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**“The Implementation of
Strategic Alliances By Thai
Firms”**

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Date: December 18, 2003

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The Implementation of Strategic Alliance by Thai Firms

Chapter One

1. Problem statement

1.1. Introduction

Today's business environment is one of intense global competition, rapid changes in technology, demanding consumers and other pressures (Jarratt, 1998). Firms operating in this environment are challenged by consumers to rapidly develop wider product lines that encompass greater technological sophistication and quality, yet are still low priced. At the same time, global competition has forced corporations to seek new markets, which in turn has speeded up this cycle of product development, and simultaneously created world markets. However, firms are finding that the costs of increased research and development and entry into new markets are formidable.

Moreover, today's corporations are realizing that the days of large, vertically integrated businesses are rapidly vanishing, that one firm can no longer afford (monetarily and/or organizationally) to maintain sophistication in all levels of technology, develop international distribution channels or develop new markets. All these aspects are prompting many firms to seek cooperative relationships with other firms.

However, despite protectionist and other trade limiting measures and political constraints in some countries, the globalization of business is increasing rapidly, and the information revolution is playing an important part in this process. As Drucker (1994) states, "Few things so stimulate economic growth as the rapid development of information, whether telecommunications, computer data, computer networks, or entertainment media."

As a means of meeting the combined challenges of entering or maintaining markets with new, better products, many firms are realizing that they must find outside partners to share the risks and, hence, are forming collaborative alliances (Horton, 1998). Collaborative alliances are nothing new: corporations have been getting collaborating for generations, whether formally through joint ventures or through more informal partnerships. Up until, a few years ago strategic alliances were perceived as an option reserved only for giant corporations. Today, however, for many companies, a go-it-alone strategy no longer seems to be a viable alternative. As a result of the consequences of several trends which began in 1980s – intensified foreign competition, shortened product cycles, soaring capital investment costs, and the ever growing demand for new technologies – alliances are becoming an attractive strategy for the future (Vyas et. al., 1995).

From agriculture to industry, from software to steel, aerospace to apparel, the pace of strategic alliances is quickening. Defined broadly as any relationship between companies sharing common interests, strategic alliances are cropping up all across the globe. A strategic alliance is an agreement between two or more partners to share knowledge or resources, which could be beneficial to all parties involved. Perhaps the most important trends in integrating the world economy is the rapid growth of cross-border alliances between companies or in networks of cooperating organizations.

In fact, since the early 1980s, there has been a dramatic increase in the number of strategic alliances. For example, between 1980 and 1990 Japanese firms signed over five hundred alliances with American firms (Vyas et.al., 1995). Moreover, the successful of alliances has also been seen. For example, Van de Gevel (2000) has shown the successful American firms in Japanese allied firms. America's renewed success in Japan has occurred because of private sector initiatives by US and Japanese companies to work together in strategic alliances and joint ventures despite the US government's managed trade policies. The key technological and manufacturing reasoning underlying the formation of interfirm partnerships has been the shift to Very Large Scale Integration (VLSI) production and submicron fabrication. This shift has led to a rapid increase in the

cost of research and development (R&D), equipment, and facilities, as well as to an increase in the risk of market failure. Mass volume sales constitute the *sine qua non* of low-cost production and of moving rapidly down steep learning curves. Therefore, it is essential for companies to explore different avenues in order to gain access to foreign customers. As the up-front costs and risks of breaking into foreign markets can be prohibitively high, there are strong incentives for companies to find foreign partners through strategic alliances. Companies cannot afford to confine themselves to domestic markets, no matter how large they may be.

It is important to point out that the vast majority of US-Japan alliances are between small – or medium-sized US companies, (many of them young start-ups) and large, vertically integrated, diversified Japanese corporations. While small venture start-up firms in the US need funds, manufacturing foundries and marketing outlets, and look to large deep-pocketed vertically integrated and diversified Japanese corporations to meet these needs, many of the large Japanese giants look to small US start-ups to provide new product designs to fill niche markets or to compensate for certain deficiencies in their own innovative capabilities. Partnership agreements between US design houses and foreign wafer fabrication foundries represent a substantial proportion of the total number of strategic alliances established during the 1980s (Van de Gevel, 2000).

Moreover, within North America, the 90s have witnessed some high profile strategic alliances between American and Canadian firms, such as the ones between the MCI (U.S.) and Stentor (Canada), between AT&T (U.S.) and Unitel (Canada), between American Airlines and the Canadian International Airlines, and between United Airlines and Air Canada. A more recent example of strategic alliance on a global scale is the Star Alliance of five airlines (Air Canada, Lufthansa, SAS, Thai, and United – Chen, 1999).

In this sense, the economic integration in the European Union is proceeding far more through alliances than through mergers and acquisitions, especially among the middle-sized companies which dominate most European economies. Networks of strategic and other alliances often span different countries but are tied together by common goals and are perceived as being local wherever they operate (international note, 1996).

The reason why alliances remain so popular is because of the allure of flexibility, informality, speed and efficiency related to them. As technology becomes more complex, costly and speculative and as customers demand more integrated tools and materials, companies appear to be pursuing alliances in record numbers.

Due to the difficulties of going it alone, even competitors are joining in strategic alliances to reach common objectives such as the advancement of technologies, sharing production and research facilities, and the development of industry standards to ensure market growth. Current efforts for more efficient R&D are resulting in worldwide trends towards collaboration – as technology becomes increasingly complex, no single company can do it alone. R&D alliances are increasing in every major industry, including autos, electrics, aircraft, and biotechnology (Daussage et.al., 2000).

Furthermore, not all alliances have to last forever to be considered successful. Constantly changing market forces make long-term alliances a thing of the past. Successful alliances need dedicated resources. An alliance is not a way of avoiding of applying resources to something; it is a way of leveraging those resources toward accomplishing a goal. Alliances should be established from a position of strength, not from a defensive posture to stave off a business threat.

However, it is recognized that many alliances crumble under the weight of a number of factors: poor management, a lack of clear goals at the outset, the growing dominance of one partner or the drain on resources by another, and the failure to adequately measure a partnership's performance. With the possibility of failure so high, the sheer number of alliances being formed is a wonder. In industry at large, the average company which had no alliances a decade ago has more than 30 today (Van de Gevel, 2000).

To summarize, it is possible to say that alliance may help to address the following issues: adding value to products, improving market access, strengthening operations, adding technological strength, enhancing strategic growth, enhancing organizational skills, and building financial strength.

So far, this research has reviewed some of the advantages and facts related to strategic alliances. Various papers have been published in leading specialized journals where real examples of advantages strategic alliances have been presented (Fearne, 1994; Shamdasani, & Sheth, 1994; Cardwell, & Bolon, 1996; Gibson, & Dickson, 1997; Hoffman, & Viswanathan, 1997; Das, & el, 1998; Gulati, 1998; Baum, 2000; Dussauge, & el. al., 2000;).

However, there are fewer papers analyzing the implementation of strategic alliances in countries emerging from an economic crisis situations. That is the purpose of this dissertation: to analyze the implementation of strategic alliances in Thailand, a country that has suffered a deep economical crisis, like many other Asian countries; as well as to determine the degree of satisfaction of the Thai firms with this strategic tool. Due to the fact that strategic alliances often prove to be the best way for a company to grow, it can be answered that the implementation of strategic alliances in Thailand will follow an increasing index. Moreover, to get the growth that Thai firms need, going overseas often could be the unique alternative because the domestic market is truly mature. In this case, strategic alliances could be an important tool in driving Thai firms to penetrate new markets more quickly and at less cost.

1.2. Strategic Alliances in Thailand

Nowadays Thai firms are establishing strategic alliances. Surased (2001), for example, explains the successful strategic alliance undertaken by Air Product Industry (API) in Thailand (the company produces industrial gases such as Oxygen, Nitrogen, Argon and gas supply equipment). Their customers are hospitals and industries where gas is a major resource in this operational process. The company states that the integration of operations within the firm and between firms is essential for this type of business. Primarily because users need its a reliable large volume punctually and it is crucial that they never run out of stock. Their customers would experience a significant impact if supply shortage occurred. To maintain punctuality and reliable delivery is the major goal in this industry. Partnership is vital since any changes need to be responded to quickly. For instance, if a machine breakdown occurs and stocks run out, they are therefore able to

ask their partners to satisfy their customers' gas demands. Moreover the infrastructure investment and manufacturing costs for this type of industry are quite high and organizations need to consider a make-or-buy strategy. Frequently, they prefer to buy the products from their partners or competitors in order to save their own manufacturing costs. These agreements are also made in the contract on sharing capacity as well as the market share.

This strategic alliance could be considered as an example of how corporate alliance with suppliers and customers is important. However, although the type of the established strategic alliances, the company highlights that, sometimes, strategic alliance in the form of co-contracting with competitors is necessary. For example, the joint logistic distribution center in Thailand between Ford and Mazda¹, Big C preparing to introduce parent company Casino's Leader Price banner, Tesco has established an alliance with the oil company Esso to develop convenience stores at a number of its petrol stations in Thailand, and Tops (Ahold) has signed a deal with its allied partner Conoca to develop convenience stores at Jet stations in Thailand (Trompiz, 2001).

Also, Thai Airline is participating in the "Star Alliance", a strategic alliance established by 14 competing companies. In fact, agreements between airlines in various forms have been made recently.

The airlines are very much aware that they need each other's cooperation, experience and network to complement and enhance their own routes. Star Alliance, for example, claims to offer a much better service to their customers. An alliance very often means better timetables and connecting times between the agreeing carriers. Other benefits include better overall fares and access to each others' lounges (Airwise News, 2002).

Another successful type of strategic alliances in Thailand are those among retailers and suppliers who are Small and Medium Enterprises (SMEs) (Surased, 2001).

Variations in demand to suppliers from retailers in traditional retailer-supplier relationships are far greater than the variation in demand seen by retailers. In addition,

¹ From www.supplychainreview.com/index.cfm?cp=archivist.cfm&arch=february98

suppliers have far better knowledge of their lead times and production capacities than retailers do. Therefore, as margins get tighter and customer satisfaction becomes more important, it is logical to develop cooperation between suppliers and retailers in order to leverage the knowledge of both parties. The type of retail-supplier alliances can be viewed as a continuum. At one end is information sharing, which helps the supplier to plan more efficiently, and at the other, the supplier completely manages and owns the inventory until the retailer sells it.

As a final consideration, the collaboration between “The Thai Chamber of Commerce, The Federation of Thai Industries (F.T.I.)” and “The United States Chamber of Commerce” has been established to stimulate growth in small and mid-sized Thai businesses by helping them to form long-term trade and investment relationships with American firms. Strategic alliances between Thai and US firms are considered an engine of growth and innovation for Thai firms. Through these alliances organizations in Thailand can create a process that would provide them with different skills and, perhaps more importantly, access to US partners (Public relation Department, 2000).

As previously mentioned, strategic alliances provide an effective means to improve both the economies of scale and scope offered by traditional modes of organization (Gulati, 1995). That is the reason why it is considered an attractive option for the Thai firms. However, despite such advantages, strategic alliances do not always achieve their desired results. Uncertainty about the behavior of partners can be a cause for significant concern, thus leading to unstable and conflicting relationships (Hamel et. al., 1989). Although strategic alliances have become increasingly important, a high level of dissatisfaction with actual outcomes relative to expectations have been reported and many are not successful (Madhok & Tallman, 1998; Park & Russo, 1996). However, it is difficult to identify precise failure rates, strategic alliances are likely to have high dissolution rates (Hennart et. al., 1998). Understanding the problems associated with implementing strategic alliances in emerging economies could play a significant contribution on this topic.

In conclusion, for the above mentioned reasons, it is considered very important to develop this study of analyzing the strategic alliance phenomenon in Thailand. Without a

doubt this study would add valuable information to this topic: by analyzing the strategic alliance phenomenon in economies with changes affecting both public and private sectors.

1.3. The History of Thai Economy Since 1970

Thailand's transformation from an agriculturally dominant structure to an industrially dominant one became statistically apparent in 1981, when for the first time the value added from manufacturing surpassed that of agriculture. It is possible to say that the first period of industrialization in Thailand (1970-1979) can be characterized by import substitution.

Kaosa-ard (1998) reported that Thailand, unlike many other Asian countries, was a land abundant country (in the sense that until the late 1970s its land/person ratio had been increasing) which had never been colonized. Rice and other primary products have been Thailand's main foreign exchange earners for centuries. The production pattern, which had been based on agriculture, rendered the transition to manufacturing difficult in the early years of industrialization. Labor moved in and out of industries on a seasonal basis. In the 1970s, when land became scarce, the female workforce began to participate in the country's conversion from a rural agricultural to an urban manufacturing based economy. The large pool of female workers enabled the manufacturing sector to take root in the Thai economy.

The 1980s witnessed Thai industrialization becoming more *export oriented*. In fact, we are able to say that exports have been the engine of economic growth in Thailand and from 1970 to 1980, industrial sector growth was as high as 39.5 percent annually². In spite of this growth, there have been structural changes within subsectors of manufacturing. During the early stage of industrialization, consumer goods enjoyed a high market share. Later, the market share held by the food industry declined noticeably and gave way to textiles and garments. The four main manufacturing exports that were

² Thailand has had a long history of international trade, however it is remarkable that the degree of openness (measured in term of total imports as a ratio of GDP) increased from 46.2 percent in 1982 to 84.5 percent in 1993

the driving force of the Thai economy between 1984 to 1987 were canned food, textiles, leather products and machinery and electrical products. These sectors contributed to three-quarters of the total economic growth during this period, although towards the end they began to show sign of slowing down.

In 1985, the value of manufactured exports started to exceed that of agriculture (the value of textiles and clothing exports surpassed that of rice, and reached a level three times the value of rice by 1991) and since that time, manufacturing exports have been accelerating. Industries that expanded rapidly between 1987 and 1993 included automobile parts, machinery, electrical components, hide products, basic metal products, preserved and canned food, textiles and clothing, and finally, gems and jewelry.

The average growth rate of the manufacturing sector was as high as 14 percent annually (1988 - 1993), and Thailand registered double figure growth during this period. Rapid expansion was not limited to export oriented industries; mining related industries, especially in areas related to construction, also grew at a high rate to meet expanding domestic demand. Industries that grew at a lower rate were basic industries such as timber and timber products, tobacco, food and beverages.

It is important to point out that from 1987 to 1993, Thailand, Indonesia and Malaysia had the highest industrial growth rates in the Asia-Pacific rim. During this period, these countries experienced a similar growth pattern in manufactured exports; 28 percent for Thailand, 29 percent for Indonesia, and 30 percent for Malaysia. Thai exporters have increasingly faced international competition, especially following China and Vietnam's vigorous entries into the world market.

In 1994, Thailand's tariff rates averaged approximately 17.7 percent, a lower level than World Trade Organization (WTO) requirements. For this reason, the WTO agreement on tariff reductions did not have any significant effects on Thailand's tariff structure (which in turn effects the country's industrialization process). On the other hand, the Association of South East Asian Nations (ASEAN), and Asian Free Trade Area (AFTA) agreement are expected to impact the structure of Thailand's higher than those of other ASEAN countries. For instance in 1997, Indonesian tariff rates averaged around 11.6 percent and the Philippines rate average at 6.7 percent, as compared to Thailand's

average of 14.2 percent. Under the AFTA agreement, by the year 2000, Thailand's overall tariff rates had to be reduced by 50 percent, leaving the tariff rate for the manufacturing sector at an average of 9.0 percent (Kaosa-ard, 1998). In 1994, the value added of the manufacturing sector accounted for 28.5 percent of Gross Domestic Product (GDP) and the value of manufacturing exports accounted for 80 percent of Thailand's total export value. The expansion of industrial exports was an important feature of Thailand's economic change, and the industrial sector took on a leading role in generating substantial foreign exchange earnings for the Thai economy.

The period 1990-1995, provided an early warning that Thailand was becoming less competitive in a number of export industries. These industries included processed canned seafood (of which Thailand was the world's biggest supplier), preserved fruits and vegetables, garments, leather products, rubber products, electrical machinery and domestic appliances. The competitiveness of 13 out of 20 textile and garment products declined between 1990-1993. In early 1996, the Thai export sector began to display troubling signs, for instance, in the first and second quarters export growth was negative. This downturn triggered concern among investors and eventually led to capital flight.

Towards the end of the 1990s, the growth and competitiveness of the export sector, in particular, the food-based sector, started to slow down. Manufactured exports, which accounted for 25 percent of real GDP growth in the early 1980s, had reduced to 11 percent by 1989-90. Between 1991 and 1993, the overall industrial growth performance declined for most industries. The few industries experiencing growth were automobile parts, electrical component, basic metal products and petroleum products.

Another factor that affected a change in the structure of Thailand's industrialization was *foreign investment*. Although the country has a long history of foreign investment, foreign investment in Thailand and South Korea was considered among the lowest in Asia-Pacific countries until 1985. Following the yen³'s appreciation in 1985, foreign investment in Thailand rose rapidly due to the relocation of Japanese production plants (later Taiwanese and Hong Kong plants would also move). In 1987, Japanese investment in promoted sectors exceeded cumulative investment from the

³ Japanese currency

previous 20 years. In particular, Japanese investment provided the technical foundation for Thai industries particularly in the automobile parts and electronic sector, among others (Kaosa-ard, 1998). It is worth noting, however, that the shift to highly capital intensive industries (such as the iron, steel and petrochemical industries in the 1990s) was mainly driven by local investment⁴.

Therefore, despite rapid economic growth from 1987 to 1997, and the mentioned foreign investment, Thailand's economic structure remains highly unbalanced. This has occurred due to a number of reasons.

- i) Firstly, Thailand's economic growth was initially centered around the primary city of Bangkok. In 1990, the population of Bangkok still accounted for as much as 57 percent of the country's urban population, compared to 31 percent in other developing countries with a similar economic performance⁵. The rapid expansion of the city has created several problems, such as overcrowding, traffic congestion, and a deteriorating urban environment. These problems have drained much of the government's budget, which otherwise could have been allocated to poverty-stricken areas or other more productive uses (Siamwalla & Sobchokchai, 1998)
- ii) Secondly, although the industrial sector generated high income for the economy, this did not translate into employment opportunities for the Thai labor force (Warr & Nidhiprabha, 1996). Although the agricultural sector generated substantially less income, it employs a much larger proportion of the labor force. In 1996, agriculture contributed only 12.8 percent to GDP yet this sector absorbed as much as 53 percent of the country's total labor force. Many industrial activities remained in close proximity to the Bangkok Metropolitan Area (BMA), the Eastern region, and extended only 200 kilometers toward the Western region.
- iii) Thirdly, expectations of sustained growth and increasing land scarcity in the late 1980s and early 1990s created an explosive boom in the land and securities

⁴ Domestic investment was made possible by the liberalization of local capital markets and by heavy borrowing from overseas banks by Thai private firms (Kaosa-ard, 1998).

⁵ Bangkok's urban population ratio reduced to 36 percent by 1996.

- markets, sharply boosting land prices and salaries of white collar workers in real estate and the financial sectors (Siamwalla & Sobchokchai, 1998). Wages for blue collar workers also increased but not to the same extent as those of white collar workers. In fact, this bubble economy started during the 1989s, when land prices were inflated. The inflation of land prices was later driven by foreign capital inflows through BIBFs⁶, thus fueling speculation on stocks and land. Huge amounts of short-term loans were taken out by private real estate companies to support their long-term projects. The maintenance of a strong baht⁷ caused exports to lose their competitiveness, as demonstrated by zero export growth in 1996. These factors burst the speculative bubble and set off capital flight by mid-1997.
- iv) Lastly, up until the 1980s, the growth of the economy was largely nature-based and relied heavily on land and marine resources. These resources were depleted rapidly. For instance, although Thailand is a major world exporter of processed and semi-processed seafood, the productivity of marine fisheries declined substantially during the 1980s and 1990s. Furthermore, while fishing effort (as measured by the volume of catch per hour) averaged 42.6 kg/hour in the 1980s, this had dropped to about 25 kg/hour by early 1990s (Sirichaikavut, 1996).

An important implication of these changes is that the agricultural sector experienced “Dutch Disease” effects, i.e., resource outflows to the more lucrative non-traded sectors such as real estate and securities. As a result, both agriculture and non-agricultural-based sectors (the main pillars of the Thai economy) were substantially weakened. Compounding this problem is inadequate human resource development, which has proven to be a major obstacle hindering Thailand’s move into high technology industries.

⁶ The Bangkok International Banking Facilities.

⁷ Thai currency, 1 Euro = 49.65 Baht. (rate at June 17, 2003 – Bank of Thailand).

Table 1 presents the summarization of the history of Thai economy. In the next section the evidences of how did economic crisis occur in Thailand, and which factors had effected and led to Thai economic collapse will be presented.

Table 1.

History of Thai Economy

| | |
|-------------|---|
| Before 1970 | Concentration on agriculture |
| 1970 – 1979 | - The first period of industrialization in Thailand - Transformation from agricultural dominance to industrial dominance |
| 1980 – 1985 | Thai industrialization becoming more export oriented <ul style="list-style-type: none"> • Structural changes • The boom of textiles & garments |
| 1985 – 1987 | - Value of manufactured exports started to exceed that of agriculture. - Manufacturing exports accelerated. - Investment rose rapidly due to the relocation of Japanese investment – provided the technical foundation for Thai industries |
| 1987 – 1993 | - Industries exports expanded rapidly - Manufacturing sector growth rate was as high as 14% annually - Double figure growth |
| 1990 | Two important factors <ul style="list-style-type: none"> • Highly capital intensive industries – iron, steel, petrol-chemical industries grew • The growth & the competitiveness of the export sectors, food based sector started to slow down |
| 1994 - 1997 | Value added of the manufacturing sector accounted for 28.5% of GDP and value of manufacturing exports accounted for 80% of the total export value Rapid economic growth but Thailand's economic structure remained highly unbalanced |
| 1997 - 2001 | Two important factors: <ul style="list-style-type: none"> - Economic crisis impacted negatively on private sector enterprises, in particular their ability to pay their debts. - The terrorist attack dampened the US economy as well as Thai and world economy |
| 2001 - 2003 | The Thai economy is expanding strongly in 2003, despite external uncertainties, but it has been affected by 2 important factors: <ul style="list-style-type: none"> - US – Iraq war - Severe Acute Respiratory Syndrome (SARS) |

Source: Own elaboration

1.4. Factors of Economic Crisis

This study has already presented the background of the Thai economy. In this section the factors causing the economic crisis; internal factors; external factors; and consequences of the crisis will be explained.

1.4.1. Internal Factors

The mix of the factors mentioned above has caused many problems which in turn have led to an economic crisis. As explained the Thai economy grew impressively until the mid 1990s but structural constraints have contributed to numerous problems. The major problems come from an expansion based on quantity instead of growth with quality. Moreover, the expansion of economic activities was mainly motivated by increases in volume of inputs, rather than improvements in technology. Consequently, the country certainly faces the problem of competitiveness, both cost and quality, over a long period (Ministry of Finance, 2001).

It should also be mentioned that this problem has been fuelled by other important aspects; for example, the unemployment rate, the more intensive use of inputs and mobilization of resources, the financial system in general and in particular the flotation of the baht in particular, and government decisions .

The unemployment rate

Unemployment is one of the important factors. The rate of unemployment increased when Thailand experienced on slowdown in its economy in 1996 and later on recession in 1997. Regional income disparities were exacerbated by a decade of economic boom that was concentrated in the Bangkok Metropolitan Area and the Eastern Seaboard, as already mentioned. The concentration of growth created more and more migration from rural to urban areas. However, the growth of employment in the industrial and service sectors in urban areas did not break rural household ties. Rather, this growth provided rural households with more wage employment opportunities to supplement their earnings from agriculture through seasonal migration (Krongkaew, 1995). The lack of

employment and educational opportunities in rural areas and the labor market segmentation in urban areas are factors which have driven some of the most able-bodied men and women to work overseas (Kaosa-ard, 1998). The pattern of labor outflows are consistent with sectoral and income disparities and the lack of good opportunities for those with a lower education in the Thai labor market (Sussangkarn et. al., 1999).

However, the Thai labor market situation has begun to change in recent years as Thai industrialists are forced to cope with volatile export markets characterized by ever increasing competition from the world market. Thai industrialists are adjusting, as seen by the transition from low-end labor intensive industries to more capital intensive or labor saving technology. The production of some labor intensive manufacturing products has shifted to neighboring countries with lower wages, a move necessary to maintain their price competitiveness. Thailand is experiencing a labor market dilemma: there are shortages of medium-and high-level educated workers but there are surpluses of workers with a primary education or less.

The lack of increments in efficiency

A second problem, pointed out by Krugman (1994), is that Asia's unsustainable growth arose from the more intensive use of inputs (i.e., cheap labor and more materials) and the mobilization of resources rather than from increases in efficiency. Increased efficiency of labor would come from improved management or technological knowledge, which would underline sustainable and dynamic growth. The concern of increased labor efficiency goes beyond mere increases in labor productivity, which can be generated by machinery or infrastructure. Krugman argues that rapidly growing East Asian economies show little evidence of improvement in efficiency and technological progress, but instead rapid growth of inputs. This structural problem of the country's competitiveness has weakened the ability of its economic sectors to cushion the adverse impact of the economic crisis and severe recession that followed.

The financial system in Thailand

The third problem mentioned above as a source of the economic crisis is related to the financial system in Thailand. It could be considered as one of the most important problems associated with the Thai economic crisis. In fact, there is general agreement that the macroeconomic collapse started as a crisis of confidence, with the most immediate and devastating cause being a massive flight of capital from Thailand. In the hardest hit country, the loss of confidence arose from a large and rapidly increased dependence on short-term private capital flows and corresponding current account deficits. The domestic financial sectors in Thailand were suffering from a variety of regulatory and prudential weaknesses that had been hidden or made to appear irrelevant in the face of rapid growth and the seemingly endless appreciation of real estate and stock market assets.

As a result of defending against several speculative attacks on the Thai baht in the early part of 1997, Thailand exhausted its foreign exchange reserves by mid-year, and was forced to abandon the baht's peg to a basket of currencies on July 2, 1997. Capital flight, which had been accelerating through the year based on self-reinforcing negative expectations about the baht, caused corresponding collapses of the stock and property markets. This in turn exposed weaknesses in the financial sector, leading to the eventual closure of many finance companies and a corresponding liquidity crunch throughout the economy. There was a rapid and generally unpredicted contraction of domestic demand, putting Thailand into a major recession, the likes of which had not been experienced for many years (Sussangkarn et. al., 1999).

As explained by Tower (1997), the crisis resulted from five imbalances in Thailand's macroeconomic financial position.

1. Capital account deficit which was caused by excessive borrowing by the local private sector from foreign sources after the liberalization of the Thai financial system. The Bank of Thailand introduced Bangkok International Banking Facilities (BIBFs) in March 1993 with the intent of making Bangkok a financial center. In less than four years, the amount lent through BIBFs rose

sharply from zero to \$31.2 billion by the end of 1996, accounting for almost half of total private foreign debt. The total external debt via BIBFs was recorded at 48 percent of gross domestic product in 1996 and estimated to be 55 percent at the end of 1997.

2. Term imbalance caused by borrowing on a short-term basis for long-term purposes. Cheap loans were used to invest in the property sector, which should have collapsed several years earlier. The inflow of funds prolonged the collapse until the end of 1996. As a result, many financial companies faced severe loan problems, which led to the suspension and permanent shutdown of 56 finance companies by the Bank of Thailand.
3. High debt to equity ratio among Thai-based corporations due to borrowing from both domestic and foreign sources left many of them in highly vulnerable situations.
4. Sharp deterioration in the quality of financial institutions made many of them effectively insolvent.
5. Excessive issuance of money to support ailing financial firms by the Central Bank fueled speculation against the baht and led to the depletion of net reserves which fell to critical levels. Net reserves dropped from US\$40 billion at the beginning of 1997 to US\$ 33.8 billion six months later on the eve of the official floatation of the baht.

All these factors, including the floatation of the baht in 1997, have forced the country to seek financial help from the International Monetary Fund (IMF). The government expected a sharp revenue shortfall that year which prompted three lavish separate budget cuts, with further cuts possible if revenue targets were met. The budget cuts had been deemed necessary in light of the IMF's requirement that the government recorded a one percent budget surplus in the fiscal year 1998. In 1997, the economy's growth rate was estimated to be zero percent for the first time in three decades. The current account deficit contracted sharply as imports dropped by 14 percent from the

1996. It has been recommended that the Thai government strictly implement the austerity program negotiated with the IMF in order to rebuild economic stability (Chalamwong, 1998). If in the early 1990s, Thailand, and other countries, were hailed as an Asian Miracle, by 1996 this miracle had begun to disappear. Thailand started to encounter a balance of payment deficit, followed by successive revelations of financial flight, leading to massive foreign exchange outflows. Finally, the Thai government decided to convert the fixed exchange rate to a managed float system and announced that real growth, which had been between 1 and 10 percent, would not exceed 1 percent in 1997. In less than six months, Asia's fifth tiger had turned into a sick cat.

Another major root of the crisis was the lack of transparency and weakness in local institutions, which were also becoming apparent before the crisis. An increase in the incidence of Fraud in the financial sector, an indecisive government, and the bail-out of problematic financial institutions led to the problem spinning out of control. For example, financial mismanagement was glaringly obvious in the Bangkok Bank of Commerce (BBC) scandal that eventually led to the bank's collapse. The collapse in stock and property markets, in turn, exposed the weaknesses of the financial sector and business firms that had mushroomed during the economic heydays. Crony capitalism, a common problem in the affected Asian countries, was a crucial factor in the Thai crisis.

Government decisions

Linked to all the above mentioned factors, we cannot forget the role of macroeconomic management performed by government agencies. The Thai government seemed to ignore the warning about the weaknesses of the exchange rate and the financial system. There was weak coordination among the four key economic agencies concerned with macro-economic policy-making⁸. Also there had been a fall in technocracy in general even before the crisis, particularly in the case of the Bank of Thailand, which had performed poorly in the 1990s (Siamwalla, 1997). Unfortunately, an inherently weak

⁸ These four were, the Ministry of Finance (MOF), the National Economic and Social Development Board (NESDB), the Bureau of Budget (BOB), and the Bank of Thailand (BOT), Thailand's central bank.

political system could not offer any viable alternatives to the shortfall in technocracy in strengthening policy management and thus could not handle the economic chaos.

Problems of governance were found in both public and corporate sectors. Not only in the government sector, but also in the private sector, following from the 1997 financial crisis – since it was the lack of discipline among private investors when borrowing foreign currency and unproductive spending that burdened the country with huge foreign debts when the currency depreciated. With cheaper interest rates for off-shore loans (as local rates were high) and the perceived fixed exchange rate, there was excessive borrowing and spending in speculative sectors, which built up huge amounts of short-term foreign debts.

However, weakness in the financial sector and governance (both in public and corporate sectors) are not the only roots of the crisis. Structural weaknesses also mattered, and are perhaps the deep-rooted cause of the crisis. Signs of problems were apparent in the real estate sector long before the onset of the crisis.

1.4.2. External Factors

External factors also contributed to the problem. It was during this period that a worldwide *export downturn* in a number of sectors occurred, including the semiconductor industry. Dasgupta & Imai (1998) argued that it had been a period of downsizing in demand for world commodities, which led to a drop in demand for exports from Asian countries. In addition, a Japanese economy in recession and depreciation of the yen led to a lower demand for imports from other Asian countries. Exports from Asia declined both in quantity and value terms which was reflected in Thailand's sharp fall in exports in 1996 from double figures to a zero growth rate.

Nevertheless, the world economy in year 2001 posed challenge to the growth of the Thai economy, as the slowdown in the world economy became clearer, especially as the slowdown in the US economy and the recovery of the Japanese economy were slower than expected. This slowdown in the world's two major economies, which were Thailand's major exporting countries inevitably affected the level of Thai exports (Bank

of Thailand, 2000). Thailand, was also affected by trade liberalization, competition with other developing countries for foreign capital and markets, negative publicity abroad, etc (Department of industry, 1999).

Furthermore, *domestic economic policies* have certainly played an important role in determining the size of the aggregate macroeconomic turmoil arising from the crisis. To go much further than this, however, requires some political observations. Thailand suffered initially, in the build-up to the crisis, from indecisive and incoherent macroeconomic policies. However, a smooth, legitimate and peaceful change of government, under the rules of a new constitution, brought in a strong leadership with an equally strong macro-economic policy (Sussangkarn et. al., 1999).

In conclusion, the crisis still hurts hundreds of thousands of firms across nearly all sectors. Janviroj (2001) noted that the crisis legacy can be seen in simple statistical components. Firstly, the direct investment boom from 1986, especially from Japan. Secondly, the emerging-market boom propelled by huge investment in the capital market and credit expansion, where private borrowing from overseas surged from US\$ 16 billion (now Bt700 billion) in 1989 to \$ 100 billion by 1996. The country's national investment was Bt2 trillion in 1980, but hit Bt7 billion in 1996. The grievance for growth during this period was more than the accumulation of the previous 50 years.

These bullish trends did not result merely in economic over-heating, which was the conventional wisdom at the time. Rather, they damaged the fundamentals economic foundations. It revealed that the huge investment made was not productive, and growth in the first half of the 1990s was driven by loans. The mis-investment in the private sector was gigantic, involving 300,000 companies across almost all sectors. It was also difficult to resolve the situation as there were so many firms involved, and additionally in the 1990s investment in business diversification had taken place especially in non-traded areas such as real estate, hospitals, other types of infrastructure, telecommunications, construction materials and import-substitution products. These investments totaled as much as Bt7 trillion, of which the economic value might have been only Bt5 trillion. The demand was simply not there, while the financing was wrong as debts created were higher than equity, short-term loans were used to finance investment with long-term

returns, and in many instances the projects did not have any revenue in foreign currencies.

Moreover, non-traded goods did not have to compete overseas, where prices were realigned according to the competition. The non-traded sectors showed enormous profit potential and resources – including human resources – flooded into these sectors. Everyone wanted to invest in real estate, for example, at the time. When the bubble burst, these non-traded goods were trapped in a vice, and proved difficult to sell.

