).

*Proposition 4:* To reduce high relational risk, the partners who contribute managerial resources should desire to retain key managing position for own staffs, and to enhance goodwill trust thereby preventing own managers to be recruited.

### 4.2.2 Fb2: Managing Performance Risk

*Financial investor:* This represents the situation in which financial resource contributors wish to manage the performance risk. In present time, the number of failures possible caused by ineffective business performance is much higher than those caused by distrust and opportunistic behaviours. Therefore, the critical problem for the financial contributor is how to ensure that their investments are recoverable and profitable. Output control and social control are effective mechanisms, which are frequently used to guarantee healthy performance result, and to increase the return of investment.

Being aware of the possibility of unrecoverable invests; the partners should demand explicit *exit provisions* in the alliance contracts. Exit provisions should specify that one partner has the obligation to sell and the other partner has the right to buy the venture according to a specific pricing formula, in case the alliance has to be terminated (Bleeke & Ernst, 1995). Additionally, building mutual competence trust in the alliance is also helpful for protecting financial resources. Thus:

*Proposition 5:* To manage high performance risk, the partners who contribute financial resources should try to secure profit through effective output and social control. Also, make certain that the investment is as recoverable as possible by using exit provision in alliance contract. Build mutual competence trust can also be a useful instrument.
Technological investor: This cell simulates the situation where a technology firm worries about failure caused by high performance risk. To overcome this fear, the orientation of the partner with technology is to enhance the utility, or usefulness, of its technology, so that the venture can succeed (Das & Teng, 1998b). Except for effectual output and social control, there are two additional methods to achieve this purpose.

First, spread the technology to more users. This does not only raise the output from the technology investment, but also reduces the performance risk through a wide portfolio of partnerships. Hence, technological investors will prefer to license the technology to as many partners as possible, since only then can the firm avoid heavy involvement (Contractor, 1984). Second, constantly updating the technology, so that it could meet the market requirements. For many emerging technologies, setting high design standards is crucial for the future of the technology (Armstrong & Holyoke, 1994).

Proposition 6: To reduce high performance risk, except keeping focus on output and social controls, the partners who contribute technology resources should license the technology to as many partners as possible. Setting high design standard by constantly updating the technology is also crucial.

Physical investor: The firm which provides physical resource will prefer flexibility, if performance risk, rather than relational risk, is high in a strategic alliance (Sunoo, 1995). Due to the uncertainties in the market, the firm should not let its physical resource be dedicated specifically to the alliance. Thus, keep flexibility and be responsive to market changes would facilitate the firm to handle possible setbacks. To achieve physical resource flexibility, the firm should ask for recurrent contracts, which would involve repeated agreements contingent upon prior performance (Ring & Van de Ven, 1992). Since these recurrent contracts usually are short-termed, the firm is able to stop the cooperation whenever it wishes to thereby avoiding serious performance risk.

Competence trust has also shown to be a valuable mechanism for physical resource contributor to control the activities of the joint entity, and reduce the high performance risk. Das and Teng (1998b) suggested: that high competence indicates
higher probability of getting things accomplished successfully, which is tantamount to low performance risk.

**Proposition 7:** To reduce high performance risk, the partners who contribute physical resources should focus on increase the flexible and responsive to the market by providing for recurrent contracts. And build competence trust in the alliance.

**Managerial investor:** When the performance risk in an alliance is high, the firm who invest managerial resource must try its best to increase the managerial efficiency, rather than disputing over managerial control with partners. Thus, in these situations, the quest is to improve managerial efficiency, especially in areas which involve coordination with the partner (Kanter, 1994). Employ the best managers and offer them extended tenures are helpful to increase the efficiency of the management. And at last, it may also be necessary to build competence trust between the partners.

**Proposition 8:** To reduce high performance risk, the partners who contribute managerial resources should attempt to ensure managerial efficiency, based on the mutual competence trust.
CHAPTER 5

CASE STUDY

From now on, I will test and refine my hypothetical Model A (showed in Table 4-1) with five case studies. As mentioned in Chapter 3, this case study process will follow the comparative study method (which includes six steps) – first to compare the result of case study with hypothetical model, and then readjust the model based on the findings of the comparison. The first step of this process is to formulate a hypothetical Model A, which has been finished in Chapter 4. I will now continue where I left, going to the second step.

Step 2: Case Comparison with Model A

Company A is the first company that accepted my interview; for that reason I will use it as my first case.

Company A: -- Guangzhi technology Co, Ltd.

Shanghai Guangzhi technology Co, Ltd was established as a joint venture company by SVA Information Industry Co., Ltd. (abbreviated as SVA Info) and Taiwan Actton Technology Corporation in august 2002. The starting capital of the new entity was $25 million. It specializes in developing, producing and distributing network hardware and products. The expected sales of the first year were set to $80 million.²

Since my integrated model is designed for the alliance partners’ individual use rather than to be used by the new joint entity, I will always interview one party of an

² http://www.waigaoqiao.gov.cn/Files/file.jsr?item=AboutFTZ6l
alliance in each case and analyse how they manage risk. This time, I have interviewed the executive director of Guangzhi technology Co, Ltd- Miss Wang, who is the Chinese representative. She answered my questions on behalf of her parent company-- SVA Info. So, this case starts from the Chinese part’s stand.

The above brief introduction of company A suggests that the financial resources invested in this joint venture are quite notable. For this reason, Model A (figure a) will suggest that company A’s performance risk is much more serious than its relational risk as result of the investment of an unrecoverable resource - financial resource. It has been explained earlier why greater financial contribution to an alliance leads to higher performance risk. At the same time, we know that financial resources are property-based resources. They are therefore not as easily obtained by partner firms; hence, the relational risk will be limited for a financial investor. At last, I have showed previously that joint venture offers better protection against relational risk than performance risk. All these facts summarize up the point that in joint ventures, the financial resource providers have more serious performance risk than relational risk.

To confirm the above judgement, I asked company A about their primary worries. Miss Wang described that even though the Chinese part has the major control power (with 60% equity); there are still three problems that they need to handle very carefully: the stability of production performance; the flow of working capital; and the loss of talented managerial personnel. According to the character description of the different risks, the stability of performance and the flow of working capital both belong to performance risk (Performance risk refers to all risks evolved from unachieved goals caused by environmental-, market based- or internal reasons). The loss of talented managerial person is a classical relational risk, which is caused by partner’s intended recruit. Hence, I see that company A has two serious performance risks against only one relational risk. For now I will regard this as enough verification for the statement made by Model A (figure a), that is: In joint ventures, the financial provider faces more performance risk than relational risk.

Later in my interview, Miss Wang explained that all these three risks have close relation to their firm’s role in this alliance. The fact is that the Chinese part invested
capital in this joint venture while the Taiwanese firm mainly provided their rich marketing experience, complete distribution channels and mature technology (they invested capital too, but to avoid complexity, I will primarily describe the main invested resource). As consequence of the different resource inputs, the task division in the new joint entity was made so that the Chinese partner is responsible for financial monitoring, human resource management, etc. while the Taiwanese administers over the new joint entity’s production, technology development and market-sales. However, as result of this clear division, the monitoring power that the Chinese part posses in the Taiwanese’s duty areas is very limited. Therefore, they can not help to question the situation in these fields. Are things running smoothly? Did the partner try their best? Etc. And, for same reasons as above, the Chinese part are worried about the uncertainties and hidden dangers in the production, technology and personnel. All these doubts lead to one result, and that is: lack of confidence for their long-termed cooperation.

Perhaps it may not be that obvious for the reader to detect the direct connection between the Chinese firm’s financial resource and their expected risks, the Taiwanese case however are more easily understood. The resources contributed by the Taiwanese corporation are technology and know-how. The Chinese part lacks these kinds of possessions and clearly wishes to close the gap between the two parts in this field. It is often seen that this type of mentality can lead to development of opportunistic behaviours. A natural action to take is to apply more self protective instruments against the increased relational risk. However, although natural, this is still a quite unfortunate development as it also exposes both parties’ performances to unwished risk.

To manage their risks in the joint venture, Model A (figure b) makes six suggestions for Chinese part: 1. take a major equity position, and perform behaviour and social control; 2. get your partner to share the investment; 3. build goodwill trust; 4. secure/ensure the profit by performing output and social control; 5. make your investments as recoverable as possible with exit provision in alliance contract; 6. build competence trust. The last three methods (nr. 4-6) are more important in this case as they primary target performance risk while the other three are more relational risk.
oriented (As we spoke earlier, the Chinese part’s performance risk were greater than their relational risk.).

Now let’s check out what the Chinese have done in practice to reduce their risks. Miss Wang explained that both of parts have equity investment. The Chinese part invested $10.8 million, occupying 60% equity share, while the Taiwanese invested $7.2 million, only have 40% equity share. As result of this distribution, the Chinese possess the major administrate positions, such as executive director, financial director, etc. This ensures that they are able to exercise majority control in the new joint entity. (This agrees with figure b’s suggestion number 1 and 2.)

Though, except for relying on their major control power, the Chinese part also took the following measures to manage their risk:

- To seek more capital source. To ensure that the joint entity would run normally, preventing any potential capital problems, the Chinese part would like to seek more capital support.

- Decentralize the distribution channels. In the beginning, the distribution channels were totally supplied by their Taiwanese partner. By decentralization, expansion and extension processes of distribution channels in the mainland market, the Chinese part will have a chance to close the gap between the two parts in this field (as the Taiwanese in the beginning were far superior as regards distribution channels.).

