



Currency Risk Management

- A case study of two Swedish mid-corps

Department of Business Studies
Bachelor Dissertation
FEC 685, December 2006

Tutors :
Christer Nilsson
Annika Fjelkner

Authors:
Anna Hallgren
Nils-Petter Ljung
Linda Temler

Abstract

Foreign exchange risk is inevitable for companies that are involved in international business (in foreign exchange). Many Swedish companies are dependent on international trade and it is, therefore, important that they manage the foreign exchange risk in an appropriate way. Further, there are a variety of techniques available in order to manage the foreign exchange risk.

The purpose of this dissertation is to describe how mid-corps can manage its foreign exchange exposure. Further, we will evaluate and describe the current foreign exchange activities in two Swedish mid-corps and suggest how their usage of the different methods and instruments can be improved. In order to find answers to our research questions we conducted interviews with two mid-corps. The results of the case study showed that the mid-corps perceive the foreign exchange risk as a major risk in international business, although they do not deal with it as much as they ought to, due to lack of time and knowledge. Therefore, the need should be provided externally from the banks for natural reasons. The companies have a need for currency risk management that must be satisfied. The banks have knowledge and products to satisfy the need, at the same time as it is in their own interest to sell the products and have a financially stable customer base. Hence, a win-win situation would be possible to achieve.

Key words: Currency risk management, Foreign exchange risk, Mid-corp, Transaction exposure.

Foreword

This dissertation concludes three and a half years of studies in the field of international business at Kristianstad University. The final months of dissertation writing have been both interesting and hectic at the same time, and we would like the opportunity to thank all the people that have supported us during this period.

We would like to give a special thanks to our tutor Christer Nilsson for giving us directions and guidelines throughout the dissertation, and Annika Fjelkner for her help with the English language.

Of course, we would also like to send our gratitude to the two participating respondents and their companies for taking valuable time out of their daily work. Without these companies the aim of the dissertation could not have been reached.

In addition, we would like to thank Swedbank and in particular Håkan Kroon and Mats Ring, for giving us valuable information and helping us to find and contact the participating companies.

Kristianstad, December 2006

Anna Hallgren

Nils-Petter Ljung

Linda Temler

TABLE OF CONTENTS

1. INTRODUCTION.....	7
1.1 BACKGROUND	7
1.2 PROBLEM	8
1.3 PURPOSE.....	8
1.4 DELIMITATIONS.....	8
1.5 RESEARCH QUESTIONS	9
1.6 HYPOTHESES	9
1.7 DEFINITIONS.....	10
1.8 OUTLINE.....	10
1.9 SUMMARY	11
2. METHOD.....	12
2.1 METHODOLOGY.....	12
2.2 RESEARCH PHILOSOPHY	12
2.3 RESEARCH APPROACH.....	13
2.4 DATA.....	14
2.4.1 <i>Secondary Data</i>	14
2.4.1.1 <i>Criticism</i>	15
2.4.2 <i>Primary Data</i>	16
2.5 SUMMARY	16
3. COMPANY PROFILE	17
3.1 COMPANY X.....	17
3.2 COMPANY Y	18
4. THEORETICAL FRAMEWORK	20
4.1 BACKGROUND FOREIGN EXCHANGE RISK	20
4.1.1 THE FOREIGN EXCHANGE MARKET	20
4.1.2 DOES FOREIGN EXCHANGE RISK EXIST?	22
4.1.3 DETERMINATION OF EXCHANGE RATES	23
4.1.3.1 <i>Purchasing Power Parity (PPP)</i>	24
4.1.3.2 <i>The Fisher Effect</i>	24
4.1.3.3 <i>Expectation Theory</i>	25
4.1.3.4 <i>The International Fisher Effect</i>	25
4.1.3.5 <i>Interest Rate Parity</i>	25
4.2 FOREIGN EXCHANGE RISK	26
4.2.1 RISKS IN INTERNATIONAL BUSINESS	26
4.2.1.1 <i>Commercial Risk</i>	27
4.2.1.2 <i>Financial Risk</i>	28
4.2.1.3 <i>Country Risk</i>	28
4.2.1.4 <i>Foreign Exchange Risk</i>	29
4.2.1.5 <i>Interrelationships Between the Risks</i>	29
4.2.2 FOREIGN EXCHANGE EXPOSURE.....	30
4.2.2.1 <i>Transaction Exposure</i>	31
4.2.2.2 <i>Translation Exposure</i>	33
4.2.2.3 <i>Economic Exposure</i>	34
4.2.3 RISK ATTITUDE.....	34

4.3 CURRENCY RISK MANAGEMENT	34
4.3.1 HEDGING	35
4.3.2 MANAGING TRANSACTION EXPOSURE: INTERNAL TECHNIQUES	36
4.3.2.1 <i>Choice of Invoicing Currency</i>	36
4.3.2.2 <i>Foreign Exchange Clauses</i>	37
4.3.2.3 <i>Shared Rate Risk</i>	37
4.3.2.4 <i>Cost Increases</i>	38
4.3.2.5 <i>Matching</i>	38
4.3.3 MANAGING TRANSACTION EXPOSURE: EXTERNAL TECHNIQUES.....	39
4.3.3.1 <i>Foreign Exchange Account</i>	39
4.3.3.2 <i>Forward and Future Foreign Exchange Contracts</i>	39
4.3.3.3 <i>Foreign Exchange Option Contract</i>	40
4.3.3.4 <i>Money-Market-Hedge</i>	42
4.3.3.5 <i>Currency Swap Contract</i>	42
4.4 FOREIGN EXCHANGE POLICY.....	43
4.5 AN OVERVIEW OF THE SWEDISH BANKS' PURPOSE.....	44
4.5.1 <i>Banks' Guidance and Information about CRM</i>	45
4.6 SUMMARY.....	45
5. EMPIRICAL METHOD	47
5.1 RESEARCH STRATEGY	47
5.2 SAMPLE	47
5.3 THE INTERVIEWS	48
5.3.1 <i>Interview Subjects</i>	49
5.4 VALIDITY	50
5.5 RELIABILITY	51
5.6 GENERALISABILITY	52
5.7 SUMMARY	52
6. EMPIRICS.....	53
6.1 COMPANY X.....	53
6.1.1 <i>Risk</i>	53
6.1.2 <i>Currency Risk Management</i>	54
6.1.3 <i>Improvement of the Current Situation</i>	56
6.2 COMPANY Y.....	57
6.2.1 <i>Risk</i>	57
6.2.2 <i>Currency Risk Management</i>	58
6.2.3 <i>Improvement of the Current Situation</i>	60
7. ANALYSIS AND SYNTHESIS.....	62
7.1 BACKGROUND FOREIGN EXCHANGE RISK	62
7.1.1 THE FOREIGN EXCHANGE MARKET	62
7.1.2 DETERMINATION OF EXCHANGE RATES	63
7.2 FOREIGN EXCHANGE RISK	63
7.2.1 RISKS IN INTERNATIONAL BUSINESS	63
7.2.1.1 <i>Commercial Risk</i>	63
7.2.1.2 <i>Financial Risk</i>	64

7.2.1.3 <i>Country Risk</i>	64
7.2.1.4 <i>Foreign Exchange Risk</i>	64
7.2.1.5 <i>Interrelationships Between the Risks</i>	65
7.2.2 FOREIGN EXCHANGE EXPOSURE.....	66
7.2.2.1 <i>Transaction Exposure</i>	66
7.2.2.2 <i>Translation Exposure</i>	67
7.2.2.3 <i>Economic Exposure</i>	67
7.2.3 RISK ATTITUDE	68
7.3 CURRENCY RISK MANAGEMENT	68
7.3.1 HEDGING	68
7.3.2 INTERNAL TECHNIQUES	69
7.3.2.1 <i>Choice of Invoicing Currency</i>	69
7.3.2.2 <i>Foreign Exchange Clauses</i>	69
7.3.2.3 <i>Shared Rate Risk</i>	70
7.3.2.4 <i>Cost Increases</i>	70
7.3.2.5 <i>Matching</i>	70
7.3.3 EXTERNAL TECHNIQUES.....	71
7.3.3.1 <i>Foreign Exchange Account</i>	71
7.3.3.2 <i>Forward Foreign Exchange Contract</i>	72
7.3.3.3 <i>Foreign Exchange Option Contract</i>	72
7.3.3.4 <i>Money-Market-Hedge</i>	72
7.4 FOREIGN EXCHANGE POLICY.....	73
7.5 AN OVERVIEW OF THE SWEDISH BANKS' PURPOSE.....	73
7.6 HYPOTHESES.....	75
7.7 SYNTHESIS	77
8. CONCLUSIONS.....	79
8.1 FURTHER RESEARCH	81
REFERENCES.....	82

Appendices

Appendix 1a	The Interview guide in Swedish
Appendix 1b	The Interview guide in English

List of Figures

Figure 4.1	Four-way Equivalence in the Foreign Exchange Market.....	23
Figure 4.2	The Company's Risk.....	27
Figure 4.3	The Life Span of a Transaction Exposure.....	33
Figure 7.1	The Life Span of a Transaction Exposure in Company X.....	67

1. Introduction

This chapter begins with a general description of the background and the development of our field of study, followed by the actual problem. Then, we will explain the purpose and the delimitations of the dissertation. Further, we will present our research questions and hypotheses. The chapter is concluded by an outline.

1.1 Background

The basic principle that motivates international trade is that there are comparative advantages between countries. However, there are barriers to overcome when trading internationally. Today, the barriers have decreased and countries have opened their borders to a greater extent, which has resulted in an increased globalisation and an improved international business climate. Of course, this has implied new opportunities for companies since they can reach totally new markets all over the world. However, the new opportunities also involve new risks that have to be considered, and one of them is the foreign exchange risk. The foreign exchange risk arises since different countries have different currencies that fluctuate against each other. Currency fluctuations are one of the barriers when it comes to international trade. So, if there were a way to deal with this problem, it would be beneficial not only to the separate companies but also to the international trade.

We found the foreign exchange risk to be an interesting topic since Sweden is a small and open economy, and Swedish companies are therefore strongly dependent on international trade. In our dissertation, foreign exchange risk is defined as the risk of a change (gain or loss) in the company's future economic value resulting from a change in foreign exchange rates (Oxelheim, 1984). The foreign exchange risk is inevitable for companies doing business overseas (in foreign exchange). Therefore, the real problem is how a company should manage this problem in an appropriate way.

There are many researches made in the field of CRM - **Currency Risk Management**. However, many of those focus on large companies that often have great resources, for example their own financial department. Therefore, we thought it would be interesting to focus on CRM in smaller companies with fewer resources, and where fewer researches have been conducted. We mentioned our topic for Swedbank in Karlskrona, and Swedbank decided to cooperate with us. In this way, we came in contact with experts in the field of CRM. One of the experts advised us to focus on mid-corps, since too small companies probably would not be able to provide us with the information we wanted.

1.2 Problem

Companies that do business overseas in another currency than their domestic are directly exposed to foreign exchange risk. There is a wide range of techniques in order to manage the risk, but the question is to what extent the companies use them. Large companies often have resources and organisational structure required in order to deal with it. However, the risk is not just a problem for large companies, since it is a question of how dependent the company is on its international trade in foreign exchange. Therefore, also smaller companies are exposed to foreign exchange risk. According to the literature and experts in the field, we have been able to establish the fact that they are not as good at dealing with it. So, what we want to research is how these companies deal with their foreign exchange risk and how their CRM can be improved.

