Entry Mode Choice based on Transaction Cost Theory

Bachelor Thesis: Strategy and structure of multi business and/or multinational firms

Number of words: 6726

6/19/2009

Minh Tan Le - 537059
Tilburg University

Management Summary

The essence of this thesis is to give an insight in current academic literature regarding transaction cost theory (TCT) and its impact on entry mode choices (EMCs). This is done by introducing a problem (companies facing EMCs) and providing a solution (with TCT), both found in academic literature.

Companies that are successfully running operations in their domestic market might want to expand their activities to other places. The decision on how to approach and enter this foreign market has become crucial to international firms (McCarthy & Puffer, 1997). Companies have to decide which entry mode must be chosen. Firms that make the wrong choices (selecting a different than optimal mode) might underperform and might be taken down by their competitors (Roberts & Greenwood, 1997). Thus, choosing the entry mode that fits best to a company is quite relevant. Three main forms of entry mode will be discussed in this: *licensing agreements*, *joint ventures* and *wholly owned subsidiaries*. In this thesis the solution provided to this problem will be done with the aid of transaction cost theory.

Transaction cost theory assumes that firms pursue profit maximizing. One of the effects accompanied by pursuing profit maximization is economizing (transaction) costs (Williamson, 1985). This means transaction costs should be kept at a minimum. These transaction costs are determined by the nature of exchange; issues such as difficulty of setting prices or measuring the performance of services are instrumental in determining transaction costs (Robbins, 1987). Transaction cost theory exists of three environmental variables that a firm could adapt. These are *frequency*, *uncertainty* and *asset specificity*. Firms can keep transaction cost at a minimum by pursuing the right level of ‘vertical integration’ in these operations. E.g. when frequency is high, a firm should pursue vertical integration to economize (transaction) costs.

The strength in this thesis lies within the exposed link between entry modes (characteristics) and transaction cost theory (variables). This is done by exposing similarities between the characteristics (of entry modes) and variables (of transaction cost theory). By doing this, it is possible to use transaction cost variables as one of the few criteria to select an entry mode.

The results of this little research are:

- *Frequency*, *uncertainty* and *asset specificity* are (transaction cost) variables that can be a criteria in entry mode choice

- *Commitment* and *risk* are (entry mode) characteristics that can be a criteria in entry mode choice

A diagram in the conclusion of this thesis (chapter 5) is shown in order to help firms to make their entry mode choice. Characteristics of the firm could be compared to the entry mode characteristics / transaction cost variables to find similarities. In such cases (when similarities are found) the model provides an answer for the firm in question.

Contents

Management Summary 1
Chapter 1: Introduction 5
1.1 – Introduction 5
1.2 – Problem indication 5
1.3 – Problem statement 6
1.4 – Research questions 6
1.5 – Research design and data collection 6
1.6 – Structure of the thesis 7
Chapter 2: Transaction cost theory 8
2.1 – Assumptions 9
2.2 – Frequency 10
2.3 – Uncertainty 10
2.4 – Asset specificity 11
2.5 – Overview 11
Chapter 3: Entry modes 11
3.1 – Entry mode characteristics 12
3.2 – Licensing agreements 13
3.3 – Wholly owned subsidiaries 13
3.4 – Joint Ventures 14
3.5 – Overview 15
Chapter 4: Linking transaction costs theory with entry mode choice 16
4.1 – Uncertainty and risk 16
4.2 – Asset specificity and commitment 17
4.3 – Frequency & Control 17
4.4 – Overview 18
Chapter 5: Conclusion, limitations and recommendations 19
5.1 – What factors are fundamental in transaction cost theory? 19
5.2 – What entry modes are most common and what are their characteristics? 19
5.3 – What are the elements that determine entry mode? 19
5.4 – Limitations and recommendations 20
References 21

Chapter 1: Introduction

1.1 – Introduction

This paper is written as part of the curriculum for the Bachelor of Science Business Studies at Tilburg University. It is written in the form of a thesis. The essence of this thesis is to give an insight in current academic literature regarding transaction cost theory (TCT) and its impact on entry mode choices (EMCs). This is done by introducing a problem (companies facing EMCs) and providing a solution (with TCT), both found in academic literature.

The remainder of this chapter starts with the *'Problem indication'*, which gives a brief overview of the problem. Furthermore, by using the *'Problem indication'*, one can deduct a certain *'Problem statement'* and *'Research questions'*. Key elements are elucidated, specified and/or delimited in these subchapters. Subsequently, the subchapter *'Research design and data collection'* elaborates on how this literature research has been conducted. And finally the subchapter *'Structure of the thesis'* elaborates on how this thesis is built succeeding this first chapter.