However, in the year 2001, especially during the half of that year, global trade slowed significantly. As a result, several agencies significantly reduced their estimates of economic growth rates for Thailand and the rest of the world. The 2001 export expansion target, which was set at 10 percent at 2000, was revised downwards several times. Many believed that export growth in Thailand would be drastically reduced this year. The main factor causing these changing assessments was the weakening world economy where whose growth rates continued to decline. The slowing American economy was expected to bounce back in the second half of 2001, but so far the recovery has not been evident. The European Union was back-pedaling on predictions of economic expansion, even though the EU relied more heavily on internal than on external markets. The slowing world economy has had clear impact among Asian countries. In the first half of the year 2001, Japan showed signs of recession. With disturbing declines in orders from abroad, Asia's export oriented newly industrialized countries (NICs), such as Taiwan, Korea and Singapore, had to revise their growth estimates significantly downwards (the office of Industrial Economics, 2001).

Since the economic environment is important, the government uses international forums to exchange information and ideas, and to learn from the experiences of other countries' experts and policy planners in order to strengthen their ability to set appropriate policy and to better monitor the situation in their own region. The international community also encourages industrial countries to introduce economic measures that are beneficial to economically crisis-plagued Asian countries.

While there are many common features, the macroeconomic scenario of the crisis differs considerably across Asian countries. It was generally agreed that rapid financial liberalization, with inadequate attention to problems of corporate governance and of prudential regulation, together with poor macroeconomic management, and other policy and institutional failures, were underlying the problems of Asian economies. In retrospect, it appears that their previous growth had been built, at least in part, on shaky and unsustainable foundations. Differences in the extent of these structural weaknesses have resulted in differences in the depth and breath of the impacts of the crisis. At the broadest level, the severity of the social impact of the crisis depends primarily on the magnitude and length that the crisis has on aggregated demand and incomes. In other words, it is the magnitude of the macroeconomic shock in Asian countries, especially Thailand, which is the principal and therefore the most important factor in explaining differences in the extent of the social impact caused by the crisis among the different economies (Sussangkarn et. al., 1999).

In 2001, the September 11th terrorist attack dampened the US economy as well as the Thai and the world economy as awhile. However, In 2003 the Thai economy expanded strongly, despite external uncertainties. This was evidenced by the continued expansion in economic activity during the first 2 months of the year and the expansion in private consumption, export and production during the first quarter, which would provide momentum for economic growth in 2003. Nevertheless, the US and Iraq war and the outbreak of Severe Acute Respiratory Syndrome (SARS) posed important risks to the Thai economy growing.

1.4.3. Consequences of the Crisis

All the external and internal factors which led the Thai economy to an economic crisis, have motivated Thai industries to look for new ways of adjusting their strategies to compete with their rivals and to survive under these situations. In order to increase economic strength, there are strong trends towards the establishment of strategic alliances by both the government and the private sector in different countries, and towards international subcontracting to take advantage of each country's competitive advantage.

Porter (2003) has suggested that Thailand can improve its business environment by creating relationships and levels of trust that make them more effective. Also improvements could be achieved through conducting or facilitating the organization of collective action in areas such as procurement, information gathering, or international marketing. Furthermore, he proposes that a cooperation within broad regions can improve its microeconomic business environment primarily by removing barriers and the impediments to trade, investment, and exchange of technology and skills.

In Thailand, strategic alliance has been seen as an important tool by which Thai businesses could be enhanced. For example, the Department of Industry reports that there is already evidence of agreements under the Asian Free Trade Agreement (AFTA), Asia-Pacific Economic Cooperation (APEC), the Asian Industrial Complementation Scheme (AICO), under the Indonesia-Malaysia-Thailand Growth Triangle (ITM-GT), Mekong River Project. Moreover, recently a partnership in economic cooperation between Thailand and Singapore in jointly developing an industry park in the Eastern Seaboard of Thailand. These strategic moves may facilitate the movement of goods and services and their production within the participating countries. This trend highlights a dichotomy of countries competing in some aspects while complementing in other aspects with the potential net result would be positive synergies for all (Leopirote, 1999).

These barriers and developments are affecting Thailand's economic progress, hence there is a need to review targets and strategies, so that Thai industries are able to maintain competitiveness in the future with a new competitive advantage. It is understood that due to dynamic domestic and international environments, the competitive advantages of Thailand are shifting so that it has to identify new competitive advantages. To face the challenge of increasing global competition, domestic companies need to leverage their strengths overseas. However, newcomers to the international arena may encounter different difficulties from those of established multinational corporations.

These trends have created a business world in which cooperation between firms is exceptional. Strategic alliance arrangements, centered upon this cooperation between firms, have been growing at a rapid rate. Small firms can enjoy the reach and impact of

the larger organizations, while larger firms can benefit from the flexibility and innovation of the small firms (Gibson et al, 1997). There is also a growing body of research in strategy that is investigating the economic consequences of firms participating in strategic alliances.

Consequently, nowadays the industries and the strategic alliances within firms relationships are addressed from a wide array of disciplines and perspectives. But in regards to developing countries, studies are still very limited in number despite their valuable contribution to regional development and specially to the need to become globally competitive.

1.2. The Objective of this Research

It has been previously mentioned that because the economic crisis in Thailand occurred, this situation has led Thai firms to adapt themselves to survive. As the advantage of strategic alliance has stated above, it can be noted that strategic alliance could be an alternative tool to help Thai firms to survive and increase efficiency of their businesses . Moreover, globalization trends and the difficulties associated with gaining access to overseas markets have meant that international alliance activities have proliferated. As firms in the industrial districts of Thailand have become international over the years, alliance activity in this area has increased. Therefore, this research aims to discover the nature occurs among firms who are members of different forms of alliances and identify any differences by alliance type. The implementation of strategic alliance in Thailand under economic crisis will be analyzed as well.

The focus of this research is also on the exchange relationship between firms, the structure of allied firms, and the one that account for the satisfaction of firms that enjoy strategic alliance. This aspect will refer to this partner or the allied firm as competitors' and/or customers. Finally, the study will examine the level of satisfaction outcome, and the perception of the partner's behavior, whereas most prior studies have examined only one or two elements in this complex relationship. As a whole, this research tries to answer five important questions that are:



1. How many firms are engaging in strategic alliance activity?
2. Which are the types of cooperative relationships are chosen?
3. Is this activity related to firm size?
4. How satisfied are the firms with their efforts and results?
5. How is the degree of satisfaction influenced by perceptions of partner behavior?

In order to accomplish these proposed objectives, this research is organized into four more chapters, following this first chapter in which the interest for this investigation has been explained (the popularity of strategic alliances and the strategic alliance as an alternative choice to strengthen firms to survive in the current economic crisis being experienced by Thailand). Chapter Two delineates the notion of strategic alliances. Chapter Three provides the theory and hypothesis used, Chapter Four addresses the methodological basis of this research, and then presents a discussion of the results. Chapter Five discusses the findings of this research and concludes by identifying practical implications and future research.

1.3 Bibliography

- Airwise News. (2002). <http://new.airways.com/stories/2001/05/991310608>
- Bank of Thailand (2000). <http://www.bot.or.th>
- Baum, J.A.C. (2000). *Don't go it alone: Alliance Network Composition and Start ups' Performance in Canadian Biotechnology*, Strategic Management Journal, 21, p.267-294.
- Cardwell, R. & Bolon, D. (1996). *Strategic Alliances and Hospital: a US Perspective*, Journal of Management in Medicine, 10(2), p.40-46. <http://www.emerald.com>
- Chalamwong, Y. (1998). *Economic Crisis, International Migration and the Labor Market in Thailand*, TDRI Quarterly Review, 13(1), p.12-21.
- Chen, Z. (1999). *A Theory of International Strategic Alliance*, [Http://www.carleton.ca/economics/cep/cep99-08.pdf](http://www.carleton.ca/economics/cep/cep99-08.pdf).
- Das, S., Sen, P., & Sengupta, S. (1998). *Impact of Strategic alliances on firm valuation*, Academy of Management Journal, 41(1), p.27-41.
- Dasgupta & Imai. (1998). www.thaieconwatch.com
- Department of Industry. (1999). www.dip.go.th
- Drucker, P.F. (1994). *The Theory of the Business*, Harvard Business Review, 72(5), p95-105.
- Dussauge, P., Garrette, B., & Mitchell, W. (2000). *Learning From Competing Partners: Outcomes and Durations of Scale and Link Alliances in Europe, North America and Asia*, Strategic management Journal, 21(2), p.99-126.
- Fearne, A. (1994). *Strategic Alliances in the European Food Industry*, European Business Review, 94(4), p.30-36. <http://www.emerald.com>
- Gibson, B., Weaver, K.M., and Dickson P.H. (1997). *Strategic Alliance Use, Firm Size, Outcome Satisfaction and Partner Behaviours*, The Journal of SEAANZ, 5(1), p.3-15.
- Gulati, R. (1995). *Does Family Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances*, Academy of Management Journal, 38(1), p.85-112.
- Gulati, R. (1998). *The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances*, Administrative Science Quarterly, 43(4), p.781-814.

Hamel, G., Doz, YL., & Prahalad., C.K. (1989). *Collaborate With Your Competitors and Win*, Harvard Business Review, 67(1), p.133-139.

Hennart, J. F. (1988). *A transaction costs theory of Equity Joint Ventures*, Strategic Management Journal, 9, p.361-374.

Hitt, M.A., Levitas, E., Arregle, J., & Borza, A. (2000). *Partner Selection in Emerging and Developed Market Contexts: Resource-Based and Organizational Learning Perspectives*, Academy of Management Journal, 43(3), p.449-467.

Horton, V. (1998), *An exploration of Strategic collaboration in the Triad*, European Business Review, 98(1), p.4-12.

Hoffman, D., & Viswanathan, R. (1997). *Strategic Alliances and Small Business*, Journal of Business & Entrepreneurship, 9(1), p.133-146.

Industry Economics. (2001). www.ie.go.th

International Economic Relations Program (IER). (2001). p1-11
http://www.info.tdri.or.th/pr_ier.htm

International Note, (1996). *The Information Revolution and Its Impact on SME Strategy: The Asia Pacific Economic Cooperative Forum as a Model*, Journal of Small Business Management, 34(1), p.71-77.

Janviroj, P. (2001). *Crash of '97: Business caught in time warp*, The Nation, September, 3. <http://www.nationmultimedia.com/page.print.php3?usrsess=1&id=2286&clid=3>

Janratt, D.G. (1998). *A Strategic Classification of Business Alliances: a Qualitative Perspective Built From a Study of Small and Medium-Sized Enterprises*, Qualitative Market Research: An International Journal, 1(1), p.39-49.

Kaosa-ard, M. (1998). *Economic Development and Institutional Failures in Thailand*, TDRI Quarterly Review, 13(1), p.3-11.

Kittiprapas, S. (2000). *Causes of the Recant Asian Economic Crisis: The Case of Thailand*, The Paper Prepared for the ASEAN-ISIS/KKC Seminar on “the ASEAN Economic Crisis and Propects for ASEAN-Japan Relations, Tokyo, Japan.

Kogut, B. (1988). *Joint Ventures: Theoretical and Empirical Perspectives*. Strategic Management Journal, 9, p.319-332.

Krongkaew (ed), M. (1995). *Thailand's Industrialization and Its Consequences*. New York: St.Martin's Press.

Krugman, P. (1994). *The Myth of Asia's Miracle*, Foreign Affairs, 73(6), p.62-78.

Leopirote, M. (1999). *Promotion SMEs in Thailand*, Department of Industrial Promotion, <http://www.dip.go.th>.

Madhok, A., & Tallman, S. D. (1998). *Resources, Transactions and Risk: Managing Value Through Interfirm Collaborative Relationships*. *Organization Science*, 9, p.326-339.

Ministry of Finance. (2001). www.thaieconwatch.com

Ministry of Foreign Affair. (1996). *Asia-Europe Meeting (ASEM)*, Thailand.

Parkhe, S. H., & Russo, M. V. (1996). *When Competition Eclipses Cooperation: An Event History Analysis of Joint Venture Failure*, *Management Science*, 42, p.875-890.

Porter, M.E. (2003). *Thailand's Competitiveness: Creating the Foundations for Higher Productivity*, the presentation in Bangkok, Thailand. May 3.

Public Relation, The federation of Thai Industries (F.TI.). (2000). <http://www.thaienbdc.org/pressctv/smes.html>

Shamdasani, P.N., & Sheth, J.N. (1994). *An experiment approach to investigating satisfaction and continuity in Marketing Alliances*, *European Journal of Marketing*, 29(4), p.6-23.

Siamwalla, A. (1997). www.thaieconwatch.com

Siamwalla, A. & Sobchokchai, O. (1998). *Responding To The Thai Economic Crisis, UNDP Working Paper*, Bangkok, UNDP.

Sirichaikavat, V. (1996). *Marine Fisheries Strategies*. Bangkok: National Defence College.

Surased, J. (2001). *Examples of Strategic Alliance in SMC among SMEs*, www.smesupplychain.net/pr6.htm

Sussangkarn, C., Flatters, F., & Kittiprapas, S. (1999). *Comparative Social Impacts of the Asian Economic Crisis in Thailand, Indonesia, Malaysia and the Philippines: A Preliminary Report*, *TDRI Quarterly Review*, 14(1), p.3-9.

Tinakorn, P., & Susangkarn, C. (1996). *Productivity Growth in Thailand*, Thailand Development Research Institute: Bangkok.

Tower, I. (1997). *Mexico 1994 Versus Thailand 1997*, *TDRI Quarterly Review* 12(3).



Trompiz, G. (2001). *International Expansion*, The Cies Marketing Forum, p1-12. From www.ciesnet.com/publication/foodbusinessnews_engl.pdf

Van de Gevel, AJW. (2000). *From Contribution to Competition in the Globalize Semiconductor Industry*. <http://greywww.kub.nt:2080/greyfiles/few/2000/doc/792.pdf>

Vichyanond, P. (2000). *How to Prevent Another Crisis- Country Report: Thailand*, a Paper Presented at Asian Policy Forum, March 10, 2000. Asian Development Bank Institute, Tokyo, Japan.

Vyas, M., Shelburn, W.L., & Rogers, D.C. (1995). *An Analysis of Strategic Alliances: Forms, Function and Framework*, *Journal of Business & Industrial Marketing*, 19(3), p.47-60.

Warr, P.G. & Nidhiprabha, B. (1996). *Thailand's Macroeconomic Miracle: Stable Adjustment and Sustained Growth*, Washington DC and Kuala Lumpur, World Bank and Oxford University Press.

Chapter Two

2. Literature review

2.1. Introduction

Since the 1980s, strategic alliances have been a very popular topic in the literature (Dowling et. al., 1996). The topic of strategic alliances has become one of the most significant topics in strategic management literature. The incidence of strategic alliances among organizations has dramatically increased over the last 10-15 years, and research interest in the topic has followed suit (Zajac, 1998). Recently, an unprecedented number of business firms in many industries have been entering into a variety of interorganizational relationships (IORs) to conduct their business deals. These transactions often were undertaken through either discrete market transactions or internal hierarchical arrangements. These interorganizational relationships include strategic alliances, partnerships, coalitions, joint ventures, franchises, research consortia, and various forms of network organizations (Ring & Van de Ven, 1994).

Alliances have become an important research topic covering a range of theoretical bases and perspectives. Previous studies have progressed basically on three main paths: first, some researchers have focused on *partner characteristics* as an explanation for alliance behaviour and outcomes (Vyas et.al., 1995; Gibson et.al, 1997; Saxton, 1997). Therefore, resource exchange and the value of the resource accessed in an alliance are a central concern (Harrigan, 1986; Pfeffer & Nowack, 1976; Peffer & Salancik, 1978; Thorelli, 1986). Researchers articulating this perspective consider alliances and networks as alternative mechanisms to markets and hierarchies for addressing specific strategic needs. In this tradition, alliances are undertaken to secure scarce and valuable resources critical for a firm's survival and prosperity.

Second, some researchers have studied and focused on *the structure* of strategic alliances (Parkhe, 1993; Ring, & Van de Ven, 1992; Sparrowe, & Liden, 1997). Strategic alliances can take a variety of forms, including joint ventures, minority equity participate, R&D contracts, joint R&D, joint production, joint marketing and promotion, enhanced supplier partnership, distribution agreements, and licensing agreements (Gates, 1993;

Yoshino & Rangan, 1995). Most of the studies on alliances structural choice have been based on the dichotomy of equity alliances vs. nonequity alliances (Gulati, 1995; Osborn & Baughn, 1990; Tallman & Shenkar, 1990) but some researchers have seen some differences in equity alliances (Killing, 1998; Yoshino & Rangan, 1995; Mowery et al., 1996). These view alliances as unilateral contract-based when they embody a well-defined transfer of property rights. The key feature here is that individual firms carry out their obligation independently of others. On the other hand, alliances have been seen as bilateral contract-based when the partners have sustained production of property rights for example, partners are required to pool resources and work together (Mowery et al., 1996). In comparison to unilateral contracts, bilateral contracts are usually incomplete and more open ended.

Third, researchers have focused on *the interactive nature of cooperation between organizations* (Cook, 1977; Gulati, 1995; Heide & Miner, 1992; Levinthal & Fichman, 1988; Ring & Van de Ven, 1994). From here, the link between firms is the focus of the analysis. Rather than viewing each alliance as a separate transaction, researchers in this tradition emphasize the importance of positioning a transaction in the context of the on going relationship between the firms involved. A history of trust (Parkhe, 1993), and the prior relationship between firms engaged in a relationship (Gulati, 1995, 1998, 1999; Levinthal & Fichman, 1988) influence the willingness to partner. It is not the resource per se, but the social network of relationships in which a firm is embedded, that leads to partnering (cited by Saxton, 1997). According to this view, the understanding alliance behavior and outcome could be point out because it is the characteristics of the relationship between the firms as an on going pattern.

More recently, the literature presents studies about *learning* in alliances (for example, Khana et. al., 1994, Dussauge et. al. 2000), which explain how the tension between cooperation and competition affects the dynamics of learning alliances as well as considering the outcomes and duration of strategic alliances among competing firms, using alliance outcomes as indicators of learning by partner firms to examine interfirm relationships and outcomes.

However, while there has been growing attention paid to understanding the formation of interorganizational ties, including the motivation of firms participating and explaining the differential proclivity of firms to enter them, and also the behaviour and satisfaction of partners; less attention has been paid in the later field, especially in developing countries like Thailand as mentioned in the previous chapter.

Moreover, to reinforce one previous comment, despite the rapid proliferation of alliances and other forms of interfirm relationships in recent years, a few studies have focused on strategic alliances in Thailand (Thechatakerng, 2000; Surased, 2001) in comparison with the studies which focused on occidental alliances. From the perspective of this research, the characteristics of the relationships established by Thai firms should be the focal point for understanding alliance behavior, as well as the structure and the level of satisfaction in strategic alliances developed in Thailand. Due to the fact that understanding the characteristics and structure would encourage knowledge of studying alliances it would also help the scholar to know more through further studying. In the next section, the definitions and types of strategic alliances will be presented.

2.2. Strategic Alliances: Definitions and Types

Over the last decade there has been considerable attention placed on the changes occurring in the business environment. Of particular interest has been the change in the nature of relationships. The new forms of relationships have been referred to as partnerships (Johnston & Lawrence, 1988; Anderson & Narus, 1990; Hendrick & Ellram, 1993), networks (Miles & Snow, 1986; Thorelli, 1986), and strategic alliances (Veciana, 1970; Ohmae, 1989; Varadarajan & Cunningham, 1995)

Studies on strategic alliances have increasingly attracted the attention of academics, policy makers, trade practitioners and international organisations in the last two decades (Foss 1999). Its proliferation has led to a growing stream of research by strategy and organizational scholars who have examined some of the causes and consequences of such partnerships. Scholars who have studied in the area of strategic alliance have given a lot of different definitions of these relationships. This research has

explored a number of definitions of strategic alliances coming from different theoretical framework definitions which tend to highlight specific features of alliances.

For example, from the view of the *Transaction Cost Theory*, collaboration or alliance between firms is defined as a contractual relationship between two or more companies, in which they agree to jointly carry out one or several tasks, or specific projects, which are difficult or too costly to carry out alone. For each partner, it normally involves only one major activity respectively of its value-chain, or at least is clearly defined and limited in its objectives (Veciana, 1970; Hennart, 1988; Faulkner & Johnson, 1992).

Another view, from the *strategic perspective*, collaboration – Strategic alliances, joint ventures, cooperative agreements etc. are defined as partnerships among firms that work together to attain some strategic objectives or as part of the marketing of a product as a stream of value-chain activities where alliances enable each value-chain activity to be accomplished with the help of a partner, or it can be interfirm cooperative arrangements aimed at achieving the strategic objectives of the partners. (Porter & Fuller, 1986; Contractor & Lorange, 1988; Kogut, 1988a; Harrigan, 1992; Bleeke & Ernst, 1993; Stafford, 1994; Boulton, et. al., 1995; Das & Teng, 1998; Gulati, 1998; Peng, & Tan, 1998; Dussauge et.al.2000; Kale et. al., 2000; Hoffman & Schaper, 2001).

From a *learning perspective*, alliances are defined as coalignments between two or more firms in which the partners hope to learn and acquire from each other the technologies, products, skills, and knowledge that are not otherwise available to their competitors (Kogut, 1988a; Doz et. al., 1989; Hammel, 1991; Lane & Lubatkin 1998; Lie and Slocum, 1992; Parkhe,1993).

The last view, *resource-based perspective* defines alliance as voluntary cooperative inter-firm agreements aimed at achieving competitive advantage for the partner (Van de Ven, 1976; Kogut, 1988; Eisenhardt & Schoonhoven, 1996; Das & Teng, 2000).



Table 2 summarizes the definitions of alliances in four aspects. A variety of definitions from scholars have been developed to ensure that the strategic alliance is one of mutual benefit to all parties involved. In this study, strategic alliances are defined as two, or more partners who have achieved the agreement to carry out a project or operate in a specific business area and, as purposive strategic relationships between independent firms that share compatible goals, strive for mutual benefits, and acknowledge a high level of mutual dependence.

To understand more about strategic alliances, the next section will explain why strategic alliances are established drawing on the different points of view stated in the many academic papers published in this field.

Table 2. The Definition of Alliances in Four Aspects

| Theoretical perspective | Definition | Author | Year |
|----------------------------|--|--------------------------|-------|
| Strategic | partnerships between firms that work together to attain some strategic objectives or as part of the marketing of a product as a stream of value-chain activities where alliances enable each value-chain activity to be accomplished with the help of a partner, or can be interfirm cooperative arrangements aimed at achieving the strategic objectives of the partners | Porter & Fuller | 1986 |
| | | Contractor & Lorange | 1988 |
| | | Kogut | 1988a |
| | | Harrigan | 1992 |
| | | Bleeke & Ernst | 1993 |
| | | Stafford | 1994 |
| | | Sankar, et. Al. | 1995 |
| | | Das & Teng | 1998 |
| | | Peng, & Tan | 1998 |
| | | Dussauge et.al | 2000 |
| | | Kale et. Al | 2000 |
| Hoffman & Schaper | 2001 | | |
| Transaction cost | collaboration or alliance between firms is a contractual relationship between two or more companies, in which they agree to jointly carry out one or several tasks, or specific projects, which are difficult or too costly to carry out alone. For each partner, it normally involves only one major activity respectively of its value-chain, or at least is clearly defined and limited in its objectives | Veciana, J.M. | 1970 |
| | | Williamson | 1985 |
| | | Hennart | 1988 |
| | | Gray & Wood | 1991 |
| | | Faulkner & Johnson | 1992 |
| | | Smith, Carroll & Ashford | 1995 |
| | | Gulati | 1998 |
| Learning | coalignments between two or more firms in which the partners hope to learn and acquire from each other the technologies, products, skills, and knowledge that are not otherwise available to their competitors | Kogut | 1988a |
| | | Doz et. al. | 1989 |
| | | Hammel | 1991 |
| | | Lie and Slocum | 1992 |
| | | Parkhe | 1993a |
| | | Khanna et. al. | 1994 |
| Lane & Lubatkin | 1998 | | |
| Resource based view | Voluntary cooperative inter-firm agreements aimed at achieving competitive advantage for the partner | Van de Ven | 1976 |
| | | Kogut | 1988 |
| | | Blodgett | 1991 |
| | | Eisenhardt & Schoonhoven | 1996 |
| | | Das & Teng | 2000 |

Source: Own elaboration

2.3. The Formation of Alliances: Why are they established?

Today's firms in all sectors of business are highly dynamic and uncertain. Firms need to look for viable solutions to limit or reduce risk. Due to the fact that an alliance can increase bargaining power, firms will be able to secure critical resources in such an unstable market. Many researches have studied "why do firms established alliances", this research concludes that there are four main important theoretical approaches which explain the motivation for entering into strategic alliances: the Transaction Cost Theory, the strategic approach, the organizational learning and knowledge, and the resource-based view perspective (Kogut, 1988).

Firstly, according to the *Transaction Cost Theory*, firms enter into strategic alliances in order to reduce their production and management cost (Gulati, 1998). Alliances are viewed as the preferred option, if the anticipated management costs associated with the alliances are lower than the cost incurred by the alternatives (for example, expanding operations at home or setting up a wholly owned subsidiary (Williamson, 1975)). In this aspect, Foss (1999) argued that in the basic form of alliance, two manufacturers may have complementary products. But if one has a large distribution capacity, they may join forces in a manufacturing and distribution venture.

It is clearly explained by Veciana (1970) that the movement of collaboration between firms in industry is because firms need to complement their short comings and weaknesses and to reinforce the competitive advantage of the collaborating companies and to promote, in order to maintain a competitive market. Moreover, they need to reduce costs through cooperation in different tasks and projects, to solve technical or financial shortcomings to be able to conduct the main task or project, and to ensure large access to the market, export or enter in a new sector on which large investments are required.

Also, Vyas et. al. (1995) have shown how alliances are forged along a variety of dimensions. Analyzing the alliances by considering their dimensions is helpful to understand the motivation behind this trend and the critical factors for their success. The first dimension, Vyas et al. argued was that alliances can take place intra- or inter-industry. The example they give in their study of intra-alliance is the three US auto

makers who have formed an alliance to develop an efficient battery for the electric car. The motivation behind such an alliance was to meet the upcoming California state regulation to have a certain percentage of cars on the road by the year 2000 running on not gasoline (i.e. a pollution free alternative). If successful, this alliance would help fight foreign (Japanese or European) competition and prevent the loss of US market share to imports. The common objective here is to protect the home turf.

The Dupont (chemical giant)/Merck (pharmaceutical giant) alliance is an example of an inter-industry alliance. Dupont brings its productive discovery capabilities along with imagine-agent's business experience, while Merck contributes its development expertise, capital, market rights to several brands, and its established skills in bringing products to commercial fruition. Merck wanted to speed the costly process of bringing products to market. Dupont wanted to establish itself as a force in the pharmaceutical market (i.e. diversification). The main motivating force behind this alliances was pooling of expertise to create synergy.

The alliance partners' arena represents the second dimension of strategic alliances (Vyas et al., 1995). The partners could be from the same country as in the first case mentioned above or they could be from different countries. An increasing number of companies are turning to international alliances, relationship constitutes the next dimension of strategic alliances. Often the alliance is targeted between a firm and its supplier. This is primarily true because the supplier is a "known quantity" for the company. The relationship facilitates terms of agreement and the negotiation process as a result of a high level of trust built on past dealings.

Vyas et al. (1995) explained that technology and market-related factors, or a combination of the two, influence why alliances are formed. Factors which coalesce to determine the nature and form of the alliance include: distribution channels (going around entry barriers); synergy (to pool resources, increase efficiency, share expertise, reduce cost, increase market share and become more competitive, etc.); diversification (to reduce/share risk, gain access to new market segment); and sourcing raw materials.

Moreover, the developmental state of the technology, either recently matured (and available for application) or in an embryonic stage (needing additional R&D), is one of influencing factors in selecting partners for alliances. Firms seeking immediate



competitive advantages will seek alliances in new but readily available technologies, while those who want to remain at the cutting edge of technology and plan for long-term growth team up with technologies which are in their embryonic stage. Fusion of technologies in the study of Vyas et. al. (1995) is the last dimension considered in the formation of strategic alliances. One of the partners may contribute the specific knowledge of a process (assembly, miniaturization, coating, etc.), which is critical to gain competitive advantage or to even help create the final product.

Secondly, from *strategic perspective*, entry into strategic alliances, especially internationally, is aimed at creating competitive and synergetic advantages (e.g., risk reduction, economies of scale, cooperation in production and technological advancement) that expand the firm's resource base (Porter & Fuller, 1986; Contractor & Lorange, 1988; Kogut, 1988; Shan & Visudtibhan, 1990). In situations of high environmental uncertainty and volatility, a strategic alliance is a venue for creating a shared resource pool capable of increasing the capacities of the member firms.

For example, Chan & Wong, (1994), noted that many structural changes in manufacturing industries have become the driving forces for strategic alliances, and strategic alliances are used to share costs and risks, and to penetrate new markets. Other approaches to coping with this change have included pre-empting rivals from entering a market, and also firms have tried to gain strategic access to distribution channels or resources. In the same way as, Stuart, (1998); and Hill et al., (1998), asserted the motivation of one firm to collaborate with another, conventional wisdom suggests that a firm's size, its financial condition, its desire to enter new markets quickly, and its predilection to acquire complementary resources, are the driving motivations for collaborations. They suggested that a firm's position within its competitive environment may very well determine its propensity to form alliances, or in summary, objectives for forming alliances can be divided into two main groups. Namely, alliances that are used as an efficient way to expand strategic capabilities, and those used as a means of market control by reducing competition.

Thirdly, from a *learning perspective*, alliances are established to acquire specialized and crucial knowledge from other organizations without foregoing the firm's own skills and capacities (DiMaggio, & Powell, 1983). This reduces the cost of information search, permits rapid organizational learning, and increases the capacities of the cooperating firms, particularly in information-rich and change-oriented projects (Kogut, 1988; Doz et. al., 1989; Hamel, 1991; Khanna, et.al., 1994).

For example, Koza & Lewin (1998) have confirmed the most common motivation for forming an alliance involves the joint maximization of complementary assets by sharing in the residual returns from a business activity. This involved the partners setting up a daughter company in which the parents have joint ownership. They also argued that one of the many reasons why strategic alliances were formed was to seek out new knowledge by acquiring new technology and skills. In this type of alliance they argued that the others would seek to reduce information asymmetry between the partners. This may involve the standardization of service delivery of production processes, joint strategic planning, sharing of databases and knowledge transfer through staff exchange. A second and related motivation for forming an alliance was to explore for new market opportunities. This involved innovation, basic research, invention, risk taking, building new capabilities, entering new lines of business, and investments in the firms' absorptive capacity.

In a similar way, Shamdasani & Sheth (1994), explain how firms are attracted to form alliances, as environmental factors which influence the proliferation of strategic alliances are well documented and include growing domestic and global competition, shortening product life cycles, the rapid pace of technological change and convergence, and rampant protectionism. Firms use alliances to acquire competence through technology transfer and/or market access, and to overcome various barriers to entry such as government restrictions. In addition, there are many internal (e.g. greater asset flexibility; improved resource utilization) and relational (e.g. reduction in exchange specific uncertainty; collaborative problem solving) benefits that enhance the competitive posture of firms involved in alliances.

Gulati (1998, 1999) views firms establish alliances for many reasons and that by participating in alliances firms can develop capabilities for forming alliances that accrue as a result of the historical process of learning. Thus, due to their membership in an alliance network they can develop managerial capabilities associated with forming new alliances. Alliances are complex organizational arrangements that can require multiple levels of internal approval, significant search in identifying partners, detailed assessments for ratifying contracts, and considerable management attention to sustain the partnership. The possession of alliance formation capabilities can be a significant catalyst for firms considering new alliances. An important basis for alliance formation capabilities is learning from prior experience.

The final aspect, *resource-based view* perspective, sees firms essentially using alliances to gain access to other firms' valuable resources, or when both firms are in vulnerable strategic positions (i.e., in need of resources), or when they are in strong social positions (i.e., posses valuable resources to share) (Eisenhardt & Schoonhoven, 1996; Das & Teng, 2000).

For example, Barney (1991) suggests that a firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitor. The reason such as a strategy is not ordinarily implemented by competitors is that they may not possess the appropriate resources. The strategy literature has established the close relationship between resources (or competence) and competitive advantage (Reed & DeFillippi, 1990). The resource-based view argues that valuable firm resources are usually scarce, imperfectly imitable, and lacking in direct substitutes (Barney, 1991; Peteraf, 1993). Thus the trading and accumulation of resources becomes a strategic necessity. In sum, it is about creating the most value out of one's existing resources by combining these with others' resources, provided that this combination results in optimal returns. According to this approach, the motivation for a firm to use strategic alliances is to obtain others' resources; and to train and develop its own resources by combining them with others' resources.

Table 3 summarizes the motivations to enter into strategic alliances pointed out by the four theoretical approaches considered.