- Enforce management. The Chinese part efforts to control and guide the employees’ behaviour and measure the output periodically. This helps to discover a potential crisis in an early stage.

- Establish long-termed mutual trust in the new joint entity. The Taiwanese part has good reputation and rich experiences, which increases their credibility in Chinese eyes. However, this kind of trust is only present in rather short periods, since the partners have joined the alliance with different reasons and goals, which will result in three serious effects on their long-termed cooperation.
Partners have different prospects for the new joint entity; hence, it will be difficult to unify strategies for future development. This in turn will also add extra complexity to future decision-making processes.

Disagreements in future invest-directions and management methods will be seen. This will damage the healthy growth of the joint entity.

If partners do not have common goals, the existing essentiality of the alliance will be reduced gradually, since partners’ initial competitive advantages will weaken in the long-termed cooperation. If this continues, a point where the need for each other becomes substantially small, so that the cooperation may be terminated, will be reached.

Consequently, building mutual trust is crucial for both partners. Miss Wang said, ‘Mutual trust is the base of our long-term collaborates. So we focus on unifying members’ motivation and future perspective; share information frequently; learn each other to know better, and inter-depends more.’

As we see, the measures that Miss Wang takes are quite similar to those suggested in Model A (figure b), namely suggestion 3, 4 and 6 which all aims at reducing performance risk. Again we have agreement between model and practice.

Finally, Miss Wang added that they have also adopted a lot of internal instruments to achieve specific management objectives.

- Share information
- Find joint interests
- Clear company rule
- Keeping dialogs on regular basis
- Establish common goals of the joint entity
- Training and Staffing
- Check output periodically
Step 3: Modification of Model A

During the last step, I studied the first case—company A, and compared it with my hypothetical Model A. I concluded two things from the comparison. First, I found good agreement between my model and practice, for example: 1) in the joint venture, the financial contributor has more serious performance risk than relational risk; 2) there is strong interplay between risk and resource in alliances; 3) the external instruments suggested in Model A (figure b) are mostly similar to those used in practice. My second discovery of this case study is that parts of my model, especially figure b, are far too theoretical. My intension with the model is to equip it with high practical value so that alliance managers in spite of little knowledge about this subject (risk management in strategic alliance) still are able to easily identify their main risks and counter them. The suggestions for counter actions giving in Model A (figure b) are however rather diffuse. An example can be such as: “apply behaviour control” or “to build goodwill trust”. I find these suggestions very little useful without further explanations. Therefore, it is my wish now to improve the user-friendliness of my model by interpreting the abstract conceptions given in figure b such as “build competence trust” or “make investment as recoverable as possible” into more standard internal management measures so that the model after its modification will provide direct solutions instead of abstract ones. To do so, I will go through three steps:

1. First, I have to confess that the internal instruments Miss Wang listed have provided me great inspiration, as many of these actions are highly comparable to the abstract descriptions giving in figure b. Therefore, based on understandings of the theories and my common logical sense, I have added some more of suggestions to the list. Its full appearance is now as follow:

- Share information
- Find joint interests
- The transparency of the reward and punishment system” (R&P system)
- Intensify cooperation
Setting objectives
Finding common values
Clear company rules
Set up daily reporting regulations
Keeping dialogs on regular basis
Step by step planning
Establish common goals of the joint entity
Check output periodically
Training and staffing
Stress cultural activities
Make decision together

Next I will choose to group these managerial instruments according to their effect and usage possibilities. The suggested groups (can also be regarded as action type) employ titles that follow same terminology as in the sections of theoretical backgrounds (such as behaviour control etc.). I will not use too much effort explaining why they are ordered in manner, although mostly, the groupings are actually quite natural. Additionally, for each action, its purpose and functionalities have been explained in detail. Hopefully this will clear out possible doubts of my grouping.

2. Based on table 2-2 (the risk reductions through trust and control combination), I have ordered the above created groups of methods further, dividing them by the type of risk they target (relational or performance risk).

3. The central dogma in risk management in strategic alliance is a three steps process:
1) recognize the risk; 2) limit the extent of the risk by external instruments, such as alliance contract, organization structure, etc; 3) finally, to manage risk by internal instruments, including trust-building and control-executions. Model A seems to be quite useful in the first 2 steps but a bit too theoretical considering the last step; hence, based on the groupings of practical methods made in the two previous points, I will construct a figure c. By adding this to my model, the third step in the central dogma will hopefully be better covered thereby enforcing my model’s practical strength. Now, let’s have a look on the newly arranged
Managing Relational Risk

Goodwill Trust

The partners in the alliance are frequently at a defensive mode. A lot of energy and resources is wasted on self protection (such as to protect the invested capital or know-how). In cooperation where relational risk is high, the prospect of the alliance is not very cheering; to keep long termed win-win relation will be even more difficult. Building mutual trust, especially goodwill trust, can relief the tensions in such crisis.

1. Finding joint interests.

Motivations are an important source of trust-buildings. Finding joint interests can be understood as establishing common motivations, thereby achieving a more efficient alliance. Mutual interests purify the motives of the parts in the alliance and minimize the unneeded speculations of the partner firm’s intensions. So finding joint interest is important for long-termed cooperation.

2. The transparency of “the reward and punishment system” (R&P system):

It is very important for both parts that the system is fair. Every situation, especially in situations with big disagreement, has to be analysed and judged rationally and objectively, so that the counter part can understand that the final solution is the most reasonable (not just for one part, but for both parts).

3. Intensify the cooperation:

The two parts in the alliance should work together more intensively and gain institutional basis of trust. The increased amount of cooperation will result in a
better team spirit. The feeling that you belong only to one part of the unity will fade out. The two parts will be more united and higher level of mutual trust is to be established.

**Behaviour Control**

To fulfil the purpose of control and reduction of opportunistic behaviour, behaviour control is used. It mainly focuses on governing the employees’ behaviour, projects’ operation and process.

1. **Clear company rules:**

   The company rules should be very clear about what is allowed to do and what is not. This will turn the daily operations more systematic and standardized, which in turn eases future management and control checking.

2. **Setting up daily report regulations:**

   This facilitates the process of supervision and monitoring. The employees will behave in better manner since their activities can be checked.

3. **Training and staffing**

   With proper staffing procedures, the company will be in a position to select people whose behaviour is more in compliance with expectations. Periodical training does also help to persuade the staff to behave more properly (Cyr and Schneider 1996).
Social Control

1. Finding common values

Which values appeal to both parts? This procedure should greatly reduce unfavourable opportunistic behaviours by unifying the members with common goals and values.

2. Keeping dialogs on regular basis.

Update and exchange opinions, increase the friendship and fellow feeling in order to reduce the ideological gap between the companies. When dealing with daily matters, disagreements and different views are inevitable. Good communication is therefore a crucial factor when deciding the future of the alliance. Sometime, a shared-decision-making process can be one way to keep a good communication.

3. Taking cultural activities:

Cultural activities, i.e., staff party can help to establish shared norms and beliefs. They are informal but effective to translate organizational ideals into behaviour models. Furthermore, behaviour changes when crossing cultural borders. Healthy mutual understanding of each other’s cultural background is therefore essential for a successful alliance. Especially in international alliances, where geographical and cultural distances are large, good interplay, communication and interaction between the employees becomes even more important.

Managing Performance Risk

Competence Trust

It is frequently seen that firms lack confidence to partner’s performance skills. But if the companies always question each other’s working ability, then a lot of energy and
money will be wasted in double checking procedures. Competence trust-building is a good way, which firms used to solve this problem.

1. **Sharing information.**

   Information is not the only thing being shared. The companies should also be open about its objective, operation methods and long termed plans. Based on mutual understanding of each others methods, competence trust will be greatly increased. This will also make it easier to recognize and point out each others mistakes.

**Output Control**

Output control helps to direct the attention of alliance managers to key performance measures, so that they may react as quickly as possible when performance risk rises to dangerous levels.

1. **Setting objectives**

   Having clear objectives and frequently compare the output with the objective. Whether an objective is achieved or not, is a clear reference of the quality of the output. Also, strategies can be re-evaluated by comparing the objective and the output. Was the strategy reasonable? Or was it far too idealistic?

2. **Step by step planning.**

   Every procedure should be planned as detailed as possible. Every thinkable outcome should be evaluated. Budget calculations for each stage should be made. By doing so, the outcome is greatly controlled, and if the final outcome is different from the planned, the source of the problem can be easily found. Additionally, by comparing the actual cost with the calculated budget, difference can be quantified, and the magnitude of the problem can be decided.
3. **Checking output periodically**

The output should be checked frequently and periodically, so that a possible issue can be detected and solved as early as possible. Thereto, the output checking should be systematic and transparent. This is important as it makes the error detecting process more efficient as well as increasing mutual trust between the partners in an alliance.

**Social Control**

1. **Establishing common understanding of the goals of the joint entity.**

   This process is important not only regarding long-termed goals (such as a five-year plan) but also small objectives, for example improving the production efficiency.