1.2 – Problem indication

Companies that are successfully running operations in their domestic market might want to expand their activities to other places. The decision on how to approach and enter this foreign market has become crucial to international firms (McCarthy & Puffer, 1997). Companies have to decide which entry mode must be chosen. Entry modes represent institutional arrangements for organizing and conducting international business transactions (Root, 1987). It is critical in international entry strategies to choose the correct entry mode (Zhao, Luh & Suh, 2004). It has strong implications for organizational control over foreign operations, investment risk involved, and resource commitment required (Zhao, Luh & Suh, 2004). Firms are obliged to select the mode that provides the best return on investment according to entry mode theory (Brouthers et al., 1999). Firms that make the wrong choices (selecting a different than optimal mode) might underperform and might be taken down by their competitors (Roberts & Greenwood, 1997). Thus, choosing the entry mode that fits best to a company is quite relevant.

In order to make the correct entry mode choice, certain theories can be used. Transaction cost theory is one of these theories. Transaction cost theory can be used to determine the correct entry mode for a firm. Transaction cost theory has served as the overriding perspective for theorizing entry mode choice and, accordingly, transaction-cost-related covariates have been recognized as major determinants of entry mode decision (Zhao, Luh, & Suh, 2004). Ingram (1997) argues that transactions costs offer a great deal to the understanding of societies and particularly the

organisational and managerial function within. Thus, transaction cost theory should fit perfectly when one wants to structure a new governance form in a foreign market. Aldershot and Lyme (1997) address transaction cost theory as the cost of measuring and enforcing the mechanism of exchange in economics and represents a fundamental ingredient of the economic appreciation of any institution, organisation, or managerial function. Williamson (1992, 1996) is of opinion that transaction cost theory advocates a governance form that can minimize the costs associated with governing and monitoring transactions. This fits perfectly to the essence of the correct entry mode (as mentioned before): to obtain the best return on investment (Brouthers et al., 1999). In 1990, Hesterley et al. already stated that the key consideration of transaction cost theory lies in cost minimization in selecting governance forms that are 'mechanisms of exchange' (‘selecting governance forms’, in other words: entry mode choice).

All these aforementioned arguments provide support that transaction cost theory could be used in order to solve entry mode choices. These arguments provide the right for existence for this thesis. This thesis is going to elaborate on how transaction cost theory can explain entry mode choice for a company. This is done by giving an overview of current views about this matter in academic literature.

1.3 – Problem statement

The following research question can be deducted from the problem indication: ***How can companies choose the optimal entry mode by using transaction cost theory?***

‘Transaction cost theory’ entails the fundamental factors in TCT. These factors are elaborated on in one of the research questions. ‘Entry mode’ entails the most common entry modes. Specific modes are elaborated on in one of the research questions.

1.4 – Research questions

In order to provide a profound answer, the research is divided into the following research questions:

- What factors are fundamental in transaction cost theory?
- What entry modes are most common and what are their characteristics?
- What are the elements that determine entry mode?

1.5 – Research design and data collection

This thesis is a descriptive research with the use of literature reviews which is “a clear and logical presentation of the relevant research work done thus far in the area of investigation” (Sekaran, 2003). The design of this thesis is a descriptive research, because the purpose of this research is to obtain specific characteristics of variables of interest. These variables are in this case: ‘entry modes’ and ‘transaction cost theory’. The data has been collected solely from other academic articles. This is

the so-called secondary data, "information gathered by someone other than the researcher conducting the current study", (Sekaran, 2003).

The secondary data for this thesis consists only of scientific academic articles. These articles are only being used when sufficient thresholds are met. The first and most important threshold is reliability. To ensure this reliability, only articles published in top journals are considered as sufficient. A list of top journals is provided and selected carefully by faculty staff of Tilburg University. By using only articles from top journals reliability has already been audited by the journal in question. The next threshold is whether the article is still contemporary. The publishing date of the article cannot be of half a century ago. Therefore, academic articles that have been published too long ago (e.g. 30-40 years) are not accepted as sufficient.

The collection of these academic articles has been done by using databases which are facilitated by Tilburg University. The library department has a subscription on numerous well-known databases with academic articles such as ABI/Inform and JSTOR. The search engine of the library department of Tilburg University has been queried with terms like 'transaction cost', 'transaction cost economics', 'transaction cost theory', 'entry mode', 'entry mode choices', et cetera. Furthermore, text books regarding the subject have been aiding the search. References to academic papers in text books are also a sufficient way to search for academic papers. Please note that these academic papers, which were found by the references in text books must also meet all sufficient thresholds as mentioned in the previous paragraph.

1.6 – Structure of the thesis

The remainder of this thesis starts with the answer to the first research question, *'What factors are fundamental in transaction cost theory?'*. It is followed by chapter 3 which elaborates on entry modes that are most common. The fundamental factors that were found in the chapter regarding transaction cost theory are used in chapter 3. The fundamental factors (of transaction cost theory) are a subject of interest in chapter 3 too. The differences in these characteristics (fundamental factors) are given per entry mode in chapter 3. Chapter 4 answers the main research question by providing a link between chapter 2 and chapter 3. It should be clear in which cases a firm should pursue a certain entry mode. In the concluding chapter (5) the conclusions, limitations and recommendations are given for this thesis.

Chapter 2: Transaction cost theory

The essence of this chapter is to elaborate on the fundamental factors of transaction cost theory, also mentioned transaction cost economics by some academics. The beginning of this chapter consists of a general introduction on transaction cost theory. It is followed by paragraphs which elucidates on the substance of transaction cost theory.