1.3 Purpose

The purpose is to describe how a company can manage its foreign exchange exposure. Further, we will evaluate and describe the current foreign exchange activities in two Swedish mid-corps and suggest how the usage of the different methods and instruments can be improved.

1.4 Delimitations

Due to geographical closeness, limited time and financial resources we have chosen to focus on two mid-corps situated in the south of Sweden that are

doing business internationally. To understand how foreign exchange risk arises, we need to describe the connection between all the different risks involved in international trade. However, our focus will be on foreign exchange risk. A company's foreign exchange exposure consists of different exposures. We will mention all of them but only focus on the transaction exposure since this is what companies often refer to as their foreign exchange exposure. Therefore, when it comes to the different ways a company can manage its foreign exchange exposure we will only focus on the techniques dealing with transaction exposure. Moreover, we will only account for the most commonly used techniques and, therefore, we will exclude factoring as a way to manage the foreign exchange risk. It is also important for the reader to be aware of the fact that the research has been conducted from the companies' perspective.

1.5 Research Questions

The research questions will work as a guideline throughout the dissertation.

- How do mid-corps perceive foreign exchange risk?
- How can mid-corps deal with their foreign exchange risk?
- What can explain mid-corps inadequate CRM?
- How can the situation be improved?

1.6 Hypotheses

The hypotheses are connected to the research questions, and permeate the whole dissertation. The hypotheses have been developed after reading literature and during discussions with experts in the field.

H₁: Mid-corps perceive the foreign exchange risk as an important risk to consider.

H₂: Mid-corps are not fully aware of the existing methods and instruments that can be used to manage their foreign exchange exposure.

H₃: Mid-corps do not deal with their foreign exchange exposure as much as they ought to, due to lack of time and knowledge.

H₄: Mid-corps' need for information about CRM ought to be provided externally.

1.7 Definitions

Mid-corp A medium sized Swedish company with a turnover between 10 and 500 million SEK, and between 10 and 50 employees. In addition, a mid-corp does not have its own financial centre¹.

CRM Currency Risk Management

EUR The currency of the European Monetary Union

SEK Swedish Krona

USD U.S. Dollar

GBP Great British Pound

DEM Deutsche Mark

1.8 Outline

Chapter 2 In this chapter, we will present the method chosen. The research approach, research philosophy, and the data used to conduct our research will be discussed.

Chapter 3 Chapter three will present the profile of the two companies we interviewed.

Chapter 4 This chapter will introduce our theoretical framework and is divided into five parts including: background foreign

¹ Financial center in this context refers to a department with several full-time employees that only deal with the company's financial situation.

exchange risk, foreign exchange risk, currency risk management, foreign exchange policy and the purpose of the Swedish banks.

Chapter 5 Chapter five will introduce the empirical method used when we conducted the interviews. In addition, the research strategy, sample, the interviews, validity, reliability and generalisability of our research will be discussed.

Chapter 6 In this chapter, the empirics of the study will be presented. The study consists of two interviews.

Chapter 7 This chapter will present the analysis and synthesis of our study. Further, we will discuss our hypotheses.

Chapter 8 Chapter eight will present the conclusion and suggestions for further research.

1.9 Summary

The globalisation has improved the business climate in the world, which has made new risks of international trade appear. One of them is the foreign exchange risk, which is important to consider since many Swedish companies are dependent on international trade. There are a variety of techniques available to manage the foreign exchange risk, but the question is if smaller companies use them. The purpose is to evaluate and describe the current foreign exchange activities in two Swedish mid-corps and suggest how the usage of the different techniques can be improved.

2. Method

In this chapter we will discuss and explain the method used in order to fulfil the purpose of the dissertation. Further, we will explain how we gathered secondary and primary data.

2.1 Methodology

As described in the introduction, the purpose is to describe how a company can manage its foreign exchange exposure. Further, we aimed to evaluate and describe the current foreign exchange activities in two Swedish mid-corps and suggest how the usage of the different methods and instruments can be improved. One thing we realized early in the process of the dissertation was that many mid-corps fail to deal with their foreign exchange risk. Therefore, we started by getting an overview of already existing information with the intention to gain basic knowledge. In the theoretical framework, we have among other things discussed the foreign exchange market, exchange rates determination, the foreign exchange risk conception, the techniques available for managing foreign exchange exposure, and the function of the Swedish banks.

2.2 Research Philosophy

Research philosophy relates to how individuals think of the development of knowledge. There are mainly three different philosophies a researcher can adopt in the research process: positivism, realism, and interpretivism. The philosophy one chooses to adopt contains important assumptions about the way in which one views the world (Saunders, Lewis, Thornhill, 2007).

Positivism relates to independence of the researchers, which means that they do not want to affect or be affected by the subject of the research. The method is highly structured and the observations quantifiable and the result can be law-like generalisations. Realism is based on the belief that reality exists and also that there are different forces that affect peoples' perception. Realistic researchers share the same external objective nature as positivistic

researchers, but in a social context. The interpretivistic researcher tries to understand the differences between humans in their role as social actors. Thus, the reality is seen from a subjective point of view. This approach is also built on the belief of a complex business environment, which makes it difficult to generalize (Saunders et al., 2007).

Positivism is not in line with our research since we do not have any quantifiable observations, nor can the research result in law-like generalisations. Implications from this will be a combination of interpretivism and realism, since we thought it was critical to understand our participants' reasons, actions and intentions. At the same time as the problem of our research exists in reality.

2.3 Research Approach

According to Saunders et al (2007), there are two traditional approaches one can have when doing a research: deductive and inductive. The chosen approach is used in order to draw scientific conclusions from the research material. The deductive approach develops already existing theories and hypothesis, and designs a research strategy to test the hypothesis. The inductive approach means that one collects data and then develops a theory, as a result of the data analysis. Moreover, there can be a combination between deductive and inductive (Saunders et al., 2007).

In our research we used a combination of the deductive and inductive approach. The organisation of our dissertation has required flexibility, since it has been a continuously connection between theory and empirics. This process is reflected in our combination of the deductive and inductive approach. When we decided our research problem we started off by gathering secondary data, which gave us a better understanding of the problem. To connect this with reality, we decided to arrange meetings with experts in the foreign exchange field in order to get their view of the problem. Then, we restructured and gathered new secondary data with the

intention to narrow our research problem. The aim of the study was not to generalise since we conducted a preliminary study.

2.4 Data

Data can be divided into secondary and primary data. Secondary data refers to data that already has been collected for another purpose. Primary data refers to data that is collected specifically for the research project undertaken (Christensen et al., 2001).

Together with the method, secondary and primary data create the fundamental base, which give us vital information to the hypotheses and the research questions.

2.4.1 Secondary Data

We started our data collection by searching for secondary data. First, we looked for existing researches in the field of CRM, with the intention to find unexplored areas. We continued by gathering literature from a wide range of different books that dealt with CRM, foreign exchange market, risk conception etc. The field of CRM is rather wide and large, which we saw as an advantage since we wanted to gain fundamental knowledge. Moreover, it gave us a good base helping us compare the different sources and the authors' aspects of the problem. However, we found that the authors of the books handled CRM in similar ways: they used the same theories and models and had similar opinions. Of course, this has made the data collection easier. There are some authors we have used more than others, such as Oxelheim, Shoup, Bennet and Buckley. This is because they have had deeper explanations of the problems, which in turn have made them more understandable.

In order to get updated information about different methods and instruments available to manage foreign exchange risk we used the Internet and commercial bank's homepages in Sweden. We have also been in contact with different experts in the field (in particular Mats Ring, Swedbank

Markets) who gave us information about how the different techniques work in practice. In addition, we contacted Nordea, SEB and Handelsbanken by telephone in order to get information about how companies can proceed when they need information and guidance about CRM. However, it was difficult to get this information since some of the employees in the banks did not even know where the companies should turn in this matter.

Moreover, we wanted to get an understanding of how widespread CRM is in Swedish companies. To get this information we contacted different financial and statistical institutions in Sweden, such as Bankföreningen, Exportkreditnämnden, Finansinspektionen, and commercial banks. However, no one could provide us with the information since no statistics exist in this field.

The secondary data represents our theoretical framework. In addition, the secondary data was necessary when we gathered the primary data.

2.4.1.1 Criticism

It is important to evaluate the suitability of secondary data sources to the research since it may be appropriate to the research questions and objectives (Saunders et al., 2007). No matter how a professional an author is, his or her objectivity can be questioned. However, the secondary data we have gathered is to a great extent generally accepted facts, making it difficult for the authors to present a subjective opinion.

On the other hand, we have noticed that the Swedish and international literature to some extent differ when it comes to market conditions. This means that the international literature does not always reflect the Swedish situation. We have, therefore, compared the Swedish and international literature in order to get a correct description. In addition, the market conditions on the financial market constantly develops, which means that new things may not be included in the older literature. We have overcome this problem by gathering updated information from different sources.

2.4.2 Primary Data

Primary data can either be of a quantitative or qualitative nature. Quantitative data refers to numerical data or data that has been quantified. It is often presented in tables or diagrams in order to enable comparison of statistical relationships between different variables. Qualitative data refers to all non-numeric data or data that has not been quantified. A research of qualitative nature constitutes of words, text, symbols and actions where the focus lies in the underlying meaning. The overall understanding and the situation are more important than the separate pieces when conducting a qualitative research (Christensen et al., 2001).

We used a qualitative approach since we wanted to gain the overall understanding and describe the current situation in the companies concerned. When we gathered primary data we chose to conduct interviews. Interviews can be either structured, semi-structured or unstructured. Structured interviews are based on predetermined and standardised questions. Semi-structured interviews mean that the researcher has a list of themes and questions to be covered. However, the order of the questions may be varied and additional questions can be asked. Unstructured interviews are informal. They do not require any predetermined list of questions, and the respondent is given the opportunity to talk freely about events, behaviour and beliefs in relation to the topic area (Saunders et al., 2007).

We conducted semi-structured interviews since we wanted to cover some specific areas and at the same time allow the respondents to go deeper into these areas. We will describe the interviews in more detail in chapter five.

2.5 Summary

We have adopted a combination of the interpretivistic and realistic research philosophy. Further, we used a combination of the deductive and inductive approach in our research. We found most of our secondary data in different books, whereas we got the primary data from two semi-structured interviews.

3. Company Profile

In this chapter we will present the company profile of the two companies we interviewed. The companies are anonymous in our research and, therefore, we have chosen to call the companies and the interviewees by fictitious names.

3.1 Company X

The interviewee Stefan established Company X in 1997 in the south of Sweden. The company is privately owned and since its start it has traded internationally. The company sells kitchen utensils in Sweden and Europe, and its main products are made of cast iron. The cast iron products are semi manufactured in China and then refined to the final product in Sweden. The company imports the cast iron from China since the knowledge about casting still exists there. In addition, the price and quality are advantageous. Company X's customers are mainly other wholesalers and different stores. In addition, the company makes specific products to multiple chains, so called private branding². There are many companies in Company X's line of business, which makes the competitive situation severe.

Company X's turnover is approximately 11 million SEK, and it has been stable the last four to five years. The company's export share amounts to approximately 35%, whereas 65% is sold in Sweden. The company's import share amounts to 90%, whereas 10% is bought in Sweden. The company exports to Germany, Denmark and Great Britain. It imports from France, Portugal, Spain and China, where China represents two thirds. Moreover, approximately 50-60% of the company's total transactions are made in foreign exchange. The currencies used when trading are SEK, EUR, GBP, USD. The company's international trade has increased the latest years.