2. **Making decision together:**

   First of all, the companies can contribute with each their part of professional knowledge and experience, which helps to secure a long co-operation. Secondly, this kind of informal and participatory decision-making often creates a better atmosphere, making the partners more open and honest to each other

Now, I will quickly sum up the idea behind this arrangement. We have two types of risk, namely relational risk and performance risk. To target these, we have some different trust-building and control methods. Goodwill trust, behaviour and social control works properly for relational risk while competence trust, social and output control orient towards performance risk. For each of the mentioned trust and control methods, we have listed concrete suggestions for how to act, that is: practical instrument. So, for the user of the model, he or she simply has to identify their risk, find an appropriate control method and choose between the listed suggestions of possible counter actions. To give a better impression, I now present the modified model including the newly constructed figure c.
**Figure a: Understanding Risk in different alliance type-resource combinations**

<table>
<thead>
<tr>
<th>Alliance Resource</th>
<th>Alliance Types</th>
<th>Joint Venture</th>
<th>Minority equity alliance</th>
<th>Non-equity alliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial resource</td>
<td>Low Relational Risk</td>
<td>Low Relational Risk</td>
<td>Moderate Relational Risk</td>
<td>High Relational Risk</td>
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<tr>
<td></td>
<td>High Performance Risk</td>
<td>Moderate Performance Risk</td>
<td>Moderate Performance Risk</td>
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<td></td>
<td>Moderate Performance Risk</td>
<td>Low Performance Risk</td>
<td>Low Performance Risk</td>
<td>Low Performance Risk</td>
</tr>
</tbody>
</table>

**Figure b: Managing risk by external instruments**

- **Fb1:** To: Managing Relational Risk
  - Financial investor
    1. Take a major equity position (Behaviour and Social control)
    2. Partner could share invest too
    3. Build Goodwill Trust
  - Technology investor
    1. Protecting its technology (patent)
    2. Effective control (Behaviour and social control)
  - Physical investor
    1. Keep a stable relationship (social control)
    2. Embed the partners (longer duration, tighter integration, shared equity ownership)
  - Managerial investor
    1. Keep managerial advantage. Get key position in new entity (Behaviour and social control)
    2. Build Goodwill Trust

- **Fb2:** To: Managing Performance Risk
  - Financial investor
    1. Ensure enough profit (Output and social control)
    2. Investments as recoverable as possible (Exit provision in contract)
    3. Build competence trust
  - Technology investor
    1. Enhance the utility of technology (Output and Social control)
      a) Constantly updating technology (setting high design standard)
      b) Spread the technology to more users (license to as many partners as possible)
  - Physical investor
    1. Increase flexible and responsive to market (recurrent contract)
    2. Build competence trust
  - Managerial investor
    1. Ensure managerial efficiency (best managers, extended tenures)
    2. Build competence trust

**Figure c: Managing risk by internal management**

- **MANAGING RELATIONAL RISK**
  1. Goodwill trust-building
  2. Behaviour control
  3. Social control

- **MANAGING PERFORMANCE RISK**
  4. Competence trust-building
  5. Output control
  6. Social control

Table 5-1: Advanced Model B: Risk Management in Strategic Alliance
Step 4: Case Comparison with Model B:

Even though the model was modified after first case study, it might be expected that further improvements can be made. The correctness of the new Model B should probably also be further tested as it until now only relies on one single case, which obviously can’t be enough. The object of this step is therefore to incorporate more cases in order to justify Model B. A larger scale case study process will hopefully also reveal hidden shortages of the model giving reasons for further adjustments and refinements. I will study four more cases in this step. The relevant companies are selected from widely different industries covering over various types of alliance resources. I will regard the four cases as one group and compare the results with Model B.

Since this step is a recheck process for my advanced Model B, it ought to be accomplished on basis of the result of the first case study. Therefore, according to the results of company A’s interview, I have made a new question list (see appendix) for my remaining interviews. This question list includes three parts.

**Part 1:** Alliance background: To collect information about companies’ background, resource contribution, alliance selection and risk recognitions. This is designed for checking figure a of Model B.

**Part 2:** Managing risk by external instruments: I mainly wish to know how they selected their partners, thereby finding any possible relations between a partner’s characteristics and risk management. This provides a check of the figure b of Model B.

**Part 3:** Reducing risk by internal management: to test the practical value of figure c of Model B.

Next, I will reveal the results of these four cases.
Part 1: Alliance background

<table>
<thead>
<tr>
<th>The resource contributed in the alliance</th>
<th>Company B</th>
<th>Company C</th>
<th>Company D</th>
<th>Company E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical resource</strong>&lt;sup&gt;main&lt;/sup&gt;</td>
<td>Physical resource (factory building, and labour)</td>
<td>Technological resource&lt;sup&gt;main&lt;/sup&gt; (ERP system development)</td>
<td>Physical resource&lt;sup&gt;main&lt;/sup&gt;</td>
<td>Technological Resource&lt;sup&gt;main&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Financial resource</strong>&lt;sup&gt;main&lt;/sup&gt;</td>
<td>Financial resource (have 50% equity)</td>
<td>Physical resource (human resource)</td>
<td>Financial resource</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alliance types</th>
<th>Joint Venture</th>
<th>Minority equity alliance</th>
<th>Non-equity alliance</th>
<th>Non-equity alliance</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Risk recognize</th>
<th>National and international Marketing environment changed quickly</th>
<th>Human resource risk. Loss of key technologist</th>
<th>Knowledge of architectural design</th>
<th>Good first contact Cultural difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Division of work, good cooperate</td>
<td>Technological development Market requirement</td>
<td>Using our name and reputation Cost of design productions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relation between the risk and own resource</th>
<th>Close relation</th>
<th>Close relation</th>
<th>Close relation</th>
<th>Some relation</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Risk level (suggest by figure a)</th>
<th>Low level relational risk High level performance risk</th>
<th>Moderate level relational risk Low level performance risk</th>
<th>Moderate level relational risk Moderate level performance risk</th>
<th>High level relational risk Low level performance risk</th>
</tr>
</thead>
</table>

Table 5-2: First part of four case studies

A quick first view of this table, I can already see that all four companies are confirming that there are connections between the risk that they have to face and the resource they have invested. Secondly, I observe that companies’ actual risk level fits well with the predicted levels made by Model B (figure a). Now, I will analysis them case by case.

**Company B—Wuyang Honda**

Wuyang Honda was founded in 1992. It is a joint venture with Guangzhou motors Group Company and Honda motor, Ltd (Japana). Since 2003, Wuyang Honda has entered a phase of rapid development. Production and sales numbers are increasing steadily. In year 2004, the total production was on 545000 vehicles, in which as much as 50000 was exported to abroad. The gross yearly avenue reached a new high of 30 million. Despite the growing numbers, Wuyang Honda has always prime quality
before quantity and service in prior of sales numbers. The reliable and professional service has always been the company's way to success.

The people being interviewed in this case origins from the Chinese part, so it is their views being presented.

This is a typical model frequently adopted by large Chinese enterprises in expansion processes. Generally, Chinese enterprises prefer to join joint ventures with financial and physical resources, since the most attractive competitive advantage they posses are their physical resources, such as mature distribution channel, cheap labours, etc. In exchange, they need highly developed technological and managerial experience to complete their expansion strategy.

In the company B, both of partners invested 50% equity share. Additionally, the Chinese part added physical resource--factory building and workers etc; the Japanese partner contributed technology and production know-how on top their financial invest. The six manager positions in the new entity are equally shared between the two parts. The division of work is also very clear. Japanese managers are in charge of production, quality control, distribution and market sales, while the Chinese managers are responsibly for the financial and human resource control etc. In eyes of Chinese agent, a clear work division like this is not so perfect. It of course has advantages: partners stay in balance, inter-dependent, mutual supervision, and inter-control, so both of us know our place, we work hard in our own areas. But on the other hand, the clear division also means we have little chance to get the first information about production and sales, usually we knows them only through Japanese partner’s accounting report. Therefore, that’s very difficult for us to predict and control various risks, especial in the practical areas.

I found that company B’s situation is very similar to company A’s: with help from joint venture, the opportunistic behaviours are being controlled, which means that they will face few relational risks. The situation is not so fortunate when considering performance risk. The Chinese part lacks performance control. Their reaction ability

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3 [http://www.wuyang-hongda.com](http://www.wuyang-hongda.com)
is quite slow and even passive. This of course means high level of performance risk. These observed facts cling harmonically with the prediction by figure a in Model B: in joint venture relationships, the physical resource providers have low level relational risk and high level performance risk.

**Company C**—HAND Enterprise Solution Company

**HAND Enterprise Solution Company** was established in 1996 as one of the first local ERP consulting firms in China, and has since expanded to the current size of over 400 consultants with annual revenue growth rate of 50%. The company is headquartered in Shanghai with branches in Beijing and Guangzhou. The R&D facilities, technical support center, and training department are located in Zhangjiang, Pudong, which is one of the most vibrant high tech development zones in China. In 2002, IDC named HAND one of "The Top Consulting Companies" in China IT industry. In 2002, HAND joined the alliance with Twinwood (Singapore). Substantial influx of financial as well as market support not only helped the company grow, but also raised its service quality to a higher level.4

In this alliance, the Chinese part invested their technological resource- ERP system development, while their Singaporean partner contributed a part of the capital. The alliance type chosen in this case is minority equity alliance. I have interviewed the manager of technological department, hence, representing the interests of the Chinese part.