Costs associated with an economic exchange that varies independent of the competitive market price of the goods or services exchanged are transaction costs (Robbins, 1987). The costs of finding and negotiating with an appropriate partner (Agarwal & Ramaswami, 1992; Makino & Neupert, 2000), and the costs of monitoring the performance of the partner firm (Makino & Neupert, 2000) are part of transaction cost. Transaction cost theory assumes that firms pursue profit maximizing. One of the effects accompanied by pursuing profit maximizing is economizing (transaction) costs (Williamson, 1985). This means transaction costs should be kept at a minimum. These transaction costs are determined by the nature of exchange; issues such as difficulty of setting prices or measuring the performance of services are instrumental in determining transaction costs (Robbins, 1987). The particular structure of a firm, most importantly, the extent to which it will integrate vertically (Williamson, 1985) is explained by transaction cost theory. A more tangible approach is that transaction costs are concerned with the costs of integrating an operation within the firm as compared with the costs of using an external party to act for the firm in a foreign market (Williamson, 1985).

Before using and applying the transaction cost theory (on entry mode choice) one must be made aware of certain assumptions that come with transaction cost theory. These assumptions are fundamental for the understanding of transaction cost theory. More regarding the assumptions is elaborated on in paragraph 2.1.

Transaction cost theory comes with three variables which determine in which circumstances the lowest transaction cost occur. The variables aid in decision-making regarding vertical integration of the firm and its foreign strategy. Williamson (1988) therefore claimed that these variables aid in entry mode decision for firms. The variables in question are frequency, uncertainty and asset specificity. Detailed description of these variables are give in paragraph 2.2 (frequency), paragraph 2.3 (uncertainty) and paragraph 2.4 (asset specificity).

The remainder of this chapter starts with paragraph 2.1 which elucidates on the *assumptions* that are made by the transaction cost theory. After these assumptions are made clear, the variables of the transaction cost theory are clarified. Paragraph 2.2 elaborates on the variable *frequency* within

the transaction cost theory. Subsequently the variable *uncertainty* is explained in detail in paragraph 2.3. The last variable, *asset specificity* is discussed in paragraph 2.4. Ultimately, a short wrap-up regarding transaction cost theory is given in paragraph 2.5.

2.1 – Assumptions

This paragraph elucidates on the assumptions made by transaction cost theory. A general introduction starts this paragraph. In subparagraph 2.1.1 the concept of *bounded rationality* is elucidated on. Subparagraph 2.1.2 explains the essence of opportunism within the assumptions of transaction cost theory. Aubert and Weber (2001) label these assumptions in transaction cost theory (environmental) as human factors that rise transaction cost. The assumptions consist of the following variables: *bounded rationality* and *opportunism*.

2.1.1 – Bounded rationality

Simon (1985) states that human actors posses *bounded rationality*, by which he means the human actors are 'intentionally rational' but limited in its operation. Aubert and Weber (2001) explain this concept in a more tangible way: *'humans are unlikely to have the abilities or resources to consider every state-contingent outcome associated with a transaction that might arise'*. An example is given next in order to illustrate the concept: A good metaphor is a game of chess. Human actors that are aware of all the rules in chess, are most likely not able to take the optimum decision during any phase in the game. They cannot foresee the actions that other (human) actors might take (unpredictable). Furthermore it is very unlikely that human actors (and their brains) are capable of such analytical skills to see all options. It is rather too complex for the human brain. Analogies can be found in the corporate world. Managers are not able to foresee their opponents (competitors) actions. It is also very unlikely that all possibilities are found, analyzed and are passed on for a decision round. Constraints could be money, time or just plain lack of knowledge. This assumption, bounded rationality, is therefore inevitable to avoid for a firm.

2.1.2 – Opportunism

The concept of *opportunism* is a threat for any firm and thus it transaction costs (Williamson, 1985). He labels *opportunism* as an unflattering attribute. *Opportunism* is an expression of "self-interest unconstrained by morality according to Milgrom and Roberts (1992). Aubert and Weber (2001) explain the concept of *opportunism* as the phenomenon that human actors will act on their own self-interests. *Opportunism* is, according to Williamson (1985), the possibility that human actors will act in a self-interested way. However one must note that not all human actors are always acting opportunistic. Williamson (1985) assumes that human actors act opportunistic some of the time and it is not possible to foresee during job

interview applications which of the applicants are opportunistic or not. Like with the assumption of the concept of bounded rationality, it is inevitable to avoid opportunism. Williamson (1998) states "it is truly utopian to presume unfailing stewardship".

The concepts in detail above (*bounded rationality* and *opportunism*) are variables that concern a firm. However these are not variables that explain whether a firm should integrate vertically or not (choose a certain entry mode). These variables are most likely characteristics of modern (corporate) society and firms are not possible to omit the implications that come with it. In the next paragraphs (2.2, 2.3 and 2.4) variables that describe the characteristics of the firm internally are discussed. These are variables which firms can change and reverse to their own preferences.