² Private branding is when a retailer buys from a manufacturer in bulk and puts its own name on the product (Wikipedia, 2006).

There are ten employees in the company. Stefan, the interviewee, is the CEO and the main owner of the company, who takes care of the personnel, finance and other administrative tasks. He has completed a nine-year compulsory education. However, he has long experience in the industry since he earlier worked as a business manager for a company that was in the same line of business. Stefan is responsible for the CRM in Company X.

3.2 Company Y

The interviewee's father established Company Y in 1975. Today, it is one of the leading producer and supplier of particular products in Scandinavia. Company Y is privately owned and act internationally. It belongs to a group of companies with a common owner, but where all of the companies are freestanding and trade with each other. Company Y's head office and production unit is located in the south of Sweden, where the products are also refined and distributed from. The company's customers are mainly to be found in the Swedish and European food industry as well as in the international pharmaceutical industry. The competitive situation is severe when it comes to deliver at the right price and a quality. However, the increasing demand for its main product has improved the competitive situation.

Company Y's turnover is approximately 400 million SEK and it has increased constantly. Its main product represents 60-70% of the total turnover, and 80% of the main product is sold to the international pharmaceutical industry. The import share amounts to 40%, whereas 60% of the products are bought in Sweden. Today, the export share amounts to 60%, whereas 40% is to Swedish customers. Company Y exports to twelve different countries, where China, Japan and Italy are its main customers. It imports from ten different countries, where Russia, Lithuania, Estonia, Romania, Ukraine, Italy, Bosnia, and Macedonia are its main suppliers. Further, 50-70% of the company's total transactions are made in foreign exchange. Company Y trades in several different currencies, although EUR and USD are the most frequently used. When importing the products, the

company pays the supplier in its domestic currency, for example when importing from Ukraine Company Y pays in the Ukrainian currency. When exporting the products, the company receives payments in USD and EUR. Company Y has in- and outflows and in EUR and USD. Further, the company has relatively large outflows to other companies within the company group. When it trades within the group they deal with SEK, USD and EUR.

There are 25 employees in the main production site in Sweden. Karl, the interviewee, is the production director and also part owner of the company. He has completed a nine-year compulsory education. However, he has worked in the company since he was 15 years old. Karl is in charge of the final decisions concerning the company's CRM, although the financial director has a free hand.

4. Theoretical Framework

In this chapter we will describe the models and theories essential to analyse CRM. We have divided our theoretical framework into different main chapters including background foreign exchange risk, foreign exchange risk, currency risk management, foreign exchange policy and the purpose of the Swedish banks.

4.1 Background Foreign Exchange Risk

In order to understand how and why a company is exposed to foreign exchange risk it is a necessity to understand where the risk arises. Therefore, this part begins with a short description of the foreign exchange market and its function. Since the foreign exchange risk arises due to movements between different currencies it is of importance to understand the connections between the factors that affect the movements. For this reason, the economic theories that explain the movement will be briefly described. Chapter 4.1 is only background theories to the real problem. However, it is of importance to have the background theories in mind when reading the remaining part of the dissertation.

4.1.1 The Foreign Exchange Market

The foreign exchange market is a worldwide market where foreign exchange transactions are carried out and exchange rates determined. However, it does not constitute a centralized and physical marketplace. Instead, it is made up of banks and dealers that are linked by a highly sophisticated telephone and telex system. The market allows individuals and companies to transfer purchasing power between countries and in this way it facilitates international trade (Dixon & Holmes, 1992).

The market's development has accelerated in the same pace as international trade has increased. Today, the foreign exchange market is the largest market in the world in terms of cash value traded. In 1995, it was estimated

that the daily turnover exceeded \$1300 billion a day (Buckley, 1996). The market is a twenty-four-hour market that moves from one centre to another; when it closes in Europe it opens in the US and when it closes in the US it opens in Asia. It is also the cheapest market in the world in which to deal. The twenty-four-hour access, the low trading costs and the transparency of information on the market makes it function very well. This indicates that the foreign exchange market may be the only market in the world that fulfils the requirements for the expression “perfect competition” (Kinnwall & Norman, 1994).

Today, trade accounts for only a small proportion of all foreign exchange deals, only about 1 to 2 percent of total transactions. Capital movements between different financial institutions and broker’s taking positions in different currencies make up the largest share of total transactions. Behind these transactions there are different actors such as companies and individuals, commercial banks, central banks and brokers. Companies and individuals need foreign exchange for business and travels. The commercial banks are the source from where companies and individuals obtain foreign exchange. In addition, the commercial banks have access to a network of trade rooms, where their arbitrage³ opportunities take place. The arbitrage activity ensures that the quotations in different foreign exchange markets tend towards the same price. The foreign exchange brokers, who bring buyers, sellers and banks together, receive commissions on the deals arranged. The central banks’ main foreign exchange activity involves the buying and selling of home currency or foreign exchange, with the intention to ensure that the interest rate moves in line with the established targets set by the government (Buckley, 1996).

The foreign exchange market can be divided into a spot market and a forward market. The spot market refers to deals that are arranged for immediate delivery (technically, a spot deal has delivery two working days

³ The purchase and immediate sale of equivalent assets in order to earn a sure profit from a difference in their prices (Bodie & Merton, 2000).

after the spot transaction). The forward market refers to a purchase or sale arranged today at an agreed rate but with delivery at some point in the future (Buckley, 1996).

There are several historical events that have influenced the foreign exchange market. Two of the most critical in modern time are the fall of the Bretton Woods Agreement⁴ in 1971 and the development of the European Monetary Union. The fall of the Bretton Woods Agreement implied more floating currencies, which in turn created a more volatile market. The development of the European Monetary Union has decreased the number of currencies, which has facilitated international trade. The foreign exchange market has been under constant change and the future development is unknown (Bennet, 1996).

4.1.2 Does Foreign Exchange Risk Exist?

A fundamental issue in this matter is whether or not companies view foreign exchange risk as an actual risk that is worth dealing with. There are theoretical models, which imply that there is no actual foreign exchange risk to consider. However, these models are based on the principle *ceteris paribus*, which means that reality is more complex than the models will emphasize. A common argument based on these models is that movements in exchange rates will be equalised in the long run. However, this argument loses its credibility since it does not consider the company's short-term business (Schuster, 2002).

When a company deals with the foreign exchange risk it ought to consider the risk as something that needs to be minimized, and not a way to increase the profit.

⁴ The agreement fixed all exchange rates vis-à-vis the US dollar. Since the dollar was linked to gold all currencies were fixed in terms of gold (Dixon et al., 1992).

4.1.3 Determination of Exchange rates

It is important that international companies have an understanding of the principles underlying exchange rate determination. At the simplest level it can be said that exchange rates are determined by the total demand for, and supply of, different currencies. However, this example does not tell us the underlying factors of the demand and supply for a currency (Buckley, 1996).

The most important theoretical ideas when you study foreign exchanges are the main international parity relationships, which are illustrated in figure 4.1. Each of the theories will be discussed separately later in this chapter.

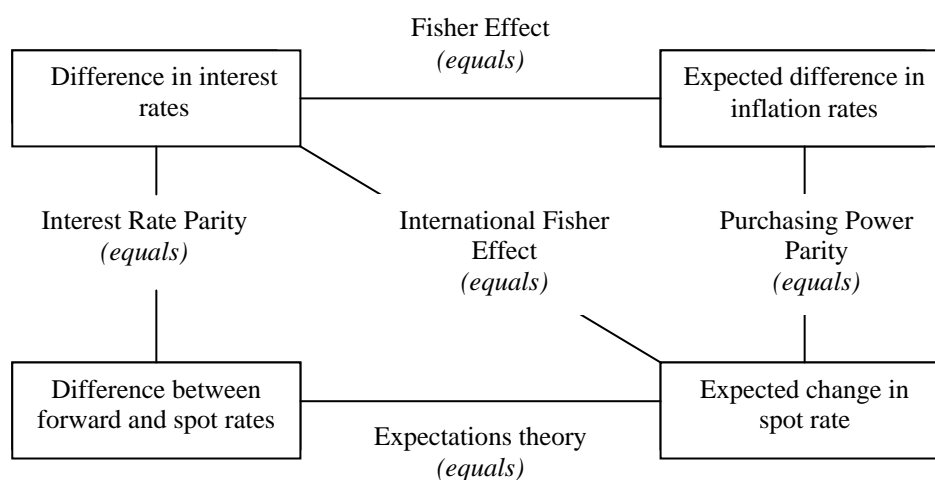


Figure 4.1 Four-way Equivalence in the Foreign Exchange Market.

Source: p. 9 in Buckley, A. (1996). *The Essence of International Money*.

There is a relationship between spot exchange rates, forward rates, interest rates and inflation rates. The model is an equilibrium model. However, it must be stressed that in the real world the markets move towards equilibrium but rarely demonstrate total equilibrium. So it would not be surprising if some of the arms of the four-way equivalence model do not hold in the real world of financial markets in the short term. In fact, the Interest Rate Parity is the only model that has a strong connection to reality. The remaining models are found to be long-run phenomena (Buckley, 1996). Of course, it is critical to know that there are also other factors,

outside this four-way equivalence model, that determines the exchange rates.

4.1.3.1 Purchasing Power Parity (PPP)

To use the rate of inflation as a base for exchange rate forecasts is called Purchasing Power Parity. The idea of PPP is that the exchange rates need to be adjusted if a country has higher rate of inflation than their trading partners, in order to maintain their competitiveness. PPP is usually categorised as two parities: relative and absolute (Wrambsby & Österlund, 2005/2006).

The absolute PPP is also known as the law of one price. The law of one price states that commodities bought in one country should have the same price in any other country. If there were a difference in price between two countries this would eventually be equalized. This is because of the fact that the demand for the cheaper product in one of the countries would increase and the other way around for the more expensive product (Eiteman, Stonehill & Moffett, 2007).

The relative PPP is based on the law of one price. It predicts that the exchange rate changes to compensate for differences in inflation between two countries. Thus, if one country has higher inflation than its trading partners, the exchange rate of the former should weaken to compensate for this relativity (Eiteman et al., 2007).

However, it is definite that PPP holds up well over the very long run but poorly for shorter time periods. In addition, the theory hold better for countries with relatively high rates of inflation and underdeveloped capital markets (Eiteman et al., 2007).

4.1.3.2 The Fisher Effect

The Fisher Effect, sometimes referred to as Fisher's closed hypothesis, is named after the statistician Irving Fisher. The theory states that nominal

interest rates in each country are equal to the required real rate of return plus compensation for expected inflation (Eiteman et al., 2007). Moreover, the theory can be explained in two stages. The expected inflation rate determines the nominal interest rate, which in turns affect the expected future exchange rate.

4.1.3.3 Expectation Theory

The expectation theory states that the forward exchange rate is equal to the expected value of the spot exchange rate for the time of forward delivery (Dixon et al., 1992). Intuitively this means that the distribution of possible actual spot rates in the future is centred on the forward rate. However, this only works if the foreign exchange market is efficient. In real life, the forward rate does seldom equal the future spot rate (Buckley, 1996).

4.1.3.4 The International Fisher Effect

The International Fisher Effect, also known as Fisher's open hypothesis, explains the relationship between the percentage change in the spot exchange rate over time and the differential between comparable interest rates in different national capital markets. The theory states that the spot exchange rate should change in an equal amount but in the opposite direction to the difference in interest rates between two countries (Eiteman et al., 2007).