The Chinese manager gave this description of their situations:

“We are a technology company; the technological employees are our heart and the ability to develop advanced technologies and meet market requirements is our advantages. Maintaining these competitive advantages, however, turns to be harder and harder. The market environment changes quickly, the horizontal competitions are so intense. Furthermore, efficient control of loss of key scientific employees is becoming an growing problem. For a company like ours, this problem is probable

more lethal than any other...”
To acquire capital support, the Singaporean company was asked to join. For the Chinese part, expect for extra capital, this move will also expose them selves to additional risk as their technology and scientific staff will be more easily accessible. Well aware of this problem, the Chinese part cleverly selected minority equity alliance rather than joint venture as the cooperation method. In joint ventures, all the partners are working together which means no secrets. But now in a minority equity alliance, the Singaporeans only invest parts of the capital. The daily management, expect for parts of sales, are left totally untouched. This of course provides better safety level for the company’s technologies and key staffs.

From the above description, we have seen that the Chinese member indeed worries about their relational risk in higher extent than their performance risk, which also is evidenced by their deliberate choice of alliance type. If we look at figure a’s theory, we will see that we have a matching picture: In the minority equity alliance, the technological resource investor has more dangerous level of relational risk than performance risk.

Company D – MTA International

MTA International is a Danish design company providing services in Architecture, Urban Planning and Design for clients in both the private and public sector nationally and privately. The company brings together creative imagination and rational logic, resulting in projects of unique aesthetic and functionality. MTA International is associated with Møller & Grønborg Urban Planners in Denmark and together they deal with large scale projects developing the architecture and open space together with planning principles.  

This time, I focused on the Danish partner- Møller & Grønborg A/S (abbreviated as M&G). Company D’s answers represent their views.

In this collaboration, Danish partner is responsible for architectural design, in fact all

5 http://www.mtastudio.com/
the cooperate project are being promoted as ‘M&G design’. Chinese part administrates on the remaining work, such as construction, engineering, monitoring and customer communication, etc. Compared with the Chinese partner’s managerial resource, the Danish member contributes property-based physical resource in form of their reputation and brand in this non-equity alliance.

As above mentioned, Danish member’s duty in this alliance is project design. But their perfect designs can only be displayed through high quality construction and detailed management. However, these factors accompany great level of performance risk, which probably also is the main reason for why they chose to cooperate in non-equity alliance with the Chinese company. Since there is no transfer of equity in the non-equity alliance, the level of commitment tends to be comparatively limited which partly protects the Danish part from high performance risk. However, this protection is not totally bullet-proof but just damage controlling as it only provides them the ability to react faster after a crisis arises. In other words, this only heals the wound faster protecting the organism from long term effects but does not in anyway prevent such crisis from happening. The performance risk is therefore still very noteworthy in this situation.

As the Danish member besides their architectural design also contributes their brand name and reputation, which is the soul of design companies, they are exposed to great risks (both relational and performance) because the negative affections on their reputation will be very difficult to recover even if the crisis only arises once. This is also why the Danish part self considers using their name and reputation as the most risky part. In addition, the Danish aren’t familiar with the Chinese market and the local customers, leaving their design's promotion and brand’s creation single-handedly to their Chinese partner. Thereupon, it’s so difficult for them to judge the result of the work done by the Chinese. As the Danish manager said, they have to trust their partners’ original reputation in this industry. If we review our theory we remember that the shortage of a non-equity alliance is its lack of control power. Danish part cannot be sure that their partner always will produce satisfactory results. Even though their brand name is patented, protected by law and impossible to be stolen or transferred, there are no protections against their brand being misused. This is the reason why we also see relational risk being kept at moderate level.
If we confront my model, we see conformation again: In the non-equity alliance, performance and relational risk are equally important for the physical resource providers as both are at moderate level.

**Company E—V. Guldmann A/S**

V. Guldmann A/S is a Danish company, which established in 1980 by Viggo Guldmann with the concept to develop, manufacture and market technical aids for the disabled and working tools for their carers. Today they supply products and services within two main areas and under two trademarks:

1. **Guldmann—Time to care.** Under the Guldmann trademark they aim primarily to improve the working environment in every part of the social sector where people need to be moved and handled. By supplying beds and lifting equipment as well as services that include advising, education, service and mounting, they contribute to ensuring the optimum utilization of the resources in the care system, where more time to care will be freed up. Guldmann operates worldwide and all products are manufactured in their own factories.

2. **Stepless-Accessibility for all.** Under the Stepless trademark they sell accessibility that ensures the walking-impaired, wheelchair users and others access to the surrounding world. The product range comprises ramps, lifting platforms and small lifts. Stepless operates worldwide and the main part of the products are manufactured in their own factories.6

To enter the Chinese market, company E chose one Chinese company, who has good reputation and rich marketing experience in Chinese rehabilitation industry, as their exclusive distributor. This kind of distribution agreement is a market-based contract, which belongs to non-equity alliance. In this alliance, partners do not need to establish a separated joint entity, and Danish part maintains the initiative in their relationship. I will study this alliance focusing the interests of the Danish part which also is why company background only deals with Guldmann not their Chinese counterpart.

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The role of the Chinese in this alliance is to use their distribution channels and rich sales experiences to seek buyers for company E. After receiving orders, the Danish part transports their finished productions from Denmark directly to their Chinese customers, and arranges their Danish experts to install and demonstrate these productions. After this, the Chinese company will be responsible for long-term customer services while sending feedbacks to Danish partner, etc.

Since the Chinese partner comes from the same industry, it is equipped with relevant product knowledge and solid understanding of the local market and customers, therefore, the promotion and customer communication will not be a big problem. In stead Danish part may concern about two other issues:

1. The after-sale services are very important in rehabilitation industry, but it’s difficult for company E to station their Danish experts in China for long periods, hence, they need their Chinese partner to help them do that. This on the other hand means that their products must be introduced in great detail to their partner regarding the operation and maintenance procedures. The relational risks caused by their technological resources will then be hard to estimate and manage.

2. Whether or not the Chinese partner is doing their best to sell the Guldmann productions? Until now, company E is still bothered by this question. The Danish manager thinks that their Chinese partner is not enough dedicated to sell their products.

As we know, non-equity alliance posses very limited ability of reducing relational risk. The high relational risk faced by company E is therefore not lowed by its alliance type. And the result is not surprisingly: The technological resources contributor has to deal with high level relational risk and low level performance risk when they join a non-equity alliance.
Part 2: Reducing risk by external instruments

The following 10 questions have been answered by the 4 companies. Answers to some of the questions are given as a score, where ‘1’ is the most negative and ‘5’ is the most positive.

<table>
<thead>
<tr>
<th>Question</th>
<th>Company B</th>
<th>Company C</th>
<th>Company D</th>
<th>Company E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How did you select the alliance partners?</td>
<td>Partners have good technical development skill and perfect marketing ability.</td>
<td>Have same conception and rich marketing experience</td>
<td>Through the networks, to get local knowledge, to min cost and min salary</td>
<td>By finding a reliable company within the rehabilitation industry.</td>
</tr>
<tr>
<td>2. Was your choice of partner specifically aimed at reducing one or several pre-recognized risk type?</td>
<td>Some consideration (3)</td>
<td>Some consideration (3)</td>
<td>Little Consideration (2)</td>
<td>Some consideration (3)</td>
</tr>
<tr>
<td>3. Did you ever consider partner’s reason to join the alliance?</td>
<td>Very carefully Considered (5)</td>
<td>Very carefully Considered (5)</td>
<td>Carefully Considered (4)</td>
<td>Some Considered (3)</td>
</tr>
<tr>
<td>4. Did you join for the same or different reason</td>
<td>Similar reason (4)</td>
<td>Similar reason (4)</td>
<td>Similar reason (4)</td>
<td>Same reason (5)</td>
</tr>
<tr>
<td>5. Whether for the same reasons or not, did this affect the future cooperation?</td>
<td>Positive affection (4)</td>
<td>Very positive affection (5)</td>
<td>Positive affection (4)</td>
<td>Positive affection (4)</td>
</tr>
<tr>
<td>6. Did you select your present partners because of their?</td>
<td>- Goodwill - Good business Perform skill</td>
<td>- Good business Perform skill</td>
<td>- Goodwill - Good Perform skill - We could rely of them to trust</td>
<td>- Goodwill - Good contacts to the rehabilitation industry</td>
</tr>
<tr>
<td>7. Did partners bring any extra risk which are out of your predict?</td>
<td>A lot extra risk (4)</td>
<td>No extra risk (1)</td>
<td>Little extra risk (2)</td>
<td>No extra risk (1)</td>
</tr>
<tr>
<td>8. Are you satisfied with your cooperation?</td>
<td>Satisfied (4)</td>
<td>Satisfied (4)</td>
<td>Satisfied (4)</td>
<td>Middle satisfied (3) (partner not enough dedicated to sell our products)</td>
</tr>
<tr>
<td>9. What’s the most difficult part of your cooperation?</td>
<td>The disparity of culture</td>
<td>The disparity of culture</td>
<td>The disparity of the information level</td>
<td>The disparity of culture</td>
</tr>
<tr>
<td>10. Did your part take any additional measures to reduce risk?</td>
<td>- Enhance self marketing perform skill</td>
<td>- Enhance manage skill</td>
<td>Letter of intent</td>
<td>No not necessary</td>
</tr>
</tbody>
</table>

Table 5-3: Second part of four case studies
The above answers have two values:

1. To evaluate the correctness of figure b in Model B.

Figure b lists external methods to reduce pre-recognized risk for different resource contributors. By comparing figure b’s suggestions with four companies’ answers, we will be able to see if there are agreements between their act and the methods described in the model. The presence of considerable similarities will obviously mean that the model reflects actual cases indicating it’s the practical value.