2.2 – Frequency

This paragraph is the first of three paragraphs in which the variables of transaction cost theory are elucidated on. The variable *frequency* is the first variable to be dealt with.

Frequency corresponds with the number of times a transaction takes place. Transaction cost theory states that in case of high frequency integrate should integrate vertically (Williamson, 1985). Many transactions cost implies many costs like finding and negotiating with an appropriate partner (Agarwal & Ramaswami, 1992; Makino & Neupert, 2000), and the costs of monitoring the performance of the partner firm (Makino & Neupert, 2000). These are just a few examples of costs that could occur. Other examples are mentioned in the introduction of this chapter (Chapter 2). To cut in costs, transaction cost theory states that firms are likely to integrate vertically in case frequency is high (Williamson, 1985). It is likely that a firm running the operation itself (by means of integrating vertically) will save costs. Mind that, in case of lower transaction frequency this is not the case. The start-up costs are likely to not outperform costs of transactions that are very scarcely needed (Williamson, 1985).

2.3 – Uncertainty

Uncertainties are hard to be foreseen. One must take into account certain eventualities that might occur during transactions (Williamson, 1985). However it is hard to foresee all possible options (eventualities) that might occur. This is quite the same phenomenon that occurs with the concept of *bounded rationality*. Therefore, Aubert and Weber (2001) claim that *uncertainty* exacerbates the problems that arise because of *bounded rationality*. This means that *uncertainty* would exaggerate or make transactions more complex. Another *uncertainty* could be the diverse interests of actors during the transaction. Actors might behave on their own interest and diminish the current agreement. The phenomenon *opportunism* shares the same implications (as mentioned before in subparagraph 2.1.2). Aubert and Weber (2001) noticed this relation and stated that

uncertainty exacerbates the problems that arise because of *opportunism*. The essence here is to minimize this *uncertainty*. Transaction cost theory states economizing can be done by integrating vertically (Williamson, 1985).

2.4 – Asset specificity

Asset specificity concerns assets that are much more (or only) valuable in certain transactions. Aubert and Weber (2001) explain this by stating that assets may be attached to a particular transaction. And that in case the party who has invested in the asset will incur a loss if the party who has not invested withdraws from the transaction. Like with *uncertainty*, *asset specificity* can be linked to the assumptions *bounded rationality* and *opportunism* as well (Williamson, 1985). This can be explained by the upcoming reasoning. In case *bounded rationality* was not an issue, a more thorough decision would have been made and this would diminish the chance of wrongful asset allocation. *Opportunism* is not aiding asset specificity as well, since personal interests of actors could diverse too much from the firms. In a later stadium this difference might be too severe, and measures must be taken, by means of determination of the transaction. In order to counter these transaction costs caused by *asset specificity*, vertical integration should be applied according to transaction cost theory (Williamson, 1985).

2.5 – Overview

The transaction cost variables (*frequency*, *uncertainty* and *asset specificity*) were elaborated on in this chapter. The important notes from this chapter to remember are:

- *Bounded rationality* and o*pportunism* make transactions more complex
- *Frequency* concerns the amount of repetitions of a certain transaction
- *Uncertainty* is exacerbated by *bounded rationality* and *opportunism*
- *Asset specificity* is exacerbated by *bounded rationality* and *opportunism*
- Vertical integration is advisable in case of high *frequency*
- Vertical integration decreases *uncertainty* and *asset specificity*

Chapter 3: Entry modes

This chapter introduces the most common entry modes that companies can utilize in order to obtain the best return on investment (Brouthers et al., 1999). In current academic literature three main forms of entry modes can be found. These three main forms are licensing agreements, joint ventures and wholly owned subsidiaries (Brouthers & Hennart, 2007). Anderson and Gatignon (1986) constructed a perspective in which licensing agreements, wholly owned subsidiaries and joint

ventures are placed on three continuums with control, commitment and risk. Their perspective is not a rarity and not solely viewed by just themselves. Their perspective, regarding the characteristics of entry modes, is shared by Erramilli and Rao (1990) & Hill et al. (1990) since they have used this particular view as a basis for their own researches. The reason why these dimensions are chosen for this thesis is that these dimensions show similarities with the variables of transaction cost theory. The variable *uncertainty* in transaction cost theory is quite similar to the characteristic *risk* in entry mode when the current dimension is used; *asset specificity* corresponds with *commitment*. *Frequency* and *control* are not similar to each other, however this is justified for in the chapter (chapter 4) following this current one.

The remainder of this chapter consists of the elaboration of the three main forms of entry mode. This is done by at first giving a more detailed description of the characteristics control, commitment and risk according to current academic literature. It is followed by the clarification of the concept of licensing agreements in paragraph 3.2. The characteristics of this entry mode (*control*, *commitment* and *risk*) are also given in this paragraph. Following the first paragraph, paragraph 3.3 elucidates on the concept of joint ventures. Again, the accompanying characteristics are illustrated in order to notice the (most important) differences among the entry modes. The last concept of entry mode, wholly owned subsidiaries, is exemplified in the paragraph 3.4. The characteristics control, commitment and risk are also illustrated in this paragraph. This chapter concludes with a short overview in paragraph 3.5 of the subjects of this chapter.