4.1.3.5 Interest Rate Parity

Interest Rate Parity says that the differential in interest rates between two countries must be equal to the differential between the forward and spot exchange rates for the currencies of the two countries (Dixon et al., 1992). The theory states that the difference in the national interest rates for securities of similar risk and maturity should be equal to, but opposite in sign to, the forward rate discount or premium for the foreign exchange, except for transaction costs (Eiteman et al., 2007).

4.2 Foreign Exchange Risk

We have now stated that foreign exchange risk exists and that it is important that international companies deal with it. To develop the foreign exchange risk conception further it has to be considered in a total risk perspective, together with the risks involved in international business and the interrelationships between them. Furthermore, in order to deal with the risk companies need to be aware of what type of foreign exchange risk they can be exposed to. How the companies choose to deal with their foreign exchange exposure can to some extent be explained by the companies' attitude towards risk.

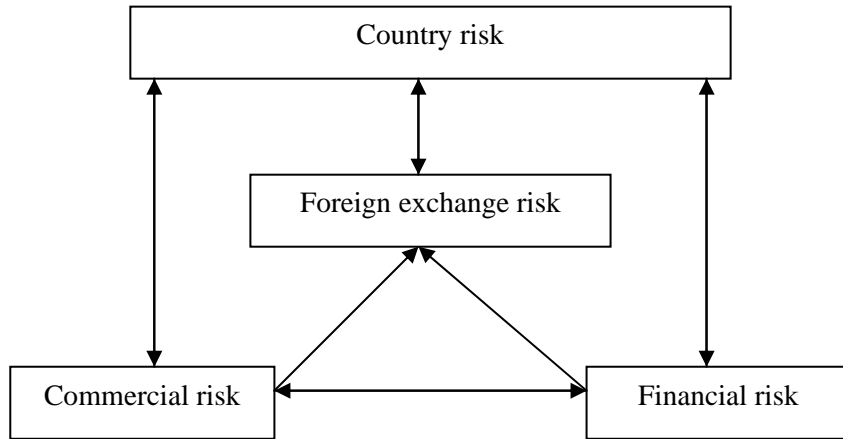
4.2.1 Risks in International Business

Every business situation involves risks. The risk profile will vary depending on if it is an international or domestic business situation. Doing business overseas requires awareness of all the risks involved. Therefore, it is important that a company map the risk profile of every business deal.

Risk is a frequently used expression even though its meaning may be unclear. People believe to have a clear conception of risk. In spite of this, people will probably give you different definitions depending on whom you ask. There are also different definitions among the authors in the economic literature and according to Oxelheim (1984) the risk refers to uncertainty about the future value of the company. This value is affected by changes in interest rates, inflation rates, and exchange rates from a macro perspective but also by changes in prices and volumes on the company level. In other words, risk is the change in the future value of the company and what affects this value can depend on a variety of factors.

When a company deals with international risks, the company first needs to categorise them. Oxelheim (1984) has the following categorisation: commercial, financial, country and foreign exchange risk. However, it is not said that all the different risks are encountered for in every business deal

(Grath, 2004). The different types of risks and the relations between them are illustrated in Figure 4.2.



Figur 4.2 The Company's Risk

Source: p.14 in Oxelheim, L. (1984). *Exchange Risk Management in the Modern Company*.

The risk factors are of different importance in business deals, and the interrelationship between them also differs. According to Oxelheim (1984), there are two main elements of risk traditionally said to arise when a company is engaged in international business. These two risk elements, which are specifically attached to export/import business and overseas investment, consist of foreign exchange risk and country risk. However, it is difficult to draw clear boundaries between these risks and the other corporate risks - the financial and commercial (Oxelheim, 1984). The links between the different risk elements will be discussed later in this chapter.

4.2.1.1 Commercial Risk

Commercial risk can be explained by the variation in relative prices and sales volume (Oxelheim, 1984). It refers to the risk that a counterpart goes bankrupt, becomes insolvent or does not complete its obligations according to the established agreement. Principally, it involves the buyer's paying obligations. To get useful information about the counterpart's ability to pay

one can inspect its credit and annual reports or contact credit institutions for information. However, the commercial risk becomes more difficult to deal with in international business since the availability of information and the legal system differ from country to country (Grath, 2004).

4.2.1.2 Financial Risk

Financial risk can be said to express the variation in interest rates and capital costs in a specific currency. Moreover, it is the risk that involves the company's suspension of payment. Thus, every business deal can imply some kind of financial risk, in the sense that it is always possible that the deal will not proceed exactly the same way or in the same pace as was originally expected (Grath, 2004). In other words, all business deals need to be financed in some way and if the predetermined finance would alter, the financial risk would arise.

4.2.1.3 Country Risk

Country risk refers to the risk that a business deal cannot be carried out according to the contract, depending on the actions that has to do with the counterpart's home country or another country's government or public authority (Grath, 2004). In other words, every international business is affected by decisions, actions and legal situation in the country the company does business with. Further, it is almost impossible for companies to protect themselves against country risk since there are governments involved. To clarify the meaning of country risk, Grath (2004) categorises it according to different underlying factors: political, social and economical stability.

- Political stability refers to the domestic political structure and ideology, combined with the external relationship to other countries.
- Social stability involves problems such as adverse distribution of incomes, political, ethnical or religious oppositions.
- Economical stability involves infrastructure, the country's dependence of a specific import or export merchandise, burden of debt and supply of raw materials.

However, Oxelheim (1984) has another categorization of country risk: political risk and the risk of suspended payments.

- Political risk includes the risk of future legal changes, which may affect the return on the company's investment or the risk of socialization or nationalization of its assets.
- The risk of suspended payments refers to suspension of payments and dislocations directly due to decisions by the exchange regime (usually the central bank) in a country.

4.2.1.4 Foreign Exchange Risk

Foreign exchange risk is the risk of a change (gain or loss) in the company's future economic value resulting from a change in foreign exchange rates (Oxelheim, 1984). Thus, it arises when the payment is made in another currency than the exporter has its costs in or the importer has its receipts in (Grath, 2004). The size of the foreign exchange risk will vary depending on the time laps between the day of transaction and payment. In addition, it will depend on the currency used in the business deal. This description of foreign exchange risk is of quantitative nature and there is of course a more qualitative definition. Hence, to get the qualitative understanding of what foreign exchange risk is one has to understand the interrelationships between the risks.

4.2.1.5 Interrelationships Between the Risks

So far, the different risks have been discussed as isolated factors in a broad risk perspective. However, the risks are closely linked and cannot be viewed separately. Therefore, a change in one of them would result in changes in the other risks.

The country risk can be said to overlap the three other risk categories. The overlapping nature of the country risk stems from the fact that it is generated mainly by the exchange regime in a particular country, whereas the other risks are largely market generated. The implication of this is that the country

risk is not possible to handle or predict to the same extent as the market generated risks. The political situation and the decisions taken by the central bank in a country will have direct affect on the movement in a country's local currency. Therefore, the linkage between the country risk and foreign exchange risk is relatively clear (Oxelheim, 1984).

Another linkage is between the foreign exchange risk and the financial risk. When the company decides to deal with its foreign exchange risk the company automatically transforms it into a financial risk (Oxelheim, 1984).

In addition, there is a linkage between three of the risks: the foreign exchange, financial and commercial risk. For example, if a company cover its foreign exchange exposure by transferring the risk to its counterpart, the foreign exchange risk transforms into a financial risk since this may put the counterpart into financial difficulties. Thus, the counterpart may not be able to fulfil its obligations towards the company and, hence, it has become a commercial risk.

4.2.2 Foreign Exchange Exposure

Companies are exposed to foreign exchange risk when changes in exchange rates, short-term or long-term, affect the company's profitability, cash flow and market value (Eiteman et al., 2007).

The changes in exchange rates can affect a company either indirectly or directly. The direct exposure is relatively clear for the company. Principally, it refers to changes in exchange rates that result in a gain or loss in exchange rates for the company, which relatively immediate affect the company's balance sheet and income statement in different ways. The indirect exposure is, on the other hand, more difficult to measure and control since it is very dependent on the surrounding world. It can for example be that the company's competitiveness changes but where the result of this change appears in the future (Bennet, 1996).

To get an understanding of a company's foreign exchange exposure it is critical to define it further. In the literature, the company's foreign exchange exposure is usually categorized as transaction, translation and economic exposure. Transaction and economic exposure are both cash flow exposures, whereas translation exposure expresses a change in the company's equity (Wramsby et al., 2005/2006). Further, transaction exposure and translation exposure can be connected to direct exposure, whereas economic exposure can be connected to indirect exposure.

4.2.2.1 Transaction Exposure

Transaction exposure is concerned with how changes in exchange rates affect the value of anticipated foreign exchange denominated cash flows relating to transactions already entered into (Buckley, 1996). It consists of the uncertainty that the value of contracted future receivables will cover the value of payables. When companies talk about their foreign exchange exposure they often refer to transaction exposure (Wramsby et al., 2005/2006). There are both short-term⁵ and long-term⁶ transaction exposures and usually they result in profit or loss on exchange for the company (Bennet, 1996). Eiteman et al (2007) mentions four scenarios in which transaction exposure may arise:

1. When purchasing or selling on credit goods or services when prices are stated in foreign exchange.
2. When borrowing or lending funds when repayment is to be made in a foreign exchange.
3. When being a party to a foreign exchange forward contract.
4. When acquiring assets or incurring liabilities denominated in foreign exchange.

The first scenario refers to a company that sells something to another company that has another currency than the selling company. Then, the

⁵ For example receivables or payables denominated in foreign exchange.

⁶ For example a long-term currency loan.

transaction exposure arises because of the risk that the selling company will receive something other than expected. Thus, exposure is the chance of either a loss or a gain. The second scenario arises when funds are borrowed or loaned and the amount involved is denominated in foreign exchange. It can for example be a company that raises a loan in a foreign exchange with repayment at a specific time in the future. Then, adverse exchange rate variations could result in an increase in debt. The third and fourth scenario concerns a company that deliberately has created a situation where it is exposed to transaction exposure, by for example buying a forward foreign exchange contract. The reason why the company does this is because it wants to secure its other transaction exposure (Eiteman et al., 2007).

However, the most common example of transaction exposure arises when a company has receivables or payables denominated in a foreign currency. The total transaction exposure consists of quotation, backlog and billing exposure, which are illustrated in figure 4.3. The quotation exposure starts when the seller quotes a price in foreign exchange to a buyer, and remains until the order is placed. Then, it becomes backlog exposure since the products have not been shipped or billed. The backlog exposure lasts until the goods are shipped and billed, and then it becomes billing exposure. Billing exposure remains until the seller receives the payment (Eiteman et al., 2007).