When asked whether its part took any additional measures to reduce risk for the new entity, Company B answered: now we are mostly depending on partner’s hard work to handle production and sales, we ought to share the burden and improve our market performance skill and technological skill. Company E on the other hand does not think it is necessary to do any extra work because mutual trust will always be the most important factor for them.

Company C and company D have to pay great attention to protecting their technology as they both provide technological resource in their alliances. Additionally, they had these comments: Company C stated: we cannot always depend on our partner’s assist although we are satisfied with our cooperation now. We must improve our management and marketing skills simultaneously with our technology development so that even if partner left us someday, we could still function independently. Company D is more worrying about the risk caused by the disparity of the information level. This is also why they insist on high level of communication, good personal relationships and frequent use of letter of intent.

After studying the answers carefully, we indeed see similarities compared with figure b’s ideas, which suggest physical resource investors (company B, E) to keep a stable relationship and embed the partners to limit their relational risk. And for managing performance risks, they need to be more flexible and enhance their ability to response to the market. Building competence trust among partners will also have positive effect in this issue. For technological contributors (company C, D), it is instead of greater importance to focus on protecting their technologies by applying effective controls
and to enhance their technological utility.

2. The answers encouraged me to consider whether or not the partner selection could assist to reduce new joint entities’ risk as all four companies consider the partner’s character an important factor for healthy long-term cooperation.

*Company B:* Whether or not their partner joined for the same reasons as them is an important factor for the Chinese part, because this question has decisive influence on how the new joint entity makes planning, how it performs in the initial stage and how to design new entity’s long-term strategies.

*Company C:* The Chinese part hoped that their partner would have good business performance skill as well as sharing the same concepts. Although the partner firm does not involve in the daily administration of the company, they are still an important player when making significant strategic decisions. Sharing the same conception of enterprise management hereby eases the decisions making process considerably. Besides, the members need to cooperate in the marketing area frequently, therefore, except for the rich business experience, its partner’s motivation is also essential for maintaining a long-term collaboration.

*Company D:* The Danish part expects to introduce their designs to more and more Chinese customers, but it is difficult to make a direct entry into the Chinese market. To collect more local knowledge and minimize cost of transport and other expenses, they decided to cooperate with a Chinese local company first. The result of this cooperation will influence Danish part’s next extending strategy. Therefore, except for having similar join reasons, the Danish part still requires their partner to have goodwill and good perform skill.

*Company E:* When the Danish firm decided to use non-equity alliance as its entrance to the Chinese market, they have considered the possibility of reducing potential risks by partner selection. Although they didn’t require that their partner must share the same reason for joining, the Danish part still mentioned, they were looking for a reliable company, who has goodwill and good contacts to Chinese rehabilitation industry. Fortunately, it seems that their join reasons indeed were the same. Common
motivation proves to be a great enhancer of mutual understanding thereby improving the cooperation prospects.

**Part 3: Reducing risk by internal management**

The four companies were also giving questions about whether or not they have used the below listed methods of internal management and to which extent they were used. Same as in the last part, answers to some of the questions were given as a score, where ‘1’ is the most negative and ‘5’ the most positive.

<table>
<thead>
<tr>
<th>Building goodwill trust</th>
<th>Company B</th>
<th>Company C</th>
<th>Company D</th>
<th>Company E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motivate mutual interest</td>
<td>Carefully Motivated (4)</td>
<td>Carefully Motivated (4)</td>
<td>Carefully Motivated (4)</td>
<td>Some Motivated (3)</td>
</tr>
<tr>
<td>2. Have R &amp; P systems</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Help to Improve understanding of each other</td>
<td>High level (4)</td>
<td>High level (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency level high?</td>
<td>Helpful (3)</td>
<td>Helpful (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviour control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Improve individual, team level-trust</td>
<td>Tried little (2)</td>
<td>Tried a lot (5)</td>
<td>Never tried (1)</td>
<td>Tried some (4)</td>
</tr>
<tr>
<td>4. Cooperate frequently</td>
<td>Some Cooperation (3)</td>
<td>Very frequently (5)</td>
<td>Frequently Cooperation (4)</td>
<td>Little Cooperation (2)</td>
</tr>
<tr>
<td>5. Have clear working rules</td>
<td>Very clear rules (5)</td>
<td>Little rules (2)</td>
<td>No rules (1)</td>
<td>No rules (1)</td>
</tr>
<tr>
<td>7. Have training programs</td>
<td>Every quarter (3)</td>
<td>Every year or longer (1)</td>
<td>No</td>
<td>Every year or longer (1)</td>
</tr>
<tr>
<td>Social control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Have shared values</td>
<td>Some (4)</td>
<td>Some (4)</td>
<td>Some (4)</td>
<td>Some (4)</td>
</tr>
<tr>
<td>9. Communicate frequently</td>
<td>Some Communicate</td>
<td>Very frequently</td>
<td>Frequently communicate</td>
<td>Frequently communicate</td>
</tr>
</tbody>
</table>
Table 5-4: Third part of four case studies

This part is designed to test figure c in Model B. These 16 indicators are divided into five parts: question 1 to 4 are used to test the utility of *goodwill trust* in different alliance; questions 5 to 7 are used to test the utility of *behaviour control*; questions 8 to 12 are for *social control*; and finally question 13 and 14-16 are indicators for the utility of *competence trust* and *output control* respectively.

From above figure, we can see that almost all 16 methods had been adopted by our four interviewees, although some received relatively low scores (1 or 2). However, I do not consider an instrument wrong just because it is given on low score. A better interpretation can be that some of the methods only are effective in some particular alliance types. The unique characteristics of the different alliance types and the special culture backgrounds make some measures more preferable than others for each company. For instance, company D and company E are both cooperating in the non-equity alliances in which partners collaborate according to clear-cut agreements and, thus, must rely in greater extent on output control rather than behaviour control. Especially for company E, as long as standard products and services are provided, the cooperation should remain satisfactory. It is therefore not very necessary for partner
firms to regulate and influence each other’s behaviour. Consequently, company D and company E offered awarded low score for the Behaviour Control Series.

Another low-score example is question 10: arrange cultural activities, which is an approach of social control. Only company B marked it with a high score while the other three companies all down prioritised it. In alliance entities, staffs usually originate from different countries and culture backgrounds, which mean that they are attracted by quite different activities. For example, the Christmas party is a very important traditional event for the Danish and Singaporean staff, while in Chinese eyes; it is only a matter of fashion festival not quite as meaningful as the Spring Festival. Difference in celebration methods, food culture and et cetera therefore all complicates the situation, making it incredible difficult to arrange activities accepted by all part. Hence, although cultural activities are very helpful to improve staffs’ communication and relationship, they are rarely adopted in alliances.

The careful reader may have noticed that this list includes one more instrument than figure c, namely question 3, improving individual-level trust. Company C mentioned in their interview that sometimes, if you trust an individual, then your trust for the higher unit, to whom the individual belongs, will be automatically elevated. And Ring and Van de Ven (1994) also suggest that inter-firm trust often boils down to individual-level trust. But this opinion is not shared by all companies, as both company D and company A rejected it. However, company D also thought that whether or not to use this instrument depends ultimately on the industry in which you operate. Therefore, as long as it has value for some companies, I will still keep it on my list. In fact, it is a quite general observation that instruments are being used at different levels by different companies. But as long as it is not rejected by a vast majority, I still consider them acceptable (for same reasons as before). All the listed instruments will therefore also be kept in figure c as reference for future research.

**Step 5: Modification of Model B**

I studied four more companies in the last step, dividing the text into three parts, each targeting one particular figure (a, b or c) of Model B. The result was quite
encouraging. It showed that Model B has better agreement with practice than Model A and proved to possess high practical value. However, on top of many confirmations, I did also suspect some shortages that need to be improved.

I believe it is necessary to add a step in my model that describes how specific characteristics of your partner can help to control your own risk. By selecting a partner with matching properties, much risk could be avoided. However, I will mean that before considering the property of your partner, you must be aware of your own risk. Therefore, I will place this step between figure a and b. Moreover, I need to emphasize the “partner-selection” can only be regarded as one effective assist for risk management, but not the only one. For example, the partners with goodwill trust will necessarily have better reputation than other, which helps to lower the relational risk in the alliance. However, the relational risk is only lower relatively to others, not eliminated. It is therefore still required to use other measures to manage the remaining relational risk.

Figure c has been adjusted adding one instrument in it.

The different figures in the model represent the different stages of alliance risk management. However, until now, they have carried some quite irrelevant names in form of a, b and c. Hence, I felt strongly required to rename them as Step1: understand risk (same as figure a); Step2, managing risk by partner’s characteristics; Step 3: managing risk by external instruments (same as figure b); Step 4: managing risk by internal management (same as figure c).

The result of these adjustments is my final Model C, which still adopts the form of a flowchart.
Figure 5-1: Final Model C: Risk Management in Strategic Alliance
Step 6: Recheck Model C

This is the last step of my case study. I will divide all the five companies into two groups, Chinese companies (marked in red in figure 5-2) and Danish firms (showed in blue). The two groups will afterwards be compared using Model C as a benchmark. Hopefully, by comparing the two groups, using the finding to trace their different behaviours and thought, I will be able to find a possible explanation of the high risk behind strategic alliances. At last, remaining suggestions for further development of this model may be also made based on the findings in this step.
P.S. step 4 only marks the instruments scored 4 or higher.