3.1 – Entry mode characteristics

Anderson and Gatignon (1986) and others following into their footsteps have come up with three characteristics that distinguishes the three main entry modes. The characteristics differ from each other by being consistent with another level of risk, commitment and control (Hill et al., 1990). A short elaboration of each characteristic is given below to provide a clear general definition of the characteristic. This elaboration is fundamental in order to correctly interpret the definitions as it is used in this thesis.

3.1.1 – Control

The three main entry modes (licensing agreements, joint ventures and wholly owned subsidiaries) differ in level of control. Control is meant to be authority over operational and strategic decision-making (Hill et al., 1990).

3.1.2 – Commitment

The entry modes also differ in level of commitment. Vernon (1983) states that (resource) commitment means that dedicated assets that cannot be redeployed to alternative uses

without costs (loss of value). This can be both tangible (e.g. manufacturing equipment) and intangible assets (e.g. goodwill).

2.1.3 – Risk

Hill and Kim (1988) state that risk entails dissemination risks, in other words the (unique) knowledge that a firm possesses is shared with other parties. Firms might not want others to possess this information since this could vaporise their current competitive advantage.

3.2 – Licensing agreements

The concept of licensing agreements is accompanied with a low level of *control* (Hakansson, 1984). According to Hill et al. (1990) *control* over operations and strategy is granted by the parent company in exchange for a monetary reward and a commitment to abide the terms set out in the licensing contract.

In case of licensing agreements, most of the costs to enter the foreign market are for the licensee. In this case the parent firm does not own any assets that generate revenues. Oftentimes the parent company is only involved in training the human capital of the licensee. Another important aspect which is done by the parent firm is monitoring the licensee to rule out any disobediences of the licensing contract (Hill et al., 1990).

In order to enter foreign markets, products must be manufactured. It is inevitable that manufacturing occurs without specific knowledge of the parent firm. In such cases the parent company runs a (significant) risk in spite of strict licensing agreements. Hill and Kim (1988) mention examples in which either the licensee or employees of the licensee might disseminate this knowledge. The level of know-how dissemination *risk* is for the licensing agreement entry mode thus rather high.

3.3 – Wholly owned subsidiaries

Wholly owned subsidiaries give the firm, according to Erramilli and Rao (1993), full *control* of foreign production, and marketing activities. This is therefore a full-control designated entry mode. This perspective is also backed by Root (1983). Root states that within wholly owned subsidiaries the level of control is rather high. In fact, it is at the highest in comparison with the other two main entry mode forms, licensing agreements and joint ventures. This high level of *control* over day-to-day operations and (some) strategic decisions might be assigned to the local subsidiary. However, the headquarters of the parent firm can always overrule this since they have ultimate control (Hill et al., 1990).

When wholly owned subsidiaries are chosen as entry mode the firm must cover all costs to enter the foreign market themselves (Hill et al., 1990). An important aspect to notice is that the revenue generating assets will be as a gratuity in possession of the parent firm itself. The level of commitment is in this entry mode thus rather high (Hill et al., 1990).

The *risk* of dissemination is most likely the lowest in case wholly owned subsidiary is the chosen entry mode (Hill et al., 1990). A firm can solely control how the exquisite knowledge will be utilized without interference of other parties. Furthermore, within the same organization the firm is able to foster the same goals and values within their workforce (Hill et al., 1990). However, one must note that there is no absence of *risk*; there is no guarantee employees might disseminate the knowledge to unauthorized external parties. Still, one can state that the risk of dissemination is the lowest, in comparison with risk levels of licensing agreements and joint ventures, by using a wholly owned subsidiary as entry mode.

3.4 – Joint Ventures

In academic literature the concept of joint venture academics rather share the same view. Li (2008) describes joint ventures (JV) as inter-organizational forms of cooperation that involve equity sharing. Another perception is that a joint venture is an agreement of two or more legally independent companies, which pool their capabilities and resources together to a shared business. By doing this, ownership is shared and as a result risk will diminish (Lukas, 2005). The economics thoughts behind the concept of a joint venture are to exchange and obtain knowledge in case parties have complementary resources (Buckley & Casson, 1996). The other requisites are, according to Beamish (1985), opportunities for collusion and barriers to full integration on economics, financial legal and political matters.

The characteristics of a joint venture match with a medium level of *control*. *Control* is split among the involved firms (Hill et al., 1990). Hence this level of control for this entry mode lies between high (wholly owned subsidiaries with solely pure control) and low (licensing agreements with many parties involved).

The level of *commitment* in case of a joint venture is somewhat moderate (Hill et al., 1990). It lies between the low level and the high level of respectively the entry modes licensing agreements and wholly owned subsidiaries. The level of *commitment* depends on the proportions in which (mainly) equity was put into the joint venture per firm (Hill et al., 1990). A fundamental consequence of this that must be noted is that high (resource) *commitments* are oftentimes barricading the exit strategy of a firm (Harrigan, 1981). The strategic flexibility of a firm is somewhat compromised hereby

according to Harrigan (1981). According to Staw (1982) this exit barrier, and thus the inflexibility, puts the firm in a tough position to respond to local developments.