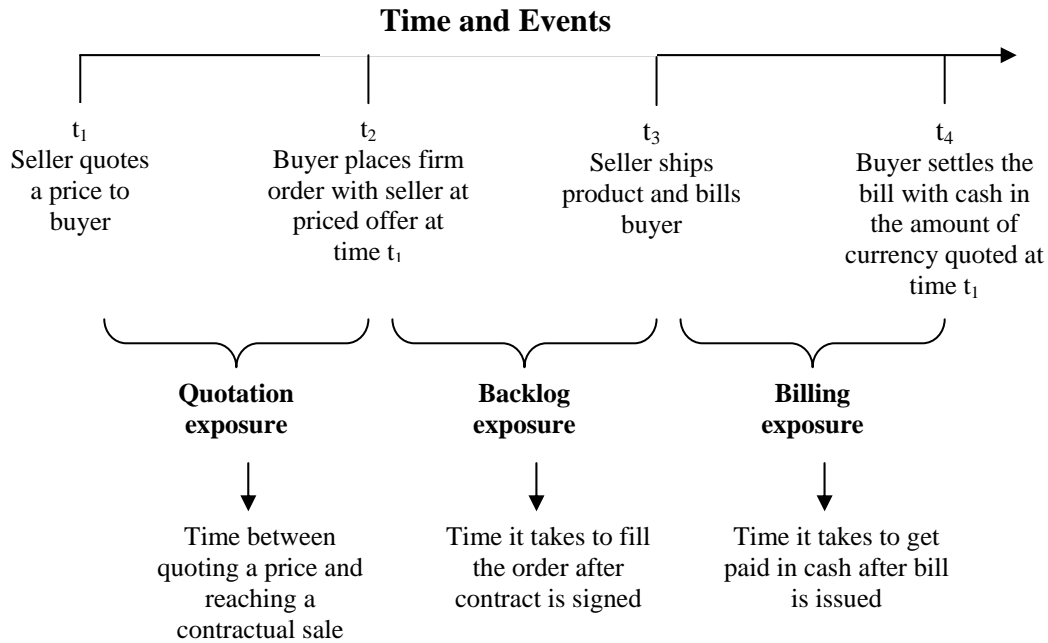


Figure 4.3 The Life Span of a Transaction Exposure

Source: p.258 in Eiteman, D., Stonehill, A. & Moffett, M. (2007). *Multinational Business Finance*.

There is a wide range of methods and instruments available with the intention to manage transaction exposure. The techniques will be discussed further in chapter 4.3.

4.2.2.2 Translation Exposure

Translation exposure, sometimes termed accounting exposure, refers to companies having foreign subsidiaries or other real assets in foreign countries. It arises because the financial statements of foreign subsidiaries, which are stated in foreign exchange, must be converted into the parent company's reporting currency, for the company to prepare consolidated financial statements (Eiteman et al., 2007). The value of assets and liabilities in foreign exchange, expressed in the domestic currency, will therefore vary because of changes in exchange rates. However, the potential exchange rate profit/loss arising from the conversion does not cause any real cash flows until the subsidiary or real asset is sold (Wramsby et al.,

2005/2006). The structure of the translation exposure is related to the accounting principals used in the parent company (Bennet, 1996).

4.2.2.3 Economic Exposure

Economic exposure is sometimes termed operating, competitive or strategic exposure. It measures any change in the present value of a company, resulting from changes in future operating cash flows caused by any unexpected change in exchange rates (Eiteman et al., 2007). Currency fluctuations that affect the company's future sales volumes, prices and costs, cause the change in value. These are the factors that affect the company's long-term competitiveness. In other words, economic exposure is a measurement of how currency fluctuations affect the company's economical value (Wramsby et al., 2005/2006).

4.2.3 Risk attitude

A company's risk attitude will most certainly decide how it chooses to deal with its foreign exchange exposure. Basically, there are three different risk attitudes a company can apply: risk neutral, risk paranoid or somewhere in between called asymmetrical risk. The risk neutral company is not concerned about risks. On the contrary, the risk paranoid company is very concerned about risks and aims at reducing the company's exposure to zero no matter the cost for this procedure. A company that has an asymmetrical risk attitude is somewhere in between of the risk neutral and the risk paranoid. This company aims at reducing the risk to a certain cost (Oxelheim, 1981).

4.3 Currency Risk Management

When a company knows in what way it is exposed to foreign exchange risk, there is a wide range of methods and instruments available in order to manage it. However, when the company chooses to deal with its foreign exchange exposure it is normally the transaction exposure it tries to manage. CRM is the process of formulating the benefit-cost trade-offs of risk

reduction and deciding on the course of action to take (including the decision to take no action at all) when it comes to the company's foreign exchange exposure. The goal of CRM is to limit the variability of cash flows (Bodie & Merton, 2000).

4.3.1 Hedging

A commonly used conception in the CRM field is hedging, where hedging is a trade designed to reduce risk (Hull, 2002). From this, hedging is a method of transferring risk in which an action taken to reduce one's exposure to loss also causes one to give up possible gains (Bodie et al., 2000). A hedger is an individual who enters into hedging trades (Hull, 2002). According to Shoup (1998), there are five ways a hedger can transfer foreign exchange risk: to the marketplace, to another hedger, to a speculator, to a supplier or to a customer. In the Swedish language, the term hedging is widely used as a description of how to deal with risks. Moreover, hedging is quite new word, although its sense has a long history. For example, farmers who sold their future crops before the harvest at a fixed price eliminated the risk of a low price at harvest time, but also gave up the possibility to profit from high prices at harvest time (Bodie et al., 2000).

The hedging market is often connected with the different methods and financial instruments (such as forwards and options) a company can use in order to transferring risk. The globalisation has increased the need for more complex methods and instruments, which in turn has pushed the development forward. Today, the hedging market has become very sophisticated (SNS Förlag, 2000).

It can be questioned whether or not the hedging market has any public welfare. For example, the stock market is said to help companies find cheap finance, but the hedging market does not seem to provide society with anything in particular. However, on second thoughts, markets that redistribute risks effectively appear to be more useful for the society since the risks can be traded between people that want to take them and those who

want to avoid them. Therefore, the hedging market serves a purpose also from a public economic point of view (Tjeder, 2000).

Many of the techniques with the aim of managing transaction exposure can be associated with hedging. The techniques can be divided into internal and external.

4.3.2 Managing Transaction Exposure: Internal Techniques

Internal techniques can be applied without any interference from third parties outside the company and do not imply any external costs (Buckley, 1996). The foreign exchange risk is said to be definite when the sales agreement is signed. However, there are also some methods a company can use to reduce the foreign exchange risk, before the company submits an offer (Wramsby et al., 2005/2006). On the contrary, using these methods may result in the fact that other risks appear.

4.3.2.1 Choice of Invoicing Currency

The extent of the transaction exposure very much depends on the currency that companies use in the invoice. There are three types of currencies that the parties can choose: the exporter's or importer's domestic currency, the opposite party's currency or a third country's currency. The choice is often based on the relationship between the parties and the current position of each currency's exchange rate (Grath, 2004).

If the seller chooses its domestic currency in the invoice, the foreign exchange risk is eliminated since no other currency than the local will be handled. On the other hand, this agreement automatically transfers the potential foreign exchange risk to the buyer, which means that the buyer may not find the contract attractive enough. In addition, if the seller's domestic currency increases in value against other currencies it will become more expensive for its customers to buy the products. This can also result in the fact that the buyer searches for another alternative (Wramsby et al., 2005/2006). Moreover, the transference of risk may put the buyer into

financial difficulties, which means that the buyer might not be able to fulfil its obligations towards the company (Shoup, 1998). Hence, some companies do not have any other possibility than to choose the currency the buyer prefers, if the companies do not want to run the risk of losing sales (Larsson, 2000).

4.3.2.2 Foreign Exchange Clauses

One possibility to reduce the foreign exchange risk is by inserting a foreign exchange clause in the contract of sale, established between the buyer and the seller. The clause prescribes that after the parties have signed the contract, they should consider exchange rate variations. For example, it could be that the exchange rate is allowed to fluctuate within a specific interval, and if the exchange rate exceeds this interval the buyer needs to pay an additional amount (Larsson, 2000). Hence, the contract may be less attractive for the buyer since he or she becomes responsible for exchange rate variations. If companies want to include a foreign exchange clause in the contract they must be very careful so the clause is correctly and clearly formulated. If not, it may result in a dispute between the buyer and seller (Grath, 2004). Therefore, this method requires a good relationship between the parties.

4.3.2.3 Shared Rate Risk

Companies can also choose to establish an agreement including shared rate risk. This contractual arrangement means that the parties (buyer and seller) agree to share the potential profit/loss, if the foreign exchange rate ends up outside an agreed interval (Wramsby et al., 2005/2006). Therefore, the party that is favoured by the exchange rate variations, shares any potential loss with the opposite party. Of course, this can also result in the fact that the buyer does not find the agreement attractive enough. Therefore, this method requires a good relationship between the parties.

4.3.2.4 Cost Increases

Adverse effects of exchange rate variations cause increased costs for the seller. The seller can counter this by increasing the sales price of a product or service. However, an increased price can for the seller result in a considerably deteriorated competitiveness in the markets. Therefore, this method only works in markets where the competition is low (Buckley, 1996).

When the contractual agreement is signed there is an additional internal method by which the company can reduce its transaction exposure, called matching.

4.3.2.5 Matching

Matching means that a company tries to match its inflows and outflows in the same currency; the company simply adjust them so they occur approximately at the same time. Thus, receipts in a particular currency are used to make payments in the same currency. Of course, this method requires a two-way cash flow in the same foreign exchange (Buckley, 1996). The more a company manages to match its cash flows, the less will it be exposed to exchange rate variations. However, to manage matching requires budgeted flows in different currencies spread over time. Moreover, it requires the establishment of foreign exchange accounts in each currency. The purpose of matching is to compute a net amount of a certain currency. The more a company's inflows and outflows in different currencies get out of balance, the bigger will the transaction exposure be (Wramsby et al., 2005/2006). On the other hand, the net position can be hedged externally. The advantage of this method is that it does not involve any exchange costs.

Matching is a very useful method if the company concerned has enough resources to continuously match its inflows and outflows (Oxelheim, 1981).

4.3.3 Managing Transaction Exposure: External techniques

When using external techniques the company turns towards the financial markets (Buckley, 1996). External techniques imply external costs for the company since it involves a third party. The costs of the different techniques vary, depending on the service involved in the technique. Therefore, the costs for a company to manage the foreign exchange risk by using external techniques will vary from company to company.

4.3.3.1 Foreign Exchange Account

A foreign exchange account in itself does not eliminate the foreign exchange risk. However, it is required when using some of the techniques, for example matching. The foreign exchange account facilitates the company's CRM since the company can make receivables and payables in foreign currency without the need to exchange (Swedbank). In addition, by opening a foreign exchange account a company can control the time for exchange to the domestic currency (Nordea, 2006). Each foreign exchange account is conducted in one separate foreign exchange (SEB, 2001).

4.3.3.2 Forward and Future Foreign Exchange Contracts

A company can secure an exchange rate by trading with forward and future foreign exchange contracts. A forward foreign exchange contract is an agreement between two parties to exchange one currency for another at some future date. The rate at which the exchange is to be made, the delivery date and the amounts involved are fixed at the time of the agreement (Buckley, 1996). The transfer of the forward can take place from three business days up to a few years in the future (Shoup, 1998). A forward contract is binding, which means that both parties involved are obligated to fulfil the contract and its meaning. In substance, the rate of a forward contract is determined by the involved currencies' interest rates but there are also other factors that can affect, such as future expectations of currency fluctuations (Larsson, 2000).

A future foreign exchange contract is a contract between two parties and works in the same way as a forward foreign exchange contract except for the standardized amount of foreign exchange and the standardized future date (Buckley, 1996). This means that the parties are not able to tailor the contract, in respect of the amount of currency traded and the date of delivery. However, it is not possible to trade with future foreign exchange contracts in Sweden (Mats Ring, Swedbank Markets).