Figure 5-2: Danish-Chinese Alliance Comparison
Danish - Chinese Comparison

Facts regarding the five companies have been giving in previous steps. Additionally, they are also presented in figure 5-2. I have no doubts that the careful reader by now is fully capable of reading the figure by following the different style/colour lines. Therefore, I see no value in repeating the details in words. Instead, I wish to present some of my noteworthy findings regarding special characteristics of Chinese/Danish companies.

Both the studied Danish companies are cooperating in non-equity alliances. My guess is that as the foreign investors, the Danish companies are still not familiar with the Chinese market, culture, customer, and local companies. They can therefore not operate as confidently as in the European market. For the safety reasons, they have chosen non-equity alliance because it can be stopped at any point.

Although company D and company E are Danish companies, their partners are Chinese local firms. If we add them to our remaining companies, we have a total of five Chinese local firms. Except for company C, all the Chinese companies have contributed physical resources in their alliance. Company B and company E* (company E’s Chinese partner) invested physical resources as their primary resources, while company A and company D* (company D’s Chinese partner) provided physical resources as their secondary investment (reference: the Table 3-1). This situation presents a good picture of the state of the Chinese nation and its growth policy. China is a developing country, for keeping growth the Chinese government encourages exchange of domestic physical resource for foreign capital and know-how. In addition, our picture can be well fitted to China’s national development strategy: transform the population pressure to the human resource advantages. In contrast, for Danish companies, the primary goal for cooperating with Chinese is to penetrate the local market and to minimise costs.
Additionally, I found that the partners rarely consider the new joint organization as an independent entity, but just as an extended part of own parent companies. The alliance entities are usually classified as your part and my part. Partners lack good communication and cooperation which results in additional risks caused by inter-misunderstandings.

However, the above findings and conclusions are made only based on these five alliances and are therefore not universal. But I have still good reasons to believe that they can serve as a reference for future large quantity research.

**Insufficiency and Suggestions for Model C**

Because of insufficient time and empirical analysis, I have decided to end my development at Model C. However, I am well aware of the fact that this model is also far from perfect. It will remain my wish to try to make it an universal model that could be used in any circumstance or alliance type. This is however impossible as every model has its limitations. Further steps of case studies can though improve the model further. Theoretically, an infinite number of steps are needed for the most optimal model. This is however beyond the scope of this study (or any study, I guess). Instead, I have listed some missing of my final model and suggestions for future research.

**The ignorance of sub-resource**

To keep up its competitive capacity, companies often contribute more than one type of resource. These resources will individually induce different risk, and the particular combination of resource inputs will result in some other risk. However, although greatly interested, I found it far too complicated for the scope of this study to consider this kind of matter. Instead, I have only concentrated on each company’s primary input resource. This is defined as the resource that has the greatest importance for the new entity as well as for the mother firm and can therefore result in highest level of risk. Because these primary resources are the
highlights in an alliance, they will also be the main targets for opportunistic behaviours. The effects of the remaining resources have therefore been neglected so far. However, this can be a quite rough approximation. To refine the model further, secondary resource contributions must also be considered.

**Suggestion:**

When analysing the alliance’s risk level, future researchers could add the influence of secondary resources to the primary resources, but the effect of sub-resource ought to be weaker than the primary ones, and risk caused by sub-resource should also be at a lower level. An example can be like this:

<table>
<thead>
<tr>
<th>Case 1.</th>
<th>Joint Venture</th>
<th>Final risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary-Resource</td>
<td>Financial</td>
<td>Relational risk—Low Performance risk—High</td>
</tr>
<tr>
<td>Sub-Resource</td>
<td>Physical</td>
<td>Relational risk—Low Performance risk—Moderate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 2.</th>
<th>Joint Venture</th>
<th>Final risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary-Resource</td>
<td>Financial</td>
<td>Relational risk—Low Performance risk—High</td>
</tr>
<tr>
<td>Sub-Resource</td>
<td>Managerial</td>
<td>Relational Risk Moderate Performance risk—Low</td>
</tr>
</tbody>
</table>

**The value of internal management instruments**

Model C lists a lot of control and trust methods to manage risk and each of the methods includes several instruments. For example, for managing relational risk, a company can use goodwill trust, behaviour control and social control. Each of them is supported by at least three instruments, so there are totally 10 measures to be used. But does a company necessary apply them all? I guess not. This will lead us to the next questions: which one is most effective? Do some of the instruments overlap in result? How much would it cost to execute a particular instrument? It’s clearly very difficult to answer these questions by words.

**Suggestion:**

I suggest that we quantify the instruments by calculating an exactly value for each of them. For example, to build up goodwill trust, there are four instruments that can be used: find joint interests; the transparency of the R&P system; build up individual-level and team-level trust; intensify cooperation. The quantifying
process starts with letting a large group of alliance managers to score these instruments. Two scores are required for each one of them, namely:

1. **Effect Score**: it measures the different effect level of each instrument.

2. **Cost Score**: it measures the cost of each instrument, how much is it!

After this, it will be best to perform a statistical investigation of these numbers. However, this can also be simplified by only calculating the average number of each score. The effective value of each instrument can then be calculated using this simply formula:

\[
value = \frac{Effect}{Cost}
\]

This allows the instruments to be arranged according to their relative efficiency. The user of this model can thereby easily find the best and most economic solution (best solution: high effect score; economic solution: low cost score; best result for your money: high value).

However, this quantification system does also have limitations since the efficiency of an instrument can depend on alliance type or other facts. To ensure the value’s accuracy, I advise to interview people in twelve groups, each group consisting of 10 companies.

- Group 1: ten companies who contribute the financial resource in the joint venture.
- Group 2: ten companies who contribute the physical resource in the joint venture.
- And so on.

The twelve groups represent the twelve combinations of alliance-types and alliance resource. The product of research will be twelve lists, which cover every situation. The users can thereby select a list according to own situation.
CONCLUSION

The overall purpose of my thesis has been to construct an integrated model by extending the existing ‘fragmented’ theories about risk management in the strategy alliance, then test and refine the integrated model with the findings of case studies. The detailed processes have been described in Chapter 4 (construct hypothesis model) and Chapter 5 (test and refine the hypothesis model by five case studies). In this conclusion chapter, I would like to give a short summary of my model. After that, I think it is appropriate at this point to sum up the answers for the questions stated in Problem Statements. All these questions have been earlier considered in different parts of this thesis. Yet, some of the answers may be well hidden or scattered, other questions may even be answered quite indirectly. Therefore, I guess it is best to summarize them again in order to rule out any remaining doubts.

6.1 Summary of My Model

The integrated framework has been presented as a flowchart within which a rather systematic and chronological overview of the entire risk management process can be analyzed. The proposed flowchart covers four major stages of risk management in the strategic alliance. First, Understanding own risk. This part emphasizes that resource invested by the company is the origin of all risks in an alliance. The different characteristics of resources lead to a wide variety of risks. At the same time, different selection of alliance types, company’s structure and many other relations also results in different levels of restrictive power on the actual risk. Therefore, by combining own alliance resource and alliance types, companies can quickly identify the risks that they will face and their respective levels. Second, Managing risk by partner’s characteristics. This part describes how specific characteristics of your partner can help to control your pre-recognized risk. If the partner can be trusted by his goodwill,
the possibility of opportunistic behaviour is low, and the relational risk in this alliance is limited. And for partners with competence trust, their advanced technology or effective performance skill helps to lower the performance risk in the alliance. Third, Managing risk by external instruments. According to different resource contributions, this part lists possible external actions such as alliance contract, organization structure, etc, that can be taken to manage various risks. Finally, managing risk by internal managements. This part explained how to manage risk by the daily operations, which include trust-buildings and control-executions. Through these steps, the risks can be monitored and controlled tightly.

This flowchart considers four kinds of critical resources that the members bring into an alliance: financial, technological, physical, and managerial resource. It also analyzes three typical alliance types: joint venture, minority equity alliance and non-equity alliance. The flowchart, therefore, almost include all kinds of possible combinations of alliance resource and types. Hence, it can be regarded as a quite general model, which is not influenced by users’ culture, countries, etc. Moreover, to test the flowchart, this paper studied five cases representing companies from different countries and industries with various alliance resource-types combination. This flowchart has been tested and modified three times by the findings of case studies. Hence, it is not only a theoretical framework but consists also of high practical value.

6.2 The Answers of Problem Statements

1. What determines the risk level in strategic alliance?

The findings of this comparative case study provided confirmative evidence that the relative levels of the resource contributed by alliance partners have significant impact on the pattern of risk management. By adopting a resource perspective, focusing on the partners’ interdependence, I was able to clarify the reasons for why and how risk and its level are caused by resource, and restrained by alliance types.
2. What characterise the risks in strategic alliances? Why are they special?

Compared with single firm or other cooperation organization, strategic alliance companies are co-managed by joint partners, therefore it has a unique and unavoidable risk—relational risk. Partners join the alliance entity with their different competitive advantages, which decide their owners’ position in the new joint entity directly. To keep their positions, partners must protect and maintain their competition advantages in the alliance. But partners are working under the same roof, and sharing the management of new joint entity; they have motivations, opportunities and possibility to behave opportunistic. And these firm-firm interactions cause relational risk.

3. What are the success factors of risk management in strategic alliances?

- It is best for the alliance that the partners’ competitive advantages (include resource, market position, etc) are complementally

- It is best to find a partner that had served in market area different from your own, in order to avoid mutual benefit collision.