In case a joint venture is the chosen entry mode, it is inevitable that specific knowledge must be shared with other parties (Agarwal & Ramaswami, 1992). Once again, there is a *risk* that this knowledge might be spread to external parties outside the joint venture. However, Hill et al. (1990) state that within joint ventures firms, by their contributed equity, are more able to control how this knowledge must be utilized in comparison with licensing agreements. One could state the level of risk is rather moderate when a joint venture is chosen as entry mode.

3.5 – Overview

Now that one clear view has been constructed by several academic papers, a short overview regarding the three entry modes (licensing agreements, wholly owned subsidiaries and joint ventures) and its accompanying level of control, risk and commitment is depicted below in a matrix. Besides a textual overview, also a visual overview is drawn beneath which might be easier to use to draw conclusions and set up relations among the variables.

	entry mode characteristics		
entry mode	*Control*	*Commitment*	*Risk*
Licensing agreements	low	low	high
Joint ventures	medium	medium	medium
Wholly owned subsidiaries	high	high	low

Table 1: entry mode characteristics (Hill et al., 1990)

Chapter 4: Linking transaction costs theory with entry mode choice

This chapter is the most fundamental part of this thesis. The essence is to expose the link between transaction cost theory and entry mode choice. In order to expose this link similarities between the transaction cost variables (*frequency*, *uncertainty* and *asset specificity*) and the characteristics of entry modes (*control*, *commitment* and *risk*) are shown. The remainder of this chapter starts with paragraph 4.1 where the transaction cost theory variable *uncertainty* is paired with entry mode characteristic *risk*. Subsequently the similarities between *asset specificity* and *commitment* are exposed in paragraph 4.2. The remaining variable *frequency* and the remaining characteristic *control* are justified for in paragraph 4.3. At the end of paragraph 4.1 a brief graphical overview is shown to provide visual aid in clarifying this thesis. Paragraph 4.2 and 4.3 also conclude with this graphical overview. This chapter ends with paragraph 4.4 in which all brief graphical overviews of this chapter are combined into one matrix.

4.1 – Uncertainty and risk

This paragraph elaborates on the link between *uncertainty* (transaction cost variable) and *risk* (entry mode characteristic). This is done by showing the similarities between the two elements in question. By doing this, the characteristics of an entry mode can be replaced with transaction cost variables. A graphical overview is given at the end of the paragraph by means of a matrix to make absolutely clear what the purpose is of showing similarities between transaction cost variables and entry mode characteristics.

The transaction cost theory variable *uncertainty* concerns eventualities that might occur and are hard to be foreseen (Williamson, 1985). Hill and Kim (1988) state that *risk*, which is an entry mode characteristic, entails dissemination risks, in other words: the (unique) knowledge that a firm possesses is shared with other parties. One could say that *risk* as it is stated by Hill and Kim (1988) can be similar to *uncertainty* mentioned as transaction cost variable by Williamson (1985).

Chapter 3 concluded with a small graphical representation by means of a matrix (table 1). Due to the fact that the entry mode characteristic *risk* shows similarities with the transaction cost variable *uncertainty*, this table can be altered by adding the transaction cost variable *uncertainty* in the same field as *risk*. The result is in the table depicted here below:

	entry mode characteristic / transaction cost variable
entry mode	*Risk / Uncertainty*
Licensing agreements	high
Joint ventures	medium
Wholly owned subsidiaries	low

Table 2: risk/uncertainty with corresponding entry mode

4.2 – Asset specificity and commitment

This paragraph elaborates on the link between *asset specificity* (transaction cost variable) and *commitment* (entry mode characteristic). This is done by showing the similarities between the two elements in question. By doing this, the characteristics of an entry mode can be replaced with transaction cost variables. A graphical overview is given at the end of the paragraph by means of a matrix to make absolutely clear what the purpose is of showing similarities between transaction cost variables and entry mode characteristics.

Commitment (entry mode characteristic) is according to Vernon (1983) dedicated assets that cannot be redeployed to alternative uses without costs (loss of value). Aubert and Weber (2001) argue that a*sset specificity* concerns assets that are much more (or only) valuable in certain transactions. Aubert and Weber (2001) explain this by stating that assets may be attached to a particular transaction. And that in case the party who has invested in the asset will incur a loss if the party who has not invested withdraws from the transaction. By viewing the arguments of these two academic publications one must notice that *commitment* and *asset specificity* have a common topic:

- the value of assets in a certain environment or transaction
- the costs of re-allocating wrongfully allocated assets

Like in paragraph 4.1 a small graphical representation by means of a matrix (table 3) is shown. This time the entry mode characteristic is *commitment* and the transaction cost variable is *asset specificity*. The result is in the table depicted here below:

	entry mode characteristic / transaction cost variable
entry mode	*commitment / asset specificity*
licensing agreements	high
joint ventures	medium
wholly owned subsidiaries	low

Table 3: commitment/asset specificity with corresponding entry mode

4.3 – Frequency & Control

This paragraph elaborates on the link between *frequency* (transaction cost variable) and *control* (entry mode characteristic). However, this time there is no link to be found between the two elements in question. There are no clear similarities to be found at first sight. However, this does not mean that *frequency* and *control* are not useful. First the concept of *frequency* and *control* are briefly recited. It is followed by a discussion that shows that *frequency* can be indeed useful for entry mode choice.