The advantage of forwards and futures is that the company knows precisely the sum to be received in the future and, thereby, the risk associated with adverse exchange rate movements has been removed (Dixon et al., 1992). Furthermore, it is also one of the cheapest external instruments available and thereby the most frequently used. However, the reality of the business world is such that one cannot be certain when a customer will pay a bill. The customer may pay before the due date or afterwards, which make the purpose of the contract useless or put the contract holder unprotected against foreign exchange risk.

4.3.3.3 Foreign Exchange Option Contract

A foreign exchange option contract offers opportunities and advantages to those companies seeking either protection or profit from changes in exchange rates. The foreign exchange option contract gives the holder (buyer) of the contract the option to buy or sell shares at a specified price on or before a specific date in the future. The buyer of the contract pays the writer (seller) for the right, but not the obligation, to purchase shares from, or sell shares to, the writer at the price fixed by the contract (Dixon et al., 1992). There are both standardized and tailor-made so-called OTC - **O**ver **T**he **C**ounter - options. OTC options are tailor-made to meet a company's specific needs in respect of the currency to be bought and sold, the amount, the price and the time period to be covered (Buckley, 1996). In Sweden, all foreign exchange options are OTC options (Mats Ring, Swedbank Markets).

There are two types of foreign exchange options, American and European. The American option can be exercised on any business day within the option period. The European option, on the other hand, can only be exercised on the expiry date (Buckley, 1996). In our dissertation, we refer to the American option since this is the one used in Sweden (Tjeder, 2000).

The foreign exchange option can be divided into a call option and a put option. The call option gives the buyer the right to buy a fixed number of shares in a particular security at the exercised price up to the date of expiration of the contract. The put option gives the buyer the right to sell a fixed number of shares in a particular security at the exercised price up to the date of expiration of the contract (Dixon et al., 1992). It is always the holder of the contract that decides whether he or she would like to exercise the contract or not. The writer of the option is passive, he or she is totally committed to the contract and has to follow the will of the holder. For this opportunity the holder will have to pay a fee to the writer, called a premium (Buckley, 1996).

The advantage of the foreign exchange option is that the holder can decide if the contract should be exercised or not. Therefore, if a company's customer pays before the due date the holder can decide to exercise the contract. In this way, the option has an advantage compare to the forward and future foreign exchange contract. However, if the customer pays after the due date the risk remains and the option contract is useless.

The price of the option is significantly higher than the price of a forward or future, since the holder has greater possibilities when using an option. The price of the option is determined by the period of time, the intrinsic value, interest rate and volatility (Buckley, 1996).

Price and flexibility must be taken into consideration when choosing between forward, future and option as instruments (Elmér, Jakobsson & Lundin, 1992).

4.3.3.4 Money-Market-Hedge

Money-market-hedge refers to companies that expect future payables or receivables in foreign exchange. In this case, they can raise a bank loan in the same currency with the intention to eliminate the foreign exchange risk. This method is best illustrated by an example: an exporter has a three months exposure since it expects a receivable after three months. Assume that the exporter decides to use the money-market-hedge to cover the transaction exposure. At the same time as the signing of the agreement the company borrows an equivalent sum in the trading partner's domestic currency. Then, the company exchange this amount on the spot market into its domestic currency and invests it on the domestic money market. When the company gets its receivable, it will be used to pay off the loan instantly (Wrambsy et al., 2005/2006).

The cost for using this method is the difference between the interest rates in the trading currencies. In other words, it is the difference between the interest the company has to pay for the loan, and the interest it receives from investing the money on the money market (Grath, 2004). If the difference in interest rates is advantageous to the company this method is inexpensive to use (Buckley, 1996).

4.3.3.5 Currency Swap Contract

A currency swap contract is an agreement, which means that companies swap loans or cash flows with each other. In other words, two parties can exchange one currency towards another and on a later date in the future change it back to the original exchange rate. A reason why companies sometimes choose this method is because they can get favourable loan conditions in their domestic currency in their home country, in comparison of raising a loan in foreign exchange in a foreign bank. If this is the case, then two companies can make an agreement where they both raise loans in their domestic currency in their home country and then swap loans with each other. In this way, they eliminate the risk of currency fluctuations and at the same time obtain the best possible interest rate (Shoup, 1998).

Currency swap contracts are tailor-made in respect of amount, time etc. and cannot be exercised before the due date (Mats Ring, Swedbank Markets).

The advantage of this method is that it is inexpensive. The price the company pays for this transaction is the difference in interest rate between the two currencies (Mats Ring, Swedbank Markets).

4.4 Foreign Exchange Policy

One way for a company to deal with its foreign exchange exposure more effectively is to prepare a well-defined foreign exchange policy. A foreign exchange policy is a set of guiding principles determining what and how things should be done when it comes to foreign exchange exposure. The purpose of the policy is to clarify how the CRM should be performed and implemented. If the company prepares a well-defined foreign exchange policy its CRM becomes more effective since the employees know exactly how to act under certain circumstances (Bennet, 1996).

First of all, the company must decide what tactic to use when it comes to managing foreign exchange exposure. Principally there are three different possibilities: either the company do not deal with its foreign exchange exposure at all, only to some extent, or the whole exposure. The company's choice is often based on the company's general risk attitude (Oxelheim, 1981).

In order to grasp the complexity of CRM the company needs to proceed systematically. It is important that companies' employees are aware of their foreign exchange exposure, its size and time perspective. Furthermore, the company must identify where in the company the foreign exchange risks arise, of what nature they are, how they can be measured and finally how they can be managed (Bennet, 1996). Bennet (1996) suggests that the company answers following questions before the foreign exchange policy is developed:

- What type of foreign exchange exposure shall the company focus on?
- Is it possible to identify and measure the different exposures the company chooses to focus on?
- How long is the time span of the exposure?
- What techniques shall be used in order to manage foreign exchange exposure in the company?
- What risk attitude shall the company have?
- How much can the adverse currency movements affect the company's result?

To develop a generally applicable foreign exchange policy is not possible. How the policy should be prepared and developed differ from company to company. But one thing that is important for all companies to consider is the fact that the foreign exchange policy must be transparent. In other words, the policy's effectiveness requires an organising of the CRM so the responsibility distribution is clear and it can be carried out effectively (Bennet, 1996).

4.5 An Overview of the Swedish Banks' Purpose

Banks serve an important purpose in the Swedish economy, and constitute approximately 39 percent of the actors in the financial market. The banks' main activities are to receive deposits from and lend money to private persons and companies. In addition, the banks make sure that there are effective cash flows between actors on the market. In Sweden, the cash flows are technically well developed and characterised by high effectiveness. Moreover, the banks provide private persons and companies with the possibility to minimize, reallocate and distribute risks, for example by offering trade in forward and option contracts (Svenska Bankföreningen, 2004).

Risk-taking is an essential part of the banks' business and the risks are, therefore, always well calculated. For example, if a company wants to raise

a loan, the bank carefully evaluates the risk commitment and the credit reliability of that company (Riksbanken, 1999).

The financial products have become increasingly sophisticated, and the development of the products is to some extent dependent on expertise outside the banks. Therefore, an important task for the banks is to intermediate information about the products to its customers (Riksbanken, 1999).

4.5.1 Banks' Guidance and Information about CRM

If a company wants guidance and information about CRM from Swedbank, Nordea, SEB or Handelsbanken it should contact its personal advisor at the bank. On the other hand, if the personal advisor cannot provide the company with advice and information, he or she turns to the banks' centralised currency department. It is also possible for the company to contact the centralised currency department directly (Swedbank, Nordea, SEB, Handelsbanken, Nov 13, 2006).

4.6 Summary

Foreign exchange risk arises on the foreign exchange market when currencies fluctuate. Currency fluctuations can be explained by different economic factors, for example interest rates and inflation. The foreign exchange risk is best understood together with the other risks involved in international trade, which embrace the country risk, commercial risk and financial risk.

A company is exposed to foreign exchange risk when changes in exchange rates affect the company's profitability, cash flow and market value. Further, the company's foreign exchange exposure can be divided into transaction, translation and economic exposure. When companies talk about their foreign exchange exposure it is usually the transaction exposure they refer to.

There are different techniques available to manage the transaction exposure, which can be divided into internal and external. Internal techniques can be applied without any interference of third parties outside the company, and when using the external techniques the company turn towards the financial market. When a company has assimilated the information about the different techniques, a foreign exchange policy would facilitate the company's CRM.

One of the banks' main tasks is to provide private persons and companies with the possibility to minimize, reallocate and distribute risks, for example by offering trade in forward and option contracts.

5. Empirical Method

In this chapter we will present the empirical method chosen when we gathered primary data. First, the research strategy is introduced. Then, the sample and the interviews are presented. Finally, the validity, reliability, and generalisability are discussed.

5.1 Research Strategy

The research strategy is a general plan of how the researcher will proceed when answering the research questions. There are several strategies one can employ when conducting a research: experiment, survey, case study etc. A case study investigates a contemporary phenomenon within its real life context. It is of particular interest if one wants to gain rich understanding of the context of the research and the processes being enacted. Further, it generates answers to the questions why, what and how (Saunders et al., 2007). Therefore, the case study strategy suited our research best.

5.2 Sample

Since we established cooperation with Swedbank in Karlskrona, it was never a problem for us to find a suitable sample frame. We made a list of criteria that we required the companies to fulfil, and then Swedbank found two companies that could match our criteria. The criteria and the motivation for them are as follows:

1. A significant part of the company's total trade has to be international in foreign exchange, which means that the company depends on its international trade. The transactions made in foreign exchange shall amount to approximately 50% of the total transactions.

Motivation: If a company fulfils this criterion it is without doubt exposed to currency fluctuations in one way or another.

2. The company should have traded internationally for at least five years.

Motivation: It is important that the company is not too new when it comes to foreign business, and to ensure that the company has had time to think about the problems concerning the foreign exchange risk.

3. The company should not have done any major changes in its CRM recently.

Motivation: It is important that the company has fully understood and seen the effect of its current situation when it comes to CRM. In addition, it avoids misleading effects on our findings.

4. The company should be a mid-corp.

Motivation: Large companies have greater possibilities to deal with the foreign exchange risk since they often have enough resources. In addition, there are many researches that have already covered large companies' CRM. Therefore, we thought it would be interesting to focus on smaller companies since they often have limited resources but are just as exposed to foreign exchange risk. After a meeting with Mats Ring, an expert in the currency field, we chose to focus on mid-corps. He made us realize that we should not focus on too small companies, since they would not be able to provide us with the information we wanted.

5.3 The Interviews

We conducted semi-structured interviews with two mid-corps in order to get the companies' description of the situation, so we could gain indications of the problem. Swedbank helped us find two mid-corps that had the characteristics we required. Before we contacted the mid-corps, we talked to their respective personal advisor at the bank. The personal advisors contacted the person at the companies that was in charge of the CRM, which prepared them for our interview and increased our credibility. In the initial

contact with the interviewees, we introduced our research and ourselves and made an appointment for the interview. Before we met them, we e-mailed them additional information about our research. When we conducted the interviews, we chose to meet each of the interviewees in person at their own company with the intention to make them feel more comfortable with the situation. This made it the easier since we could interpret both their pitch and body language. We recorded the interviews on tape to make sure we did not leave out any important information. This can imply that the interviewee feels uncomfortable and that the answers may be affected in some way. However, the advantages of using the tape recorder outweighed the disadvantages of taking notes. Of course, we asked the interviewees before if it was ok with them to use a tape recorder.