Table 3. The Four Aspects of Motivation of Alliances

| Aspect | Motivation |
|--|---|
| Transaction Cost Theory | to reduce production and management cost |
| The Strategic approach | creating competitive and synergetic advantages (e.g., risk reduction, economies of scale, cooperation in production and technological advancement) that expand the firm's resource base |
| The Organizational Learning & Knowledge perspective | to acquire specialized and crucial knowledge from other organizations without foregoing the firm's own skills and capacities |
| The Resource Based View approach | To gain access to other firms' valuable resources |

Source: Own elaboration

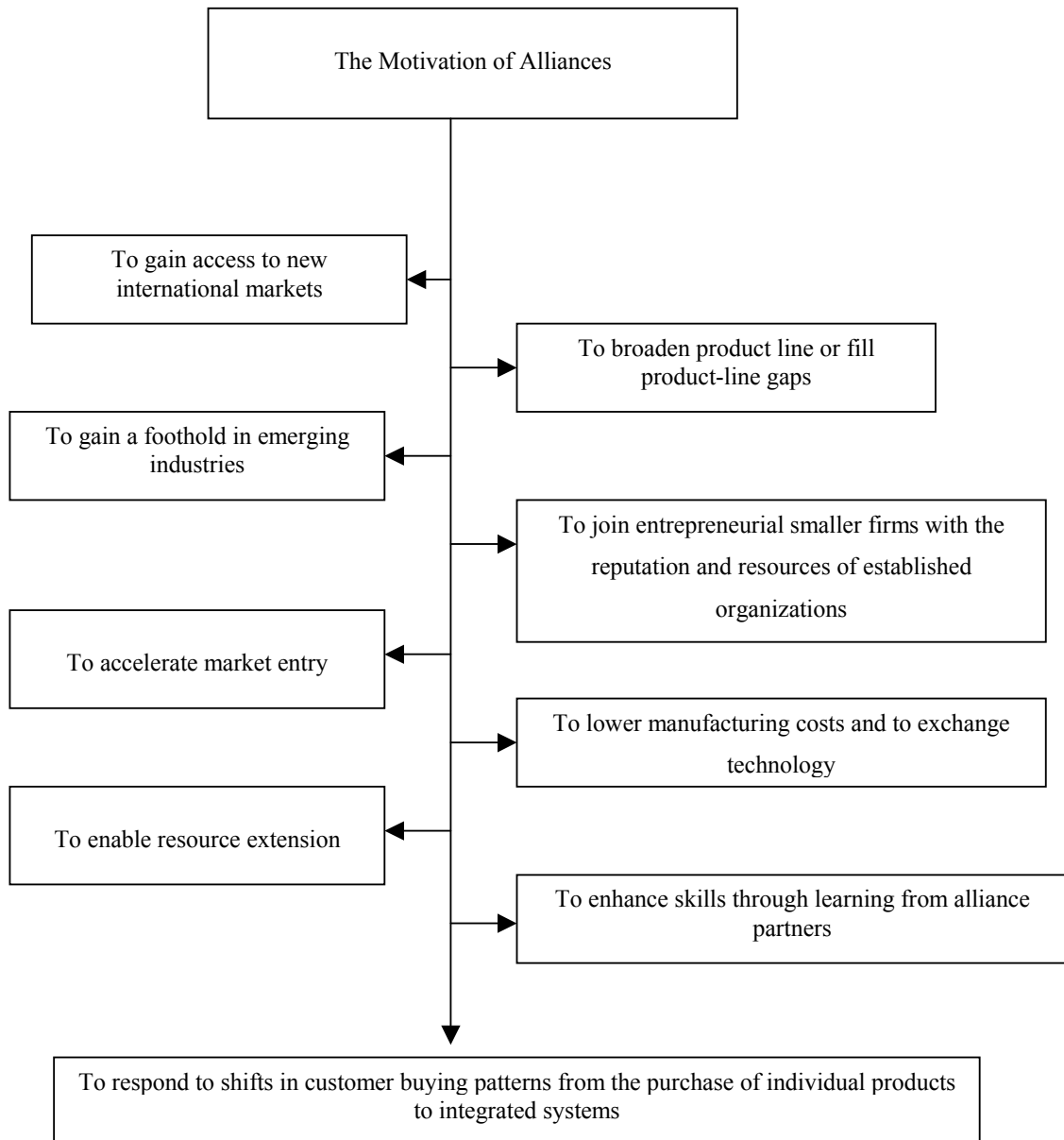
From the perspective in this research, it is important to point out that an alliance can increase bargaining power and strengthen purchasing power, which will enable the alliance to secure critical resources in such an unstable market. Firms under economic crisis are in current danger. An alliance can strengthen these firms' positions by eliminating duplicate services and improving their production, thus reducing the firms' risks and also can reduce poor financial position and high costs.

Also, the research (consistent with the conclusion by Varadarajan (1994)), describes that motives for joining strategic alliances with firms that have complementary skills and resources include (see Table 4):

1. To gain access to new international markets.
2. To broaden product lines or fill product-line gaps.
3. To gain a foothold in emerging industries.
4. To join entrepreneurial smaller firms with the reputation and resources of established organizations.
5. To accelerate market entry by using host partner's sales force, distribution infrastructure, and knowledge of local markets.
6. To lower manufacturing costs by sharing production facilities and manufacturing process experience, and to exchange technology.
7. To enable resource extension for smaller firms that lack the means for investment in research and product development.
8. To enhance skills through learning from alliance partners.
9. To respond to shifts in customer buying patterns from the purchase of individual products to integrated systems.

In the next section, it is necessary to review some theoretical frameworks that traditionally have been considered for analyzing strategic alliances. Specially, the Transaction cost theory (TCT) has been applied to many areas of research, particularly in strategic alliance aspects.

Table 4. The Summarizing of Motivation of Alliances



Source: Varadarajan, 1994

2.4. The Traditional Theoretical Framework: Transaction Cost Considered for analyzing Strategic Alliances

General aspects of Transaction Cost

In the 1970s, interest in transaction costs increased. Pioneering work in the development of a theory of transaction costs was carried out by Williamson (1975). Gradually, a body of theories based on the concept of transaction costs emerged: these included the transaction cost economics of Williamson (1985), the property rights school, agency theory, the economics of multinational enterprise and a transaction cost approach to economic history (Hobbs, 1996).

Many scholars (Coase, 1937; Hayek, 1945) have studied transaction cost, especially after Williamson launched his studies, transaction cost became a popular theory. Transaction cost theory has been applied to analyzing in many areas of studying, one such case is in the strategic alliances. Transaction Cost Theory views alliances as intermediate hybrid forms between the extremes of markets and hierarchy (Williamson, 1985) that occur when transaction costs associated with a specific exchange are too high for an arm's-length market exchange but not high enough to mandate vertical integration (Hennart, 1988).

From this view, a major assumption of transaction cost theory (TCT) is the bounded rationality and opportunism of human behavior. Bounded rationality means the human behavior is rationally motivated but also limited. Opportunism refers to a lack of candor or honesty in transactions. TCT argues that given the interaction of bounded rationality and opportunism, the organization must choose between markets (external purchasing) and firms (internal production) for input or output of goods or services. Transaction costs represented in an organization's procurement of external resources can explain the organization's decision regarding their preferences for either hierarchies or markets (Wey & Gibson, 1991).

Williamson (1985) identified three critical dimensions that can be used to determine the costs of transactions: uncertainty, asset specificity, and frequency. Uncertainty, refers to the complexity of the transaction and it is determined by the number of conditions which need to be considered. If there are many conditions in a



transaction, the uncertainty of the transaction is high since they are bounded to human rationality. Opportunism is more likely to occur when the uncertainty of a transaction is high. Accordingly, opportunism in a highly uncertain transaction environment may increase transaction costs. Asset specificity refers to the marketability of the assets used for obtaining specific products or services. When the asset can not be used for producing differentiated goods, the organization may be locked into a inflexible situation. Transaction costs will be high because of the high risk involved in the transaction specific (non-marketable) investment. Frequency refers to the number of transactions during a specific time span, such as occasional and recurrent. Markets are argued to be most efficient under conditions of frequent transactions. TCT can be widely applied to studies focused on strategic alliances which is demonstrated in the next section (see also Table 5).

Table 5. Areas of Studying Transaction Cost

| Author | Year | Theory | Area |
|------------------------------|------|---------------------------------------|---|
| Monteverde & Teece | 1982 | Transaction cost | The value of appropriable quasi rents is positively related to quasi vertical integration. |
| Anderson & Schmittlein | 1984 | Transaction cost | Behavioural uncertainty and asset specificity. |
| Palay | 1984 | Transaction cost | Transactions with idiosyncratic investments are likely to be governed bilaterally among the exchange partners. |
| Anderson | 1985 | Transaction cost | Behavioural uncertainty and the interaction of asset specificity and environmental uncertainty. |
| Levy | 1985 | Transaction cost | Firms with higher levels of specific assets and environmental uncertainty are more vertically integrated. |
| Balakrishnan & Wernerfelt | 1986 | Transaction cost | Technological obsolescence has a negative impact on vertical integration. |
| Anderson & Coughlan | 1987 | Transaction cost | Integrated or independent channel for foreign market entry. |
| Joskow | 1987 | Transaction cost | The length of contract duration is positively related to asset specificity. |
| Hennart, J.F. | 1988 | Transaction cost | Equity of Joint venture. |
| Gatignon & Anderson | 1988 | Transaction cost, Property rights | Ownership is more likely under conditions of high asset specificity, high behavioural uncertainty, and low environmental uncertainty. |
| Gates | 1989 | Transaction cost | Product/market strategy costs influence managerial perceptions of selected types of transaction costs |
| Heide & John | 1990 | Transaction cost | Manufacturer and supplier's specific investments are positively related to the extent of joint action. |
| Osborn & Baughn | 1990 | Transaction cost | Alliances are governed by contractual agreements under conditions of high environmental uncertainty. |
| Leffler & Rucker | 1991 | Transaction cost | When presale measurement costs are low, lump-sum contracts are used; when postsale monitoring costs are low, per-unit contracts are used. |
| Wey, J.Y.J. & Gibson, D.V. | 1991 | Transaction cost, Resource dependence | Managerial environment on interorganisational systems |
| Ring & Van de Ven | 1992 | Transaction cost | Alternative forms of governance, and extent transaction cost used to address governance forms. |
| Heide, Jan. B., & George, J. | 1992 | Transaction cost | Interfirm relationship & behavioral norm of opportunism. |
| Parkhe, A. | 1993 | Transaction cost, Game theoretic | Interfirm cooperation and model of alliance structuring |
| Plains, W. | 1993 | Transaction cost | Governance form. |
| Zajac, E.J & Olsen | 1993 | Transaction cost, Transactional value | Joint value maximization, and the processes by which exchange partners create and claim value. |
| Maltz | 1994 | Transaction cost | Specific assets are negatively related to out sourcing. |

| Author | Year | Theory | Area |
|--|------|--|--|
| Dutta et.al. | 1995 | Transaction cost | Lock-in and performance ambiguity increase the probability that a manufacturer will use a dual channel. |
| Dutta & John | 1995 | Transaction cost | Sellers in a monopoly condition extract higher prices than sellers in a duopoly condition. |
| Chiles, T.H., & McMackin, J.F. | 1996 | Transaction cost | Neglected behavioral assumptions using trust and explicate subjective costs and risk. |
| Hobbs, J.E. | 1996 | Transaction cost | Vertical co-ordination within an industry on supply chain management. |
| | 1996 | Transaction cost | Strategic alliance partnerships between retailer, processors and marketing groups composed of farmers may emerge as the method of vertical co-ordination, which minimizes transaction costs. |
| Spraakman, G. | 1997 | Transaction cost, agency | Internal audit operation for cost economizing and analytical agency. |
| Nooteboom, B., Berger, H., & Noorderhaven N.G. | 1997 | Transaction cost | The effects of governance and trust on the risk perceived by agents of firms in alliances, and extent the transaction cost to address trust. |
| Roberts, P.W., & Greenwood R. | 1997 | Transaction cost, institutional | Adopt new organizational designs |
| Colombo, M.G. | 1998 | Transaction cost | The choice of the governance form of strategic alliances. |
| Peng, M.W., & Tan, J.J. | 1998 | Transaction cost | Alliance postsocialism: business strategies in a transitional economy |
| Rialp, J & Salas, V.S. | 2000 | Transaction cost, property rights | Governance form in interfirm collaborations. |
| Reuer, J.J. | 2001 | Transaction cost | Hybrid governance structure to an internal unit within firm's hierarchy. |
| Sabbatini, P. | 2001 | Transaction cost | The significant contraction of transaction costs of business to business. |
| Shrader, R.C. | 2001 | Transaction cost | The relationship between collaboration and performance in foreign markets. |
| Geoffrey, B. | 2002 | Transaction cost | The structure of contracts involving exchange under uncertainty are influenced by costs incurred by the contracting parties prior to, as well as after, a contract is signed. |
| Heiman, B., & Nickerson, J.A. | 2002 | Transaction cost, knowledge-based view (KBV) | A set of relationships that have the potential to reconcile the dispute between the KBV and TCE |
| Peyrefitte, J., Golden, P.A., & Jr., J.B. | 2002 | Transaction cost | Vertical integration and economic performance. |
| Woodruff, C. | 2002 | Transaction cost, property rights | Integration among manufacturers and retailers |
| Russell, C. | 2003 | Transaction cost, knowledge-based view (KBV) | knowledge-based theory should gain explanatory power <i>over</i> transaction cost economics, in which opportunism is the primary driver |
| Gainey, T.W., & Klaas, B.S. | 2003 | Transaction cost, social exchange, resource-based view | Identify inter-firm relationship, behavior & satisfaction |

Source: Own elaboration

The structuring aspect

The work carried out by Parkhe (1993) in relation to transaction Cost Theory led to new insights into the *structuring of alliances* and suggested that interfirm cooperation was complex, embedded in various institutional arrangements, and at the same time both forward-looking and backward-looking. There is thus an essential connection between the transaction cost notion of opportunism and asset specificity and game-theoretic notions of defection and sucker's payoff. This connection is at the root of Ouchi's (1980)⁹ fundamental problem of cooperation, referred to earlier, which integrated behavioral uncertainty with interdependence and vulnerability in the pursuit of self-gain through joint action: Without committed assets, a new, untested partner has no way of knowing the other's intentions, raising the prospects of short-term exploitation and agreement collapse. This risk of exposure to the other party's possible opportunistic withdrawal may be counterbalanced by both partners' commitment of nonrecoverable investments, which in turn alters the alliance structure and promotes goal congruence between partners.

Also Heide & George (1992) applied TCT when selecting the structure of the firms. For example, they used transaction cost to predict the relationship between the presence of specific assets and the presence of safeguards for the investing party. Due to this TCT has a prominent role in several streams of work in marketing literature. The theory is a blend of institutional economics and organizational and legal analysis. Its usefulness derives from its insight into the comparative properties of mechanisms for structuring exchange relationships and from its explicit identification of the conditions under which different structural arrangements are appropriate.

The aspect of choosing governance structures

Transaction Cost Economics (TCE) relies on three behavioral assumptions in predicting how firms *choose governance structures*; bounded rationality, opportunism, and risk neutrality (Chiles, et. al., 1996), which we have previously mentioned.

⁹ Cited by Parkhe, A. (1993).

The original framework presented the governance decision as a discrete choice between spot-market transactions and complete vertical integration. Recent theoretical studies have attempted to delineate more sharply the precise benefits of vertical integration as a safeguard, thus extending the analysis to intermediate situations. In a path-breaking analytic model, Grossman & Hart (1986), formally defined vertical integration as control over decisions and argued that the benefits of vertical integration are not attributable to ownership per se, but rather to the ability to exercise decision control. Hence, in situations where complete integration is not desirable or feasible, quasi-integration can be achieved in relationship between independent firms by establishing vertical control. In Stinchcombe's (1985) terminology, control involves establishing a vertical interfirm authority relation, which is the functional equivalent of an organizational hierarchy.

The extant TCE analysis thus offers a somewhat incomplete set of prescriptions. It identifies the conditions under which a firm has an incentive to structure relationships in a particular way (i.e., the presence of transaction-specific assets). Moreover, vertical control has been suggested as a functional substitute for ownership in nonintegrated situations.

The Transaction Cost Economics (Williamson, 1975, 1985, 1991) analysis of governance structure alternatives has also explored managers pursuing the kinds of business objectives used by the market, relying on their own organization, or using a mix-mode relationship (Ring & Van de Ven, 1992; Plain, 1993).

For example, a governance structure chosen under the uncertainty of disequilibrium to economize on subjective transaction costs at the moment of choice may be judged in error, as having failed to economize on objective transaction costs, when assessed ex-post by an outside observer. Hence, from the distance, ex-post equilibrium perspective of an outside observer, such failures to economize on transaction costs result not in an "optimal level of integration" as TCE would predict, but rather in a "preferred level of integration". However, from an up-close, ex-ante disequilibrium perspective of an actual decision maker, this choice of governance structure may have, in fact, been based on a transaction-cost-economizing rationale, given the uncertainty of the moment, hence, resulting in an optimal level of integration as understood at the moment of choice.

From the treatment of risk in TCE that the behavioral assumption of risk neutrality has received but sparse attention in the TCE literature to date. Williamson defended his own cursory treatment of the issue (which is relegated to the concluding section of his 1985 book) on the grounds. By adopting the simplifying assumption that all transactors are neutral in their attitudes to risk, Williamson argued attention is firmly focused on the transaction as the unit of analysis. A striking contrast can be observed in the TCE literature between the limited attention afforded to the assumption of risk neutrality, and the more direct focus on the behavioral assumptions of bounded rationality and opportunism. There are three important reasons why a closer examination of risk neutrality is called for. Firstly, it differs from the risk-aversion assumption of neoclassical economics. Given that “transaction cost analysis relies on an implicit analogy to neoclassical economics” (cited by Chiles, et. al., 1996), an explicit treatment of the differences in the behavioral assumptions of the two models is a prerequisite for any comparison between them. Secondly, psychological studies of risk taking in organizational contexts suggest that the assumption of single risk attitude for a firm may be inadequate and that risk preferences for a single firm vary in a systematic fashion on a spectrum from risk aversion through risk neutrality to risk seeking, influenced by a variety of contextual variables. Finally, the governance structure predicted by the TCE model will vary with the risk preference of the firm (Chiles, et. al, 1996).

Furthermore, vertical co-ordination can be viewed as a continuum. At one extreme lie spot markets where goods are exchanged between multiple buyers and sellers in the current time period, with price as the sole determinant of the final transaction. In other words, other aspects of transaction are non-negotiable – the buyer either accepts the product in its current form, or does not purchase it. In between the two extremes of spot market transactions and vertically integrated firms lie a myriad alternative ways of co-ordinating economic activity, from strategic alliances and formal written contracts, to vertical integration (Hobbs, 1996).

The aspect of motivation of firms to interorganization & international venture

The Transaction Cost Theory (TCT) also can explain the *motivation of firms to cooperate*. It has described the managerial environment which is needed to analyze the development, diffusion, and implementation of interorganizational systems (IOS). TCT, also emphasized the organization's concerns with efficiency within the external exchange operations, how organisations act under the influence of rational choice and environmental pressure. The Transaction Cost Theory argues that the cost of transactions between organisations is the main motivation behind an organization's actions (Hennart, 1988).

In current studies, transaction cost has been employed to explore factors moderating the relationship between collaboration and performance in foreign markets among international new venture. TCT by Williamson (1975, 1985) provides an excellent lens through which to examine the relative costs and benefits of collaboration and, more importantly, for understanding how those costs and benefits vary depending on the type of knowledge that is transferred between partners. This theory, frequently called Internationalization Theory within the international business literature (Rugman, 1981)¹⁰, has been used extensively to examine the entry mode choices of large multinational firms (Shrader, 2001). The TCT argument is that both collaboration and internalization involve several specific and substantial transaction costs. When the transaction costs of collaboration are high relative to the transaction costs of internalization, performance advantages are conferred to firms that internalize transfers within their own hierarchical structures. Logically, the reverse is also true. In other words, the relationship between collaboration and performance is moderated by the transaction costs of collaboration relative to the transaction costs of internalization.

The Transaction Cost Theory (TCT), as developed and applied in the international literature and market-entry research, is extended to the post-entry investment setting to isolate sources of value creation or dissipation from the governance changes effected by Joint venture (JV) partner buyout. This is how TCT has been developed and applied within the international economics and management fields. This perspective has proven

useful in explaining firms' initial adoption on JVs over alternative governance structures. Although this branch of the theory is often referred to as simply TCT, it is also referred to as internalization theory and appears within eclectic paradigm (Reuer, 2001). Another example, the work done by Hennart (1988) presented a Transaction Cost Theory (TCT) of *equity joint venture*. TCT of the choice between contracts, full ownership, and joint ventures. It distinguishes between scale and link joint ventures. Scale joint ventures arise when parents seek to internalize a failing market, but indivisibilities due to scale or scope economies make full ownership of the relevant assets inefficient.

The alliance aspect

Transaction cost economics has had a profound effect on analyses of interfirm collaboration (Williamson 1985). Many analyses of both domestic and international alliance formations utilize key concepts drawn from this body of literature. Transaction cost paradigm provides a useful lens through which researchers can view essential aspects of alliances. For example, Duassaige et al. (2000) argued that transaction cost approach is the main theoretical explanation for answering why firms form alliances. The Transaction Cost Theory viewed by Parkhe (1993) merged research grounded in game theory insights with the logic of transaction cost economics in a general model of *alliance structuring* to test the formation, maintenance, and dissolution of interfirm alliances. Some researchers (Osborn & Hagedoorn, 1997) realized that with all of the multiple interpretations of transaction cost economics, it is quickly becoming more of a guiding metaphor than a tested set of propositions. Several substantive developments have added to the robustness of the transaction view even as they have moved away from the initial statements by such scholars as Williamson. The developments of the transaction view are described through three such developments below.

One development is the expansion in the variety forms of alliances takes in the functions they serve. Once analyses merely sought to examine the gross choices among markets, hierarchies, and hybrid forms (mainly joint ventures and franchising agreements). Early studies, and even many recent ones, placed alliance administrative forms on a continuum from quasi-markets to quasi-hierarchies (e.g., Gulati, 1995). Now

¹⁰ Cited by Shrader, R.C. (2001).

scholars are recognizing that distinct administrative forms of alliances should be considered separate and unique entities with identifiable capabilities and limitations. The differentiation among administrative forms has been accompanied by a broader view of alliance functions. Some still see alliances as just instruments to reduce transaction cost, but others suggest they may perform a wide variety of functions.

A second development is an elaboration of some key *alliance characteristics* and the embeddedness of these characteristics. Once it was common to separate the description of an alliance from an account of its setting. However, recent studies suggest that the direction of information flow through alliances, industry characteristics, and national origins are embedded in the administrative form and function of these entities (Osborn & Bauhn, 1990).

This embeddedness of the administrative form in its environment has also led to a third development: a profound change has occurred in the research design of alliance studies, even though there has been no explicit theoretical recognition of embeddedness. Some traditional examinations of transaction costs were based on the assumption that the level of some proxy variable reflected an aspect of the transaction cost perspective. Typical examples included proxies for uncertainty, asset specificity, or “small numbers bargain”. For instance, variations in industry R&D have been considered surrogates for uncertainty. Industries with higher R&D rates were thus expected to have a higher proportion of alliances with more integrated forms (e.g., joint ventures) than more quasi-market forms (e.g., agreement). This idea and other cross-national and cross-industry expectations have not been generally supported, as there appears to be nonlinear, complex variation across industry sectors and nations. The notion that a single surrogate can represent a singular unmeasured transaction cost construct seems to be losing favor.

The recent work from Peng & Tan, (1998) has also analyzed strategic alliances via TCT. They viewed Transaction cost as also being used to explain three basic strategies for firms’ growth: generic growth, acquisition, and network expansion. Generic growth can be considered as growth through the hierarchy, and acquisition is growth via the market. By extension, network expansion can be regarded as a strategy of growth that is neither market nor hierarchy: It relies on strategic alliances and joint ventures whereby two or more firms combine forces .

Although, the literature has reviewed the wide advantages of TCT, limitations have also been found which will be explained in the next section.

2.4.1 Limitations of Transaction cost

Transaction cost has been found some limitations, as explained by Chiles, et. al. (1996) the perceived shortcomings of the TCE paradigm are in part attributable to the inadequate treatment of risk and trust in earlier empirical and theoretical work. Williamson's adoption of the behavioral assumption of risk neutrality has had the effect of rendering TCE silent on one of the fundamental determinants of economic behaviour.

The property rights theory has also criticized transaction cost for presenting some limitations: accurate predications about the structure of the collaboration arrangement, for example when there are R&D activities implied in the relationship are not fully accomplished. Transaction cost generally anticipates structures closer to hierarchy but some empirical studies have not found this relationship at all (Rialp & Salas, 2000; Rialp et. Al., 2001).

Accordingly Transaction cost arguments are often used to justify the introduction of hierarchical controls in collaborations, but ownership dimension of going from contracts to hierarchies has been ignored in the past and with it the so called costs of ownership. Rialp & Salas (2000) used transaction cost theory (which they acknowledged had limited from) to explain that the governance form in inter-firm collaborations requires to properly identify the relevant attributes involved in the transaction. The transaction attributes listed as determinants of the cost of governance, differ across the authors. Williamson (1985) selected three: the nature of the involved assets, general or specific; the available information, uncertainty and symmetry; the frequency under which the transaction takes place. Milgrom & Roberts (1992)¹¹, on the other hand, indicate five potentially relevant attributes: the specificity of investments, frequency and duration between consecutive transactions; complexity and uncertainty about possible actions in the future; difficulty of measuring the performance along the transaction; interrelations among transaction and/or persons involved.

¹¹ Cited by Rialp & Salas (2000).

Additionally, the transaction costs associated with collaboration are directly related to the type of knowledge that is to be transferred as well as to contextual factors, including bounded rationality and opportunism. TCE analysis also assumes that economic actors are opportunistic. The implications of trusting behaviour in designing governance mechanisms are generally ignored. Williamson (1991:269) has pointed out that TCE has been criticized because it deals with polar-forms markets and hierarchies to the neglect of intermediate or hybrid forms. Although cognizant of alternative modes of governance, the tendency to emphasize markets and hierarchies in the formulation of the governance question leaves a significant void in Ring & Van de Ven, (1992)'s understanding of alternatives. Especially, in the case of alternative forms for governance of repeated transactions of highly idiosyncratic assets under conditions of uncertainty, and small number bargaining, such as biotechnology research, transactional joint ventures, or extractive resources exploration. TCE theorists argue that these kinds of transactions are best governed by hierarchy because it solves many of the problems associated with opportunistic behaviour by the parties.

It is worthwhile to differentiate this branch of the theory from related transaction treatments of alliances in the economic and strategy fields. Unlike transaction cost analyses of alliances that examine features of individual transactions such as asset specificity or uncertainty within the Williamsonian vertical integration frameworks, this includes firm-level variables such as the firm's stock of intangible assets (i.e., technological know-how, marketing ability and goodwill, etc.) as well as country-level variables such as cultural differences and political risk.

The limitations explained above, have led this study to find some theories alternative, which could help to analyze the purpose of this research. For example, transaction cost has integrated the property rights theory in relation to the boundaries of the firm, by explaining the choice of a governance form in interfirm collaborations. The reason "why these theories" will be presented in the next section.

2.5 Complementary Theories

2.5.1 The Property Rights aspect

Furubotn & Pejovich (1972) explain property rights as an individual's net valuation, in expected terms, of the ability to directly consume the services of an asset (including, e.g., a monopoly position) (Foss & Foss, 2002). The property rights theorist directs attention to rights rather than to goods because fundamentally goods typically have many attributes, such as, characteristics and services. Ownership of assets is especially pertinent to the definition of property rights, where this consists of three elements: the right to use the asset, the right to appropriate returns from the asset, and the right to change the asset's form and/or substance (Furubotn and Pejovich, 1972).

Many scholars (Aghion & Tirole, 1994a, 1994b; Rialp & Salas, 2000, Rialp et al., 2001) have found the property rights theory (PRT) can explain some behaviors while TCT can not. For example, if governance structure moves away from the market, then hybrids will be the considered governance structure and price becomes less and less important: what is going to be the main aspect? Ownership. In the world where price can be fixed, ownership is irrelevant. However, when the price can not be fixed, the allocation of decision rights (ownership) matters in terms of intensives. Aghion & Tirole (1994a, 1994b) explained how the allocation of property rights of the innovations could affect both the frequency and the magnitude of these innovations. It also affects the allocation of control in the innovation process and monetary compensations in play. The scholars (Grossman & Hart, 1986; Hart & Moor, 1990; Hart, 1995) asserted property rights theory which addressed governance forms; separated ownership. Joint ownership, trilateral governance, and single ownership to analyze the collaboration between firms and one technology center, which presented the typology of relationships. Moreover, they have shown that R&D collaboration activities do not need to be organized through hierarchical solutions.

As we have seen, the property rights theory is able to explain some behavioural patterns which TCT can not but it still is not enough to analyze some case for example, interorganisational strategies. In this case transactional value theory could be applied and this theory will be presented in the section below.

2.5.2 Transactional Value approach

Many researchers (Balakrishnan & Koza, forthcoming; Hennart, 1988; Pisano & Teece, 1987) have generally adopted the original logic that Williamson (1975, 1985) developed and employed in his analysis of vertical integration. At first glance, standard transaction cost logic seems well-suited to the study of interorganizational strategies, which are typically viewed as falling into the intermediate state (Joskow, 1988) between markets and hierarchies. However, some researchers (Zajac & Olsen, 1993; Rialp et. al., 2001, 2002) have found that TCT perspective is limited in its ability to explain interorganizational strategies. For example, TCT's neglect of the interdependence between exchange partners, as shown in an analysis of the transaction approach to vertical integration, and TCT's intellectual kinship to another branch of the industrial organization literature.

The work done by Zajac & Olsen (1993) offered a transactional analysis framework that is based on joint value maximization, and proposed a set of processual dimensions relevant to creating and claiming value in interorganizational exchange relationships. They stressed that firms would gain more opportunities for joint value recognized over time through enhanced information acquisition and exchange, along with the emergence of shared interests. Such processes in interorganizational strategies can result in a transformation that leads to greater expected net benefits for both parties, rather than a transformation that leads to greater expected losses for one party due to an increased risk of costly exploitation.

This research has reviewed the literature relating to TCT in various aspects, particularly when applied to strategic alliances. Also, as already mentioned the TCT is a useful theory to study alliances between firms because it can explain some partial of behaviour of allied firms, however, because of its limitations, therefore it can not explain all of our objectives. As mentioned, the PRT was also considered to help answer research questions posed in this study. Furthermore, we also found that TVT could be used advantageously to explain the long term relationship between partners. It is important to point out that TCT, PRT, and TVT constitute the model chosen for this study and offer a good explanation for strategic alliances. In the next chapter these three theories will be presented more integrately.

2.6 Bibliography

Aghion, P. & Tirole, J. (1994a). *The Management of Innovation*, The Quarterly Journal of Economics, 109, p.1,185-1,209.

Aghion, P. & Tirole, J. (1994b). *Opening the Back Box of Innovation*, European Economic Review, 38, p.701-710.

Balakrishnan, S. & Koza, M.P. (forthcoming). *Information asymmetry, adverse Selection and Joint Ventures*, Journal of Economic Behaviour and Organization.

Barney, J. (1991). *Firm Resources and Sustained Competitive Advantage*, Journal of Management, 17, p.99-120.

Baum, J.A.C. (2000). *Don't go it alone: Alliance Network Composition and Start ups' Performance in Canadian Biotechnology*, Strategic Management Journal, 21, p.267-294.

Bhattacharya, R., Devinney, T.M. & Pillutla, M.M. (1998). *A Formal Model of Trust Based On Outcomes*, Academy of Management Review, 23(3), p.459-472.

Bleeke, J. A. and Ernst, D. R. (1993). *Collaborating to Compete*, New York: John Wiley and Sons.

Blodgett, L.L. (1991). *Part Contributions as Predictors of Equity Share in International Joint Ventures*, Journal of International Business Studies, 22, p.63-78.

Cardwell, R. & Bolon, D. (1996). *Strategic Alliances and Hospital: a US Perspective*, Journal of Management in Medicine, 10(2), p.40-46. <http://www.emerald.com>

Carnes, K.C. (2000). *A Progress Report on International Auditing Reciprocity*, Managerial Auditing Journal, 15(9), p.464-468.

Chan, P.S., & Wong, A. (1994). *Global Strategic Alliances and Organizational Learning*, Leadership & Organization Development Journal, 15(4), p.31-36.

Chen, Z. (1999). *A Theory of International Strategic Alliance*, <Http://www.carleton.ca/economics/cep/cep99-08.pdf>.

Chiles, T.H., & McMackin, J.F. (1996). *Integrating Variable Risk Preferences, Trust, and Transaction Cost Economics*, Academy of Management Review, 21(1), p.73-97.

Coase, R.H. (1937). *The Nature of The Firm*, Economica, 4(n.s.), 1937, p.386-405. Reprinted in R.H. Coase, (1988) *The Firm, the Market, and law*, Chicaco: University of Chicago Press, 33-35.

Contractor, F. & Lorange, P. (Eds). (1988). *Co-operative Strategies in International Business*, Lexington Books, Lexington, Ma.

Cook, K.S. (1977). *Exchange and Power in Networks of Interorganizational Relations*, Sociological Quarterly, 18, p.62-82.

Das, S., Sen, P., & Sengupta, S. (1998). *Impact of Strategic alliances on firm valuation*, Academy of Management Journal, 41(1), p.27-41.

Das, T.K. & Teng, B. (1999), In Press, *Instabilities of Strategic Alliances, An Internal Tensions Perspective*, Organization Science.

Das, T. K., & Teng, B. (2000a). *A resource-based theory of strategic alliances*, Journal of Management, 26, p.31-61.

DiMaggio, P.J. & Powell, W.W. (1983). *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*. American Sociological Review, 48, p.147-160.

Dowling, M. J., Roering, W. D., Carlin, B. A., & Wisniewski, J. (1996). *Multifaceted relationships under cooperation: description and theory*, Journal of Management Inquiry, 5(2), p.155-167.

Doz, Y., Hamel, G., & Prahalad, C.K. (1989). *Collaborate With Your Competitors & Win*, Harvard Business Review, 67, p.133-139.

Dussauge, P., Garrette, B., & Mitchell, W. (2000). *Learning From Competing Partners: Outcomes and Durations of Scale and Link Alliances in Europe, North America and Asia*, Strategic management Journal, 21(2), p.99-126.

Eisenhardt, K.M., & Schoonhoven, C.B. (1996). *Resource-Based View of Strategic Alliance Formation: Strategic and Social Effects of Entrepreneurial Firms*, Organization Science, 7, p.136-150.

Faulkner, D. & Johnson, G., (1992). *The Challenge of Strategic Management*. Kogan Page, London. p.118-143.

Fearne, A. (1994). *Strategic Alliances in the European Food Industry*, European Business Review, 94(4), p.30-36. <http://www.emerald.com>

Foss, N. (1999). *Networks, Capabilities and Competitive Advantage*, Scandinavian Journal of Management, (15)1, p. 1-15.

Furubotn, E.G., & Pejovich, S. (1972). *Property Right and Economic Theory: A Survey of Recent Literature*, Journal of Economic Literature, 10(4), p.1137-1162.

Gates, S. (1993). *Strategic alliances: Guidelines for Successful Management*. New York: Conference Board.

Gibson, B., Weaver, K.M., and Dickson P.H. (1997). *Strategic Alliance Use, Firm Size, Outcome Satisfaction and Partner Behaviors*, *The Journal of SEAANZ*, 5(1), p.3-15.

Grossman, S.J., & Hart, O.D. (1986). *The Costs and Benefits of Ownership: A theory of Vertical and Lateral Integration*, *Journal of Political Economy*, 94(4), p.691-719.

Gulati, R. (1995). *Does Family Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances*, *Academy of Management Journal*, 38(1), p.85-112.

Gulati, R. (1998). *Alliances and Networks*, *Strategic Management Journal*, 19, p.293-317.

Gulati, R. (1998). *The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances*, *Administrative Science Quarterly*, 43(4), p.781-814.