Frequency corresponds with the number of times a transaction takes place. Transaction cost theory states that in case of high frequency integrate should integrate vertically (Williamson, 1985). Control is meant to be authority over operational and strategic decision-making (Hill et al., 1990). One cannot see any similarities between *frequency* and *control*. And for the characteristic *control* it is hard to see any contribution on entry mode.

However, the transaction cost variable *frequency* can contribute to entry mode choice. A high *frequency* implies many transactions cost. This means that many costs might arise for e.g. finding and negotiating with an appropriate partner (Agarwal & Ramaswami, 1992; Makino & Neupert, 2000). Other examples can be found in paragraph 2.2 in which this subject was handled more thoroughly. Transaction cost theory states that in case of high frequency integrate should integrate vertically (Williamson, 1985).

The small graphical representation by means of a matrix (table 4) is a little this time. Only the transaction cost variable *frequency* is used, since no similar entry mode characteristic could be found. The result is in the table depicted here below:

	transaction cost variable
entry mode	*frequency*
licensing agreements	low
joint ventures	medium
wholly owned subsidiaries	high

Table 4: frequency with corresponding entry mode

4.4 – Overview

In this concluding paragraph, all the three graphs of this chapter are combined into one big matrix. This overview should give a clear representation of what has been researched in this thesis. One could see which entry mode should be chosen when firms meet certain characteristics/variables.

	entry mode characteristics / transaction cost variables		
entry mode	*frequency*	*commitment / asset specificity*	*risk/ uncertainty*
licensing agreements	low	high	high
joint ventures	medium	medium	medium
wholly owned subsidiaries	high	low	low

Table 5: entry mode characteristics/transaction cost variable with corresponding entry mode

Chapter 5: Conclusion, limitations and recommendations

This chapter starts with the answer of the problem statement. This is done by providing a brief answer to each of the research questions that were mentioned in chapter 1 and that gave this thesis coordination and direction. Paragraph 6.1 starts with the answer to the first research question. Subsequently in paragraph 6.2 and 6.3 the answer is provided to the second and third research question. The chapters ends with paragraph 6.4 in which the limitations and recommendations of this thesis are discussed.

5.1 – What factors are fundamental in transaction cost theory?

The first fundamental factor of transaction cost theory is *frequency*. *Frequency* implies many transactions and many transactions imply many transaction costs like finding and negotiating with an appropriate partner (Agarwal & Ramaswami, 1992). *Uncertainty* is the second fundamental factor of transaction cost theory. *Uncertainties* are certain eventualities that might occur during transactions (Williamson, 1985) and that cannot be foreseen. The last fundamental factor is *asset specificity*. Aubert and Weber (2001) explain *asset specificity* by stating that assets may be attached to a particular transaction. And that in case the party who has invested in the asset will incur a loss if the party who has not invested withdraws from the transaction.

5.2 – What entry modes are most common and what are their characteristics?

Three entry modes are most common, these are *licensing agreements*, *joint ventures* and *wholly owned subsidiaries*. The characteristics of each entry mode are *control* - control is meant to be authority over operational and strategic decision-making (Hill et al., 1990), - *commitment* - Vernon (1983) states that (resource) commitment means that dedicated assets that cannot be redeployed to alternative uses without costs (loss of value) - and *risk* - the (unique) knowledge that a firm possesses is shared with other parties.

5.3 – What are the elements that determine entry mode?

The elements that determine entry mode consists of parts that were listed before. These elements are *frequency*, *commitment / asset specificity* and *risk / uncertainty*. With exception of the first variable *frequency*, the other elements are paired to each other based on similarities. The result is shown below in a diagram:

	entry mode characteristics / transaction cost variables		
entry mode	*frequency*	*commitment / asset specificity*	*risk/ uncertainty*
licensing agreements	low	high	high
joint ventures	medium	medium	medium
wholly owned subsidiaries	high	low	low

Table 6: entry mode characteristics/transaction cost variable with corresponding entry mode

This diagram should help firms to make their entry mode choice. Characteristics of the firm could be compared to the entry mode characteristics / transaction cost variables to find similarities. In such cases (when similarities are found) the model provides an answer for the firm in question.

5.4 – Limitations and recommendations

Regarding the results of this thesis, it is always questionable in what way a thesis of a young student with no work experience will actually enhances any corporate strategy. Of course, by referring to many top academics in this expertise, the impact might increase. Though, it is very unlikely that the outcomes of this thesis will find its way to a company and makes this thesis useful for (any) corporate strategy.