- The new joint entity ought to retain some autonomy, while still receiving continual support from parent companies.

- Alliance cooperation must be based on mutual trust and inter-confidence, rather than relying on right and obligation, which are defined by alliance contract.

- Partners need to focus on the disparity of behavioural style and enterprise culture, and try to form a new common style and culture which are different from parent companies’.

- Confrontations and distrusts always exist in the strategic alliance. Alliance entities are frequently broken up, because of various reasons. Partners can therefore not ignore the risk management, even if the alliance has existed for very long time.
6.3 Reflection on the Thesis

6.3.1 Advantages of My Theory:

The aim of this thesis research is to construct an integrated model, which is comprehensive, practical, straightforward and testable. Fortunately, the results of this research met many of these requirements. Now, I will list some advantages of my final model:

This is a general model, which is not influenced by users’ backgrounds, such as its countries, market area and culture, etc. This integrated model offers relevant instruments to manage various collisions caused by environment and cultures. Hence, the integrated model will prove to be useful for a wide range of different users.

Another advantage of this integrated model is its user-friendliness. I concluded all views about risk management of strategic alliance in one flowchart; from risk understanding, to risk management by partner-selection, external instruments, and at last, by internal management. They are listed in chronological order, which makes them easy to be understood and followed. The users are only required to position themselves in the right cell, and then follow the flowchart step by step. It is no longer needed to spend long hours on studying the insipid theories to locate a suitable method. Compared with so many other models, this one is much easier to use.

This is a contrastable model too. Besides using it in own risk-management, users can also apply this model for investigation of other companies’ situations. As easy as in the Chinese-Danish comparison process (in Chapter 5. step 6), users will only be required to place their several partners in the right cells in the same flowchart, after which a clear matching picture will appear. This simple procedure will provide a detailed description of each partner’s risk level and relevant solutions. The result can either be saved as a cross reference, or to be
used as the starting point for a collective risk management method.

6.3.2 Limitation of the Study

My research also left several shortages; they can be concluded as limitations of my study:

- The primary focus of this text will be considering risk and risk management in strategic alliances from the manager’s perspective. Other areas like law, accounting or human resource, which all have great relevance in strategic alliance, will therefore not be considered.

- There are also many other forms of alliances than the mentioned ones, however, to avoid overcomplicating the topic, I have decided only to concentrate on the three most general forms, namely joint venture, minority equity alliance and non-equity alliance. The theory can though easily be expanded for usage in other alliance forms.

- In the development of this model, I have focused making it as user friendly as possible. To do so, I have deliberately placed myself in the manager’s seat, seeing the situation from his or her point of view. However although proved very useful, this method also sets some limitations. The suggested risk controlling instruments for example are as result of this fixed at one parts perspective. Although the instruments do not harm the new joint entity, the partner firm’s risks are still neglected. Differently stated, the new joint entity is not in centre when considering risk management. The mother firms are still viewed as the starting point for this.

- The scope of this research does not extent to the pre-alliance preparations or post-alliance evaluations. Instead, the alliance process and the risk management during the alliance are in focus.

- Although being very overall, minor corrections may still be needed if the model is to be applied to an industry totally different from the studied cases, considering
that all industries have its own unique characteristics.

6.3.3 Further Research

I had many good ideas before starting the research, but not every one was realized in this thesis. It is therefore my strong wish that these missing can be implemented in future studies.

Risk management is also a typical financial subject; hence, I originally planned to add some financial aspects, such as a real options approach, in my study. These approaches however are most usually adopted by single firms to manage their own individual risk. Alliances and their risks on the other hand are unique as result of their multi partner organizational structure. I found it therefore more important to study partner-partner relations and partner-environment relations because these are the origin of the unique risks in alliances. After having fixed my view on the multi part structure, implementing “single firm approaches” such as real options becomes rather difficult.

The optimal situation will be to interview and study two companies, one foreign and one local, which are in alliance with each other, as such a study will present the most realistic picture thereby offering more promising and reliable results. This was however not possible due to my limited contacts. Instead, I have studies five companies in which three are Chinese and two are Danish. They have all joined an alliance operating in the Chinese market. Hopefully, this is a good imitation of the optimal situation; after all, this is the best I can offer.
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http://www.hand-china.com/

http://www.ntastudio.com/

Appendix 1: Question List in English

Part 1: Alliance Background

1) Why did your company select strategic alliance as the entry model?

2) What kind of alliance did you use?
   - joint venture
   - minority equity alliance
   - non-equity alliance
   - Others (please describe)

3) What was your contribution in the new joint entity? (multi-choices)
   - Financial resource
   - managerial resource
   - technological resource
   - physical resource
   - Others (please describe)

4) During the collaboration, which types of risk did your part face? (please describe)
   i. Which of them are easy to handle?
   ii. Which of them are difficult to handle?
   iii. Are there any relation between the risk type you face and the resource you invested?

<table>
<thead>
<tr>
<th>No relation</th>
<th>Little</th>
<th>Some</th>
<th>Close</th>
<th>Very close</th>
</tr>
</thead>
</table>

Part 2: Reducing risk by external instruments.

5) How did you select the alliance partners?

6) Was your choice of partner specifically aimed at reducing one or several pre-recognized risk type?

<table>
<thead>
<tr>
<th>No consideration</th>
<th>Little</th>
<th>Some</th>
<th>Specifically</th>
<th>Very specifically</th>
</tr>
</thead>
</table>

7) Did you ever consider your partner’s reason to join the alliance?

<table>
<thead>
<tr>
<th>Never considered</th>
<th>Little</th>
<th>Some</th>
<th>Carefully considered</th>
<th>Very carefully considered</th>
</tr>
</thead>
</table>

8) Did you join for the same or different reasons?

<table>
<thead>
<tr>
<th>Different</th>
<th>Little similar</th>
<th>Part similar</th>
<th>Similar reason</th>
<th>Same reason</th>
</tr>
</thead>
</table>
9) Whether for the same reasons or not, did this affect the future cooperation?

<table>
<thead>
<tr>
<th>Very Negative affection</th>
<th>Negative affection</th>
<th>No affection</th>
<th>Positive affection</th>
<th>Very Positive affection</th>
</tr>
</thead>
</table>

10) Did you select your present partners because of their (multi-choices)
    Goodwill ( )
    Perform skill ( )
    Others (please describe) ( )

11) Did your partners bring any extra risk which are out of your predict?

<table>
<thead>
<tr>
<th>No</th>
<th>Little</th>
<th>Some</th>
<th>A lot</th>
<th>Very much</th>
</tr>
</thead>
</table>

12) Are you satisfied with your cooperation? And why?

<table>
<thead>
<tr>
<th>Very unsatisfied</th>
<th>Unsatisfied</th>
<th>Middle</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
</table>

13) What’s the most difficult part of your cooperation? (multi-choices)
    The disparity of culture ( )
    The disparity of purpose ( )
    The disparity of value ( )
    The disparity of language ( )
    Others (Please describe) ( )

14) Except for depending on your partner’s cooperation, did your part take any additional measures to reduce risk?
    Yes ( ) (Please describe)
    No ( ) (Please describe)

**Part 3: Reducing risk by internal management**

15) Did you consider building goodwill-trust between you and your partners to reduce trust crisis?

<table>
<thead>
<tr>
<th>Never considered</th>
<th>Little</th>
<th>Some</th>
<th>Carefully considered</th>
<th>Very carefully considered</th>
</tr>
</thead>
</table>

16) Did you try to motivate mutual interest with your partners?

<table>
<thead>
<tr>
<th>Never motivated</th>
<th>Little</th>
<th>Some</th>
<th>Carefully motivated</th>
<th>Very carefully motivated</th>
</tr>
</thead>
</table>

17) Are there any rewards and punishments systems which are approved by all partners?
    Yes ( )
    1. how about the transparency level

<table>
<thead>
<tr>
<th>Very low</th>
<th>Low</th>
<th>Middle</th>
<th>high</th>
<th>Very high</th>
</tr>
</thead>
</table>

101
2. Could it help to resolve problems fairly?

<table>
<thead>
<tr>
<th>Not helpful</th>
<th>helpful</th>
<th>Very helpful</th>
</tr>
</thead>
</table>

3. Do those systems help to improve the understanding of each other?

<table>
<thead>
<tr>
<th>Not helpful</th>
<th>helpful</th>
<th>Very helpful</th>
</tr>
</thead>
</table>

No ( )

18) Did you try to improve the public appeal of some individuals or teams in order to gain more trust from lower level employees in the new organization?

<table>
<thead>
<tr>
<th>Never tried</th>
<th>Tried a little</th>
<th>Tried</th>
<th>Tried a lot</th>
</tr>
</thead>
</table>

19) Is the cooperation between the parts frequent?

<table>
<thead>
<tr>
<th>No cooperation</th>
<th>Little</th>
<th>Some</th>
<th>Frequently</th>
<th>Very frequently</th>
</tr>
</thead>
</table>

20) Are you making account to control behaviours of the staff?

<table>
<thead>
<tr>
<th>Never controlled</th>
<th>Little</th>
<th>Some</th>
<th>Carefully controlled</th>
<th>Very carefully controlled</th>
</tr>
</thead>
</table>

21) Are there any clear and precise working rules in the new entity, to regulate what’s right, what’s wrong?