Gulati, R. (1999). *Network Location and Learning: The influence of Network Resources and Firm Capabilities on Alliance Formation*, *Strategic Management Journal*, 20, p.397-420.

Hagedoom, J. (1993). *Understanding the rationale of strategic technology partnering: Interorganizational modes of cooperation and sectoral differences*, *Strategic Management Journal*, 14, p.371- 385.

Hamel, G. (1991). *Competition for Competence and Inter-Partner Learning Within International Strategic Alliances*, *Strategic Management Journal*, 12 (Special Issue), p.83-103

Hayek, F.A. (1945). *The Use of Knowledge in Society*, *American Economic Review*, 35, p.519-530.

Hennart, J.F. (1988). *A Transaction costs theory of Equity Joint Ventures*, *Strategic Management Journal*, 9, 361-374.

Hamel, G., Doz, YL., & Prahalad., C.K. (1989). *Collaborate With Your Competitors and Win*, *Harvard Business Review*, 67(1), p.133-139.

Hart, O. D. (1995). *Firms, Contracts, and Financial Structure*, London: Oxford University Press.

Hart, O., & Moore, J. (1990). *Property Rights and the Nature of the Firm*, *Journal of Political Economy*, 98(6), p. 1119-1158.

Harrigan, K.R., (1992). *Strategic Alliances and partner Asymmetries*, Strategy Research Center, Graduate School of Business, Columbia University, New York, N.Y.

Harrigan, K.R., (1986). *Managing for Joint Venture Success*, Lexington, M.A: Lexington Books.

Heide, J., & George, J. (1992). *Do Norms Matter in Marketing Relationship?*, Journal of Marketing, 56(2), p.32-47.

Heide, J.B., & Miner, A.S. (1992). *The Shadow of the Future: Effects of Anticipated Interaction and Frequency of Contact on Buyer-Seller Cooperation*. Academy of Management Journal, 35, P.265-291.

Heiman, B., & Nickerson, J.A (2002). *Towards Reconciling Transaction Cost Economics and the Knowledge-based View of the Firm: The Context of Interfirm Collaborations*, Journal of the Economics of Business, 9(1), p.97-116

Hendrick, T. & Ellram, L. (1993). *Strategic Supplier Partnering: An International Study*, Tempe, AZ: Center For Advanced Purchasing Studies.

Hennart, J. F. (1988). *A transaction costs theory of Equity Joint Ventures*, Strategic Management Journal, 9, p.361-374.

Hennart, J. F., Kim, D. J., & Zeng, M. (1998). *The Impact of Joint Venture Status on the Longevity of Japanese Stakes in U.S. Manufacturing Affiliates*, Organization Science, 9, p.382-395.

Hill, C.M., Robinson, T.M., & Bailey, J. (1998). *Skill and Competence Transfers in European retail alliances: a Comparison Between Alliances and Joint Ventures*, European Business Review, 98(6), 300-310.

Hitt, M.A., Levitas, E., Arregle, J., & Borza, A. (2000). *Partner Selection in Emerging and Developed Market Contexts: Resource-Based and Organizational Learning Perspectives*, Academy of Management Journal, 43(3), p.449-467.

Hobbs, J.E (1996). *A Transaction cost approach to supply chain management*, Research paper, MCB university press, 1(2), p.15-27. <http://www.emerald.com>

Hobbs, J.E (1996). *A Transaction cost analysis of quality, traceability and animal welfare issues in UK beef retailing*, British journal, 98(6), p.16-26. <http://www.emerald.com>

Hoffman, W.H., & Schaper, R.W. (2001). *Acquire or Ally? A Strategy Framework For Deciding Between Acquisition and Cooperation*, Management International Review, 41 (2), p.131-159.

International Note, (1996). *The Information Revolution and Its Impact on SME Strategy: The Asia Pacific Economic Cooperative Forum as a Model*, Journal of Small Business Management, 34(1), p.71-77.

Johnston, R. & Lawrence, P (1988), *Beyond vertical integration: the rise of the value-adding partnership*, Harvard Business Review, July- August, p.94-101.

Joskow, P. (1988). *Asset Specificity and the Structure of Vertical Relationship: Empirical Evidence*, Journal of Law, Economics, and Organizations, 4, spring.

Kale, P., Singh, H., & Perlmutter, H. (2000). *Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital*, Strategic Management Journal, 21, p.217-237.

Killing, J.P. (1988). *Understanding alliances: The role of Task and Organizational Complexity*. In F.J. Contractor & P. Lorange (Eds.), *Cooperative Strategies in International Business*. P.55-68. Lexington, MA: Lexington Books.

Khanna, T., Gulati, R., & Nitin N. (1994). *Alliances as Learning Races*, In Dorothy Moore (ed.), *Academy of Management Proceedings*: p.42-46.

Kogut, B. (1988). *Joint Ventures: Theoretical and Empirical Perspectives*, Strategic Management Journal, 9, p.319-332.

Koza, M. & Lewin, A. (1998). *The Co-Evolution of Strategic Alliances*, Organization Science, 9(3), p.255-264.

Lane, P.J., & Lubatkin, M. (1998). *Relative Absorptive Capacity and Interorganizational Learning*, Strategic Management Journal, 19, p.461-477.

Lei, D. and Slocum, J.W., (1992). *Global Strategy, Competence Building and Strategic Alliances*, California Management Review, Fall, p.81-2.

Levinthal, D.A., & Fichman, M. (1988). *Dynamics of Interorganizational Attachments: Auditor-Client Relations*. Administrative Science Quarterly, 33, P.345-369.

Madhok, A., & Tallman, S. D. (1998). *Resources, Transactions and Risk: Managing Value Through Interfirm Collaborative Relationships*. Organization Science, 9, p.326-339.

Menard, C. (1997). *Transaction Cost Economics*, Edward Elgar Publishing, U.K.

Mowery, D.Cg, Oxley, J.E., & Silverman, B.S. (1996). *Strategic Alliances and Interfirm Knowledge Transfer*, Strategic Management Journal, 17, p.77-91.

Osborn, R., & Baughn, C.C. (1990). *Forms of Interorganizational governance for multinational Alliances*, *Academy of Management Journal*, 33, p.503-519.

Osborn, R.N., & Hagedoorn, J. (1997). *The institutionalization and Evolutionary Dynamics of Interorganizational Alliances and Networks*, *Academy of Management Journal*, 40(2), p. 261-278.

Parkhe, A. (1993). *Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation*, *Academy of Management Journal*, 36(4), p.794-829.

Ohmae, K. (1989). *The Global Logic of Strategic Alliances*, *Harvard Business Review*, 67, p.143-154.

Peng, M.W., & Tan, J.J. (1998). *Toward Alliance Postsocialism: Business Strategies in a Transitional Economy*, *Journal of Applied Management Studies*, 7(1), p.145-148.

Pfeffer, J., & Nowack, P. (1976). *Joint Ventures and Interorganizational Interdependence*, *Administrative Science Quarterly*, 21, p.398-418.

Pisano, G. & Teece, D. (1987). *Collaborative Arrangements and Global Technology Strategy: Some Evidence From the Telecommunications Equipment Industry*, In Rosenbloom, R. and Burgelman, R. (Eds.), *Research on Technological Innovation, Management, and Policy: Volume IV*. Greenwich, Conn.: JAI Press.

Plains, W. (1993). *The Institutions of Industrial Governance*, *International Studies of Management & Organization*, 23(1), p.29-37.

Porter, M.E., & Fuller, M.B. (1986). *Coalitions and Global Strategy*, In Michael E. Porter (ed.), *Competition in Global Industries*, p. 314-315. Boston: Harvard Business School Press.

Reed, R., & DeFillippi, R. J. (1990). *Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage*, *Academy of Management Review*, 15, p.88-102.

Reuer, J.J. (2001). *From Hybrids to Hierarchies: Shareholder Wealth Effects of Joint Venture Partner Buyouts*, *Strategic Management Journal*, 22(1), p.27-44.

Rialp, J. & Salas, V.S. (2000). *The Cost of Ownership In The Governance of Interfirm Collaborations*, Working Paper in The Documents De Treball D'economia de L'empresa at Universidad Autonoma de Barcelona.

Rialp, J. & A, Santamaria, L. (2001). *Collaboration Strategies and Technological Innovation: A Contractual Perspective of the Relationship Between Firms and Technological Centers*, Paper Presented in Euram's conference, Italy.

- Ring, P.S., & Van de Ven, A.H. (1992). *Structuring Cooperative Relations Between Organization*, Strategic Management Journal, 13(7), p.483-498.
- Ring, P.S., & Van de Ven, A.H. (1994). *Developmental process of cooperative interorganizational relationships*, Academy of Management Review, 19(1), p.90-101.
- Saxton, T. (1997). *The Effects of Partner and Relationship Characteristics on Alliance Outcomes*, Academy of Management Journal, 40(2), p.443-461.
- Shamdasani, P.N., & Sheth, J.N. (1994). *An experiment approach to investigating satisfaction and continuity in Marketing Alliances*, European Journal of Marketing, 29(4), p.6-23.
- Shan, W. & Visudtibhan, K. (1990). *Cooperative Strategy in Commercializing an Emerging Technology*, European Journal of Operational Research, 47, p.172-181.
- Sparrowe, R.T. & Liden, R.C. (1997). *Process and Structure in Leader Member Exchange*, Academy of Management Review, 22(2), p.522-552.
- Shrader, R.C. (2001). *Collaboration and Performance in Foreign Markets: The Case of Young High-Technology Manufacturing Firms*, Academy of Management Journal, 44(1), p.45-61.
- Stinchcombe, A.L. (1985). *Contracts as Hierarchical Documents*, In A. Stinchcombe and C. Heimer (eds.), *Organization Theory and Project Management*: 121-171. Bergen, Norway: Norwegian University Press.
- Stuart, T.E. (1998). *Network Positions and Propensities to Collaborate: An Investigation of Strategic Alliance Formation in a High-Technology Industry*, Administrative Science Quarterly, 43, p.668-698.
- Surased, J. (2001). *Examples of Strategic Alliance in SMC among SMEs*, www.smesupplychain.net/pr6.htm
- Tallman, S.B., & Shenkar, O. (1990). *Interantional Cooperative Venture Strategies: Outward Investment and Small Firms From NICs*, Management International Review, 30, p.299-315.
- Thechatakerng, S. (2000). *Strategic Alliances and Performances of Firm in Fruit and Vegetable Processing Industry in the Northern Region of Thailand*, the Unpublished 7 Credits Research Paper, Presented at Universitat Autònoma de Barcelona.
- Thorelli, H.B. (1986). *Networks: Between Markets and Hierarchies*, Strategic Management Journal, 7, p.37-51.
- Van de Ven, A.H. (1976). *On the Nature, Formation, and Maintenance of Relations Among Organizations*. Academy of Management Review, 1, p.24-36.

Varadarajan, R. (1994). *Strategic Alliances for Competitive Advantage*, Presented at the Global Strategic Alliance Seminar, International Trade Association of Greater Chicago (May).

Varadarajan, P., and Cunningham, Margaret H (1995). *Strategic Alliances: A Synthesis of Conceptual Foundations*, Journal of the Academy of Marketing Science, 23(4), p.282-296.

Veciana, J.M. (1970). *Formas Colectivas de Empresa en el Ambito Economico*, Cesea. Madrid.

Vyas, M., Shelburn, W.L., & Rogers, D.C. (1995). *An Analysis of Strategic Alliances: Forms, Function and Framework*, Journal of Business & Industrial Marketing, 19(3), p.47-60.

Wey, J.y.J. & Gibson, D.V. (1991). *Influence of The External Environment on Interorganisational system: An Integration of Transaction Costs and Resource Dependence Perspectives*, System Sciences, Proceedings of The Twenty-Fourth Annual Hawaii, International Conference, 4, p.501.507.

Williamson, O.E. (1975). *Markets and Hierarchies*. New York: Free Press.

Williamson, O.E. (1985). *The Economic Institutions of Capitalism*. New York: Free Press.

Williamson, O.E., (1986). *Economic Organization-Firms, Markets and Policy Control*, Harvester Wheatsheaf, Hamel Hempstead.

Williamson, O.E. (1991). *Comparative Economic Organization: The Analysis of Discrete Structural Alternatives*, Administrative Science Quarterly, 36, 269-296

Williamson, O.E. & Masten, S.E. (1999). *The Economics of Transaction costs*, Edward Elgar Publishing. U.K.

Yoshino, M.Y., & Rangan, U.S. (1995). *Strategic Alliances, An Entrepreneurial Approach to Globalization*, Boston, M.A. Harvard Business School Press.

Zajac, E.J. & Olsen, C.P. (1993). *From Transaction Cost to Transactional Value Analysis: Implication for the Study of Interorganizational Strategies*, Journal of Management Studies, 30(1), p.131-145.

Zajac, E.J. (1998). *Commentary on Alliances and Networks by Gulati*, Strategic Management Journal, 19, p. 319-321.

Chapter Three

3. Theoretical framework

3.1. Introduction

As already mentioned, the purpose of this study is to analyse the behaviour and satisfaction of Thai firms participating in collaboration agreements. The following sections will try to demonstrate how the behavior of the parties could be related to the structure of the collaboration agreement. So, the selection of the structure and its relationship with behavior in a collaboration relationship will be analysed.

This section is not going to focus on the analysis of the motivation for establishing a collaboration agreement. The assumption is that firms have already decided upon the collaboration as the best option for developing their business. However, it is known that there are a lot of different structures for implementing collaboration agreements. In fact, in the relevant literature, it is possible to find different articles trying to predict which structure should be selected for developing a collaboration (Pisano, 1989; Pisano et. al., 1988; Osborn and Baughn, 1990; Gulati, 1995; Oxley, 1997; Gulati and Singh, 1998). Many of these articles considered Transaction Cost Theory (TCT) as the theoretical framework, so they link the selected structure with characteristics of the activity being the origin of the relationship and also characteristics of the partners (see for example, Gulati, 1995; or Oxley, 1997)¹².

3.2. Theoretical Model

In this section, the theoretical framework that will be considered in this dissertation to explain the selected structure for developing a collaboration agreement will be presented. However, before presenting this theoretical framework, this study

¹² Other studies focused on strategic alliances that have considered TCT as a suitable theoretical framework have been mentioned in the previous chapter (Osborn & Bauhn, 1990; Osborn & Hagedoorn, 1997; Peng & Tan, 1998; Adler, T.R., & Scherer, R.F., 1999; Love et.al., 2002).

believes that it is necessary to point out the classification of governance forms that will be analyzed in this dissertation.

Agents participating in exchange and/or production are often forced to rely on incomplete contracts¹³, where the allocation of “residual decision rights” solves the contingencies when they appear. To hold such rights over the non-human assets of the transaction means to have the rights to decide on any non-anticipated contingency, and matters in terms of incentives to invest more or less in the specific assets, before the transaction takes place. Therefore, governance forms can be classified in two main groups attending to how residual decision rights are allocated:

- Separated ownership: ownership of the assets is distributed among transacting parties. Each party participating possesses decision rights individually over some of the assets participating in the relationship. The degree of involvement among the parties is not always the same when the ownership is separated. When this degree is high, although the ownership remains separated, the parties can agree to establish penalties for certain behavior or explicit dispute resolution mechanisms. Therefore, we could consider separated ownership with and without safeguards. For example, Oxley (1997) distinguishes between “bilateral” (less safeguards) and “multilateral” (more safeguards) contracts.

Joint ownership: each of the two or more transacting parties has veto power on the use of the assets. A 50 – 50 equity joint venture between two firms will be a form of joint ownership. In this case, the fact that a new firm is created suggests that the joint venture is substituted in the market by the hierarchy. Notice, however, that this governance form differs from that of pure hierarchy (hierarchical governance) because, in the later, assets on both sides of the transaction are owned by a single party; single ownership.

Obviously, this classification considers two groups of collaboration agreements. In the literature, it is possible to find many of examples of this (see, for example; Parkhe, 1993; Osborn & Baughn, 1990). This classification is considered objective and allows

¹³ When the contract is written down it is impossible or extremely costly to anticipate all future contingencies, or such contingencies will be unverifiable by third parties (mainly the courts) when they actually occur.

for clarity rather than confusion caused by terminology. Furthermore, it fits perfectly with the theoretical framework presented in the next sections because, as a component, this framework contains the property right theory.

3.2.1. Transaction Cost Theory

Transaction cost analysis belongs to the “New Institutional Economics” paradigm, which over time, has supplanted traditional neoclassical economics. Although neoclassical economics has largely ignored the concept of the firm by viewing it strictly as a production function (Barney & Hesterly, 1996). Transaction cost analysis explicitly views the firms as a *governance structure*. One of Coase’s (1937) initial propositions was that firms and markets are alternative governance structures that differ in their transaction costs. Specifically, Coase proposed that under certain conditions, the costs of conducting economic exchange in a market could exceed the costs of organizing the exchange within a firm. In this context, transaction costs are “the costs of running the system” and include such ex ante costs as drafting and negotiating contracts, and such ex post costs as monitoring and enforcing agreements.

Over the past two decades, Williamson (1975, 1985, 1996) has added considerable precision to Coase’s general argument by identifying the types of exchanges that are more appropriately conducted within firm boundaries rather than within the market. He also augmented Coase’s initial framework by suggesting that transaction costs include both the direct costs of managing relationships and the possible opportunity costs of making inferior governance decisions. Williamson’s microanalytical framework rests on the interplay between two main assumptions of human behaviour (i.e., bounded rationality and opportunism) and two key dimensions of transactions (i.e., assets specificity and uncertainty).

The concept of Transaction Cost is prominent in strategy and organizational theory research, especially with regard to why firms diversify, engage in joint ventures and multinational alliances, buy goods and services in the open market, and rely on informal agreements in conducting business transactions (Monteverde & Teece, 1982a, 1982b; Walker & Weber, 1984; Palay, 1985; Masten et.al.,1989; Osborn & Baughn, 1990). Gomes & Casseres (1989, 1990), for example, used Transaction Cost arguments to

explain that multinational enterprises will use foreign direct investment when it is inefficient to transfer capabilities through contracts.

The basic proposition of Transaction Costs Economics establishes that “transactions which differ in their attributes, are aligned with governance structures which differ in their costs and competencies in a discriminatory way” (Williamson, 1991, p. 277). Basically, Transaction Costs Economics considers that transactions could be governed by three generic governance structures: market, hybrid or hierarchy. The transaction attributes listed as determinants of the cost of governance (the cost of using one of these structures) include: the nature of the involved assets, general or specific; the available information, uncertainty, complexity and symmetry; the frequency under which the transaction takes place and the duration; the difficulty of measuring the performance throughout the transaction and the interrelations among transaction and/or persons involved (Coase, 1937; Klein et.al., 1978; Williamson 1975, 1985; Milgrom and Roberts, 1992).

In this study the term “hybrid” refers to “interfirm collaboration”, defined as any non transitory relation among independent companies involving exchange and/or sharing of resources and capabilities to obtain mutually beneficial outcomes.

Therefore this definition, identifies transactions where there are at least two firms and both remain legally independent entities¹⁴ (so the transaction does not take place within a single firm, as would be the case if it was the result of a merger, acquisition or internal development).

¹⁴ We are not considering the extreme possibility of vertical integration in this paper due to the fact that the main characteristic of the collaboration agreement (participation of more than one firm and their survival) vanishes. We have to recognize that to ignore two of the possible alternatives, spot contracting and merger or internal development, when explaining the choice of governance forms in collaboration, may in fact bias the results. In any case, the literature on the determinants of “vertical integration” is very large. Worth mentioning because of its proximity to interfirm collaboration, is the study of vertical integration in the context of the theory of the multinational firm; Gatignon and Anderson (1988) as it is an excellent example of work in this field.

Each hybrid implies alternative ways of solving the coordination and incentive problems of the collective action, different amounts of explicit resources employed in such solutions, and different residual or opportunity losses. The contribution of TCE has been to identify attributes of each transaction and dimensions of the different governance forms, such that a reduced cost function can be identified relating transaction costs and attributes of the transaction, for each possible governance forms. In general, more complex interfirm collaboration also implies more transaction costs, but the evolution and nature of such costs will differ from one governance form to another and therefore the most efficient form can be selected.

One type of hybrid form (which can be considered closer to the market because it presents similar rules for acting (see Imai and Itami (1987)) is based on simple contracts. In fact, contract is addressed as a governance device limiting opportunism by either party (Hallen et. al., 1991). However, as uncertainty increases, for example under the presence of resources specificities which create bilateral relationships, intense interdependencies and high coordination is needed, contracts have to be necessarily more incomplete and exit can not longer protect efficiently against ex-post bargaining and opportunism (Oxley, 1997).

On the other hand, opportunism is one of the behaviours of the parties that has a significant influence in the results obtained in the collaboration relationship. It is defined by Williamson (1979: 234) as self-interest seeking guile. That is, businesses and individuals will sometimes seek to exploit a situation to their own advantage. Opportunism extends the conventional assumption that economic agents are guided by considerations of self-interest, to make allowance for strategic behavior. As we have mentioned before, the behavior of opportunism could vary depending on the form of contract chosen. When the likelihood of opportunistic behaviour is higher, a simple contract cannot be the most efficient structure for managing the relationship.

Opportunism emerges because of the problem of separating contributions generated cost in reaching price agreement. While this is a seemingly unattractive view of human nature, Williamson (1985) states there is a risk that people may act in an opportunistic manner. This risk is greater when there are a small number of organizations

in a bargaining position; for example, in the knowledge that other companies are (for whatever reason) unable to undertake a subcontract, one subcontractor firm may attempt to negotiate a higher price with a contractor.

As it has been pointed out before, alliances may be formed through a wide variety of contractual arrangements. In general, an alliance is a contractual arrangement that involves a division of labor in searching for specialists as well as sharing of risks and liabilities. Such a contractual arrangement will also decrease extra costs due to project delays and managerial complexity. Under alliances, the firms/agents work in collaboration, and each firm/agent has a residual claimant. While the contribution of each may not be directly priced, they will be completely honest because they will be paid for every contribution.

Opportunism can be seen as the opposite of partner cooperation in strategic alliances. Opportunistic behaviour in alliances is exemplified by cheating, shirking, distorting information, misleading partners, and providing substandard products/services. Parkhe (1993) has also noted that opportunistic behaviour is “individually rational yet produces a collectively suboptimal outcome”. Opportunism is a relatively unflattering behavioural assumption and many understandably prefer to describe self-interestedness in a more being way (Menard, 1997). It is reasonable to say that prior to transaction one is uncertain about the partner’s potential opportunism, and hence should take opportunism into account. Additionally, taking time into account, in on going transactions, it is unreasonable to ignore the formation of perceptions about propensities towards opportunism (Nooteboom, 1996).

Evidence suggests that firms entering alliances are potentially vulnerable to the opportunistic behavior of their partners and in the fact of the hazards associated with alliances. The contracts used for managing the relationship reflect the risks of the partners (Gulati, 1995). A contractual agreement serves as a framework within which cooperation between partners proceeds. Although alliance partners may not follow their initial contract to the letter, it provides a set of normative guidelines. Also, the recent availability of an array of innovative contractual arrangements opens up the possibility for new interfirm cooperative agreements. The dramatic increase in the use of arm’s-

length contracts, which don't involve shared ownership, is particularly noteworthy in this respect (Gulati, 1995).

The self governance nature of interfirm cooperative alliances provides that the self-interest orientation of alliance partners may lead to actions, that for the individual firm may be rational and efficient, but for the alliance will prove to be detrimental. This incentive to "cheat" within the relationship in order to maximise individual gains is at the very heart of opportunism. Firms are tempted to behave opportunistically when they believe that the returns from such behavior outweigh the value of future cooperation. The potential for such opportunistic behaviour by an alliance partner greatly increases the perceived cost of cooperation (Parkhe, 1993a, and Hill et al, 1998).

Chiles & McMackin (1996) claimed that not all actors are assumed to behave opportunistically, but rather that some probability exists that any given actor will do so some of the time. The traditional Transaction Cost Economic paradigm assumes this probability to increase as investments in specific assets by the other party increase. The party making significant investments in transaction-specific assets is placed at risk of exploitation by the other party as a consequence of the latter's opportunistic behavior. In the face of opportunism, contracts have to be laden with safe-guards that are designed to protect each party from the opportunistic behavior of the other. From an economic point of view, the tradeoff that needs to be faced in excusing contract performance is between stronger incentives and reduced opportunism. If the state realization in question was unforeseen and unforeseeable, if strict enforcement would have truly punitive consequences, and especially if the resulting "injustice" is supported by opportunism, the excuse can be seen mainly as a way of mitigating opportunism, ideally without an adverse impact on incentives (Williamson & Masten, 1999, p.105).

Consistent with these assumptions about opportunism, when contracts can no longer protect efficiently against ex-post bargaining and opportunism, one alternative for firms is to rely on some "voice" mechanism to induce the parties to participate in the transaction. Joint ownership, that could imply the creation of a new firm, includes voice rights and, at the same time, rights over residual income, so some alignment between individual and collective interests is also achieved. With joint ownership the likelihood of

more complex collaboration being completed (those with a higher likelihood of opportunistic behavior) increases (Kogut, 1988; Osborn and Baughn, 1990; Gulati and Singh, 1998). Therefore:

H1: Joint ownership as a governance structure is likely to be more effective as a governance form when collaborations are highly complex in terms of uncertainty, resources specificities, interdependencies, opportunism behavior, etc. (in other words: where incentive problems and coordination needs are highly severe).

Low complexity implies that the attributes of the transaction are such that prices are sufficient statistics to guide adjustment and coordination, and individual incentives are compatible with global efficiency. A Contract is an efficient mechanism for organizing the relationship. The introduction of Joint Ownership would imply the use of resources to perform coordination, supervise activities and measure inputs or outputs (visible hand).

A. Role of reputation and trust

Although this study has established an hypothesis that joint ownership as a governance structure is likely to be more effective when collaborations are highly complex in terms of opportunism behavior, it is possible to find collaboration relationships where the risk of opportunism is high but the joint ownership is not the selected structure. Then, partners are taking into account some other aspect in their collaboration relationship that acts as an insurance against opportunism.

One possibility open to an alliance partner is to rely on the record of its counterpart's cumulative past behavior as a guide to future behavior, or to use reputation as a proxy for knowledge of opportunistic intentions. Parkhe (1993) stated in his study that actors will try to avoid entering an exchange with another actor who has a questionable reputation and, if avoidance is not viable, they will demand that the potentially opportunistic party absorb bonding costs when they enter into an exchange with them. In addition, the other actors will have to bear monitoring costs in order to detect opportunism. The bonding and monitoring costs will absorb much of the expected benefit from the alliance, so that "the value created by exchanges involving actors of

questionable reputation is significantly reduced by the need to set up safeguards to limit opportunism” (Hill, 1990: 505, emphasis in original). Nevertheless, frequently, information on a potential partner’s past behaviour does not exist in the public domain. Thus, in an environment of questionable reputation, or in the absence of any reputation at all, the design of appropriate governance structures should be a function of the perceived probability of opportunism.

Another possibility is trust. The term trust has widely varying connotations (Luhmann, 1979; Barber, 1983; and Gambetta, 1988). Doney et. al. (1998) stated that trust is a valuable contributor to many forms of exchange. In interfirm relationships, researchers credit trust with lowering transaction costs in more uncertain environments (Dore, 1983; Noordewier, John, & Nevin, 1990), thereby providing firms with a source of competitive advantage (Barney & Hansen, 1994). Trust also facilitates long term relationships between firms (Ganesan, 1994; Ring & Van de Ven, 1992) and it has been considered an important component in the success of strategic alliances (Browning, Beyer, & Shetler, 1995; Gulati, 1995). Within organisations, trust contributes to more effective implementation of strategy, greater managerial coordination (McAllister, 1995) and more effective work teams (Lawler, 1992). Trust may concern a partner’s ability to perform according to the intentions and expectations of a relationship (competence trust) or his or her intentions not to defect (Nooteboom & Noorderhaven, 1997).

“Trust... is a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action both before he can monitor such action...and in a context in which it affects his own action. When we say we trust someone or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that it benefits or at least is not detrimental to us, is high enough for us to consider engaging in some form of cooperation with him” (Gambetta, 1988: 217).

Bhattacharya & Devinney (1998) viewed trust in several themes. Firstly, they suggested that trust could not exist in an environment of certainty; if it did, it would do so trivially. Therefore, trust exists in an uncertain and risky environment. Secondly, trust

reflects aspects of predictability, it is an expectancy. The third and fourth characteristics of trust are its importance and strengthen. Fifthly, trust exists in an environment of mutuality, it is situation and person specific. Therefore, they have given the definition of trust as follows: Trust is an expectancy of positive (or nonnegative) outcomes that one can receive based on the expected action of another party in an interaction characterized by uncertainty.

Similarly way, Davis et.al. (2000), suggested that all trusting relationships have meaningful incentives at stake and that the trusting party must understand the risks involved in the relationship. A willingness to take risks may be one of the few attributes of all trusting situations. They also cited the definition of trust as a willingness to be vulnerable. When individuals take risks in relationships with others they become vulnerable to the party to whom they extend their trust.

Trust has been referred to one's belief and expectation about the likelihood of having a desirable action performed by the trustee. On the other hand, some have narrowly defined it in terms of one's assessment of others' goodwill and reliability. Those with a more restrictive approach define trust as "positive expectations about another's motives with respect to oneself in situations entailing risk". Trust is believed to be a source of confidence, which exists when the trustor holds a positive attitude towards the trustee's goodwill and reliability in a risky exchange situation (Das & Teng, 1998).

Concurrent with the growing interest in trust, Kale et al.(2000) argued that trust has been referred to in several ways in relevant literature. First, it is considered "a type of expectation that alleviates the fear that one's exchange partner will act opportunistically". Offering a slightly different emphasis, trust between exchange partners has two components: a structural component, that is fostered by a mutual hostage situation; and a behavioural component, which refers to the degree of confidence that individual partners have in the reliability and integrity of each other. Trust is proposed as the inverse of opportunism. The presumption of opportunistic behaviour, acknowledges that trust rather than opportunism may prevail in a cooperative relationship (Williamson, 1985). Similarly, Gulati (1998) argued that trust between firms refers to the confidence that a partner will not exploit the vulnerabilities of the other.

Trust can be viewed as the coordinating mechanism, which binds relationships and facilitates greater flexibility and reduced complexity within the alliance arrangement. Social norms identify the important role of trust which “underwrites many forms of cooperation”. Trust encompasses the willingness by alliance partners to govern their own behavior in light of the good of the cooperative and to honor their commitments (Nooteboom, 2002).

According to Chiles & McMackin (1996) trust can be incorporated with ‘relative ease’ into transaction cost theory, concluding that it can be conceptualized as a parameter that raises the switchover level from market to hierarchy. In particular, trust relates to the behavioural assumption of opportunism. Trustworthiness in this view equals reduced opportunism and less need for (costly) safeguards. This is supplemented by the idea that trust induces more open sharing of information (reduced uncertainty) and more risk-seeking attitudes or reduced control (Mollering, 2002).

Groenewegen (1993, p.15) asserted that trustworthiness may well be a form of calculated long-term self-interest and may go beyond any self-interest. It may be based on an emotion of friendship or a socially or institutionally ingrained morality, which detaches it from self-interest in the short and longer term.

Consequently, this study views that trust goes beyond obligations based on agreements and also applies to unforeseen contingencies. Trust can only be considered an instrument of governance in a limited sense: it contributes to risk reduction, but it cannot be instituted instantaneously. If trust is not already present, it has to be built by developing bonds or shared norms and values. Firms entering alliances is the predictability of their partners’ behavior. A detailed contract is one mechanism for making behavior predictable, and another is trust. Where there is trust, people may not choose to rely upon detailed contracts to ensure predictability (Gulati, 1995). In other words, trust can be a substitute for hierarchical contracts in many exchanges and serve as an alternative control mechanism (Bradach & Eccles, 1989).

Nooteboom (2001) claimed trust is neglected in the assumption that in the governance of relations we need to safeguard against opportunistic behaviour. And if opportunities for opportunism cannot be eliminated, one can aim to reduce inclinations to utilize such opportunities by reducing the incentives to do so in the governance form of relational contracting. Each governance form implies alternative ways of solving the coordination and incentive problems, different amounts of explicit resources employed in such solutions, and different residual or opportunity losses. The contribution of transaction costs and dimensions of the different governance forms, such that a reduced cost function can be identified relating transaction costs and attributes of the transaction, for each possible governance forms (Rialp & Salas, 2000). Consistent with these interpretations it is proposed that:

H2: Joint ownership is less likely as a governance structure if the firm trust in its partner.

In this context, Trust as “a type of expectation that alleviates the fear that one’s exchange partner will act opportunistically” (Bradach & Eccles, 1989; and Gulati, 1995). The possibility of trust between alliance partners emerging from prior ties clearly alters assessments of the transaction costs associated with specific alliances. Trust counteracts fear of opportunistic behavior and as a result, is likely to limit the transaction costs associated with an exchange (Bradach & Eccles, 1989). However, trust itself can be difficult to observed and measured. It has a taken-for granted character since it is so closely linked to fundamental social norms and customs. Therefore, this study agrees with Gulati (1995) in using a factor that is likely to produce trust as its proxy, this factor could be prior alliances between the firms (Zucker, 1986). This substitution is based on the intuition that two firms with prior alliances are likely to trust each other more than other firms with whom they have had no alliances. Moreover, the presence of a prior history of cooperation between two firms limits their perception of expected opportunistic behavior in new alliances.

B. Reciprocity and its role in strategic alliance relationships

To devise a “mutual reliance relation” or “reciprocity” is one way of accomplishing the practice of taking business to whoever brings business to you. Reciprocity implies that one is morally obligated to give something in return for something received (Ring & Van De Ven, 1992).

Mauss (1925) surfaced the concept of reciprocity through studies of primitive societies grounded in basic “give and take” obligations. Malinowski (1926) agreed that give and take was the basis for the entire social structure in such societies. Alliance theory expanded on these early works and suggested that reciprocal exchanges represent not only the foundation of human social structure, but also the fundamental quality of the human mind. For instance, Levi-Strauss (1949) proposed a hierarchy of goods/services to be exchanged for a balanced exchange achieved without deliberate calculation by either party. Part of the balance may be made up of intangibles, such as political and territorial rights and relative prestige (Leach, 1951).