Due to recent credit crunches and its accompanying causes and effects, firms might change their preferences on entry mode choice. Trust, long-term instead of short-term are examples of nowadays hot issues within the corporate world. It would have been more interesting if this thesis could include findings of recent developments in the corporate world. However, due to lack of recent publications it is yet too early include such findings into this research.

With no budget at all, not all publications could have been used. The university offers facilitations for browsing and using academic publications, however not everything has been covered. During literature screening a couple of times a portal demanded a subscription which would required some funding. Without a budget, this is not an option, and perhaps by the lack of budgets certain key publications might have been missed.

Reliability is an element that cannot be easily checked personally. One must trust the editorial board of the journal in question in which the publications have been made. However, by mainly using publications from top journals, reliability can be accounted for.

Validity might have been compromised by the great amount of available literature. Usually this would be a great opportunity for a research. However, in the short time span in which this research has been conducted, it is not possible to make sure that the most useful resources have been used.

Validity has been accounted in a way by using publications that were not too old and outdated. The oldest article is from the year 1983, a mere 26 years ago. This should be acceptable and validity has been partly accounted for by this measure.

References

Agarwal, S., & Ramaswami, S. N. (1992). Choice of foreign market entry mode: impact of ownership, location and internalization factors. *Journal of International Business Studies*, *23*, 1-27.

Anderson, E., & Gatignon, H. (1986). Modes of foreign entry: a transaction cost analysis and propositions. *Journal of International Business Studies*, *17,* 1-26.

Aubert, B. A., & Weber, R. (2001, may). Transaction cost theory, the resource-based view, and information technology sourcing decisions: a re-examination of Lacity et al.'s findings. *Cahiers du GRES*, 01-08

Beamish, P. W. (1985). The characteristics of joint ventures in developed and developing countries. *Columbia Journal of World Business*, *20*, 13-19.

Brouters, L. E., Brouthers, K. D., & Werner, S. (2000). Is Dunning's eclectic framework descriptive or normative? *Journal of International Business Studies*, *30,* 831-844

Brouthers, K., & Hennart, J. M. A. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management*, *33*, 395-425.

Erramilli, M. K., & Rao, C. P. (1990). Entry mode choice in service industries. *International Marketing Review*, *7*, 50 - 62.

Erramilli, M. K., & Rao, C. P. (1993). Service firms international entry mode choice: a modified transaction-cost analysis approach. *Journal of Marketing*, *57*, 19-38.

Hakansson, H. (1984). *International marketing and purchasing of industrial goods.* New York: John Wiley and Sons.

Harrigan, K. R. (*1981*). Barriers to entry and competitive strategies. *Strategic Management Journal*, *2*, 395-412.

Hesterly, W. S., Libeskind, J., & Zenger, T. R. (1990). Organizational economics: an impending revolution in organization theory? *Academy of Management Review, 15*, 402-420.

Hill, C. W. (1990). Cooperation, opportunism, and the invisible hand: implications for transaction cost theory. *Academy of Management Review,* 15, 500-51.

Hill, C. W., & Kim, W. C. (1988). Searching for a dynamic theory of the multinational enterprise: a transaction cost model. *Strategic Management Journal*, *9,* 93-104.

Li, N. (2008). Religion, opportunism, and international market entry via non-equity alliances or joint ventures. *Journal of Business Ethics*, *80*, 771-789.

McCarthy, D. J., & Puffer, S. M. (1997). Strategic investment flexibility for MNE success in Russia: Evolving beyond entry modes. *Journal of World Business*, *32*, 293–319.

Milgrom, P. (1992). Organizational Prospects, Influence Costs and Ownership Changes, *Journal of Economics and Management Strategy*, *1*, 9-35.

Makino, S., & Neupert, K. E. (2000). National culture, transaction costs, and the choice between joint venture and wholly owned subsidiary. *Journal of International Business Studies*, *31*, 705-713.

Robbins, J. (1987). Organizational economics: Notes on the use of transaction cost theory in the study of organizations. *Administrative Science Quarterly*, *32*, 68-86.

Root, F. J. (1983). Foreign Market Entry Strategies, New York: AMACON.

Root, F. J. (1987). Foreign Market Entry Strategies, New York: AMACON.

Sekaran, U. (2003). *Research methods for business* (4th ed.). New York: Wiley & Sons.

Simon, H. (1985). Human Nature in Politics: The Dialogue of Psychology with Political Science. *American Political Science Review*, 79, 293–304.

Vernon, R. (1983). Organizational and institutional responses to international risk. *Managing International Risk*, *1*, 191-216.

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

Williamson, O. E. (1992). Markets, hierarchies, and the modern corporation. *Journal of Economic Behavior and Organization*, *17*, 335-352.

Williamson, O. E. (1996). *The mechanisms of governance*. New York: Oxford University Press.

Williamson, O.E. (1998). Transaction Cost Economics: How it works and where it is headed. *The Economist*, *146*.

Zhao, H., Luo, Y., & Suh,T. (2004). Transaction Cost Determinants and Ownership-Based Entry Mode Choice: A Meta-Analytical Review. Journal of International Business Studies, *6*, 524-544