We were three persons that interviewed and well aware of the fact that this can have an adverse effect on the answers we got, since the respondent may feel uncomfortable in the situation. To avoid this outcome, we chose to have one main interviewer and the other should only fill in with complementary questions. We also contacted the companies after the interview since we wanted to complement with some questions that came up during the analysis.

5.3.1 Interview Subjects

As we mentioned earlier we have conducted semi-structured interviews, which means that we have not used any structured questionnaire. Instead, we had four different subjects that were covered during the interviews.

1. Company Profile

We discussed the mid-corp's background, turnover, international trade, organisation etc. in order to get a fundamental picture of the mid-corp.

2. Risk

We discussed the mid-corp's risk profile and general risk management. We had this discussion in order to gain information about the overall risk

management in the company. In this way we could see if the mid-corp deals with the risks in different ways and if some of them were more important than others. In addition, we wanted to find out how aware and informed the mid-corp is when it comes to the different risks.

3. Currency Risk Management

We also considered the company's CRM, if it has changed over the years, and the underlying factors for its activities. Further, we discussed how the problem with foreign exchange risk is perceived and if the company has experienced any adverse or favourable effects of foreign exchange fluctuations. This discussion gave us a picture of their knowledge in this field, which was fundamental for our research since it contained vital information for our hypotheses and research questions.

4. Improvement of the Current Situation

Finally, we discussed what factors that could increase the company's usage of the methods and instruments. We also considered the company's contact with different financial institutions. From this, we realized how the mid-corps believed the current situation could be improved. In addition, the discussion provided us with information for our hypotheses and research questions.

5.4 Validity

Validity refers to whether the findings really are what they appear to be about (Saunders et al., 2007).

In order to make sure that our respondents would not misunderstand our research subject, we prepared a small summary about the research and e-mailed it a week before the interviews. In addition, we made sure that the companies had not done any major changes in their CRM recently in order to avoid misleading effects on our findings. Another thing that could have a negative effect on the validity of a research was if the respondents believed that the results of the research could disadvantage them in some way

(Saunders et al. 2007). This has not been a problem in our research, since our respondents were anonymous and also because the results would be advantageous for them in the future. Further, we have not had any problems with mortality⁷ in the research since we did not pursue any long-term studies.

5.5 Reliability

The level of reliability is determined by how well the data collection technique yields consistent findings and if other researchers could reach similar results (Saunders et al., 2007).

We believe that the reliability of our research is very high since we managed to avoid the different threats to reliability. An important factor that increased the reliability of our research was that we chose to conduct the interviews in person and not send questionnaires or use the telephone. This gave us the opportunity to explain any unclear questions and avoid misinterpretation. We also believe that there are no subject or participant bias in our research due to the fact that we were directly in contact with the owners of the companies. Thus, we avoided the problem of employees saying what they thought their company owners would have wanted them to say. Further, our companies and respondents were completely anonymous, which eliminated any incentive not tell us the truth. We also felt that we avoided any observer error or bias. Since all three of us conducted the interviews together, and not separately, we did not have to worry about the fact that the interview questions could be asked differently. In addition, after receiving the answers from the respondent we thoroughly repeated the respondent's answer back to him and asked if we had interpreted him correctly. Further, we let the respondents decide which week, day, and time they wanted us to come and conduct our interview. Thus, they were prepared and had the time that was necessary to talk with us and did not have to answer any questions under stress.

⁷ Mortality refers to participants dropping out of studies (Saunders et al., 2007).

5.6 Generalisability

Generalisability concerns the extent to which the research findings are applicable to other research settings (Saunders et al., 2007).

Our dissertation is a preliminary study and, therefore, we cannot generalise. However, the mid-corps we interviewed gave us approximately the same answers even though they differ remarkably in size, turnover and line of business. Hence, we assume it is an indication that the result can be applicable to other Swedish mid-corps. One needs to conduct a larger-scale research to find out how applicable our result is.

5.7 Summary

We conducted a case study of two Swedish mid-corps. Swedbank helped us to find companies that fulfilled our required criteria. Moreover, we conducted semi-structured interviews with the intention to cover specific areas, including company profile, risk, CRM and improvement of the current situation. We believe that the validity and reliability of the research are high. However, we cannot generalise since our dissertation is a preliminary study, although we got indications that the result can be applicable to other Swedish mid-corps.

6. Empirics

In this chapter we will present the two interviews we conducted. We will present the interview from each company separately, and have the same structure through both of them. The interviews begin with a discussion about the companies' risks and CRM. We will conclude with a discussion about how their CRM could be improved.

6.1 Company X

6.1.1 Risk

Stefan thinks that owning and investing in a company is a risk in itself. For example, he has invested approximately one million SEK in equity in his company. He has put a lot of thoughts to the different risks that the company can be exposed to. Stefan believes that there are other risks (except the foreign exchange risk) to consider when trading internationally. For example, the political risk with the dictatorship China. In spite of this, he says that the advantages outweigh the disadvantages. Company X has never actively avoided any country because of the possible risks involved. The company makes documentary letters of credit⁸ in order to ensure that the customer delivers the products according to the contract, and, thus, stabilise the cash flows. Moreover, he states that cast iron is a material without any huge risk. For example, if the products would become damaged by water or fire they would not be destroyed since they can be blased and later sold as totally new products.

Stefan mentions foreign exchange risk as their biggest risk, since adverse foreign exchange movements can affect their costs and turnover dramatically.

⁸ Documentary letters of credit principally means that the buyer's bank undertakes to pay the seller when the terms and conditions of the documentary credit have been met (Nordea, 2006).

6.1.2 Currency Risk Management

We also considered the CRM in mid-corps in general. According to Stefan, CRM is far too poor in smaller companies, even though there is a need of dealing with the foreign exchange risks in these companies. He claims that the foreign exchange exposure has decreased for individual companies since there are fewer currencies to consider, and also because the SEK has become more stable. From another point of view, Stefan believes that the total foreign exchange exposure has increased since more Swedish companies have become dependent on export. Further, he states that there is an increased need of CRM, even though he does not believe that the knowledge about it has increased. Stefan believes that companies are more aware of the foreign exchange risk today, but he does not think they are good enough at dealing with it. Stefan thinks that he has more knowledge and experience about CRM compared to what other entrepreneurs have, especially new entrepreneurs.

Company X does not have any foreign exchange policy, and Stefan does not think it is necessary for the company to establish one. Stefan does not always secure the company's foreign exchange transactions. One explanation is that he sometimes sells invoices to a factoring company⁹, in order to increase the company's liquidity, which makes these receivables impossible to secure. However, when the company gets a large order he always secures the purchase for that particular order directly, so he knows the margins of the products in the future. He explains:

“If I already have made an agreement with a customer at a specific price, I cannot increase the price to cover the potential adverse foreign exchange movements. We always include a clause in the contract that says that changes out of our control make it possible for us to renegotiate the contract. However, I know this is not possible in our line of business since

⁹ A factoring company buys invoices from other companies. In this case, the factoring company is not responsible for the credit risk.

we might then lose our customers. Therefore, I do not have any other alternative than to secure the foreign exchange transaction.”

When he secures the foreign exchange transactions he uses forward contracts (and once he used a currency option). He establishes the fact that speculation is not an option for Company X. However, one year he did not deal with the foreign exchange risk at all. This was due to the lack of communication between him and the bank the company had at that time. Even though this resulted in a profit of 50 000 SEK, he points out that it was the wrong thing to do towards the company. He continues:

“This profit could just as well have been a loss, so I was very relieved that I managed this time. Pure luck! It gave me an incentive not to let it happen again. Maybe it is my experience and background that have made me think this way.”

Stefan follows the foreign exchange forecasts every day. However, he checks it more actively when he has decided to buy a forward contract. Stefan explains that he is not focused on the daily changes. It is more important for him to keep track of the long-term fluctuations. In addition, he watches the news and the political decisions in order to get a picture of what might affect the foreign exchange rates. When he makes the decisions he estimates the foreign exchange risk carefully, since he wants to be loyal towards the company, its employees and customers. He claims that he must consider the foreign exchange risk since he would not put the company's future survival in danger.

Forwards and one option are the only external instruments he has used during the ten years of international activities. When the company first started to deal with foreign exchanges he chose not to secure the foreign exchange risk as often as he does today, since it was not large amounts of money involved. Today, Company X has foreign exchange accounts in USD and EUR, but the company only has a two-way cash flow in EUR. Stefan tries to match inflows and outflows in the EUR account to some extent. He

is continuously keeping track of the different currencies and on a monthly basis they are recounted into SEK. Stefan says that he does not actively keep track of the payments coming in and out from the accounts, since the amounts of money are quite small. Sometimes he is forced to use money from the SEK account to pay the suppliers, since the money on the foreign exchange accounts do not last.

Company X's cost for securing foreign exchange risk is 10 000-20 000 SEK annually. He thinks it is a reasonable price since that will give the company a stable cash flow.

6.1.3 Improvement of the Current Situation

Stefan thinks that the banks must push smaller companies in order to make them use the available methods and instruments. Another alternative could be to make the instruments easier to use and to offer cheaper solutions. Stefan points out that Company X needs help with the CRM from the commercial banks or from new competence within the company.

During its ten years of activities Company X has had three different banks. Stefan states that there is a lack of knowledge when it comes to CRM in the local banks. However, he feels that the knowledge is better at the bank's centralised currency department. For example, the local banks usually refer to the specialised department when he has questions about CRM. He asserts that competence exists in the banks, but only a few have it. He believes the reason for the lack of knowledge at the local banks may be that the personnel do not have enough experience, since most of the large companies have their own financial department. He continues:

“If I would not have any background and experience in this field, I would be completely exposed! The banks do not push the companies enough when it comes to handling foreign exchange risk. The external push must appear and today it is definitely too poor!”

Stefan thinks that that the external push only comes if the bank has a high credit risk in the company concerned. He has experienced this himself, during a period when the value of the dollar decreased dramatically. Then, his bank at that moment advised him to secure his foreign exchange transactions. On the contrary, if a company is not heavily mortgaged and has good liquidity, the banks' incentive to help the company is low. In other words, he thinks that the banks are more concerned when their own risk is high. From Stefan's point of view, he wants the banks to take greater responsibility, especially when it comes to the smaller companies that do not have enough knowledge about CRM. He claims that it would be enough if the banks started a dialog with the companies concerned. Stefan himself wants to discuss it more often with the banks, and he also wants the CRM to be of mutual interest for both involved parts. Today, Stefan cannot assimilate new information about CRM due to lack of time.

Stefan thinks it would be positive for Company X if its personal advisor in the bank gained more knowledge in the field, and at the same time be closely connected with the company. In this way, it would become easier to discuss and handle the problems concerning foreign exchange risks. Stefan trusts the bank completely when it comes to other advice and information he gets from it. He states:

“Imagine a situation where Company X has experienced a major foreign exchange loss. If I then went to the bank with the intention to raise a loan so Company X could manage the situation, and they told me that I should have secured that particular transaction. I would get extremely furious due to the fact that the bank did not tell me at an earlier stage! If this would happen, I would change bank immediately.”