Sahlins (1960) suggested negative reciprocity is more likely to occur with strangers or enemies than with kinsmen. In negative reciprocity, the exchange participants attempt to receive goods or services for something less than its customary value by using negotiations, trickery or even theft to turn the exchange in their own favor. The resulting transactions become imbalanced. Polanyi (1947) distinguished between two broad transactional patterns of integration: (1) Reciprocity, or obligatory gift – giving between kin and friends; and (2) redistribution, or obligatory payments to a central political or religious authority, which in turn uses the receipts for its own maintenance, to provide community services and as an emergency stock in case of community disaster.

Recently, reciprocal exchange has become an offshoot of a socially equal relationship rather than a hierarchical one (Pryor, 1977). Parkhe (1993a) points out that reciprocity as a concept is difficult to measure, but is still at the core of international alliances. There are three commonly found forms of reciprocity: generalized reciprocity is characterized by “identifiniteness” in the obligation, both in terms of equality and immediacy of returns, and it reflects a kind of altruistic interest in the other (e.g.

hospitality, help or generosity). Another form which is balanced reciprocity is characterized by immediacy of return of a customary and recognised equivalent and reflects mutuality in interests between exchange partners (e.g. trade, rents, similar buying-selling relationship). The last form is negative reciprocity, reflecting the antithesis of generalized reciprocity, in which giving is replaced by taking and complete self-interest. Negative reciprocity which overlaps with the norm of retaliation is the attempt to get something for nothing with impunity (Sparrow & Liden, 1997).

This study conceives the concept of Gibson et al (1997) that reciprocity encompasses the alliance partners ability to demand an equal exchange as a safeguard against potential opportunism. When high levels of reciprocity are built into cooperative relationships, the “fear of possible retribution against those who engage in self serving and devious behaviour” provides a strong guarantee against opportunistic behaviour. The guarantee of an equal exchange of both benefits and penalties, while reducing a participant’s willingness to behave opportunistically, also reduces expectations of cost associated with such behaviour from a partner.

It is possible to say that, reciprocity transforms a unilateral supply relation – where A sells X to B – into a bilateral one, whereby A agrees to buy Y from B as a condition for making the sale of X and both parties understand that the transaction will be continued only if reciprocity is observed. Although reciprocal selling is widely held to be anticompetitive, reciprocity can serve to equalize the exposure of the parties, thereby reducing the incentive of the buyer to defect from the exchange – leaving the supplier to redeploy specialized assets at a greatly reduced alternative value. Absent a hostage (or other assurance that the buyer will not defect), the sale by A of a specialized product to B may never materialize. The buyer’s commitment to the exchange is more assuredly signaled by his willingness to accept reciprocal exposure of his specialized assets. Defection hazards are thereby mitigated (Williamson, 1996). The reciprocity can have advantageous governance structure benefits. For these reasons, it is therefore proposed that:

H3: When partners expect low levels of reciprocity in a cooperative relationship, joint ownership is more likely as the governance structure.

3.2.2. Property Rights Theory

Until this point, and according to Gibson et al (1997), TCE appears to be a particularly useful framework for understanding not only the motives underlying cooperative behavior, but the structures being implemented as well.

However, in recent years there have been significant advances in transaction cost theory (Williamson & Masten, 1999) and the transaction cost paradigm provides a useful lens through which researchers can view essential aspects of alliances (one aspect is the “private ordering” that occurs in voluntary cooperative relationships (Parkhe, 1993). This theoretical framework presents some limitations, as previously reviewed and presented in Chapter Two (Chiles & McMackin, 1996; Colombo, 1998; Rialp & Salas, 2000; Rialp et al., 2001), a single party cost minimization emphasis, neglecting the interdependence between exchange partners in the pursuit of joint value; and, on the other hand, an over-emphasis on the structural features that neglects important process issues.

In the same way, Todeva & Knoke (2003) argues that the concept of TCT no longer provides a sufficient explanation for organizational behavior, because the firms pay relational costs arising from all their joint efforts to build bridges to span the partnership’s uncertainties. Relational costs in an alliance are not merely expenditures necessary to maintain informal relations with business partners, but additionally include the commitments and investments the partners commit to their risky and uncertain venture. Relational costs to each firm arise from potential negative impacts on a company’s profits, occurring because the partners must strategically adjust their other business relations and operations to oblige the new alliance. Participation in an alliance that could imply joint ownership may require a firm to reorganize, reduce, or terminate other business relations in order to accommodate a new partner’s interests. This post-decision adjustment leads to foreclosures of some future business opportunities and their associated loss of potential benefits and profits.

Therefore, the Transaction Cost approach emphasizes the benefits of ownership to explain the choice of governance forms, but the costs have been largely ignored. Rialp & Salas (2000) argued that this criticism is also pertinent for the literature on inter-firm

collaboration, where the advantage of hierarchical controls to solve coordination needs (Gulati and Singh, 1998) and to protect the firm from appropriation hazards (Oxley, 1997), have been spelled out with detail, but the costs are practically ignored. In this sense, decisions about asset ownership are important because control over assets gives the owner bargaining power when unforeseen or uncovered circumstances force parties to negotiate how their relationship should continue (so we are in a world of incomplete contracts and resources specificities that make the exit option unattractive). References to the cost of bureaucracy, the weakening of individual incentives, the hazards of internal politicking..., to explain the limits to the expansion of the hierarchy (firm) are ambiguous and difficult to make operative in empirical analysis.

The property rights approach can be understood as an attempt to formulate empirically meaningful optimization problems by associating the utility function with the individual decision maker and then introducing specific content into the function. The property rights approach helps to understand the cost of ownership. Some point noted is that property rights do not refer to relations between men and things but rather, to the sanctioned behavioral relations among men that arise from the existence of things and pertain to their use. Obviously, it can include: (a) the right to receive the residual after all other inputs have been paid their contractual amounts, (b) the right, however qualified, to terminate or revise the membership of the team (i.e., the possessor of these rights is a central party to a set of bilateral contracts), and (c) the right to sell those rights specified under (a) and (b) (Furubotn & Pejovich, 1972). Some literature related to property rights emphasizes that “ownership matters,” where the rights of ownership of an asset take three parts: the right to use the asset, the right to appropriate returns from the asset, and the right to change the form and/or substance of an asset. Once the issue of property rights is clearly agreed and set, it is commonly assumed that asset utilization will thereafter track the purposes of its owners. This will obtain if (1) the legally sanctioned structure of property rights is respected and, (2) human agents discharge their jobs in accordance with instructions.

Thus, whereas the monopoly branch of contract interprets nonstandard forms of exchange as having monopoly purpose and effect, the property rights literature would inquire whether mistaken property rights assignments were responsible for resource

misallocations. Redescribing property rights, possible complex (nonstandard) ways, is what explains contractual irregularities. Put differently, discrete market contracting is supplanted by more complex forms of contracting, because that is the way residual rights to control can be placed in the hands of those who can use those rights most productively (Williamson, 1985; p.27).

Grossman & Hart (1986) essentially argued that a contractual relationship between a buyer and a seller will be plagued by opportunistic and inefficient behavior in situations in which, because of the impossibility of writing a complete, contingent contract, the ex ante contract does not specify a clear division of the surplus. Such situations in turn are likely to arise when either the buyer or the seller must make investments that have a smaller value in a use outside their own relationship than within the relationship. Firms matter when parties must make specific investments and because of the impossibility of writing detailed long-term contracts, quasi rents from these investments cannot be divided up appropriately in advance. Integration is seen as a way of reducing the opportunistic behavior and holdup problems that can arise in such circumstances. A change in ownership brings costs as well as benefits. Transferring ownership of an asset from party 2 to party 1 increases 1's freedom of action to use the asset as he or she sees fit and therefore increases 1's share of ex post surplus and ex ante incentive to invest in the relationship; but 2's share of ex post surplus and incentive to invest falls. Hence concentrating ownership in 1's hands will be good to the extent that 1's investment decision is important relative to 2's, but of integration can be understood as two sides of the same coin (Hart & Moore 1990).

In this sense, Rialp & Salas (2000) explain why sometimes it is more efficient, for example, to keep ownership of non human assets separate among the different transacting parties than create a new firm with each partner holding 50 per cent of the shares (joint ownership): separate ownership induces more investment in ex-ante specific human capital than joint ownership. Generalizing this assumption, it is proposed that:

H4: when one party has made important ex-ante investments in assets, inter-firm collaborations that imply Joint Ownership are less likely than those which keep ownership of assets separate among the collaborating parties.

From the property rights perspective, therefore, joint ownership may be less attractive than separate ownership at high levels of complexity (uncertainty and resource specificities). Consequently, in the case of joint ventures (a clear case of joint ownership), we may have to weigh the potential benefits of introducing administrative systems, which help to solve coordination needs, against the direct costs of these systems and with the indirect costs due to the choice of an inefficient governance form, from the point of view of the allocation of ownership rights.

3.2.3. Transactional Value Theory: The Effect of The Net Value Gains

Until this point, only efficiency considerations have been taken into account to explain the selection of a governance structure for a collaboration agreement. This study tries to go step further because, taking advantage of all of this knowledge, it will relate the structure selected for managing a collaboration agreement with characteristics of the activity and/or partners, their behavior, and also with the level of satisfaction gained with the relationship. Therefore, it considers that the possible gains to be obtained through the collaboration agreement have an important role, so this study is adding some dynamics in the research. What this study tries to say is that neither the characteristics of the alliance, nor the allocation of property rights might be sufficient to explain the selected structure for developing a relationship among firms (Rialp et.al, 2001): the net value of the gains, the future aims of the firm and/or the future relationship with partners, could also determine the structure to be implemented.

In this sense, Zajac and Olsen (1993) point out that the transaction cost perspective presents two limitations when explaining the phenomenon of interfirm alliance: on one hand, a single-party cost minimization emphasis, neglecting the interdependence between exchange partners in the pursuit of joint value; and on the other hand, an over emphasis on the structural features that neglects important process issues.

Furthermore, these authors point out that a firm's inclination to act opportunistically is often dominated by the firm's estimation of the negative impact that the opportunistic behavior will have on the value of expected future exchanges with its partners (Zajac & Olsen, 1993, p.137). Under the Transactional Value Theory the selection of the structure for developing a collaboration agreement is more a function of anticipated value gains rather than anticipated losses due to the cost of constraining opportunism. Moreover, the Transactional Value framework considers joint value maximization, rather than single-firm cost minimization, and the process by which exchange partners create and claim value. Therefore, under this approach, the crucial issue in a collaboration is not merely a single organization's concern for minimizing transaction costs, but rather both organizations' concern for knowing the partner's preferences as a basis for exchanging and mutual gain. The partners in one alliance would like to discover ways in which similarities or shared interests can be exploited to maximize cooperative joint gains that would accrue to both parties (Zajac & Olsen, 1993; Rialp et al., 2001).

This crucial issue of the Transactional Value Theory fits perfectly with the concept of forbearance, which occurs when a partner presented with the possibility to engage in opportunistic or self-interested behaviour, declines such action. Behaviour associated with forbearance primarily emerges when alliance partners take a long-term view of their relationships and believe that future gains from present cooperative behaviour outweighs the potential immediate gains of cheating (Gibson et al 1997).

The underlying rationale for forbearance law is two fold: (1) Parties to an internal dispute have deep knowledge – both about circumstances surrounding a dispute as well as the efficiency properties of alternative solutions – that can be communicated to the court only at great cost, and (2) permitting internal disputes to be appealed in the court would undermine the efficacy and integrity of hierarchy. The application of the forbearance doctrine to internal organisation means that parties to an internal exchange can work out their differences themselves or appeal unresolved disputes to the hierarchy for decision (Williamson & Masten 1999, p.108).

Jayachandran et.al. (1999) claimed that the intensity of competition between firms with overlapping market domains may be dampened by a phenomenon known as mutual “forbearance”, a tacit collusion as a consequence of firms competing in many markets and the resulting increase in their interdependence. Tacit collusion, as opposed to direct collusion, which is illegal, is a situation in which two firms understand each other’s motives and strategies and implicitly coordinate to avoid competing intensely. Two different processes may be responsible for forbearance as a result of higher degrees of multimarket contact (Baum & Korn, 1999): familiarity and deterrence (cited by Jayachandran, 1999):

- Familiarity is the extent to which tacit coordination is enhanced by a firm’s awareness of the capabilities and actions of a rival. For example, with higher degrees of multimarket contact, the firms involved would have more common prior experiences in competitive engagements.
- Deterrence is the extent to which a firm is able to prevent its rivals from initiating aggressive actions that may be harmful to its interests in the market. It is a consequence of the ability of the firm to cause its rivals serious financial loss by retaliating aggressively to their actions. In such conditions, firms might not compete aggressively because the expected gains from aggressive moves may be lower than the future losses due to competitive retaliation (Jayachandran et.al., 1999).

By increasing the ability of firms to deter each other, and the familiarity between firms, multimarket competition may find the payoff from forbearance more attractive than that from aggressive rivalry, and this may make it easier for firms to realize that they share the same beliefs regarding the beneficial nature of forbearance and to coordinate their expectations.

In summary, the basic condition for forbearance (tacit collusion) to be sustained would be for each firm to perceive that the payoff for engaging in tacit collusion or forbearance is likely to be greater than what can be gained by renegeing on an implicit

agreement and that other firms share the same belief (Jayachandran, 1999). Obviously, a firm could achieve the highest performance if it undertakes a competitive move while its rival forbears. However, such a move for unilateral gain, risks competitive relations and the erosion of its performance below the mutual forbearance level (Young, et.al., 2000). The study of forbearance argued that analogous to form of hostage exchange (Williamson, 1985), a firm that violates the norms of forbearance behavior in one market can be punished by its rival.

As previously mentioned, when a firm trusts its partner (it is sure that the partner would not engage in opportunistic behavior), such perceptions will not lead to a organizing the collaboration agreement through joint ownership structures. In the same sense, when a firm perceives that its party is decided to act in the spirit of cooperation, not cheating, and not withholding helpful action (Smith & Barclay, 1997), therefore it is displaying forbearance from opportunism, such structures are not needed. Therefore it is proposed that:

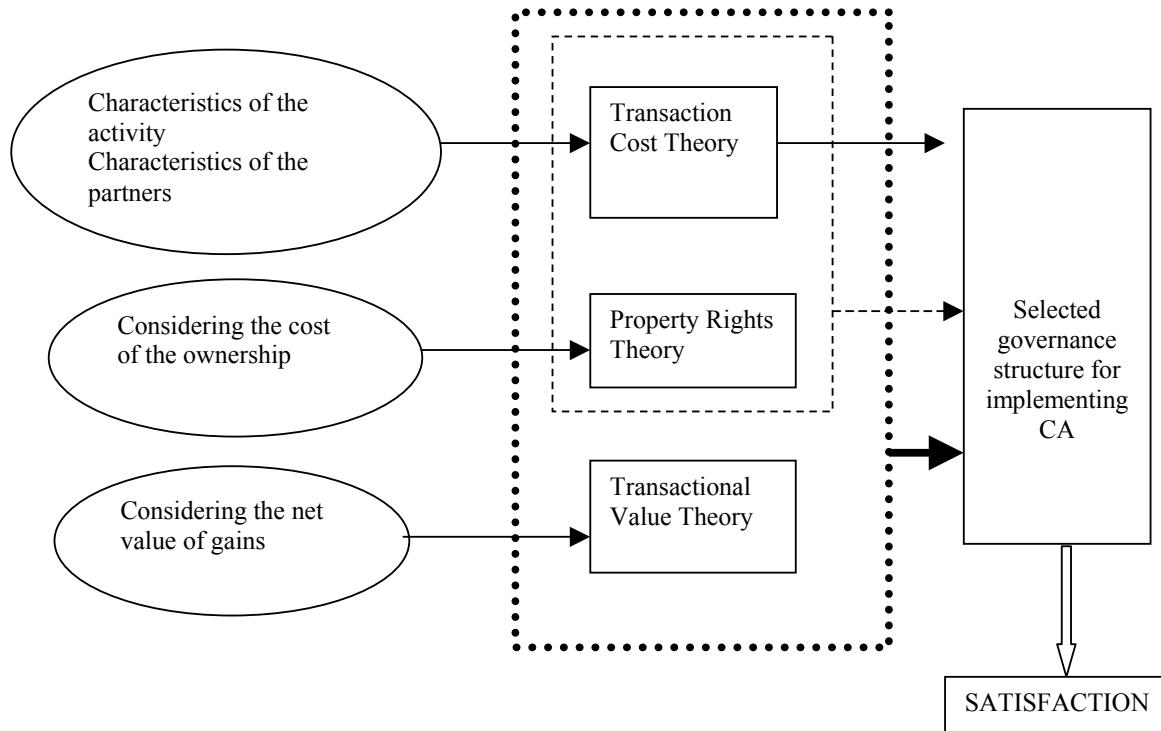
H5: when incentive problems and coordination needs are highly severe joint ownership is less likely as a governance structure, if alliance partners take a long-term view of their relationship and believe that future gains from present cooperative behaviour outweigh the potential immediate gains of cheating.

3.2.4. Structure of The Collaboration and Satisfaction

It has just been seen how under the Transactional Value framework, the selected structure for managing the relationship between firms should be the one maximizing the net value of the collaboration for all of the parties. This criteria could lead to a position far away from the structure that should be selected under the criteria of the Transaction Cost and/or Property Rights Theories i.e selecting the most efficient structure (Rialp et al., 2001). As Zajac and Olsen (1993) and Stinchcombe (1985) show, the pursuit of greater joint value could require the use of governance structures that are less efficient from a transaction cost perspective.



However, it is convenient to say that although the Transactional Value approach represents another theoretical framework, it is consistent with the implicit intent of the Transaction Cost Theory in some ways. Transaction costs are a subset of total costs to be aggregated and compared with the set of total benefits/gains in an overall calculation of the value of the collaboration. In this way, the second aspect related to the approach of the Transactional Value (to consider the process by which exchange partners create and claim value) becomes relevant, because it can result in a transformation that leads to greater expected net benefits for both parties (Rialp et al., 2002). That is the reason why it can be said that the Transactional Value Theory should be complementing the explanations of the Transaction Cost Theory and the Property Rights Theory of the selected structure for developing a collaboration agreement, and, thinking about the objective of this dissertation, the overall theoretical framework allows for behavior, structure, and satisfaction to be related (see Figure 1).

Figure 1. Theoretical framework

Source: Own elaboration

It follows, then, that the type of analysis required is one that considers how parties attempt to create and claim value within a relationship over time (Lax and Sebenius, 1986). To understand this process the three temporal stages identified by Zajac and Olsen (1993) in the collaboration process will be considered:

- *Initializing stage*: individual firms estimate the expected value that they see as accompanying a collaboration because a first round of exchange occurs at this stage (therefore, a more accurate calculation of value can be reached because the various components of the relationship become better known and understood). Perceptions of value from the partners' point of view also emerge at this stage and firms engage in the process of projecting exchange into the future (Macneil, 1983), and constructing

net present valuations of alternative collaborations. Firms' behavior during this stage can set a precedent for future exchange and provide information for learning about the expected behavior of the partners.

- *Processing stage*: value-creating exchanges in the relationship are expected to occur. These exchanges occur simultaneously over multiple pathways. The level of actual value becomes clearer but, at this stage, value is not only created: it is also claimed and distributed among partners. Surrounding the issues of claiming and distributing value we find important elements of conflict, negotiation power and temporal horizons. A perceived compensated distribution of the value among the partners, obviously affected by the negotiation power of them, decreases the conflict issues, defined here as the perceived divergence of interest (Pruitt and Rubin, 1986). As a consequence, there is not obstacle to value maximization what is increasing the likelihood of cooperative relationship over multiple rounds; in other words: it has produced an extension of the exchange horizon and a subsequent reduction in incentives for uncooperative behavior (Axelrod, 1984). Partners feel a growing confidence in the expectations of the future, trust is being developed, and they can behave as if the expected value of interdependent activity would be stable over the course of an uncertain future.
- *Reconfiguring stage*: this stage is characterized by changes in the partners' perceived level of the relationship's value. Such changes may emerge from compare actual to expected value creation or from a new and/or changing environment. Reconfiguring may imply that partners choose to leave the relationship but it may also mean that partners will choose to link their interdependence more tightly by widening the scope of parallel collaboration processes. Therefore, the reconfiguring stage may only involve a change in the process of interaction within the existing collaboration. This stage will typically loop back to the initializing stage (value forecasts are re-specified) or the processing stage (where the forms of exchange are revised).

Notice that parties attempt to create and claim value essentially in the first two stages: the initializing and processing stages. This study sees, the reconfiguring stage as a consequence of the other two, as well as of the evolution of the environment.

Looking at the overall process, once the individual firms establish which is the preferred structure considering the characteristic of the collaboration *per se*, the investments required and their relationship with previous investments made by the firm, the characteristics of its partner, its reputation, the possibility of trust and forbearance and the expected value that they see in the relationship (firms engage in the process of projecting exchange into the future (Macneil, 1983), and constructing net present valuations of alternative collaborations); the implementation of this structure will determine the behaviour of the firms in the collaboration process. In fact, the processing stage decreases conflict issues, defined here as the perceived divergence of interest (Pruitt and Rubin, 1986). As a consequence, there is not obstacle to value maximization what is increasing the likelihood of cooperative relationship over multiple rounds; in other words: it is produced an extension of the exchange horizon and a subsequent reduction in incentives for uncooperative behaviors (Axelrod, 1984). Partners will feel a growing confidence in the expectations of the future, trust is being developed, and they can behave as if the expected value of interdependent activity were stable over the course of an uncertain future. In other words:

H6: Satisfaction of the firm with the collaboration should be independent of the implemented structure if it has been selected taking into account aspects from the Transaction Cost Theory, the Property Rights Theory and the Transactional Value Theory.

Having presented the theoretical framework under consideration in this dissertation, the next chapter will present the data that will be used to contrast the established hypotheses.

3.3 Bibliography

- Axelroad, R. (1984). *The Evaluation of Cooperation*. New York: Basic Book.
- Barber, B. (1983). *The Logic and Limits of Trust*, New Brunswick, NJ: Rutgers University Press.
- Barney, J. B., & Hansen, M. H. 1994. *Trustworthiness as a source of competitive advantage*, *Strategic Management Journal* 15: 175-190.
- Barney, J.B., & Hesterly, W. (1996). *Organizational Economics: Understanding the Relationship Between Organizations and Economics Analysis*, in Hand book of Organizational Studies, S.R. Clegg, C.Hardy, and R. Nord, eds. Thousand Oaks, C.A: Sage Publications, p.115-147.
- Baum, J.A.C. (2000). *Don't go it alone: Alliance Network Composition and Start ups' Performance in Canadian Biotechnology*, *Strategic Management Journal*, 21, p.267-294.
- Bhattacharya, R., Devinney, T.M. & Pillutla, M.M. (1998). *A Formal Model of Trust Based On Outcomes*, *Academy of Management Review*, 23(3), p.459-472.
- Bradach, J.L., & Eccles, R.G. (1989). *Markets Versus Hierarchies: From Idea Types to Plural Forms*. In W.R. Scott (Ed.), *Annual Review of Sociology*, 15, p.97-118. Palo Alto, CA: Annual Reviews Inc.
- Browning, L. D., Beyer, J. M., & Shetler, J. C. (1995). *Building cooperation in a competitive industry: SEMATECH and the semiconductor industry*, *Academy of Management Journal* 38: 113-151.
- Carnes, K.C. (2000). *A Progress Report on International Auditing Reciprocity*, *Managerial Auditing Journal*, 15(9), p.464-468.
- Chiles, T.H., & McMackin, J.F. (1996). *Intergrating Variable Risk Preferences, Trust, and Transaction Cost Economics*, *Academy of Management Review*, 21(1), p.73-97.
- Coase, R. (1937). *Nature of the Firms*, *Economica*, 4, p.386-405.
- Das, T.K. & Teng, B.S. (1998). *Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances*, *Academy of Management Review*, 23(3), p.491-512.
- Davis, J.H., Schoorman, F.D., Mayer, R.C., & Tan, H.H. (2000). *The Trusted General Manager and Business Unit Performance: Empirical Evidence of a Competitive Advantage*, *Strategic Management Journal*, 21(5), p.563-576.

- Doney, P.M., Cannon, J.P., & Mullen, M.R. (1998). *Understanding the Influence of National Culture on the Development of Trust*, *Academy of Management Review*, 23(3), p.601-620.
- Dore, R. 1983. *Goodwill and the spirit of market capitalism*, *British Journal of Sociology*, 34: 459-482.
- Furubotn, E.G., & Pejovich, S. (1972). *Property Right and Economic Theory: A Survey of Recent Literature*, *Journal of Economic Literature*, 10(4), p.1137-1162.
- Gambetta, D. (1988). *Can We Trust Trust? In D. Gambetta (Ed.), Trust: Making and Breaking Cooperative Relations*: p.213-237. Cambridge, M.A: Basil Blackwell.
- Ganesan, S. 1994. *Determinants of long-term orientation in buyer-seller relationships*, *Journal of Marketing*, 58(2): 1-19.
- Gatignon, H. & Anderson, E. (1988). *The Multinational Corporation's Degree of Control Over Foreign Subsidiaries: An Empirical Test of a Transaction Costs Explanation*, *Journal of Law, Economics and Organization*, 4(2), p.305-336.
- Gibson, B., Weaver, K.M., and Dickson P.H. (1997). *Strategic Alliance Use, Firm Size, Outcome Satisfaction and Partner Behaviours*, *The Journal of SEANZ*, 5(1), p.3-15.
- Ghoshal, S., & Peter, M. (1996). *Bad for Practice: A Critique of the Transaction Cost Framework*, *Academy of Management Journal*, 21, p.13-47.
- Gomes-Casseres, Benjamin. (1989). *Ownership Structures of Foreign Subsidiaries: Theory and Evidence*, *Journal of Economic Behavior and Organization*, p. 1-25.
- Gomes-Casseres, Benjamin. (1990). *Firm Ownership Preferences and Host Government Restrictions: An Integrated Approach*, *Journal of International Business Studies*, First Quarter, 1990, pp. 1-22.
- Groenewegen, J. (1993). *Dynamics of the Firm*, Edward Elgar Publishing, England.
- Grossman, S.J., & Hart, O.D. (1986). *The Costs and Benefits of Ownership: A theory of Vertical and Lateral Integration*, *Journal of Political Economy*, 94(4), p.691-719.
- Gulati, R. (1995). *Does Family Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances*, *Academy of Management Journal*, 38(1), p.85-112.
- Gulati, R. & Singh, H (1998). *The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances*, *Administrative Science Quarterly*, 43(4), p.781-814.

- Hallen, L., Johanson, J., & Seyed, N. (1991). *Interfirm Adaptation in Business Relationships*, Journal of Marketing, 55(2), P.29-37.
- Hart, O., & Moore, J. (1990). *Property Rights and the Nature of the Firm*, Journal of Political Economy, 98(61), p. 1119-1158.
- Hill, C.W. (1990). *Cooperation, Opportunism, and the Invisible hand: Implications for Transaction Cost Theory*, Academy of Management Review, 15, p.500-513.
- Hill, C.M., Robinson, T.M., & Bailey, J. (1998). *Skill and Competence Transfers in European retail alliances: a Comparison Between Alliances and Joint Ventures*, European Business Review, 98(6), 300-310.
- Imai, K., & Itamai, H. (1984). *Interpenetration of Organization and Market*, International Journal of Industrial Organization, 2, p.285-310.
- Jayachandran, S., Gimeno, J., & Varadarajan, P.R. (1999). *The Theory of Multimarket Competition: A Síntesis and Implications for Marketing Strategy*, Journal of Marketing, 63, p.49-66.
- John R. and Nevin (1990). *Communication Strategies in Marketing Channels: A Theoretical Perspective*, Journal of Marketing 54, p.36-51.
- Kale, P., Singh, H., & Perlmutter, H. (2000). *Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital*, Strategic Management Journal, 21, p.217-237.
- Klein, B., Crawford, R.A. & Alchian, A.A. (1978). *Vertical Intergration, Appropriable Rents and the Competitive Contracting Process*, Journal of Law and Economics, 21, p.297-326.
- Kogut, B. (1988). *Joint Ventures: Theoretical and Empirical Perspectives*. Strategic Management Journal, 9, p.319-332.
- Lawler, E. 1992. *The ultimate advantage: Creating the Highinvolvement Organization*, San Francisco: Jossey-Bass.
- Lax, D. & Sebenius, J.K. (1986). *The Manager as Negotiator: Bargaining for Cooperation and Competitive Gain*. New York. Free Press.
- Leach, E. (1951). *The Structural Implications of Matrilinear Cross – Cousin Marriage*, Journal of The Royal Anthropology Institute, 81, p.24-53.
- Levi-Strauss, C. (1949). *The Elementary Structure of Kinship*. Boston: Beacon Press.
- Luhmann, N. (1979). *Trust & Power*. New York: Wiley.

- McAllister, D. J. 1995. *Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations*, *Academy of Management Journal* 38:24-59.
- Macneil, I.R. (1983). *Values in Contract: Internal and External*, *Northwestern University Law Review*, 78(2), p.340-418.
- Malinowski, B. (1926). *Crime and Custom in Savage Society*. London: Kegan Paul.
- Mauss, M. (1925). *The Gift: Forms and Functions of Exchange in Archaic Societies*, Translated by I.Cunnison in 1954. Glencoe: The Free Press.
- Masten, S.E., Meehan, J.W., & Snyder, E.A. (1989). *Vertical Integration in The U.S. Auto Industry*, *Journal of Economic Behavior and Organization*, 12, p.265-273.
- Menard, C. (1997). *Transaction Cost Economics*, Edward Elgar Publishing, U.K.
- Milgrom, P., & Robert, J. (1992). *Economics, Organization and Management*. Prentice-Hall. Englewood Cliffs, New Jersey.
- Mollering G. (2002). *Perceived Trustworthiness and Inter-Firm Governance: Empirical Evidence From the UK Printing Industry*, *Cambridge Journal of Economics*, 26, p.139-160.
- Monteverde, K., & Teece, D.J. (1982a). *Supplier Switching Costs and Vertical Integration in the Automobile Industry*, *Bell Journal of Economics*, 13, p.206-213.
- Monteverde, K., & Teece, D.J. (1982b). *Appropriable Rents and Quasi-Vertical Integration in the Automobile Industry*, *Journal of Law and Economics*, 25, p.321-328.
- Noordewier, M.O., Towell, G.G., & Shavlik, J.W. (1990). Training Knowledge-Based Neural Networks to Recognize Genes in DNA Sequences. <http://citeseer.nj.nec.com/noordewier91training.html>
- Nooteboom, B. (1996). *Trust, Opportunism and Governance: A Process and Control Model*, *Organization Studies*, 17(6), p.985-1010.
- Nooteboom, B., & Noorderhaven, N.G. (1997). *Effects of Trust and Governance on Relational Risk*, *Academy of Management Journal*, 40(2), p.308-338.
- Nooteboom, B. (2001). *Learning and Governance in Inter-Firm Relations*, Paper for AFSE conference, Paris, 20-21, September. <http://www.eyr.nl/webDOC/doc/erim/erimrs20020117172204.pdf>
- Nooteboom, B. (2002). *Governance and Competence: How Can They Be Combined?* www.eur.nl/WEBDOC/doc/erim/erimrs20020312152311.pdf

- Osborn, R.N. & Baughn, C.C. (1990). *Forms of Interorganizational governance for Multinational Alliances*, *Academy of Management Journal*, 33, p.503-519.
- Oxley, J.E. (1997). *Appropriability Hazards and Governance in Strategic Alliances: a Transaction Cost Approach*, *Journal of Law, Economics and Organization*, 13 (2), p.387-409.
- Palay, T.M., (1984). *Comparative Institutional Economics: The Governance of Rail freight Contracting*, *Journal of Legal Studies*, 13, p.265-288.
- Parkhe, A. (1993). *Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation*, *Academy of Management Journal*, 36(4), p.794-829.
- Pisano, G.P. (1989). *Using Equity Participation to Support Exchange: Evidence From the Biotechnology Industry*, *Journal of Law, economics and Organization*, 5(1), p.109-126.
- Pisano, G.P., Russo, M.V. & Teece, D. (1988). *Joint Ventures and Collaborating Agreements in the Telecommunication Equipment Industry, in International Collaboration Ventures in U.S. Manufacturing*, D. Mowery(ed.). Cambridge, MA.
- Polanyi, K. (1947). *Our Obsolete Market Mentality. Commentary*, 13, p.109.117.
- Pryor, M. (1977). *The Origins of the Economy: A Comparative Study of Distribution in Primitive and Peasant Economies*. New York: Academic Press.
- Pruitt, D.G. & Rubin, J.Z. (1986). *Social Conflict: Escalation, Statement, and Settlement*. New York, Random House.
- Rialp, J. & Salas, V. (1999). *On the selection of Governance Structures for Interfirm Collaborations*, Paper Presented in the annual Session of the Academy of Management, Chicago. August.
- Rialp, J. & Salas, V. (2000). *The Cost of Ownership In The Governance of Interfirm Collaborations*, Working Paper in The Documents De Treball D'economia de L'empresa at Universidad Autonoma de Barcelona.
- Rialp, J. & A, Santamaria, L. (2001). *Collaboration Strategies and Technological Innovation: A Contractual Perspective of the Relationship Between Firms and Technological Centers*, Paper Presented in Euram's conference, Italy.
- Rindfleisch & Hide. (1997).
- Ring, P.M., & Van de Ven, A.H. (1992). *Structuring Cooperative Relations Between Organisation*, *Strategic Management Journal*, 13(7), p.483-498.

Sahlins, M. (1960). *Political Power and Economy in Primitive Society*. In G..Dole and R. Caniero, editors, *Essays in the Science of Culture*, New York: Crowell.

Smith, J. Brock and Donald W. Barclay (1997), *The Effects of Organizational Differences and Trust on the Effectiveness of Selling Partner Relationships*, *Journal of Marketing*, 61 (January), 3–21.

Sparrowe, R.T. & Liden, R.C. (1997). *Process and Structure in Leader Member Exchange*, *Academy of Management Review*, 22(2), p.522-552.

Stinchcombe, A. (1985). *Contracts as Hierarchies Documents*, In Stinchcombe, A. And Heimer, C. *Organization Theory and Project Management*. Oslo: Norwegian University Press.

Thechatakerng, S. (2000). *Strategic Alliances and Performance of Firm in Fruit and Vegetable Processing Industry in the Northern Region of Thailand*, the Unpublished 7 Credits Research Paper, Presented at Universitat Autònoma de Barcelona.

Todeva, E. & Knoke, D. (2003). *Strategic Alliances: Formation, Developmental Dynamics, and Performance outcomes*, Paper Presented at Euram international conference, SDA Bocconi University, Milan, Italy.