<table>
<thead>
<tr>
<th>No rules</th>
<th>Little rules</th>
<th>Some rules</th>
<th>Clear rules</th>
<th>Very clear rules</th>
</tr>
</thead>
</table>

22) Are there any dairy reporting systems in the new entity, which could help the staff check their own behaviours in time?

<table>
<thead>
<tr>
<th>No</th>
<th>Little</th>
<th>Some</th>
<th>Detailed</th>
<th>Very detailed</th>
</tr>
</thead>
</table>

23) Are there any periodically training programs in the new entity?

<table>
<thead>
<tr>
<th>Yes ( )</th>
<th>One year or longer</th>
<th>Half year</th>
<th>One quarter</th>
<th>One month</th>
<th>One week</th>
</tr>
</thead>
</table>

No ( )

24) Are you making account of the social control in the new joint entity?

<table>
<thead>
<tr>
<th>Never controlled</th>
<th>Little</th>
<th>Some</th>
<th>Carefully controlled</th>
<th>Very carefully controlled</th>
</tr>
</thead>
</table>

25) Are there any shared values between partners?

<table>
<thead>
<tr>
<th>No</th>
<th>Little</th>
<th>Some</th>
<th>A lot</th>
</tr>
</thead>
</table>

26) Would you communicate with each other periodically to improve the "fellow felling” and make up the divergences as soon as possible?

<table>
<thead>
<tr>
<th>No communicate</th>
<th>Little</th>
<th>Some</th>
<th>Frequently</th>
<th>Very frequently</th>
</tr>
</thead>
</table>
27) Are there any cultural activities such as party, rituals, that can help to establish shared norms and beliefs?

<table>
<thead>
<tr>
<th>No activities</th>
<th>One year</th>
<th>One quarter</th>
<th>One month</th>
<th>One week</th>
</tr>
</thead>
</table>

28) Do the partners have same goals? Not only for the long term goal like becoming market leader, but also the detailed short term goals, such as increase production?

<table>
<thead>
<tr>
<th>No</th>
<th>Little</th>
<th>Some</th>
<th>A lot</th>
</tr>
</thead>
</table>

29) Would the partners always make decision together?

<table>
<thead>
<tr>
<th>Never</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Always</th>
</tr>
</thead>
</table>

30) Did the new organization try to increase competence trust between partners too reduce the performance risk?

<table>
<thead>
<tr>
<th>Never tried</th>
<th>Tried a little</th>
<th>Tried some</th>
<th>Tried a lot</th>
</tr>
</thead>
</table>

31) Would the partners like to share information during the cooperation?

<table>
<thead>
<tr>
<th>Never</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Always</th>
</tr>
</thead>
</table>

32) Are you making account to control the output?

<table>
<thead>
<tr>
<th>Never controlled</th>
<th>Little</th>
<th>Some</th>
<th>Carefully controlled</th>
<th>Very carefully controlled</th>
</tr>
</thead>
</table>

33) Do you make well-defined objectives, and compare them with output frequently?

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>

34) Do the new entity plan each project in detail, including make budget for every stage of those projects?

<table>
<thead>
<tr>
<th>No</th>
<th>Little</th>
<th>Some</th>
<th>Detailed</th>
<th>Very detailed</th>
</tr>
</thead>
</table>

35) How does the new entity measure the output? Are they measured frequently?

Finally, could you brief describe the most important things about how to keep an alliance relationship successful?
Appendix 2: Question List in Chinese

以下问卷中，你方代表合作中的“中国企业”，他方代表合作中“外国企业”；新公司代表合作后的现有公司。

1. 请您简单描述一下新公司的合作形式：

2. 在合作中你方投入了什么样的资源？（多选）
   iv. 资金
   v. 人力
   vi. 管理
   vii. 销售渠道
   viii. 原材料
   ix. 其它，请列举：________________________

3. 是否投资双方都参与新公司的管理？
   a) 是：
      i. 新公司如何分配管理职位？
      ii. 你方是否占有主要的管理职位？
   b) 否：
      哪方是新公司的主要管理者？

4. 在合作过程中，你方承担最多的风险是什么？
   i. 哪方面风险是容易处理的？
   ii. 哪方面风险是很难控制的？
   iii. 这些风险是否和你方投入的资源有关？
      a) 是
      b) 否

5. 你方是以什么标准选择搭档的？

6. 是否考虑到他方参与合作的目的？
   仔细考虑（）考虑（）不怎么考虑（）完全不考虑（）
7. 双方的目的是否一样？
   完全一样（） 很像（） 差不多（） 不太一样（） 完全不一样（）

8. 目的的一致/不同，是否会对后来的合作产生影响？
   影响很大（） 有影响（） 影响一般（） 没什么影响（） 完全不影响（）
   如果会产生影响，请描述一下这些影响______________________________

9. 他方有什么特色？(多选)
   a) 商业信誉好
   b) 商业执行力强
   c) 其它，请列举：______________________________

10. 他方是否会企业带来一些额外的风险？
    a) 是，请列举：______________________________
    b) 否

11. 你方对合作是否满意？
    很满意（） 满意（） 一般（） 不怎么满意（） 完全不满意（）
    如果不满意请进一步描述：______________________________

12. 你方认为合作中最困难的是什么？(多选)
    a) 沟通困难
    b) 语言障碍
    c) 文化差异
    d) 双方职员处理不公
    e) 其它，请列举：______________________________

13. 面对各种风险，除了利用他方的合作，你方还做过一些什么措施来减少风险？(多选)
    a) 加强自身管理
    b) 加强自身商业执行能力
    c) 加强自身技术，市场的力量
    d) 其它，请列举：______________________________

14. 你方是否完全信任搭档公司，认为他方会完全站在新的合作公司的立场上处理所有问题，而不是为了主要维护他方利益？
    很信任（） 信任（） 一般信任（） 不怎么信任（） 完全不信任（）

15. 双方有没有努力增进彼此的信誉度，以此缓解双方信任上的危机？
    很努力（） 努力（） 一般努力（） 不怎么努力（） 完全不努力（）
16. 双方是否有努力培养共有的兴趣？
很努力（） 努力（） 一般努力（） 不怎么努力（） 完全不努力（）

17. 新公司是否有双方都认可的奖惩制度？
a) 是:
   4. 透明度高吗？
       很高（） 高（） 一般（） 低（） 差（）
   5. 是否双方员工都愿意接受？
       很愿意（） 愿意（） 一般（） 无所谓（） 排斥（）
   6. 是否能帮助增进双方的了解，如，远景展望，处理问题的手段，
       并帮助员工互相合作等。
       帮助很大（） 帮助挺大（） 帮助一般（） 没有帮助（）

b) 否:

18. 新公司是否有试图建立起某个人或某团队在企业中的威望，并以此增加
    员工对新公司的信任感。
很重视（） 重视（） 一般（） 不重视（） 完全没有（）

19. 双方的合作是否很具体，很频繁，具体到很多细节上的商业操作都是一
    起完成？
很具体（） 具体（） 一般（） 很少（） 不合作（）

20. 新企业是否很重视管理员工的行为和操作？
    很重视（） 重视（） 一般（） 不重视（） 完全忽略（）

21. 新公司是否有详细而清晰的公司守则，具体表明什么可以做，什么不可
    以做？
    很详细（） 详细（） 一般（） 不详细（） 没有守则（）

22. 新公司是否有日常报告制度？帮助员工及时核对自己的行为。
    很详细（） 详细（） 一般（） 不详细（） 没有这制度（）

23. 新公司是否有阶段性的培训项目，以便及时纠正员工的操作和行为？
    每周（） 每月（） 每季度（） 每半年（） 每年或更长（）

24. 新公司是否试图建立双方员工都认可的价值观。
    完全认可（） 认可（） 一般（） 认可度低（） 完全不认可（）

25. 新公司是否会定期进行双方交流？以便增进双方对彼此工作的认识。
    每周（） 每月（） 每季度（） 每半年（） 每年或更长（）
26. 新公司是否有些文化活动（类似舞会，座谈会等），以此帮助双方员工加深对彼此文化的了解，工作方式等背景的了解？
   每周（） 每月（） 每季度（） 每半年（） 每年或更长（）

27. 新公司是否建立了公共的目标？不仅是几年计划类的大目标，也包括一些具体而小的目标，比如提高生产效率等。
   很具体（） 具体（） 一般（） 不具体（） 没有（）

28. 新公司是否是双方一起商讨并解决问题？或是双方各自管理所属部门，独立解决问题？
   全部一起商讨（） 部分问题商讨（） 少部分问题商讨（）
   很少商讨（） 完全不商讨（）

29. 在合作过程中，双方是否会积极的分享信息？
   很积极（） 积极（） 一般（） 不积极（） 完全不分享（）

30. 新公司是否会着重控制项目操作的结果？
   很重视（） 重视（） 一般（） 不重视（） 完全不重视（）

31. 新公司是否会明确告知员工，每项操作的目的？
   很明确（） 明确（） 一般（） 不明确（） 完全不告诉（）

32. 新公司是否对各个项目都设定详细的计划，并为每个阶段设定具体预算？
   很详细（） 详细（） 一般（） 不详细（） 完全没计划（）

33. 新公司对操作结果的测量，是否是定期而频繁的，并且将测量制度化，透明化。
   很频繁（） 频繁（） 一般（） 很少（） 完全不测量（）

34. 最后，你能否简短的描述一下为了维持一个成功而愉快的合作，有哪些方面是需要注意的。