Van de Gevel, AJW. (2000). *From Contribution to Copetition in the Globalized Semiconductor Industry*. <http://greywww.kub.nt:2080/greyfiles/few/2000/doc/792.pdf>

Veciana, J.M. (1970). *Formas Colectivas de Empresa en el Ambito Economico*, Cesea. Madrid.

Walker, G. & Weber, D. (1984). *A Transaction Cost Approach to Make or Buy Decisions*, *Administrative Science Quarterly*, 29, 330-354.

Williamson, O.E., (1975). *Markets and Hierarchies*. New York: The Free Press.

Williamson, O.E., (1979). *Transaction Cost Economics: The Governance of Contractual Relations*, *Journal of Law and economics*, XXII, 2, p.233-261.

Williamson, O.E., (1985). *The Economic Institutions of Capitalism*, New York, NY: The Free Press.

Williamson, O.E., (1986). *Economic Organisation-Firms, Markets and Policy Control*, Harvester Wheatsheaf, Hamel Hempstead.

Williamson, O.E., (1991). *The Nature of the Firm: Original, Evolution, and Development*. New York: Oxford University Press.



Williamson, O.E., (1996). *The Mechanisms of Governance*, Oxford University Press.

Williamson, O.E. & Masten, S.E. (1999). *The Economics of Transaction costs*, Edward Elgar Publishing. U.K.

Young, G., Smith, K.G., & Simon, D. (2000). *Multimarket Contact and Resource Dissimilarity: A Competitive Dynamics Perspective*, *Journal of Management*, 26(6), p.1217-1236.

Zajac, E.J., & Olsen, C.P. (1993). *From Transaction Cost to Transactional Value Analysis: Implications for the Study of Interorganizational Strategies*, *Journal of management Studies*, 30(1), p.131-145.

Zucker, L.G. (1996). *Production of Trust: Institutional Sources of Economic Structure 1840-1920*. In B.M Staw & L.L Cummings (Eds.), *Research in Organizational Behavior*, 8, p.53-111.

Chapter Four

4. Empirical Research

4.1. Introduction

As already mentioned in previous chapters, little research has been focused on strategic alliances established by Thai firms. For example, Thechatakerng (2000) explored about strategic alliance formation in the fruit and vegetable processing industry but no studies have considered strategic alliances across sectors, partner behavior and satisfaction. In fact, there are very few studies in the literature focused on strategic alliances among Thai firms. Therefore, this research is designed with two different purposes: on one hand, to be exploratory research into the implementation of alliance by Thai firms; and on the other, to be explanatory research in the field of partner behavior and satisfaction of allied firms in Thailand.

To understand the dynamics in strategic alliances use as well as satisfaction and partner behavior, we have studied extant literature in the areas of strategic alliances. The theoretical model that was developed in Chapter Three addressed the research questions. This exercise also provides richness of contextual detail permitting grounded of the framework and constructs. Then, the data collected allowed the hypotheses which were mentioned in Chapter Three to be tested.

4.2. Methodology

4.2.1. Research design

4.2.1.1. Methods of data collection

Based on the purposes of this research, 3 different sources of information have been used:

1. Archival data on the firms operating across industries was collected through industrial associations, the industrial state authority of Thailand and the Bank of Thailand, which are the best data resources in Thailand. The objective was to create a preliminary list of firms and also executive names and contact details. In cases where

not enough information was available, contact was made with the company to collect or reconfirm data.

2. Primary data for accomplishing the aim of the research was obtained using a questionnaire as a survey instrument via the mail, and personally conducted interview with the owner or the top management of the firms in industrial districts of Thailand.
3. Internet sources were also used to gather some information for this study.

4.2.1.2. Sample selection

This research obtained information considering the different industrial districts in Thailand. Industrial district or industrial town or industrial city, refers to a place which is provided the complete infrastructure necessary for industrial operations such as ample electricity, water supply, flood protection, waste water treatment, solid waste disposal etc. by an Industrial Estate in Thailand. It is accessible to seaports, airports and other transportation centers. Besides providing communication facilities and security systems, an industrial estate also contains commercial banks, and a post office. This research has taken the name list of the firms in industrial districts from The Industrial State Authority of Thailand, who provided this source of information.

In Thailand, there are 28 industrial districts under the industrial authority of Thailand. There are 2,136 firms who have the right to run their business on these industrial districts but only 1,327 firms have established businesses there (see Table 6). This research has considered all these firms in these industrial districts as units to be analyzed. Therefore, the units for this study will consist of large, medium and small size domestic and foreign companies.

Table 6. Firms in Industrial Districts in Thailand

| Industrial Estates | Allowed Firm | Existing Firm | Industrial Estates | Allowed Firm | Existing Firm |
|--------------------|--------------|---------------|----------------------------|--------------|---------------|
| Bangchan | 167 | 67 | Plangyao (Gateway city) | 35 | 21 |
| Bangpu | 455 | 271 | Auntanee | 39 | 25 |
| Ladkabang | 219 | 146 | Ratananakorn | 55 | 35 |
| Bangple | 116 | 116 | Nongkae (Sraburi) | 5 | 3 |
| Lamchabang | 128 | 65 | Padang | 3 | 3 |
| Northern Region | 88 | 56 | Pichit | 2 | 2 |
| Mabtapud | 85 | 58 | Southern Region (Chaloong) | 7 | 1 |
| Chonburee (Boiwin) | 48 | 18 | Sraburee (Kangkoy) | 1 | 1 |
| Welco | 116 | 77 | Eastern Sea Broad (Rayong) | 89 | 53 |
| Samutsakorn | 102 | 47 | Pintong | 11 | 3 |
| Amatanakorn | 134 | 134 | Amatacity | 21 | 12 |
| Banwa (Hi-tech) | 61 | 34 | Rachaburee | - | - |
| Bangpaimn | 122 | 57 | Koankan | 1 | 1 |
| Tawanok | 27 | 21 | T-S 21 | - | - |
| TOTAL | | | 28 | 2,136 | 1,327 |

Source: Industrial Estate Authority of Thailand, 2001

It is necessary to study firms that are engaged in alliances, operating in industries where alliances could be a critical means of competing. Kale et. al. (2000) cited that past research shows that firms in industries such as pharmaceuticals, chemicals, computer (hardware and software), electronics, telecommunications, and services fall within this category (Culpan and Eugene, 1993). To obtain the required information this research also identified the appropriate respondents in each unit of analysis.

Needless to say, alliance-related data on aspects such as partner's behavior and satisfaction are almost impossible to get through archival sources. One collects this data through interviews or surveys with managers who are responsible or knowledgeable about their firm's alliances. Simonin (1999) suggested that the strategic nature of the survey's content, the focus on cross corporate boundary issues, such as transfer of technological know-how and the probing of past corporate experience with collaborations, necessitated the choice of top executives, whose understanding and field of action pertain to the overall organization. These top executives are the most able to observe and to determine the impact of a specific alliance on the rest of the organization's activities. Furthermore, these executives are best qualified to direct the questionnaire to other individuals in the organization who may be even more competent on the subject. As a consequence, this study collected the data through survey questionnaires administered

to relevant managers across a large sample of firms that have formed alliances in the industrial districts in Thailand. From the directory, key executives were identified as potential respondents by their name, address, and function in each selected company, based on their area of responsibility.

With the purpose of testing the questionnaire, that will be presented later, 20 firms in the northern industrial district were personally interviewed by the researcher and 2 trainees. Once the questionnaire had been tested, 1,307 questionnaires were distributed to all the firms that exist in the industrial districts nationwide by mail. In total, 1,327 firms were interviewed.

However, a lot of questionnaires have not been mailed back (in these cases they were followed up again by phone). This study found that some firms did not pay any attention but some did. Finally the valid number of firms participating in our research is 504. Table 7 shows the distribution of these firms in the industrial districts:

Table 7. Firms Answering the Questionnaire

| Industrial Estates | Existing Firm | Firms answering | Industrial Estates | Existing Firm | Firms answering |
|--------------------|---------------|-----------------|----------------------------|---------------|-----------------|
| Bangchan | 67 | 23 | Plangyao (Gateway city) | 21 | - |
| Bangpu | 271 | 153 | Auntanee | 25 | - |
| Ladkabang | 146 | 96 | Ratananakorn | 35 | - |
| Bangple | 116 | 41 | Nongkae (Sraburi) | 3 | - |
| Lamchabang | 65 | 14 | Padang | 3 | - |
| Northern Region | 56 | 41 | Pichit | 2 | - |
| Mabtapud | 58 | 2 | Southern Region (Chaloong) | 1 | - |
| Chonburee (Boiwin) | 18 | 7 | Sraburee (Kangkoy) | 1 | - |
| Welco | 77 | 38 | Eastern Sea Broad (Rayong) | 53 | 19 |
| Samutsakorn | 47 | 17 | Pintong | 3 | - |
| Amatanakorn | 134 | 39 | Amatacity | 12 | - |
| Banwa (Hi-tech) | 34 | 5 | Rachaburee | - | - |
| Bangpains | 57 | 9 | Koankan | 1 | - |
| Tawanok | 21 | - | T-S 21 | - | - |
| TOTAL | | | | 1,327 | 504 |

Source: Industrial Estate Authority of Thailand, 2001

4.2.1.3. Methodology

To test the hypotheses this research shall use the logit model. Let x_i be the synthesis of a collaboration agreement i where:

$$x_i = \beta y_i + \varepsilon_i$$

The vector y_i includes all the variables (proxies) representing opportunistic behavior (together with possible control terms); the vector β includes the weights attached to each variable representing such opportunistic behavior; and ε_i is the error term.

The theoretical model assumes that the unobservable variable x_i determines the choice of one governance form as it falls in one of the following discrete intervals:

- i) If $x_i < \mu_0$, Separated Ownership (=0) is selected
- ii) If $\mu_0 \leq x_i$, Joint Ownership (=1) is selected

The logit statistical analysis estimates the vector of parameters β taking into account the observed characteristics of the collaboration y_i . It assumes that the underlying probability distribution of ε_i is normal. The logit choice model provides statistical methodology which is based upon the comparison of the utilities associated with each of the alternative governance forms, given a vector of the collaboration's characteristics. In probabilistic form, the model is expressed as follows:

$$P_{ij} = P(G = j / y_i) = e^{\alpha_j y_i} / \sum_k e^{\alpha_k y_i}$$

Where P_{ij} is the probability that collaboration I is governed by structure j , $j = 0, 1$; α_j is a vector of coefficients which determine the impact of the explanatory variables on the probability that each of the governance forms will be selected. The variation of α_j across governance forms is consistent with the assumption that the utilities are different for each of them.

To estimate the coefficient α_j the utility of one of the alternatives is used as a normalization value. In this case, the alternative will be the Separated Ownership.

Therefore, the parameters of the other alternatives have to be interpreted in reference to the omitted one. A particular value of one estimated coefficient α_{ij} , indicates the extent to which the attribute l of the collaboration contributes to the utility of governance alternative $j = 1$, beyond the contribution that this attribute would have in determining the utility of the base option, Separated Ownership. If the base option for comparison is Separated Ownership, then it should be expected that the likelihood of choosing the other governance form different from the base option at lower levels of opportunism decreases. At the same time, the likelihood of choosing Joint Ownership compared with Separated Ownership, as opportunistic behavior increases, should increase; therefore, $\alpha_1 > 0$ is expected.

4.3. Results

4.3.1 Experience of Thai firms with collaboration agreements

The instrument used to collect the information related to the experience of Thai firms with collaboration agreements was a questionnaire divided in six different parts:

1. General information about alliances, for example number of alliances implemented by the firms, number of partners, type of allied partners, source of facility, type of alliance and motivation
2. Assessment of the experience with alliances
3. Assessment of the partners' behavior
4. Degree of agreement with different topics related to the establishment of strategic alliance
5. Identification of problems for implementing strategic alliances
6. Characteristics of the firms and characteristics of the respondents

In the next section this study will present the information relating to different variables contained in these six sections, that are perceived as the most important for the research purposes of this dissertation (basically, variables contained in sections 1, 2, 3

and 6 of the questionnaire). Furthermore, in the Appendix of this chapter, the reader is able to find some descriptive information of the other variables.

4.3.1.1 Descriptive information of the interviewed firms

A. Characteristics of the firms and characteristics of the respondents

The last part of the questionnaire focused on characteristics of the firms as well as characteristics of top management or questionnaire respondents (the characteristics of the respondents are presented in the Appendix of this chapter). The firms' characteristics considered are: age of the firm, number of employees, and type of industries. These characteristics have been used as control variables in the analyses because of their potential effect on partner behavior and satisfaction.

▪ *Age of the Firm*

The age of the firm may have an influence on the firm's ability to learn about allied firms relationships and their behavior. Also Kale et.al. (2000) emphasized that it could be argued that the greater the duration of the alliance, the greater the learning would be from the alliance partner. At the same time, the longer duration would also increase the likelihood of losing proprietary assets to the partner firm. Audio et.al. (2000) suggested that older firms may have an experience advantage, or, alternatively, younger firms may have a higher capacity to take in new knowledge. This study, consistent with these researchers, includes the age of the firms as a control variable. In this study the ages have been classified into seven groups initially (see Table 8).

Table 8. Age of Thai Firms

| Age of firm | Nº | % |
|---------------------|------------|--------------|
| < 5 years | 1 | 0.2 |
| between 5-10 years | 123 | 24.5 |
| between 11-15 years | 314 | 62.4 |
| between 16-20 years | 1 | 0.2 |
| between 21-25 years | 2 | 0.4 |
| between 26-30 years | 60 | 11.9 |
| between 31-35 years | 2 | 0.4 |
| Total | 503 | 100.0 |

As this research has done with other variables, to study the relationship between structure-behavior-satisfaction, the purpose of this dissertation, this variable was transformed and was considered in just two categories: firms which one more than 10 years old and firms which one 10 years old or younger. Table 9 presents how 75.3% of the Thai firms that answered the questionnaire are more than 10 years old.

Table 9. Thai firms 10 or More Years Old

| Age of the firm | N | % |
|----------------------|------------|--------------|
| More than 10 | 379 | 75.3 |
| Less or 10 years old | 124 | 24.7 |
| Total | 503 | 100.0 |

▪ *Firm Size*

The size of a firm can affect its market power and thus its ability to dominate the partners in an alliance. Because of this, large firms are likely to seek different types of characteristics than smaller firms in alliance partners. Although different proxies could be considered for capturing the size of the firm, the total number of employees or the revenues are the most common. Furthermore, total number of employees is often highly correlated with total annual revenue. Therefore, the number of employees as a control variable has been used in this research. Table 10 shows how Thai firms answering the questionnaire can be categorized in four groups in relation to employee size.

Table 10. Number of Employees

| Number of employees | N | % |
|---------------------|------------|------------|
| 0 – 50 | 32 | 6.40 |
| 50 – 200 | 194 | 38.50 |
| 200 – 500 | 252 | 50.0 |
| > 500 | 25 | 5.0 |
| Total | 503 | 100 |

Again, and thinking in future analysis, this variable has been transformed and considered in just two categories: firms having less than 200 employees and firms having 200 employees or more. Table 11 shows that 55.1% of the Thai firms that answered the questionnaire have 200 or more employees.

Table 11. Thai Firms with 200 or More Employees

| Number of employees | N | % |
|---------------------|-----|-------|
| <200 | 226 | 44.9 |
| 200 or more | 277 | 55.1 |
| Total | 503 | 100.0 |

▪ *Industry sector*

It is believed, as other authors have highlighted, that the type of industry influences the establishment of alliances as well as in other firm's decisions. For example, the study from Hitt et. al. (2000) argued that the type of industry affected the criteria used to make acquisition decisions. A number of others (e.g., Henderson & Mitchell, 1997; McGahan & Porter, 1997) have argued the importance of industry type in determining the strategies employed by firms. For the purposes of this study four groups which relied on SIC industries classification and Department of industry in Thailand classification have been established: natural resources (feed mills, agricultural process products, wood processing and minerals), basic manufacturing (leather, textiles, gems and jewelry, vehicle supplies, heavy fabrics, metal, medicine, shoe decorates, plastics), service (wholesale/retail, lodging/entertainment, and general service sectors), and high technology (electronic products, electronics supplies, and telecommunication). Table 12 presents the distribution of the firms answering the questionnaire in these four groups:

Table 12. Industry Sectors

| Industry Sectors | N | % |
|---------------------|-----|------|
| Natural resources | 60 | 11.9 |
| Basic manufacturing | 380 | 75.5 |
| Service | 32 | 6.4 |
| High Technology | 31 | 6.2 |
| Total | 503 | 100% |

The results show that more than 75.5% of the firms participating in this research belong to the basic manufacturing sector and 6.2% to the high technology sector. This distribution could affect results in future analysis so it is taken into account in this research.

B. General information about alliances

The valid number of firms participating in the research is 504. Of these firms, 503 (99.8%) had implemented strategic alliances.

This research has concreted information on the number of firms participating in alliances with another partner, two other partners, etc. Table 13 summarizes this information by showing the number of firms participating in alliances of only two partners in alliances or of more than two partners.

Table 13. Number of Partners in Thai Firms' Alliances

| Description | | N | % | | N | % |
|------------------------------------|----|-----|-------|-------------|-----|-------|
| Number of partners in the alliance | 2 | 207 | 41.2 | 2 partners | 207 | 41.2 |
| | 3 | 34 | 6.7 | More than 2 | 296 | 58.8 |
| | 4 | - | - | | | |
| | >4 | 262 | 52.1 | | | |
| Total | | 503 | 100.0 | Total | 503 | 100.0 |

Based on the figures, Thai firms don't seem to look for other Thai partners when implementing a strategic alliance. It can be observed in Table 14, of the analyzed firms, 52.9% cooperated with foreign partners and 47.1% established cooperation agreements where the partner was a Thai firm or among the partners there was another Thai firm.

Table 14. Nationality of Thai Firms' Partners

| Description | | N | % |
|-----------------|---|-----|-------|
| Allied partners | Domestic or domestic and foreign | 237 | 47.1 |
| | Foreign | 266 | 52.9 |
| | Total | 503 | 100.0 |

In this section of the questionnaire, firms were also asked about the structure of the alliances they had implemented. Initially, five forms of alliances were considered (this classification is an adaptation of Veciana's scheme (1970)):

- Cooperation agreement to gather information
- Cooperation agreement to exchange information
- Cooperation agreement to jointly carry out the tasks through a third party (i.e. market research institute, export firm, research institute, etc.)
- Cooperation agreement to jointly carry out the tasks with other firms
- Joint ventures

Table 15, presents the number of interviewed firms that had established each one of these structures. The results of the survey show that most of the firms have implemented more than one form of alliance¹⁵.

Table 15. Alliance Structures Implemented by Thai Firms

| Alliance Structure | N | % |
|--|-----|--------|
| Joint venture | 416 | 82.7 |
| Cooperation agreement to jointly carry out the task with other firms | 115 | 22.86 |
| Cooperation agreement to gather information | 68 | 13.51 |
| Cooperation agreement to exchange information | 67 | 13.32 |
| Other type | 1 | 0.2 |
| Cooperation agreement to jointly carry out the task through a third party | - | - |
| Total | | 100.00 |

It should be observed that most of the firms in the industrial districts in Thailand enjoyed participating in joint ventures (this result is interesting if when compared to the former study (Thechatakerng, 2000)), where firms in the fruit & vegetable processing industry did not pay much attention to this type of alliance). Joint venture structures are followed by “cooperation agreements to jointly carry out the task with other firms” with 17.24% of the firms giving information pointing out that they had implemented this

¹⁵ In the Appendix a Table is presented indicating for those firms that have implemented more than one structure, which one was implemented first, second, etc.

structure. Of the firms answering the questionnaire 10.19% also implemented “cooperation agreements to gather information”; 10.04% implemented “cooperation agreements to exchange information; and 0.15% other types of alliances.

In order to accomplish the purpose of this dissertation this study proceeds to recode this variable and this study considers firms that have implemented structures implying joint ownership, basically joint ventures, and firms that have implemented other types of structures but never implying joint ownership. Table 16 shows the number of firms in each new category.

Table 16. Firms Implementing Joint Ownership Structure

| Alliance Structure | N. | % |
|--|------|------|
| Joint Ownership (Joint Venture) | 323 | 64,2 |
| Other type of structure | 120 | 23,9 |
| Total | 443* | |

* 60 observations lost because they have implemented both structures.

Focusing now on the type of alliance formed, Table 17 shows that 293 firms have established technology alliances relating to product and process research and development, 292 firms have established production alliances, 238 firms purchaser-supplier relationships respectively, and 237 established export alliances, respectively.

It should be observed that 293 firms point out that they had established technology alliances related product and process research and development.

Table 17. Alliance Type

| Alliances type | N. | % |
|--|-----|-------|
| 1. Long-term agreements relating to marketing | 126 | 25.04 |
| 2. Distribution | 237 | 47.17 |
| 3. Production | 292 | 58.05 |
| 4. Export management or trading companies | 203 | 40.35 |
| 5. Technology alliances relating to product research and development | 293 | 58.25 |
| 6. Technology alliances relating to process research and development | 293 | 58.25 |
| 7. Outside contracting | 29 | 5.76 |
| 8. Purchaser-supplier relationships | 238 | 47.31 |
| 9. Other | 34 | 6.75 |

In fact, to study the relationship between structure-behavior-satisfaction, the purpose of this dissertation, this research will now transform this variable and consider just two categories: strategic alliances related to R&D activities and strategic alliances related to other activities. Table 18 shows how 58.3% of the Thai firms that answered the questionnaire implemented R&D strategic alliances.

Table 18. Thai Firms Implementing R&D Alliances

| Alliance Type | N. | % |
|------------------------|-----|------|
| R&D activity | 293 | 58.3 |
| Other type of activity | 210 | 41.7 |

C. Assessment of experiences with alliances

The information contained in this section of the questionnaire reflects the experience of Thai firms with strategic alliance. Those firms answering the questionnaire were asked to grade the company experience, in general, with alliances from 1 “extremely poor” to 5 “extremely good”. Furthermore, they were asked to characterize the financial returns produced by their companies’ alliance relationships. Their answers were graded from 1 “large loss” to 5 “profitable”. Finally, firms were asked to compare the performance of their alliances with their expectations and the answers were graded from 1 “very poorly” to 5 “very well” (see Table 19).

Table 19. Experience of Alliances of Thai firms

| Alliance’s experiences | 1 | | 2 | | 3 | | 4 | | 5 | |
|--|---|---|----|----|---------|----------|-----|----------|----|-----|
| | N | % | N | % | N | % | N | % | N | % |
| 1. Your firm’s experience with alliance(s) has been | | | 30 | 6 | 14 3 | 28. 4 | 300 | 59. 5 | 30 | 6 |
| 2. How would you characterize the financial returns produced by your company’s alliance relationships? | | | 30 | 6 | 22 9 | 45. 5 | 242 | 48 | 2 | 0.4 |
| 3. In your overall assessment, how has the alliance(s) performed as compared to your expectations? | | | 56 | 11 | 20 1 | 40 | 185 | 36. 7 | 61 | 12 |

As it can be observed, firms answering these three items are grading them essentially in the intermediate positions (basically number 4 on the scale). So firms seem to assess positively their experiences with strategic alliances.

D. Assessment partners' behavior

The perceived partner's behavior is measured utilizing six items adapted from Gibson et. al. (1997). These items were rated by using the Likert scale to obtain this information (see Table 20).

Table 20*. Partners Behavior

| Partner's behavior | Vsd (1) | Sd (2) | D (3) | N (4) | A (5) | Sa (6) | Vsa (7) |
|---|---------|--------|-------|-------|-------|--------|---------|
| Provide us with a truthful picture of their business | 6 | 6 | 17.3 | 21.6 | 17.5 | 24.8 | 6.7 |
| Seem to feel that it is acceptable to do anything within their means that will help further their organization's interest | 6 | 6 | 6.7 | 33.3 | 17.3 | 30.4 | 0.2 |
| Carry out their duties even if we do not check up on them | 5.6 | 17.3 | 11.7 | 23.8 | 11.3 | 30 | 0.2 |
| Have sometimes promised to do things without actually doing them later | 6.3 | 16.9 | 12.7 | 34.5 | 17.9 | 11.3 | 0.2 |
| Usually register a complaint if our organization fails to meet our cooperative agreement | 24.4 | 6.2 | 17.1 | 18.7 | 17.5 | 10.3 | 5.8 |
| Expect an equal exchange of benefits from our cooperative agreement | - | - | 10.7 | 18.1 | 0.6 | 47 | 23.4 |

*We only present the percentages of firms indicating each one of the possible answers.

Again, firms answering these statements are grading them basically in the intermediate positions (number 4 to 6 of the scales). However, it is interesting to remark the percentage of firms that give the lower value of the scale to the statement indicating that the partner usually registers a complaint if the organization fails to meet the cooperative agreement (24.4%). Likewise, it is also interesting to note the percentage of firms that give the highest value to the item indicating that they expect an equal exchange of benefits from the cooperative agreement (47% and 23,4%).

4.3.2. The Relationship between behavior, structure and satisfaction

In this section the different hypotheses established in the previous chapter linking behavior of the partners, structures for implementing collaboration agreements and also satisfaction will be tested.

Having identified the variables of the questionnaire that related to traits of behavior of Thai firms participating in collaboration agreements, through logit regression the effect of the behavior in the selection of the structure implemented for managing the relationship will be determined. Different models will be estimated, depending on the theoretical framework considered. The assumption is that the estimated model based on a theoretical framework considering the transaction cost theory, the property rights theory and the transactional value theory should give better results than previous models which did not consider all these theories.

Finally, a final assumption has been applied to this study establishing that satisfaction with collaboration agreements is independent of the structure, if this has been selected based on the theoretical framework used in this study, which will be contrasted.

4.3.2.1. Variables

- *Dependent Variable*

The dependent variable is the governance form of the collaboration. The coding of this variable proceeds as follows:

- i) Separated Ownership (SO) = 0, when the collaboration is an Exchange Agreement
- ii) Joint Ownership (JO) = 1, when the collaboration involves a Joint Venture.

Overall, in the data file 27 per cent of the collaborations are Separated Ownership agreements and 73 per cent involve joint ownership (joint ventures)¹⁶.

¹⁶ 60 observations were lost because no consideration was taken of those firms that have used separated and joint ownership structures.

An interfirm collaboration is identified as an Exchange Agreement when it involves the supply of a product, service or know-how from one firm to the other on a recurrent basis; when firms share a given facility for marketing, distribution or after sale services; technology licensing; subcontracting of manufacture or R&D. For example, Thai Union Frozen Products PCL. (TUF) specialized in the production and export of frozen seafood. It wanted to expand into foreign markets, so in 1992, its cold storage capacity was expanded along with strategic partnership agreements with overseas business alliances – Mitsubishi Corporation and Hagefoma Foods Corporation. Both companies, major raw material suppliers and long-time customers, have to date assumed their key roles in its product developments in response to competitive international markets (Thai Union Group, 2003).

The creation of new entities, Joint ventures, is the easier collaboration to identify and exist completely separate from Exchange Agreements. For example, in 1997 Hoechst Trespaphan GmbH, Neunkirchen (HTG), Germany and Thai Petrochemical Industry Plc (TPI), cooperated in the polypropylene film sector. The two companies signed a letter of intent on the formation of a new joint venture in which HTG would own a 51 percent and TPI-Group a 49 percent stake. The alliance involved the construction of a new plant with an initial capacity of 25,000 metric tons/year for standard packaging applications as well as specialty products such as cigarette packaging film and opaque grades. The plans also entailed the construction of a second production line designed to increase the production capacity of the joint venture to over 50,000 metric tons/year. HTG brought its technical expertise in polypropylene production while TPI's contribution was based on their local presence and knowledge of the market. The aim was to expand business in this growth market and to achieve a stronger position in Asia. In addition to meeting the needs of the Thai market, the new joint venture also exports to other members of ASEAN (Thai Petrochemical Industry, 2003).

In exchange agreements (Separate Ownership) collaborating firms control the residual decisions rights, if any, of the physical assets involved in the collaboration. Joint ventures, on the other hand, are treated as forms of Joint Ownership. Ideally, it would be of interest to know in which cases the parties have individual veto power on the assets



combined in the collaboration and/or the actual shares held by each of them in the joint ventures, but such information was not available. Notice, however, that Geringer and Herbert (1989) and Killing (1983) report empirical evidence on the fact that, in general, the creation of a joint venture incorporates the right of veto over strategic decisions by the partners. This study relies on this evidence to assume that this veto power is present in most of the joint ventures of our sample, although this evidence has not been contrasted.

- *Explanatory variables*

Most often, empirical data does not allow measuring directly the theoretically postulated attributes; therefore, this research has to manage with the appropriate proxies. In this particular case, the attribution of the alliances actually observed is, for example: the number of collaborating parties; the nationality of the partners; whether the collaboration involves R&D activities or not. Table 21 summarizes the explanatory variables initially considered for being used in the analysis and provides basic descriptive statistics for each of them.

Table 21. Descriptive Statistics of the Variables (a)

| Variable | % | Mean | Standard Deviation |
|---|------|------|--------------------|
| Kind of activity (%) | | | |
| 0. Other kind | 41.7 | | |
| 1. R+D | 58.3 | | |
| Number of partners | | | |
| 0. 2 partners | 41.2 | | |
| 1. More than 2 | 58.8 | | |
| Partner seems to feel that to do anything within their means that will help further their organization's interest is acceptable | | 4.42 | 1.44 |
| Partner has promised to do things without doing them later sometimes | | 3.76 | 1.404 |
| Carry out their duties even if we do not check up | | 4.09 | 1.625 |
| Nationality (%) | | | |
| 0. Foreign | 47.1 | | |
| 1. Domestic or domestic and foreign | 52.9 | | |
| Reciprocity | | | |
| 0. No disadvantageous situation | 42.1 | | |
| 1. Disadvantageous situation | 57.9 | | |
| Financial returns produced by firm's alliance relationships | | 3.43 | 0.611 |
| Sector (%) | | | |
| 1. Natural sources | 11.9 | | |
| 2. Services | 6.4 | | |
| 3. Basic Manufacturing | 75.5 | | |
| 4. High Technology | 6.2 | | |
| Age of the firm | | | |
| 0. More than 10 years old | 75.3 | | |
| 1. Less or 10 years old | 24.7 | | |
| Size of the firm: number of employees | | | |
| 1. 0-50 | 6.4 | | |
| 2. 50-200 | 38.6 | | |
| 3. 200-500 | 50.1 | | |
| 4. >500 | 5.0 | | |
| Total of firms | 503 | | |

The number of independent parties involved in the transaction will affect the complexity of such a transaction as the number of potential interactions, and therefore interdependencies among them, will increase with greater numbers. So, the number of partners is considered to have a positive influence on the coordination needs. Furthermore, the problems of measuring individual contributions to the collective action, which facilitate free riding behavior (Alchian and Demsetz, 1972), will also likely to be increased. Therefore, it will increase the risks of expropriation, compared with those between two firms. Therefore it is possible to associate these observed attributes with higher degrees of opportunistic behavior.

In the questionnaire it is possible to find three variables that are capturing the possible opportunistic behavior of the partner/s in the alliance. More precisely, Thai firms were asked if:

- i) their partners seem to feel that to do anything within their means that will help further their organization's interest is acceptable,
- ii) their partners carry out their duties even if they do not check up on them and,
- iii) their partners have promised to do things without doing them later.

Other attributes affecting the complexity of the transaction is the realization of R&D activities (1), compared with the absence of such activities (0). The presence of R&D related activities in the collaboration suggest that the transaction involves production and/or transfer of knowledge, which is difficult to protect with contracts. In this situation, opportunistic behavior increases because (Arrow, 1969; Williamson, 1985):

- i) By fixing a price it is necessary to know the product, but once the knowledge is acquired there is no point in paying the price.
- ii) The knowledge may be non-codified and often ex-ante uncertain, so the outcomes of the transaction are difficult to enumerate and verify.
- iii) The generation of knowledge often involves sunk costs and therefore specific investments.

Furthermore, it will be assumed that innovation through R&D activities is likely to have more person embodied human capital than other activities. Innovation is highly labor intensive and the costs incurred through it are widely recognized as sunk costs (Stiglitz, 1987).

One condition that favor reputation and social pressure effects as sustainable of implicit contracts, are proxies by the variables nationality of the collaborating part. Social norms are more likely in culturally homogeneous social communities. Moreover, geographical proximity will facilitate the observation of the behavior of the partners and

check whether such behavior is consistent or not with the premises. Observation of the behavior, or at least, of the consequences of it, is necessary to apply social sanctions such as shame, and to start the application for economic penalties by excluding the deviating part from future collaborations.

The partner nationality variable is divided in two categories: Foreign (0) or Domestic and Foreign partner (1). Implicit contracts are expected to be more viable when partners are domestic (cultural proximity). It may also be argued that higher socio-cultural distance among collaborating partners may create difficulties in collaborations that involve strong interpersonal relations. So, instead of introducing more hierarchical controls, firms choose to rely on more standardized contracts such as licensing. So, socio-cultural distance may favor separated ownership.

Through the questionnaire it is also possible to identify two variables that could be approximating the possible reciprocity and the Thai firm consideration of the value of the financial returns produced through the collaboration relationships. More precisely, Thai firms were asked:

- iv) if their partners were smaller, larger or the same size. It was considered that when firms participating in a collaboration agreement were the same size none of them was in a disadvantageous situation.
- v) an assessment, in a five position scale (from extremely poor to extremely good), of the financial returns produced by the firm's alliance relationships.

Information is also available as to in which economic sector the collaboration takes place. The Natural sources, Services, Basic Manufacturing and High Technology sectors are widely represented. It is acknowledged that patent protection differs across industries (Oxley, 1997; Gulati and Singh, 1998), so the legal system will protect to a different degree the interests of the parties depending upon the economic sector where the collaboration is developed. Furthermore, according to Harrigan (1985) rapidly changing technological development induces the formation of somewhat more informal forms of collaboration such as non-equity agreements. As industries become mature, more formal

modes of collaboration such as joint ventures become the preferred ones. So, in choosing particular modes of collaboration, the level of technological sophistication of industries could play an important role (Hagedoorn & Narula, 1996, p. 280). Osborn and Baughn's (1990) survey suggested that technological stability of industrial sectors is a crucial factor in explaining different patterns of equity and non-equity partnerships.

Finally, the age and the size of the firm are included as control variables to account for possible effects in the structure selection.

4.3.2.2. Results of Logistic Regression Analysis

The statistical package SPSS was used for the estimation. However, before commenting on the estimated coefficients, Table 22 presents the final explanatory variables considered in the analysis and their relationships with the hypotheses established in the previous chapter. Based on the previous comments about the content of the variables, the sign of the effect of the variable indicating if the probability of implementing Joint Ownership instead of Separated Ownership increases or decreases, is also indicated.

Table 22. Descriptive Statistics of the Variables (b)

| Variable | Hypothesis |
|---|---|
| Kind of activity (%) 0. Other kind 1. R+D | H1 , H4 + - |
| Number of partners 0.2 partners 1. More than 2 | H1 + |
| Nacionality (%) 0. Foreign 1. Domestic or domestic and foreign | H2 - |
| Reciprocity 0. No disadvantageous situation 1. Disadvantageous situation | H3 + |
| Financial returns produced by firm's alliance relationships | H5 - |
| Sector (%) 1.Natural sources 2.Services 3.Basic Manufacturing 4.High Technology | H4 - - - (Reference category) |
| Age of the firm 0. More than 10 years old 1. Less or 10 years old | Control Variables |
| Size of the firm: number of employees 0. Less than 200 1. 200 or more | |

It has been mentioned before that the number of partners, R&D activities and three other variables from the questionnaire¹⁷, could be related to opportunistic behavior. These last three variables were measured in the Likert scale of seven positions. Basically, each respondent was asked to indicate the extent to which he/she disagreed or agreed with the given statement, such that 1 = Strongly Disagree and 7 = Strongly Agree. When multiple-item scales are used to measure latent constructs and a composite score based on these items could be used in further analyses, it is important to assess the validity and reliability of the scales used (Gerbing and Anderson, 1988). Selection of scale items on

¹⁷ The three variables are: if Thai firms' partners seem to feel that to do anything within their means that will help further their organization's interest is acceptable; if they carry out their duties even if they do not check up on them and if they have promised to do things without doing them later.

the basis of prior literature, fieldwork, and pretesting of the survey instrument helped ensure content and face validity. Therefore, to assess scale reliability, Cronbach Alpha¹⁸ was computed.

In fact, the three items measuring partners' opportunistic behavior presented a Cronbach Alpha equal to 0.676. Nunnally (1967) pointed out that the minimally acceptable reliability for preliminary research should be in the range of 0.5 to 0.6 and these should be well above the cut-off value of 0.7 in each case (Nunnally, 1978; Peterson, 1994; Rialp, 2003). Therefore, it can be confirmed that the three items are referred to the same construct: opportunistic behavior of the partner. To avoid colineality problems in the logistic regression it is assumed that the variable representing "if Thai firms' partners seem to feel that to do anything within their means that will help further their organization's interest is acceptable", will be the one reflecting the opportunistic behavior in the model.

However, when this variable to the variable measuring the presence of R&D activity was related, it was possible to reject at 99% of confidence the null hypothesis establishing that both variables are independent ($F=30.468$, $\text{Sig.}<0.000$). So, if both variables in the model were introduced, this study would be facilitating colineality in the model again. Summarizing, to capture the idea of opportunism, avoiding colineality problems in the model, two variables are considered enough: number of partners and R&D activity. The coefficients of both variables are expected with a positive sign (hypothesis 1).

Nevertheless, the presence of R&D activities will be also used for contrasting hypothesis 4. For those firms collaborating in R&D activities, there are person embodied specific human capital investments. The theory predicts that separated ownership of physical assets would be more efficient than joint ownership, which is presented in joint

¹⁸ Cronbach's Alpha is a generalized measure of the internal consistency of a multi-item scale and it has become one of the foundations of measurement theory. Moreover, it is a generalized intraclass correlation coefficient, so it can be derived from the theory of true and error scores, as well as from the domain sampling model (Peterson, 1994). With these reasons coefficient alpha has been used as the measure of choice for estimating the reliability of a multi-item scale in this study.

ventures. Therefore, a negative sign would be expected for the estimated coefficient of this variable finding evidence in favor of hypothesis 4 formulated from the theory of the boundaries of the firm based in the property rights approach.

In fact, the results show, in the first column of Table 23, that hypothesis 1 is confirmed: joint ownership as a governance structure is likely to be more effective as a governance form when incentive problems and coordination needs are highly severe. Therefore, Joint Ownership seems to be preferred over Separated Ownership as having more possibilities of observing opportunistic behavior¹⁹. This research has just referred partially confirmed because the coefficient of “Number of Partners” is not statistically significant, so the variable does not seem to significantly affect the level of coordination problems, according to the data. However, in the line of hypothesis 1, the positive coefficient ($\hat{\beta}_{R\&D} = 3.45$) for the variable measuring the presence of R&D activities in the collaboration is obtained. Consistent with this hypothesis, the estimated coefficient means that those collaborations performing R&D activities imply a relatively high level of coordination problems compared with those which do not perform this type of activity, and consequently they also have a higher likelihood of incorporating hierarchical controls. On the other hand, this positive sign allows us to reject hypothesis 4; for those firms collaborating in R&D activities, Separated Ownership would not be necessarily more efficient than Joint Ownership. In other words, this hypothesis can not be supported as no significant relationship was found.

Considering the estimated coefficients of the control variables, interesting results are also obtained. The sign of the estimated coefficients are consistent with the prediction from the Transaction Cost Theory assuming that in high-tech sectors Joint Ownership is more efficient than some form of Separated Ownership. The reference category is the High-tech sector. Therefore, the sign of the coefficients of the other categories represents if the probability of Joint Ownership vs. Separated Ownership is higher or lower in those sectors vs. the reference sector. The three coefficients are negative and two of them are

¹⁹ In other words: with more interdependencies, uncertainty, resources specificities and measurement problems.

statistically significant. So the probability of Joint Ownership in High-tech sector is significantly higher than in sectors related to Natural Sources and Basic Manufacturing.

On the other hand, for younger firms, Joint Ownership is less likely to be implemented than Separated Ownership. At this point it is interesting to remember that to implement structures implying Joint Ownership is more complicated than Separated Ownership structures. Therefore, this coefficient is understood as an indicator of the experience with the establishment of collaboration agreements.

Finally, considering the size, larger firms implement structures related to Joint Ownership, more than smaller firms.

Table 23. Logit Estimation of the Choice of Governance

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| Intercept | 23.810 (34.819) | 21.183 (22.457) | 21.667 (16.613) | 3.267 (25.411) | 17.083 (26.361) |
| Number of partners (1 = More than 2) | -17.785 (34.794) | -14.795 (22.394) | -13.737 (16.511) | -13.390 (1.149) | -11.751 (26.333) |
| R&D (1 = R&D activity) | 3.450*** (0.633) | 5.718*** (1.17) | 5.420*** (1.114) | 3.944*** (1.149) | 6.630*** (1.484) |
| National (1 = Domestic or domestic & foreign) | | -11.958*** (1.743) | -11,515*** (1.669) | -10.382*** (1.606) | -9.606*** (1.471) |
| Reciprocity (1 = Disadvantage situation) | | | -1.702*** (0.597) | -2.224*** (0.704) | -2.176*** (0.715) |
| Financial returns produced by firm's alliance relationships (s2) | | | | -2.704** (1.274) | |
| Interaction Opportunism & Future Value | | | | | -5.731*** (1.453) |
| Size (number of employees) (1 = 200 or more) | 3.262*** (0.624) | 2.144*** (0.696) | | | |
| Firm age (1 = Less or 10 years old) | -2.692*** (0.703) | -3.015 (0.783) | -4.550*** (0.905) | -2.609** (1.295) | -0.781 (1.367) |
| Sector (reference = high technology) | | | | | |
| 1. Natural sources | -4.648** (2.031) | | | | |
| 2. Services | -14.145 (25.287) | | | | |
| 3. Basic Manufacturing | -9.326*** (1.393) | | | | |
| -2 Log. Likelihood | 213.839 | 130.056 | 133.278 | 126.734 | 115.301 |
| Chi square | 303.702*** | 387.485*** | 384.263*** | 390.807*** | 402.241*** |
| Cox & Snell R ² | 0.496 | 0.583 | 0.58 | 0.586 | 0.597 |
| Nagelkerke R ² | 0.72 | 0.846 | 0.842 | 0.851 | 0.866 |
| Percentage correct classification | | | | | |
| Overall | 85.1 | 92.3 | 92.3 | 92.6 | 92.3 |
| Separated Ownership | 98.3 | 99.2 | 97.5 | 98.3 | 97.5 |
| Joint Ownership | 80.2 | 89.8 | 90.4 | 90.4 | 90.4 |

Standard error in parenthesis.

*Significance < 0.1; ** Significance < 0.05; ***Significance < 0.01.

The logit model is estimated to incorporate the idea of trust affecting the choice of the governance form, hypothesis 2 (second column²⁰ of Table 23). Notice that the proxy of this variable (national) has a negative statistically significant coefficient. It would indicate therefore that, for the rest of the independent variable equal, the higher value of the variable decreases the likelihood of choosing a more hierarchical governance form. So, when the alliance is established with a domestic partner or, at least, another domestic partner participates, Joint Ownership structure is less likely to be selected, as it was supposed in hypothesis 2. Firms seem to be more reluctant to choose Separated Ownership with non-domestic partners, which would be consistent with this prediction that cultural, social and physical proximity are conditions which restrict opportunistic behavior because it is more likely to have social pressure from norms, and reputation is more valuable. It is convenient to say that the estimated coefficients for the variables “Number of the partners” and “R&D activities” are consistent with those obtained in the first estimated model. Only the variable representing the age of the firm has lost its significance but the sign remains the same.

In the third column of Table 23, the model considering reciprocity, hypothesis 3 has been estimated. In fact, the estimated coefficient for the variable measuring the reciprocity deviates from the prediction: being in a disadvantageous situation has a negative and significant coefficient. As a consequence, Separated Ownership structures are preferred rather than Joint Ownership when partners expect low levels of reciprocity in a cooperative relationship.

In this model, neither sector nor size has been considered as independent variables. The reasons are that sector is related to nationality and size is related to the variable measuring reciprocity²¹.

Finally, the idea related to forbearance, hypothesis 5, is added into the model. The fourth column of Table 23 presents the model including the consideration of financial results as independent variable. The estimated coefficient for the variable measuring the financial returns is negative and significant. Therefore, Separated Ownership structures

²⁰ To estimate this second model, the control variable indicating the sector has not been added because it is related to the nationality of the partner/s participating in the collaboration agreement.

²¹ Furthermore, the inclusion of firms' characteristics in the models does not seem to alter the basic results (Oxley, 1997; Gulati and Singh, 1998).

are preferred rather than Joint Ownership when benefits are considered. The partners consider that implementation structures where partners have veto power is not needed. Furthermore, the last column of Table 23 looks at the issue of possible complementarities between future value of the collaboration and opportunism. The model estimated now includes the interactive variable R&D – Result of the collaboration to capture those collaborations where technological activities are performed, so more probability for opportunistic behavior, but where the expected future benefits could not make it necessary to implement Joint Ownership structures. The estimated coefficients for the rest of the variables of the model practically remain the same, but the coefficient of the new interactive variable is negative and significant. It appears that future results and technological activities increase the likelihood of Separated Ownership. So this evidence reinforces hypothesis 5. Table 24 summarizes the results of hypotheses analysis.

Table 24. The Results of Hypotheses Analysis

| Hypotheses | Results |
|--|---------------|
| H1: Joint ownership as a governance structure is likely to be more effective as governance form when collaborations are highly complex in terms of uncertainty, resources specificities, interdependencies, opportunism behavior, etc. (in other words: where incentive problems and coordination needs are highly severe). | supported |
| H2: Joint ownership is less likely as governance structure if the firm trust in its partner. | supported |
| H3: When partners expect low levels of reciprocity into a cooperative relationship, joint ownership is more likely as a governance structure. | Not supported |
| H4: when one party has done important ex-ante investments in assets, inter-firm collaborations that imply Joint Ownership are less likely than those which keep ownership of assets separated among the collaborating parties. | Not supported |
| H5: when incentive problems and coordination needs are highly severe joint ownership is less likely as a governance structure if alliance partner's take a long-term view of their relationships and believe that future gain from present cooperative behaviour outweigh the potential immediate gains of cheating. | supported |
| H6: Satisfaction of the firm with the collaboration should be independent of the implemented structure if it has been selected taking into account aspects from Transaction Cost Theory, Property Rights Theory and Transactional Value Theory. | supported |

Analyzing the global usefulness of the different estimated models, we can observe how the last three models (Model 3,4,5) present the best results. More precisely, the fourth model achieves the best classification rate: globally 92.6% of the structures are

well classified and this percentage is divided into 98.3% if we focus on Separated Ownership and 90,4% when we talk about Joint Ownership.

It can be answered that these results allow us to defend the theoretical model considering the Transaction Cost Theory, the Property Right Theory and the Transactional Value Theory as a good theoretical framework for analyzing the selection of structures for implementing collaboration agreements. In the next section an attempt will be made to relate empirically the selected structure with the satisfaction.

4.3.2.3. Satisfaction with the implemented structure

In the questionnaire there was a question trying to capture the experiences of Thai firms with collaboration agreements. This question had three items measured in a Likert scale of five positions. Basically, each respondent was asked to indicate the extent to which he/she disagreed or agreed with a given statement, such that 1 = Extremely Poor and 5 = Extremely Good. As referred before, when multiple-item scales are used to measure latent constructs and a composite score based on these items could be used in further analyses, it is important to assess the validity and reliability of the scales used (Gerbing and Anderson, 1988). Therefore, to assess scale reliability, this research computed Cronbach Alpha²². In fact, the three items measuring partners' satisfaction present a Cronbach Alpha equal to 0.7418 (a value above the cut-off value of 0.7 - Nunnally, 1967, 1978; Peterson, 1994; Rialp, 2003). Therefore, it can be confirmed that the three items are referred to the same construct: satisfaction of Thai firms with their collaboration agreements.

With the aim of obtaining a measure of satisfaction, these three variables were summarized in just one new dimension applying factor analysis²³. The eigenvalue of the new dimension is equal to 2.024 and the percentage of variance this new dimension explains of the initial three variables is 67.47%.

²² See footnote 18.

²³ Although the number of variables is low, the KMO and Bartlett's Test of Sphericity allows this kind of analysis to be made (KMO=0.45; Sig Bartlett's Test < 0.01).

The assumption is that satisfaction with collaboration agreements must be independent of the structure of the agreement if the structure has been selected considering possible opportunistic behavior, property rights' aspects, trust, reciprocity and the possible benefit related to the collaboration. Therefore, this study should not observe a significant relationship between a new measure of satisfaction and the structure of the agreement. As it can be observed in Table 25, this study cannot reject the null hypothesis establishing independence between satisfaction and structure of the collaboration agreement. Hypothesis 6 is confirmed with the data.

Table 25. Satisfaction Comparison

| | N | Mean | Std. Deviation | 95% C. I. for Mean | | F | Sig |
|------------------|-----|--------|----------------|--------------------|-------------|-------|-------|
| | | | | Lower Bound | Upper Bound | | |
| Single Ownership | 120 | 0.036 | 0.633 | -0.078 | 0.150 | 1.729 | 0.189 |
| Joint Ownership | 323 | -0.110 | 1.155 | -0.237 | 0.016 | | |
| Total | 443 | -0.071 | 1.04 | -0.168 | 0.026 | | |

It can now be summarized here that hypotheses 1, 2, 5, and 6 were found to support these relationships and in the expected direction, while hypotheses 3 and 4 were not significant and were rejected.

4.4. Discussion and Conclusions

Several papers have been published, which have been reviewed in previous chapters of this dissertation, explaining why certain forms of governance may be preferred over the others. The conclusions point towards the advantages of hierarchical controls, in terms of lower transaction costs, over explicit contracts when collaborations involve intense interdependencies and appropriability hazards, and when implicit or relational contracts are not feasible. The potential costs of the hierarchy have been generally ignored, probably because the transaction costs literature has not spelled them out properly beyond generic references to “bureaucratic costs”.

This chapter has been written with the purpose to integrate the Transaction Costs Theory, the Property Rights Theory related to the boundaries of the firm, and the Transaction Value Theory to explain the choice of a governance form in interfirm

collaborations. It is believed that this theoretical framework clarifies the costs of introducing what have been called hierarchical controls, and considers the value of the net benefits in the selection of the structure. The underlying conjecture during the chapter has been that the governance forms incorporating hierarchical controls are in fact forms of “Joint Ownership” (any party has veto power on the use of the non-human assets employed in the collaboration). Therefore, to introduce the so-called “hierarchical controls” is in fact to move from “Separated Ownership”, when collaborations are governed by contracts, to “Joint Ownership”.

The empirical analysis performed in this chapter finds evidence that the costs of Separated Ownership may be superior to its benefits in collaborations which involve R&D activities. Until now, the empirical evidence (Pisano, 1989; Gulati, 1995; Oxley, 1997; Gulati and Singh, 1998) indicated that the likelihood of introducing Joint Ownership increased in collaborations related to technological activities, compared with non technological ones. This conclusion would also be consistent with the arguments of Holmstrom (1999) and Holmstrom and Roberts (1998) in the sense that the property rights approach is not sufficient to explain the boundaries of firms, and it has to be complemented with contributions from the theories of incentive design and efficient coordination.

As generated in previous literature and hypothesized in the theory section, the paper also finds evidence that trust, measured by the geographical origin of the partners, may influence the choice of the governance form. Proximity favors in general Separated Ownership. Therefore, collaborating firms may perceive Joint Ownership as a governance form which provides more protection against ex-post opportunism, and it will be preferred when partners are more “distant” so implicit contracts are less feasible. So the analysis finds evidence of substitution between conditions which favor reputation effects and the use of Joint Ownership. The reason would be that such reputation effects increase the benefits of Separated Ownership compared with Joint Ownership, relatively to the benefits when these effects are absent. So the general presumption that “trust” may reduce the need of hierarchical controls (in terms of incentives design and coordination efforts), and, as a consequence, becoming an explanation of why agents rely on Separated Ownership, is supported by the data.



Two other important results have been obtained through the empirical analysis. First of all, being in a disadvantageous situation in collaboration leads to a preference of Separated Ownership structures. When Thai firms expect low levels of reciprocity in a cooperative relationship it seems that they prefer not to be very involved with their partners. Secondly, Separated Ownership structures are preferred over Joint Ownership structures when benefits are considered. But that's not all: it is possible to point out that complementarities exist between future value of the collaboration and opportunism. As explained before, when the model includes the interactive variable R&D estimated – Result of the collaboration; the coefficient of the interactive variable is negative and significant. It appears that expected future results related to collaboration in technological activities increase the likelihood of Separated Ownership. The highest probability for opportunistic behavior is compensated by the expected future benefits. Therefore, to implement Joint Ownership structures is not necessary for managing the collaboration agreement.

This chapter and the results obtained, although encouraging in terms of opening new avenues for empirical work on the boundaries of the firm, have limitations due mainly to the nature of the data. The information relating to the collaborations is quite limited both in terms of the actual features of the selected governance form and in terms of the attributes which are identified as sources of complexity in the transaction. This research would have benefited from a more detailed description of the terms of the contracts to make sure that the coding of the dependent variable was the correct one. This difficulty is often recognized in the literature, Oxley (1997, p. 391), nevertheless it is important to recall it and introduce some caution into the conclusions. However, this research hopes that the preliminary evidences presented in this chapter will encourage future efforts to collect more data and verify the robustness of the results.

In the next and final chapter of this dissertation the conclusion of this study is presented, as well as the limitations and the future research.

Appendix 1

Sources facilitating strategic alliances

Table 26 shows that almost 50% of firms preferred to deal with an other company to facilitate their alliances, also 20.02% of firms viewed a distribution network as an important tool, followed by financial institutes 15.34%, internet sites 9.96% and 9.36% forwarded government programs.

Table 26. Sources Facilitating Strategic Alliances

| Sources Facilitating Strategic Alliances* | % |
|--|---------------|
| 1. Other company we deal with | 45.27 |
| 2. Distribution Network | 20.02 |
| 3. Financial institute | 15.34 |
| 4. Internet site | 9.69 |
| 5. Government Program | 9.36 |
| 6. Venture capital | 0.21 |
| 7. Trade/professional associates | 0.10 |
| | 100.00 |

Path of alliance structures

Firms that used more than one form of alliance were asked to indicate which structures of the alliances were implemented first, second and thirdly. The study shows that the respondents participated in “Joint venture” as the first structure; followed by “Cooperation agreement to gather information”; thirdly, “Cooperation agreement to exchange information”; and the last one “Cooperation agreement to jointly carry out the task with other firms”. These findings are detailed in Table 27.

The results of the survey show that some firms have implemented more than one form of alliance. The most utilized alliance structure was “ Joint venture”: firms in industrial districts in Thailand prefer to participate in formal alliances than in informal ones.

Table 27. Path of Alliance Structures

| Type of alliance | The implementing order | First | second | third | Fourth | fifth |
|--|------------------------|-------|--------|-------|--------|-------|
| Joint venture | | 442 | - | - | - | - |
| Ca to gather information | | 32 | 33 | | 1 | - |
| Ca to exchange information | | 1 | 32 | 32 | - | 1 |
| Ca to jointly carry out the task through the third party | | - | - | - | - | - |
| Ca to jointly carry out the task with other firms | | 26 | 61 | 2 | - | - |
| Other | | - | - | 1 | - | - |

The motivation for establishing alliances

Four items were used to capture the motivation for establishing strategic alliances. These motives were adapted from the scheme of Rialp et al. (2001).

Firms were asked to rate the motivation for establishing cooperation agreements from very unimportant to very important. They were asked to respond to several additional positions and issues regarding the agreement. The study demonstrates that “the continuing of technologies advances” is the most important motivation to establish a cooperation agreement. It is followed by “the competence of the international level” (see Table 28).

This result may indicate that Thai firms perceive strategic alliances as an appropriate business strategy although not all of them have been or are currently involved in an alliance with another company.

Table 28. The Motivation for Establishing Alliances

| Description | Very unimportant | Unimportant | Neutral | Important | Very important |
|---|------------------|-------------|---------|-----------|----------------|
| The competence of the international level | 58 | 2 | 153 | 182 | 108 |
| The continuing of technologies advances | - | 1 | 90 | 119 | 293 |
| The reducing of products life circle | 65 | - | 226 | - | 89 |
| More flexible in changing a production | 2 | - | 29 | 357 | 114 |

Opinions of alliance experiences

This part indicates more clearly the opinion of Thai firms about their alliances. The questionnaire lets the respondents rate their opinion about different items from strongly disagree to strongly agree (see Table 29).

The results demonstrate that the majority of firms did strongly agree that the cooperation between firms reduced the cost of production and administration; also they agreed with the item establishing that the agreement between firms would be met if firms had similar cultures, and objectives. Due to the internationalisation interest of some Thai firms, most of the interviewed firms that answered the questionnaire did agree with the item establishing that the alliances constitute one of the best options for initiating the international expansion. Likewise, Thai firms agreed with the item establishing that the confidence in their partners has played an important role in establishing alliances.

However, Thai firms do not want to ally with their competitors, and they do not believe they would have lost their reputation if they had implemented strategic alliances. Nevertheless, from the results, it can be concluded that alliances have been seen as positive strategic tools.

Table 29. Opinions of Alliance Experience

| Alliances experience | Opinions | | | | |
|--|----------|-----|-----|-----|-----|
| | sd | Da | N | a | sa |
| strongly disagree \longrightarrow Strongly agree | | | | | |
| The cooperation agreement reduced the production costs. | 1 | 60 | 120 | 94 | 228 |
| The cooperation agreement reduced the administration costs. | - | 91 | 177 | 124 | 111 |
| The agreement permitted small & medium firms allied without control. | 2 | 63 | 287 | 150 | 1 |
| The cooperation agreement was established between firms with similar cultures. | 30 | 30 | 115 | 240 | 88 |
| The cooperation agreement will not be established with competitor firms. | 31 | 114 | 178 | 153 | 27 |
| The agreement reduced the necessity of the firms' investment. | - | 60 | 88 | 268 | 87 |
| The agreement constituted a better option for initiating the international expansion. | - | 60 | 84 | 218 | 141 |
| The cooperation agreement affected negatively upon the firm's reputation. | 295 | 119 | 59 | - | 30 |
| The firms that participated in an agreement will have similar objectives. | - | 30 | 146 | 207 | 120 |
| The confidence between allied firms is the fundamental of the cooperation establishment. | - | - | 86 | 150 | 267 |

Problems with allied firms and with the alliances

The respondents were asked to rate the problems from very unimportant to very important and filled in the open ended question as to whether more problems had been perceived. The most serious problem found was that “allied partners have appeared to alter the facts slightly in order to get what they need”. This case created a hostile environment between allied firms. Sometimes allied firms did not protect the interest or advantage of its firm. Furthermore, “the high competition between allied firms”; “allied partners need to get more advantage”; and “culture & ethic differences created an obstacle and misunderstanding” seem to be important problems as well.

The respondents were asked by an open ended question whether other problems have been faced in their relationships. Some firms, for example, had problems with their allied partners in transferring knowledge. Likewise, the communication between domestic firms and foreign firms (due to language barrier) and the policy design, especially if the price policy was under controlled when selling to allied groups, were two other important problems. Some firms complained that the quality of products and timing in production did not achieve their expectation. Furthermore, it was difficult to plan strategy with their alliances because of the rapidity of market changing barriers (uncertainty).

This study also found that problems could occur when allied firms were different sizes and had differing capabilities, if the working system of firms depended on too much systems, and when change occurred, these would always create hostile environments. The last problem identified was that allied partners did not accept any guilt when some error in product quality occurred (see Table 30).

However, Thai firms who answered the questionnaire were satisfied with alliances, although some problems exist between allied firms, but they were already planning on more alliances in the future.

Table 30. Problems with Allied Firms & the Alliances

| Problems | Degree of Importance | | | | |
|---|----------------------|-------------|---------|-----------|----------------|
| | Very unimportant | Unimportant | neutral | important | Very important |
| The high competition between allied firms created problems in cooperation and implementation. | 21.7 | 18.1 | 35.8 | 18.3 | 6.2 |
| Have shown their need to get more advantage from allied firms. | | 0.2 | 57.9 | 30 | 11.9 |
| Culture & ethic differences created an obstacle and misunderstanding in cooperation & implementation. | 0.4 | 12.1 | 63.6 | 6.8 | 17.1 |
| Have appeared to alter the facts slightly in order to get what they need | | | 46.3 | 47.5 | 6.2 |
| Have sometimes not protected the interest/advantage of allied firms. | 6 | 11.3 | 76.1 | 5.8 | 6.8 |

Characteristics of top management or questionnaire respondents

Gender

The proportion of men and women occupying top management jobs. This study found that more than 50 % of respondents were female, and 47.8% were male (see Table 30). There is no doubt that the role of woman in business is increasing rapidly in Thai industries as shown, in comparison with the prior study (Thechatakerng, 2000) where males were dominant (more than 90%).

Table 31. Gender

| Gender | N | % |
|--------|-----|-------|
| Male | 241 | 47.8 |
| Female | 263 | 52.2 |
| Total | 504 | 100.0 |

Age

The study shows that almost of 35% of the respondents were aged between 41-45 years old, followed by respondents between 36 - 40 (23%) and 17.7% of the respondents were 31 - 35 age range (see Table 32).

Table 32. Age of Respondents

| Age | N | % |
|---------------|-----|-------|
| Between 26-30 | 27 | 5.4 |
| Between 31-35 | 89 | 17.7 |
| Between 36-40 | 116 | 23.0 |
| Between 41-45 | 176 | 34.9 |
| Between 46-50 | 34 | 6.7 |
| Between 51-55 | 30 | 6.0 |
| over 56 | 32 | 6.3 |
| Total | 504 | 100.0 |

Education

More than 60% of respondents were university graduates, 24% had attained postgraduate level qualifications and 11.9% were college educated. The results indicate that education has played an important role in Thai businesses, and the trend is for a significant increase in the near future in postgraduate studies (see Table 33).

Table 33. Education

| Institute | Frequency | Percent |
|---------------|-----------|---------|
| College | 60 | 11.9 |
| University | 322 | 63.9 |
| Post graduate | 122 | 24.2 |
| Total | 504 | 100.00 |

4.5. Bibliography

- Alchian, A.A., & Demsetz, H. (1972). *Production, Information Costs, and Economic Organisation*, the American Economic Review, 62, p.777-795.
- Audio, E., Sapienza, H.J., & Almeida, J. (2000). *Affects of Age At Entry, Knowledge Intensity and Limitability on International Growth*, Academy of Management Journal, 43, p.909-924.
- Culpan, R. and K. A. Eugene (1993). 'Cross-national Corporate Partnerships: Trends in Alliance Formation'. In R. Culpan (ed.), *Multinational Strategic Alliances*. Hayworth Press, New York, pp. 153–171.
- Department of Industry of Thailand. (1999). www.dip.go.th
- Dyer, J. and H. Singh (1998). *The relational view: Cooperative strategy and sources of interorganizational competitive advantage*, Academy of Management Review, 23(4), pp. 660–679.
- Gerbing, D. W. and J. C. Anderson (1988). *An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment*, Journal of Marketing Research, 25, pp. 186–192.
- Geringer, J. M. (1988). *Partner Selection Criteria for Developed Country Joint Ventures*, Business Quarterly, 53, pp. 55–62.
- Gibson, B., Weaver, K.M., and Dickson P.H. (1997). *Strategic Alliance Use, Firm Size, Outcome Satisfaction and Partner Behaviors*, The Journal of SEAANZ, 5(1), p.3-15.
- Gulati, R. (1995). 'Does familiarity breed trust? The Implications of Repeated Ties for Contractual Choice in Alliances', Academy of Management Journal, 38, pp. 85–112.
- Henderson, R., & Mitchell, W. 1997. *The Interactions of Organizational and Competitive Influences on Strategy and Performance*, Strategic Management Journal, 18(special issue): 5-14.
- Hitt, M.A., Levitas, E., Arregle, J., & Borza, A. (2000). *Partner Selection in Emerging and Developed Market Contexts: Resource-Based and Organizational Learning Perspectives*, Academy of Management Journal, 43(3), p.449-467.
- Kale, P., Singh, H., & Perlmutter, H. (2000). *Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital*, Strategic Management Journal, 21, p.217-237.



- McGahan, A. M., & Porter, M. E. 1997. *How Much Does Industry Matter, Really?* Strategic Management Journal, 18(special issue): 15-30.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). McGraw-Hill, New York.
- Peterson, R.A. (1994). *A Meta-Analysis of Cronbach's Coefficient Alpha*, Journal of Consumer Research, 21, p.381-391.
- Rialp, J. (2003). *Escalas de Medición y Temas Relacionados*, Dpt. D'Economia de l'Empresa. Facultat d'Econòmiques. Universitat Autònoma de Barcelona.
- Rialp, J. & A, Santamaria, L. (2001). *Collaboration Strategies and Technological Innovation: A Contractual Perspective of the Relationship Between Firms and Technological Centers*, Paper Presented in Euram's conference, Italy.
- Ring, P. S. and A. Van de Ven (1989). *Formal and informal dimensions of transactions*. In A. Van de Ven, H. Angel, and M. S. Poole (eds.), *Research on the Management of Innovation: The Minnesota Studies*. Ballinger/Harper Row, New York, pp. 171–192.
- Simonin, L.B. (1999). *Ambiguity and The Process of Knowledge Transfer in Strategic Alliances*, Strategic Management Journal, 20, p.595-623.
- Thechatakerng, S. (2000). *Strategic Alliances and Performances of Firm in Fruit and Vegetable Processing Industry in the Northern Region of Thailand*, the Unpublished 7 Credits Research Paper, Presented at Universitat Autònoma de Barcelona.
- Veciana, J.M. (1970). *Formas Colectivas de Empresa en el Ambito Economico*, Cesea. Madrid.
- Zaheer, A., B. McEvily and V. Perrone (1998). *Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance*, Organization Science, 9, pp. 1–20.

Chapter Five

5. The Summary of the Dissertation and Conclusions

5.1. Significance of this Study

The prior research in the field in Thailand found that there was a strong need for research to improve the knowledge of the alliances across sectors, partner behaviour and satisfaction. Therefore, the results of this study will increase the understanding of the strategic alliances phenomenon. Particularly, from the point of view of the relationship between the behaviour of partners, the governance structure, and the level of satisfaction, in the strategic alliances established by Thai firms in industrial districts.

It is possible to say that this research will enhance the actual knowledge of strategic alliances for developing countries and the results from the study will be useful for scholars who are interested in this field, entrepreneurs, investors or existing firms will be able to apply this information when planning, reforming, and developing their businesses.

5.2. Summary of the Dissertation

As already mentioned in Chapter One, different topics on strategic alliances have been focused in developed countries. However, few works have been centered around the implementation of strategic alliances in countries suffering from a serious economical crisis, for example Thailand. In this country, the specific economic situation has led managers to consider strategic alliances as appropriate tools for developing and implementing their strategy for their business.

In this dissertation, once the definition of a strategic alliance which was to used through out the study was presented, the theoretical framework that has been referred to in different studies focused on strategic alliances: Transaction Cost Economy (TCE) was presented as well. However, due to the specific objective of this dissertation: relating to

behavior, structure of the alliance, and partners' satisfaction, we have tried to present the different limitations are found in TCT when used as a theoretical framework. Therefore, other theoretical frameworks (Property Rights Theory - PRT – and Transactional Value Theory – TVT) which, this study believes complement the TCE; are considered and the mix of all of them allows this dissertation to reach the theoretical framework of reference. Likewise, from this theoretical framework, several hypotheses have been formulated and, in the Chapter Four, these hypotheses have been contrasted. The results of the tests done validate the theoretical framework.

As the main conclusion it can be pointed out that if different topics were considered when firms decided the structure for implementing a collaboration agreement (for example, the possible opportunistic behavior of the partner, the presence of trust, the presence of forbearance, the allocation of the property rights or the future results of the alliance), then the satisfaction of the partners is not related to the specific structure of the relationship.

Therefore, this dissertation has two main contributions: Firstly, the theoretical framework developed, using as its starting point the Transaction Cost Theory. Secondly, the empirical work that demonstrates that if the structure of the alliance is endogenous, then the satisfaction of the partners with the relationship is independent from the structure of the alliance. For each situation, the structure will be more flexible and different. Not all the firms implementing Joint Ventures are more satisfied with their alliances than those firms implementing other structures that are not implying Joint Ownership.

The first contribution, the theoretical framework presented in the theoretical background from Chapter Two and Three that Transaction Costs Economic (TCE) considers that there are some hybrid forms closer to the market and others which are closer to hierarchy. Due to the different structures that hybrid forms can take, this study decided to classify them in two main groups: hybrid forms implying Separated Ownership of the assets involved in the relationship and hybrid forms implying Joint Ownership, the most known of the later are Joint Ventures. Continuing with the argument of TCE, as uncertainty increases, forms closer to market can no longer protect themselves

efficiently against ex-post bargaining and opportunism. The required structures have to be closer to hierarchy. The conclusions point towards the advantages of hierarchical controls, in terms of lower transaction costs, over explicit contracts when collaborations involve intense interdependencies and appropriability hazards, and when implicit or relational contracts are not feasible. It is necessary to rely on voice mechanism to induce the parties to participate in the transaction, then “Joint Ownership” for example, could imply the creation of a new firm, include voice right over residual decision rights.

This movement along the continuum of structures towards the hierarchy has a cost that is not always considered. The potential costs of the hierarchy have been generally ignored, probably because the transaction costs literature has not spelled them out properly beyond generic references to “bureaucratic costs”. Under our perspective, PRT allows for the consideration of this cost because it takes into account the allocation of residual decision rights between the partners in different governance structures. The implications of this assignment could mean that the structure selected for implementing a collaboration agreement was different from the structure suggested by the TCE. Furthermore, some aspects such as trust, reciprocity and/or forbearance could mean that to reach a structure closer to hierarchy was not necessary for implementing a strategic alliance.

On the other hand, and being consistent with the arguments of Holmstrom (1999) and Holmstrom and Roberts (1998), the property rights approach is not sufficient when explaining the boundaries of firms, and it has to be complemented with contributions from the theories of incentive design and efficient coordination.

Therefore, this study has considered about another theoretical perspective when considering the different aspect/s that could be influencing the structure finally selected for implementing a collaboration agreement, namely, the Transactional Value Theory (TVT) which adds the consideration of the future benefits of the relationship. Intuition says that although under the TCE perspective the structure of one strategic alliance should be closer to the market, the consideration by the partners’ of the future benefits of the relationship could make this structure irrelevant. The result of the agreement could be

higher although the governance structure does not correspond to the one suggested by the TCT and/or the PRT (Rialp et.al, 2001).

Summarizing, this dissertation has been written integrating the Transaction Costs Theory, the Property Rights Theory and the Transactional Value Theory to explain the choice of a governance form in interfirm collaborations. It is believed that this theoretical framework clarifies the costs of introducing what has been called hierarchical controls, and considers the value of the net benefits in the selection of the structure. The hypotheses formulated in Chapter Three collected all these ideas and are the objective of the empirical contrast in Chapter Four. The present study took a step towards addressing this gap by fusing the logics of these three theories.

The second contribution, it can be pointed out that the underlying conjecture throughout Chapter Four has been that the governance forms incorporating hierarchical controls are in fact forms of “Joint Ownership” (any party has veto power on the use of the non-human assets employed in the collaboration). Therefore, to introduce the so-called “hierarchical controls” is in fact to move from “Separated Ownership”, when collaborations are governed by contracts, to “Joint Ownership”. The empirical analysis performed in Chapter Four finds evidence supporting some of the formulated hypothesis.

For example, the costs of Separated Ownership may be superior to its benefits in collaborations which involve R&D activities. To date, the empirical evidence (Pisano, 1989; Gulati, 1995; Oxley, 1997; Gulati and Singh, 1998) indicated that the likelihood of introducing Joint Ownership increased in collaborations related to technological activities, compared to non technological activities. When uncertainty and/or opportunism was high, firms were likely to form Joint Ownership with partners. Any perceived signal of opportunism at the initial stages of the relationship will motivate the partners to introduce bureaucratic monitoring and control rules within the relationship or another form of governance.

This result could suggest that for a new cooperative relationship, when there is little shared history of firms’ alliances between the allied firms, the lack of ex-ante transparency of opportunistic inclinations leads to a mutual fear of opportunism. This

situation demands firms to diminish the firm's gain from exploitation, and to reduce each party's fear of the other's opportunism. One way for accomplishing this is by establishing Joint Ownership structures (Hypothesis 1). In fact, the results sustained this hypothesis. Thus it is important to point out here that Thai firms prefer to collaborate with their partners in the form of Joint Ownership to avoid the risk of opportunism from their partners.

However, and although it is generally assumed that collaborations developing R&D activities are open to the risk of opportunistic behavior, we cannot forget some important aspects, as for example trust. In this sense, Ring & Van de Ven (1994) pointed out that "as the uncertainty, complexity, and duration of economic transactions within and between firms increase, it becomes increasingly important for scholars and managers to understand developmental processes of how equity, trust, conflict-resolution and procedures and internal governance structures emerge, evolve, and dissolve over time".

If partners collaborating in one strategic alliance trust each other, this characteristic of the relationship could imply that they do not need Joint Ownership to monitor the relationship. In fact, trust makes the collaboration cheaper and more flexible. Therefore, one suggestion emerges from this analysis: the structure of the agreement should be the one that conducts to the emergence of trust.

As mentioned throughout the dissertation, the TCE argues that among alternative governance structures (market, hierarchy, forms between market and hierarchy) the most efficient will survive. In other words: the structure minimizing the sum of production, transaction and organization costs, in a given technological and institutional environment; will be selected for developing the relationship. Hill (1990) carried this further and pointed out that since trust economizes on the cost of governance, the selection pressures of markets will lead to the prevalence of trust, so that "in the long run" opportunism is forgotten.

The empirical results support the predicted relationship between trust and governance structures. This relationship is consistent with the idea that trust in a relationship deters opportunistic behavior, encouraging partners receptivity regarding allied partners advice, and reduces monitoring costs for partners. In this research, the

finding of trust, measured by the geographical origin of the partners, influences the choice of the governance form. Proximity favors in general Separated Ownership. Therefore, collaborating firms may perceive Joint Ownership as the governance form which provides more protection against ex-post opportunism, and will be preferred when partners are more “distant”, so implicit contracts are less feasible. Therefore, the analysis finds evidence of substitution between conditions that favor reputation effects and the use of Joint Ownership. The reason would be that such reputation effects increase the benefits of Separated Ownership compared to those of Joint Ownership relative to the benefits when these effects are absent. So the general presumption that “trust” may reduce the need of hierarchical controls (in terms of incentive design and coordination efforts), and, consequently, become an explanation for why agents rely on Separated Ownership, is supported by the data in this study.

It is also important to point out that frequent and accurate communication between firms and their allied partners leads to greater trust because the more parties interact and exchange quality information, the more likely they are to understand each other’s needs and develop norms of behavior (McAllister, 1995). The relationship between trust and formal, as well as non-formal, agreement contracts is a complex and dynamic one and can have different meanings in atmospheres of trust and in those where the fear of opportunistic prevails.

In the case of alliance firms in Thailand, it is possible to say that clearly trust is an important factor in reducing the perceived cost of cooperation. According to Parkhe (1993), the real question for firms is how to differentiate between opportunists and non-opportunists. Larson (1992) concludes that reputation effects are especially important for firms in the industrial districts. A potential partner’s past behavior in other relationships is often the only proxy for knowing of opportunistic intentions (Parkhe, 1993, p.802). Additionally, trust in a cooperative relationship can be built through the provision of opportunities for agents to forbear reciprocally (Buckley & Casson, 1988). They also argue that even a small amount of mutual forbearance can be transformed into large amounts of trust.



Another aspect that could play the role that trust plays in the selection of governance structures for implementing collaboration agreements is the concept of reciprocity. A wide range of human activities, including production and distribution of goods, are carried out in the context of social groups. These activities are influenced by culture. Culture is often defined in terms of the values, tools, institutions, structures, and interactions of social groups. The relationships among individuals, and between the individual and the groups and organizations to which he or she belongs, is multifaceted and complex. Reynold & Skoro (1996) cited that the integration and co-ordination of individuals and society is the result of three processes, and reciprocity is one of those processes. To our knowledge, the concept of reciprocity is that of obligation gift giving. In most societies, anthropologists note, gift giving is crucial to stable social relationships. Reciprocity tends to have distinct sets of rules. Reciprocal behavior is encouraged by long term horizons and frequent interactions (Parkhe, 1993). As reciprocity is assured, other elements of the cooperative relationship can be made to be much more flexible (Lazerson, 1995). Alliance partners should seek out and expect opportunities to prove the reciprocal natures of their relationships. Difficulties arise when participants in the processes attempt to use the rules of one sphere to guide actions in the other.

This study thought that when reciprocity was possible, firms participating in collaboration agreements would not need structures linked to Joint Ownership for avoiding opportunistic behavior. This type of structure would only be needed for those situations where reciprocity was not possible; therefore, situations where the opportunistic behavior of one partner cannot be punished by the other partner. However, from the results, this relationship between the presence of reciprocity and structures that do not imply Joint Ownership was not supported. The findings suggest that being in a disadvantageous situation in a collaboration agreement drives to prefer Separated Ownership structures. When Thai firms expect low levels of reciprocity a cooperative relationship seems that they prefer not to be very involved with their partners.

Finally, the concept of forbearance, i.e. give the control of one type of product or geographic market to a competitor in exchange for the future competitor's control of another product or another market, has also been considered a good substitute for trust and/or reciprocity. Strategic management researchers (Ma, 1998; Oster, 1990) have suggested that forbearance requires a variety of industry contextual conditions, for example, a reciprocal dominance among rivals across the market. However, the more recent strategic management research tends to be more sanguine about the presence and effects of multipoint competition. For example, Barnett (1993) observes that firms within the same strategic groups are most likely to mutually forbear, whereas firms tend not to mutually forbear with strategically dissimilar rivals.

This study has contrasted the hypothesis establishing that when incentive problems and coordination needs are highly severe, Joint Ownership is less likely as a governance structure if alliance partner's take a long-term view of their relationships and believe that the future gain from present cooperative behavior outweighs the potential immediate gains from cheating. The prediction of this relationship was supported by evidence.

Therefore, forbearance behavior is affecting strategic alliances of firms by influencing the governance structure and partner satisfaction. The forbearance that could emerge would constrain effectively the strategies that firms could use when incentive problems and coordination needs are highly severe. The findings in this study were significant, and showed that when possible future benefits are considered, Joint Ownership is less likely as the governance structure.

Often alliance participants are reluctant to invest significant assets into cooperative relationships. This is a logical reluctance if there is the perceived possibility of high levels of opportunism in the relationship. Williamson (1985) argues that this reluctance is based upon false assumptions. If both parties to the relationship make equivalent "credible commitments" in terms of assets, the likelihood of either behaving opportunistically is greatly reduced and so too is the potential cost of opportunism. In the long run, alliances that are supported by significant levels of asset investments are more likely to be stable (Parkhe, 1993) and thereby provide a much greater return.

Separated Ownership structures are preferred over Joint Ownership structure when benefits are considered. But that is not all: it can be pointed out that complementarities exist between future value of the collaboration and opportunism. As explained before, when the study estimated the model, including the interactive variable R&D – Result of the collaboration; the coefficient of the interactive variable is negative and significant. It appears that expected future results related to collaboration in technological activities increases the likelihood of Separated Ownership. The highest probability for opportunistic behavior is compensated by the expected future benefits. Therefore, to implement Joint Ownership structures is not necessary in the management of a collaboration agreement.

Therefore, and also considering the results above globally, the present dissertation takes a step forward in the relationship between characteristics of the cooperation, behavior of the partners and the selected structure chosen to develop the relationship by fusing the logics of three theories. Together, these complementary perspectives reinforce each other and permit an excellent vehicle for focusing attention on the structural aspects of voluntary interfirm cooperation and behavior of partners, and also satisfaction as discussed below.

Hypothesis 6 of the dissertation implies that satisfaction of the firm with the collaboration should be independent of the implemented structure if this has been selected taking into account aspects from the Transaction Cost theory, the Property rights theory, and the Transactional Value Theory. The findings show strong support for hypothesis 6.

This result has interesting implications because it proves that the structure adopted by the strategic alliance is endogenous. The structure should not explain different levels of satisfaction with the strategic alliances because the structure is not an explanatory aspect of the satisfaction. The structure is a consequence of the characteristics of the activity being developed in the alliance, a consequence of the partners participating, the feeling of trust among them, forbearance, etc. If all these aspects are considered, it would also be possible that the relationship would allow a high

level of confidence to develop among the partners and this confidence would increase the reputation of the firms as partners in collaboration agreements.

Respondents to this survey clearly indicated a belief that strategic alliances offer new opportunities for the growth of Thai firms. Alliance activity among firms is significant and growing. Survey results indicate that alliance relationships are regarded as extremely satisfactory, generally meet their expectations, and produce profitable returns.

5.3. Listing of the Main Conclusions

Following the summary section, the main conclusions are stated as follows:

1. Most of the firms in the industrial districts in Thailand participate in alliances because they are seen as an appropriate tool for implementing the strategy of firms acting in uncertain environments.
2. In order to study the relationship between behavior, structure and satisfaction, the Transaction Cost Theory (TCT) and the Property Rights Theory (PRT) have some limitations as a theoretical framework. A theory considering future benefits of the relationship (for example Transactional Value Theory –TVT) can complement perfectly the traditional theoretical framework because it allows for dynamic aspects in the analysis. The study shows that these three theories (TCT, PPT, and TVT) are well integrated in explaining the structure adopted for implementing alliances in terms of the costs of introducing hierarchical controls and the value of the net benefits in the structural selection.
3. Logistic regression analysis demonstrates that if opportunism is foreseen or it is possible that partners act opportunistically, a certain form of governance will be suitable for firms to cooperate. If partners do not trust each other or they do not consider the relationship to be long term, then Joint Ownership reduce the probability of an opportunistic behavior. But if the level of trust is high or long term is considered in the relationship, then Separate Ownership is preferred (for example, the expected value related to technological activities can mitigate the possible opportunism associated to this activity and then Joint Ownership is not needed to

manage the relationship). Therefore firms choose governance structures both to manage anticipated coordination costs and to address appropriation concerns.

4. Satisfaction levels related to alliance relationships are not significantly impacted by the selected structure if this structure has been selected under the parameters established by the theoretical framework that TCT, PRT and TVT constitute.

5.4. Limitations of the Study

It is important to consider these findings in the light of several limitations associated with this study. At this point, four limitations have been seen:

1. Due to the fact that this study has focused only on firms across sectors in industrial districts in Thailand, our conclusions and suggestions, although interesting for other countries in the geographical zone that are suffering or have suffered from some kind of crisis, cannot be directly assumed. From the perspective of this study, this limitation therefore opens the possibility for further research in repeating the study in other countries which would give the possibility to confirm the adequacy of the theoretical framework proposed.
2. Related to the previous point, the data used in this dissertation reinforced the proposed theoretical framework. However, before saying something conclusive it is important to recognize that some cultural biases could exist. This study was designed to examine the implementation of strategic alliances by Thai firms, therefore, some care must be taken when drawing inferences about partner behavior, structure and satisfaction outcome outside of these industrial districts. According to Williamson (1996) transaction characteristics and other institutional factors may vary across different contexts and these different may affect the relationships observed. Therefore, the results have to be considered with some caution due to the data base.
3. The research results, although encouraging the work on boundaries of the firm, still has some limitations due mainly to the nature of the data. In this sense, the proxies used for measuring some aspects perhaps are not the best and more work is needed in this aspect. Furthermore, the information about collaborations is quite limited both in

terms of the actual features of the selected governance form and in terms of the attributes which are identified as sources of complexity in transactions. This study would have benefited from a more detailed description of the terms of the relationship to make sure that the coding of the variables was the correct one. This difficulty is often recognized in the literature, Oxley (1997, p. 391), nevertheless it is important to recall it and introduce some caution in this section. However, it is possible to say that the preliminary evidence presented will encourage future efforts to collect this data and verify the robustness of the results.

4. Due to this being a cross-sectional study, the ability to draw causal inferences is limited. In fact, some research (Klass, 2003) suggests that the relationships proposed in this study may be more complex than suggested in the theoretical framework. For instance, research has suggested that as trust improves, parties are more willing to communicate, thus creating an interactive, interlocking process between these variables (Anderson & Narus, 1990; Klass, 2003). It is possible that some relationships are more complex than the unidirectional ones mainly proposed in this study.

Acknowledging these limitations and insisting on the conclusion, it can be believed that this study contributes to understanding the satisfaction that firms can experience when they decide to participate in collaboration agreements. Specifically, this study suggests that the partners satisfaction with the alliance will depend on the characteristics of the partners themselves and other factors associated with the relationship. This study considers that, the relationship between satisfaction and the structure of the strategic alliance should not be directly analyzed because the structure is endogenous to the characteristics of the alliance. Based on these characteristics, the structure is selected. Therefore, no relationship can be obtained between one concrete structure and satisfaction.

This is a particularly interesting result because in light of all the programs available to help firms to establish Joint Ventures, for example, perhaps they are

motivating the failure of the relationship between the parties because that structure is not the most appropriate for that relationship.

5.5. Future Research

Strategic alliances are not hard to observe. Although the analyses in this research generally confirmed the hypotheses tested, and thus may provide a good starting point, there is definite conceptual and practical merit in moving towards testing more complex theories involving unanswered, deeper questions about causality. For example, how is trust between Thai firms and foreign firms generated inside a collaboration agreement? There are many other resources of the firms that have not been explored here, for example, the effect of human capital, and social capital. Godfrey & Hill (1995) argued that the best way to cope with unobservable in theory is “to focus on observable variables that determine the degree of unobservability of a rare and valuable resource”.

Moreover, the few studies attempting disentanglement of causal direction and feedback loops offer mixed views. For example, Anderson & Narus (1990) obtained a better explanation of construct covariances through a respecification of their model, in which cooperation was causally antecedent, rather than consequent, to trust. Conversely, Smith & Aldrich (1991) suggested that “perhaps the development of a trusting relation actually precedes substantial investments in specific assets, or perhaps asset specificity and trust are inextricably bound up in a reciprocal relationship”.

As such, it is possible that reliability estimates may be somewhat overstated. This is a relatively new line of research, and clearly, there is a need for future research to refine the measurement of key constructs.

Future research could significantly raise the level of theory development in alliance structures by going beyond correlational analyses to path analysis and causal modelling that may permit a deeper understanding of the causal structure of relationships among crucial variables in interfirm cooperation. Moreover, as reviewed in many studies (e.g. Grant, 1996; Mehra, 1996; Miller & Shamsie, 1996) the theory, *resource-based view theory* has been proposed to account for the emergence of strategic alliances as well



as their operation. According to Van de Ven (1976) and Kogut, (1988) the process of building inter-organizational relationships can be studied as a flow of resources among organizations.

Some theorists (for example; Amit & Schoemaker (1993); Roth (1995; 1996); Mehra, (1996)) suggest that the resource-based view of strategic alliances could be a very interesting research avenue. This study believes that its application to strategic alliances is under-explored in the literature even though such alliances are rapidly increasing in importance in today's competitive landscape (Doz & Hamel, 1989; Das & Teng, 2000). However, the application of the resource-based views perspective to strategic alliances covers only limited aspects (e.g, Rouse & Daellenbach, 1999). Therefore, an aspect that could be very interesting to analyse is the possible integration of the Resource Based View perspective in theoretical framework.

5.6 Bibliography

Amit, R., & Schoemaker, P.J.H. (1993). *Strategic Assets and Organizational Rent*, Strategic Management Journal, 14, p.33-46.

Anderson, J.C.& Narus, J.A. (1990). *Structuring Equation Modeling in Practice: A Review and Recommended two-Step Approach*, Psychological Bulletin, 103, p.411-423.

Barnett, W.P. (1993). *Strategic Deterrence Among Multipoint Competitors*, Industrial and Corporate Change, 3, p.249-278.

Buckley, P. J., & Casson, M. 1988. *A theory of cooperation in international business*. In F. J.

Das, T. K., & Teng, B. (2000). *A resource-based theory of strategic alliances*, Journal of Management, 26, p.31-61.

Doz, Y., Hamel, G., & Prahalad, C.K. (1989). *Collaborate With Your Competitors & Win*, Harvard Business Review, 67, p.133-139.

Ghoshal, S. & Moran, P. (1996). *Bad for Practice: A Critic of the Transaction Cost Theory*, Academy of Management Review, 21, p.2-12.

Godfrey, P.C., & Hill, C.W.L. (1995). *The Problem of Unobservables in Strategic Management Research*, Strategic Management Journal, 16, p.519-534.

Grant, R.M. (1996). *Toward a Knowledge-Based Theory of the Firm*, Strategic Management Journal, 17, p.109-122.

Gulati, R. (1995). *'Does familiarity breed trust? The Implications of Repeated Ties for Contractual Choice in Alliances'*, Academy of Management Journal, 38, pp. 85–112.

Gulati, R., Singh, H. (1998). *The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances*, Administrative Science Quarterly, 43(4), p.781-814.

Harrigan, K.R. (1986). *Managing for Joint Venture Success*. Lexington, M.A: Lexington Books.

Hill, C.W. (1990). *Cooperation, Opportunism and Invisible hand: Implications for Transaction Cost Theory*, Academy of Management Review, 15(3), p.500-513.

Holmstrom, B., & Roberts, J. (1998). *Boundaries of the Firm Revisited*, Journal Perspectives, 12, p.73-94.

- Holmstrom, B. (1999). *The Firm as a Sub-economy*, *Journal of Law, Economics and Organization*, 15(1), p.74-101.
- Klass, T.W. (2003). *The outsourcing of Training and development: Factors Impacting Client Satisfaction*, *Journal of Management*, 29(2), P.207-229.
- Kogut, B. (1988). *Joint Ventures: Theoretical and Empirical Perspectives*, *Strategic Management Journal*, 9, p.319-332.
- Lazerson, M. (1995). *A New Phoenix?: Modern Putting-out in the Modena Knitwear Industry*, *Administrative Science Quarterly*, 40, p.34-59.
- Larson, A. (1992). *Network Dyads in Entrepreneurial Setting: A Study of the Governance of Exchange Relationships*, *Administrative Science Quarterly*, 37(1), p.76-104.
- Ma, H. (1998). *Mutual Forbearance in International Business*, *Journal of International Management*, 4, p.129-147.
- McAllister, D.J. (1995). *Affect- and Cognition-based Trust as Foundations for Interpersonal Cooperation in Organizations*. *Academy of Management Journal*, 38, p.24-59.
- Mehra, A. (1996). *Resource and Market Based determinants of Performance in the U.S banking Industry*, *Strategic Management Journal*, 17, p.307-322.
- Miller, D., & Shamsie, J. (1996). *The Resource-Based View of The Firm in two Environment, The Hollywood Film Studios From 1936 to 1965*, *Academy of Management Journal*, 39, p.519-543.
- Oster, S.M. (1990). *Modern Competitive analysis*. New York: Oxford University Press.
- Oxley, J.E. (1997). *Appropriability Hazards and Governance in Strategic Alliances: a Transaction Cost Approach*, *Journal of Law, Economics and Organization*, 13 (2), p.387-409.
- Parkhe, A. (1993). *Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation*, *Academy of Management Journal*, 36(4), p.794-829.
- Pisano, G.P. (1989). *Using Equity Participation to Support Exchange: Evidence from the Biotechnology Industry*, *Journal of Law, Economics and Organization*, 5 (1), p.109-126.
- Reynolds, R.L., & Skoro, C. (1996). *Reciprocity, Redistribution and Exchange in US Management Thought*, *International Journal of Social Economics*, 23(8), p.3-20.



Rialp, J. & A, Santamaria, L. (2001). *Collaboration Strategies and Technological Innovation: A Contractual Perspective of the Relationship Between Firms and Technological Centers*, Paper Presented in Euram's conference, Italy.

Ring, P.S., & Van de Ven, A.H. (1994). *Developmental process of cooperative interorganizational relationships*, *Academy of Management Review*, 19(1), p.90-101.

Roth, K. (1995). *Managing International Interdependence: CEO Characteristics in a Resource-based Framework*, *Academy of Management Journal*, 38, p.200-231.

Rouse, M.J., & Daellenbach, U.S. (1999). *Rethinking Research Methods for the Resource-Based Perspective: Isolating Sources of Sustainable Competitive Advantage*, *Strategic Management Journal*, 20, p.487-494.

Smith, A., & Aldrich, H.E. (1991). *The Role of Trust in The Transaction Cost Economics Framework*, Paper Presented at annual Meeting of The academy of Management, Miami.

Thechatakerng, S. (2000). *Strategic Alliances and Performances of Firm in Fruit and Vegetable Processing Industry in the Northern Region of Thailand*, the Unpublished 7 Credits Research Paper, Presented at Universitat Autònoma de Barcelona.

Van de Ven, A.H. (1976). *On the Nature, Formation, and Maintenance of Relations Among Organizations*. *Academy of Management Review*, 1, p.24-36.

Williamson, O.E., (1985). *The Economic Institutions of Capitalism*, New York, NY: The Free Press.

Williamson, O.E., (1996). *The Mechanisms of Governance*, Oxford University Press.



APPENDIX 2



QUESTIONNAIRE

1. Are alliances being used in your firm?

1. Yes 2. no (go question 17)

2. Please, indicate the number of alliance that have been established by your firm with:

1. 2 partners
 2. 3 partners
 3. 4 partners
 4. More than 4 partners

3. When did your actual firm use the first alliance (please, indicate the year)?

4. How long have you developed alliances only with other Thai firms?

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> 1. Until 1980 (1980 included) | <input type="checkbox"/> 6. In 1997 |
| <input type="checkbox"/> 2. Between 1981-1985 | <input type="checkbox"/> 7. In 1998 |
| <input type="checkbox"/> 3. Between 1986-1990 | <input type="checkbox"/> 8. In 1999 |
| <input type="checkbox"/> 4. Between 1991-1995 | <input type="checkbox"/> 9. In 2000 |
| <input type="checkbox"/> 5. In 1996 | <input type="checkbox"/> 10. In 2001 |

5. How long have you developed alliances only with foreign firms?

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> 1. Until 1980 (1980 included) | <input type="checkbox"/> 6. In 1997 |
| <input type="checkbox"/> 2. Between 1981-1985 | <input type="checkbox"/> 7. In 1998 |
| <input type="checkbox"/> 3. Between 1986-1990 | <input type="checkbox"/> 8. In 1999 |
| <input type="checkbox"/> 4. Between 1991-1995 | <input type="checkbox"/> 9. In 2000 |
| <input type="checkbox"/> 5. In 1996 | <input type="checkbox"/> 10. In 2001 |

6. How long have you developed alliances with foreign and Thailand firms?

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> 1. Until 1980 (1980 included) | <input type="checkbox"/> 6. In 1997 |
| <input type="checkbox"/> 2. Between 1981-1985 | <input type="checkbox"/> 7. In 1998 |
| <input type="checkbox"/> 3. Between 1986-1990 | <input type="checkbox"/> 8. In 1999 |
| <input type="checkbox"/> 4. Between 1991-1995 | <input type="checkbox"/> 9. In 2000 |
| <input type="checkbox"/> 5. In 1996 | <input type="checkbox"/> 10. In 2001 |



7. Who facilitated your alliances? (you can indicate more than one)

- | | |
|---|--|
| <input type="checkbox"/> 1. Trade/professional associations | <input type="checkbox"/> 6. Other companies we deal with |
| <input type="checkbox"/> 2. Government program/agency | <input type="checkbox"/> 7. Distribution network |
| <input type="checkbox"/> 3. Financial institutes | <input type="checkbox"/> 8. Internet site |
| <input type="checkbox"/> 4. Venture capital firms | <input type="checkbox"/> 9. Other |
| <input type="checkbox"/> 5. Trade publications | |

8. Please can you indicate which type of alliance has been used by your firm? (you can indicate more than one)

- 1. Cooperation agreement to gather information
- 2. Cooperation agreement to exchange information
- 3. Cooperation agreement to jointly carry out the task through a third party (i.e. market research institute, export firm, research institute, etc.)
- 4. Cooperation agreement to jointly carry out the task with other firms
- 5. Joint ventures
- 6. Other (specify): _____

If more than one structure is considered question 9, if not please go to question 10

9. Can you indicate the order of implementing? Write 1 for the structure that was used firstly, 2 for the second structured used, 3 for the third, etc.

- 1. Cooperation agreement to gather information
- 2. Cooperation agreement to exchange information
- 3. Cooperation agreement to jointly carry out the task through a third party (i.e. market research institute, export firm, research institute, etc.)
- 4. Cooperation agreement to jointly carry out the task with other firms
- 5. Joint ventures
- 6. Other (specify): _____

10. Please, indicate the number of alliance that have been established by your firm where:

- 1. All the partners were smaller than you
- 2. All the partners were larger than you
- 3. All the partners had the same size
- 4. Some partners in the alliance were larger than you and others smaller



11. Please, indicate the number of alliance that have been established by your firm for. (you can indicate more than one):

1. Long-term agreements relating to marketing
2. Distribution
3. Production
4. Export management or trading companies
5. technology alliances relating to product research and development
6. technology alliances relating to process research and development
7. outside contracting
8. purchaser-supplier relationships
9. other: specify: _____

12. Please, considering the following statements, can you indicate the importance of each one when your firm decides to establish cooperation agreement with other firms:

| | Not important | | | | very important |
|---|---------------|-------|-------|-------|----------------|
| The competence of the international level | [1] | [2] | [3] | [4] | [5] |
| The continuing of technologies advances | [1] | [2] | [3] | [4] | [5] |
| The reducing of products life circle | [1] | [2] | [3] | [4] | [5] |
| More flexible in changing a production | [1] | [2] | [3] | [4] | [5] |
| Other (specify: _____) | [1] | [2] | [3] | [4] | [5] |

13. Please, can you indicate the number that best describes your experiences with alliances?

| Description | Extreme ly poor | Poor | Neutral | Good | Extreme ly good |
|--|--------------------|------|---------|------|--------------------|
| | 1 | 2 | 3 | 4 | 5 |
| In general, your company's experience with alliance(s) has been | | | | | |
| In general how would you characterize the financial returns produced by your company's alliance relationships? | | | | | |
| In your overall assessment, how has the alliance(s) performed as compared to your expectations? | | | | | |



14. In general our strategic alliance partner(s).....

| | Strongly disagree | | | | | Strongly agree | |
|---|-------------------|-------|-------|-------|-------|----------------|-------|
| Provide us with a truthful picture of their business | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| Seem to feel that it is acceptable to do anything within their means that will help further their organization's interest | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| Carry out their duties even if we do not check up on them | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| Have sometimes promised to do things without actually doing them later | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| Usually register a complaint if our organization fails to meet our cooperative agreements. | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| Expect an equal exchange of benefits from our cooperative agreement | [1] | [2] | [3] | [4] | [5] | [6] | [7] |

15. Please, consider the following statements related with your alliance experience. Could you indicate the number that best describes your opinions most.

| | Strongly disagree | | | | | Strongly agree | |
|--|-------------------|-------|-------|-------|-------|----------------|--|
| The cooperation agreement reduced the production costs. | [1] | [2] | [3] | [4] | [5] | | |
| The cooperation agreement reduced the administration costs. | [1] | [2] | [3] | [4] | [5] | | |
| The agreement permitted the small & medium firms allied without control. | [1] | [2] | [3] | [4] | [5] | | |
| The cooperation agreement will establish between the similar culture firms. | [1] | [2] | [3] | [4] | [5] | | |
| The cooperation agreement will not establish with competitor firms. | [1] | [2] | [3] | [4] | [5] | | |
| The agreement reduced the necessity of the firms' investment. | [1] | [2] | [3] | [4] | [5] | | |
| The agreement constituted better option for initiating the international expansion. | [1] | [2] | [3] | [4] | [5] | | |
| The cooperation agreement affected in negative to the firm's reputation. | [1] | [2] | [3] | [4] | [5] | | |
| The firms that participated in an agreement will have similar objectives. | [1] | [2] | [3] | [4] | [5] | | |
| The confidence between allied firms is the fundamental of the cooperation establishment. | [1] | [2] | [3] | [4] | [5] | | |



16. Can you order the following possible problems since the most important to the less important:

| | Very unimportant | Very important |
|---|-------------------------------|----------------|
| The high competition between allied firms occurred problems in cooperation and implementation. | [1] [2] [3] [4] [5] | |
| Have shown their need to get more advantage from allied firms. | [1] [2] [3] [4] [5] | |
| Culture & ethic different occurred obstacle and misunderstanding in cooperation & implementation. | [1] [2] [3] [4] [5] | |
| Have appeared to alter the facts slightly in order to get what they need | [1] [2] [3] [4] [5] | |
| Have sometime do not protect the interest/advantage of allied firms. | [1] [2] [3] [4] [5] | |
| Other (specify)..... | [1] [2] [3] [4] [5] | |

17. Please, mark the statement that describe your firm characteristics:

17.1 Age of firm;

- 1. () less than 5 yr. 2. () between 6 - 10 yr. 3. () between 11 - 15 yr.
- 4. () between 16 - 20 yr. 5. () between 21 - 25 yr. 6. () between 26 - 30 yr.
- 7. () between 31 - 35 yr. 8. () between 36 - 40 yr. 9. () more than 40 yr.

17.2 Number of Employee

- 1. () 0 – 15 2. () 16 – 30 3. () 31 – 50 4. () 51 – 100
- 5. () 101 – 200 6. () 201 – 250 7. () 251 – 500 8. () > 500

17.3 Type of Industries

- 1. () Electronics Products 2. () Electronic Supplies 3. () Feed mills
- 4. () Agricultural Proc. Products 5. () Leather 6. () Textile
- 7. () Wood processing & minerals 8. () Gem & Jewelry 9. () Services
- 10. () other (specify).....

17.4 Name of the Firm: _____

17.5 Location: _____



18. Please describe your own characteristics:

18.1. Gender 1. () male 2. () Female

18.2. Age

- | | | |
|------------------------|------------------------|------------------------|
| 1. () <20 – 25 | 2. () between 26 – 30 | 3. () between 31 - 35 |
| 4. () between 36 – 40 | 5. () between 41 – 45 | 6. () between 46 - 50 |
| 7. () between 51 – 55 | 8. () more than 56 | |

18.3. Education

- | | | |
|--------------------------|--------------------------|----------------------|
| 1. () Elementary school | 2.() Junior high school | 3.() High school |
| 4.() College | 5. () University | 6. () Post Graduate |
| 7. () Etc..... | | |

18.4 Name of the person that answers this questionnaire _____

18.5 Position in the firm _____

18.6 Phone _____

18.7 Fax _____

18.8 E-mail _____

*****Thank you*****