6.2 Company Y

6.2.1 Risk

Karl defines risk as the probability for divergences when it comes to the expected result of the company. Company Y is most exposed to the uncertainty concerning the weather. However, the company minimizes this

risk by purchasing its products in different countries. The company has never actively excluded any country that implies a higher risk. Karl defines himself as a risk taker when it comes to the activities within the company. He says that the reason for this may be that he is one of the owners, and, thereby, no one can blame him for the decisions he takes. Another reason is the increasing demand for the company's main product that has made it possible for Company Y to have high margins on this product. This has made the company less vulnerable and, therefore, Karl can take more risks. Further, he states that the company has had this risky attitude throughout the years of activities.

Karl mentions the foreign exchange risk as the company's biggest risk when it comes to international trade.

6.2.2 Currency Risk Management

We also considered CRM in smaller companies in general. According to Karl, the CRM is too poor in these companies, due to lack of knowledge about the existing techniques. Further, he states that this is also the case when it comes to himself and Company Y, even though the Karl is aware of the foreign exchange risk. He asserts that the company's need of CRM has increased since the company's international trade has increased. On the other hand, he thinks that the emergence of the EUR has been positive for the company since there are fewer currencies to handle.

Company Y does not have any foreign exchange policy. However, Karl and the financial director have determined rules of how things should be done when it comes to incoming foreign exchange transactions: they immediately exchange the receivables the company gets in different currencies into SEK, irrespective of the exchange rate at that time. Three years ago Karl secured all the foreign exchange transactions by using forward foreign exchange contracts. Today, Company Y does not secure anything. He stopped using forward contracts since these became useless when the company did not know when it would receive its receivables and pay its payables. Forward

foreign exchange contracts are the only external instruments Company Y has used during its years of activities.

In addition, the company raises large credits in SEK, even if the plan is to also raise credits in EUR. Company Y has a foreign exchange account in EUR, which the company tries to match as much as possible. He points out that it is difficult to do this since the customers are able to choose the invoicing currency.

Last year, the company earned money on the currency fluctuations. However, he once experienced a huge loss. This was when the SEK was devaluated and the company had all their loans denominated in DEM. He continues:

“I was afraid that the SEK would be devaluated in the near future so I called my personal bank advisor and asked her to secure the loans. She promised to do so. However, when I called her later the same day, she still had not done it. But she promised me that she would do it the first thing the next morning. At lunchtime the next day, the SEK had been devaluated so I called her again. Then, she told me that she had not secured the company’s loans as she had promised, due to the lack of time. This resulted in a loss of 20 million SEK for our company!”

After this situation Company Y sued the bank. However, Karl realized without delay that his chances of winning the dispute were small. In addition, Company Y would have to pay for all of the costs if it would not have won the settlement. Therefore, he chose to withdraw the plaint and at the same time change bank. If the bank had called him before the devaluation took place and informed him about different alternatives, he would still have the same bank. However, this was not the case. It was Karl himself that had to contact the bank and continually ask for security against the devaluation. Despite a huge loss, Company Y survived. This event made Karl act more carefully, at least for a while. He believes that it is the decrease of the currency fluctuations that has made him more risk willing

again. However, he does not feel comfortable in the current unsecured situation. He continues:

“Our company should make profit from the commercial activities, and not from financial speculation. We want to have a stable cash flow, and today this is not the case. We discuss our CRM every week, and we do not want our transactions to be unsecured. We have plans to change the current unsecured situation, but we need more time, experience, knowledge and information.”

6.2.3 Improvement of the Current Situation

Karl supposes that it is the bank or new competence within the company that can increase the company's usage of the different methods and instruments. Therefore, he thinks it is strange that the banks have not attached greater importance to inform Company Y. On the other hand, he thinks that a reason for this may be that the personal advisor also has poor knowledge in the field. Karl says that it also could be a solution for Company Y to employ new people with the knowledge. However, if Company Y were to deal with the CRM on its own, it would require a specialised employee in the field that only took care of that part.

Company Y has had different banks throughout the years of activities. The choice of bank is not dependent on the bank as such. It is rather a question of the person that is the company's personal advisor. For example, Company Y moved with its previous personal advisor when he started to work for another bank. The reason for this is because Karl thinks that the personal contact with the bank is very important, especially since Company Y needs to borrow large amounts of money.

The company's relation with the bank has changed for the better. Today, the personal bank advisor is more involved in the company, and he has also been Company Y's contact for many years. Karl feels that the current personal bank advisor wants the best for the company. For example, the personal advisor always calls and reminds him when the value of the

currencies concerned changes. Further, he thinks that Company Y's good relation with its bank is a special case. However, the bank has not pushed the company when it comes to CRM. Karl mentions that the company could not have had a better bank, but that one weakness is the inadequate information about CRM.

“I feel completely exposed when it comes to CRM! This is why I want the bank to inform and help me in this field. Even though the company has raised large loans, the banks have never asked us to secure the transactions. Of course, one reason may be that the bank get a monthly balance sheet and, therefore, knows that it has a large equity. Thus, the bank feels that they do not have any risk. They are probably more concerned and informative when it comes to companies where the business is bad.”

Today, Karl and the financial director get information about CRM from Swedbank's centralised currency department in Malmö. However, he thinks that the personnel there often talk in terms he does not understand. Of course, Karl wants to understand what the company enters into and when there is something he does not understand he rather avoids it. In addition, he does not like the centralisation since some of the personnel on the local bank offices disappear and thereby increases the pressure on the remaining personnel.

Karl supposes that it would be better if the banks made a price reduction on the available instruments, and if they had a person specialised in the currency field that only worked with the companies concerned. He continues:

“I want to work closely with a person on the bank that has full insight in Company Y. That person should almost be like a prolonged arm.”

7. Analysis and Synthesis

In this chapter links between the theoretical framework and the empirics will be made. We will use the same structure as in the theory chapter, in order to show the connecting thought. Further, we will discuss the hypotheses. The chapter ends with the synthesis.

7.1 Background Foreign Exchange Risk

7.1.1 The Foreign Exchange Market

Both case companies have experienced the globalisation in the world, and they have tried to adapt to a situation as international actors. Further, movements on the foreign exchange market affect the companies. The foreign exchange market involves a number of actors with different needs and purposes, but with equal importance to make the market function well. Both companies need the foreign exchange market in order to deal with their commercial activities, such as import and export.

The foreign exchange market is divided into a spot and forward market. The spot market is for immediate delivery of the currency, whereas the forward market is for delivery of the currency in the future. Both Company X and Y are or have been participants in the spot and forward market; the spot market when they get their direct payments in foreign exchange and the forward market when they buy (or have bought) financial instruments.

The development and change on the foreign exchange market is an ongoing process. A positive change on the market for both companies is the implementation of the EUR, which has decreased their number of traded currencies. In addition, the EUR has made countries in the world more flexible when it comes to choice of currency. Company X and Y have noticed this change, in particular when they do business with China since the companies can choose between EUR or USD.

7.1.2 Determination of Exchange Rates

There are many factors that determine the different exchange rates in the world. In the theory chapter we described the factors involved in a model, where the relationships between spot exchange rates, forward rates, interest rates and inflation are illustrated. Since all these factors affect the exchange rates in the world, they also have an impact on Company X and Y. The relationship between the factors function better in the long run, thus, they are not considered in Company X and Y's daily business.

7.2 Foreign Exchange Risk

Risk can be perceived in many ways and this was also the case in Company X and Y. Company X had a very broad description of risk, whereas Company Y's was more specific. What all companies have in common, including Company X and Y, is that they are exposed to some kind of risk. However, the risk profile will be different when a company does international business compared to companies who only trade domestically.

7.2.1 Risks in International Business

7.2.1.1 Commercial Risk

Commercial risk principally involves transactions where both counterparts fulfil the obligations they have towards each other, for example the buyer's ability to pay or the seller's ability to deliver. Company X and Y are exposed to this risk in all their business deals. Commercial risk is not only connected to international business, but the risk can be more difficult to deal with in a foreign environment. This is the case for Company Y when their international customers complain on the products delivered. The transport cost for returning the products becomes very expensive and, therefore, they consider it as a big risk. The commercial risk is considerably important for both companies since they do business overseas. Company Y did not mention if it handled this risk, whereas Company X handled this risk by, for example, using documentary letters of credit.

7.2.1.2 Financial Risk

Company X and Y differ when it comes to their financial situation, due to the type of business events they face. Company X focuses on getting the payments in advance and sometimes the company mortgages its invoices, with the intention to increase the liquidity. Company Y's financial situation differs from that of Company X since Company Y finances its current expenses by raising large short-term loans. The reason for this is that the company does not know in advance when the payments occur and how big they will be. Therefore, the level of interest becomes an important factor for Company Y to consider. The financial risk is, just like the commercial risk, not only connected to international business. However, the financial risk will differ and become more difficult to handle in an international environment.

7.2.1.3 Country Risk

Country risk is difficult for a company to manage. Company X imports approximately two-thirds of its total products from China. This fact makes the company extra vulnerable to political changes in China. Company X has so far experienced an improved business climate in China, even though the company is aware of how fast the Chinese government can change the business situation. This example is what Oxelheim (1984) mentions as the political risk. Company Y is not that dependent on one specific country. However, the company imports from historically instable countries, such as Russia, Ukraine and Bosnia. Neither Company X nor Company Y have actively avoided trading with any country due to an increased risk.

7.2.1.4 Foreign Exchange Risk

Foreign exchange risk is the risk of a change (gain or loss) in the company's future economic value resulting from a change in foreign exchange rate (Oxelheim, 1984). Company X and Y are dependent on international trade with different countries; hence, they deal with several different foreign currencies. Therefore, they are directly affected by the foreign exchange risk. The size of the foreign exchange risk is determined by the size and the

time span of the transaction. Both companies have relatively large transactions in foreign exchange. However, the time span of the companies' transactions differs from time to time. As we mentioned in the beginning of this paragraph, foreign exchange risk refers to the change of both gain and loss in the company's value. Company X experienced a gain of 50 000 SEK. On the contrary, Company Y experienced a loss of 20 million SEK. Company X and Y consider the foreign exchange risk to be their biggest risk when they do international business.

7.2.1.5 Interrelationships Between the Risks

It is critical to know that the different risks are not isolated from each other. In order to get an understanding of the total risk perspective the interrelationships between the risks need to be considered. The country risk has a direct effect on the foreign exchange. Company Y experienced this direct effect when the SEK was devaluated due to a political decision. At that time the company had loans in DEM and due to the devaluation it lost 20 million SEK. Thus, this example shows the linkage between country risk and foreign exchange risk. Company X has not experienced any political decision and its effects. However, the company is aware that a political decision in China could have an effect on the exchange rate and, thus, the company's result.

Another linkage is shown between the foreign exchange risk and the financial risk. For example, when Company Y covered its foreign exchange risk with a forward contract and its customers paid before the due date of the forward contract. Then, the company has no use of the forward contract. Hence, the foreign exchange risk had transformed into a financial risk since the company was still the owner of a worthless forward contract.

Company X and Y ought to be aware of the interrelationships between the risks, in order to completely understand and deal with the foreign exchange risk in an appropriate way.

7.2.2 Foreign Exchange Exposure

Foreign exchange exposure is a measurement of how changes in exchange rates affect the companies' profitability, cash flow and market value. Company X and Y are both directly and indirectly exposed to foreign exchange risk. There are two categories of direct exposure, transaction and translation exposure. The indirect exposure is called economic exposure. Both companies are exposed to transaction and economic exposure.

7.2.2.1 Transaction Exposure

When Company X and Y discuss their foreign exchange exposure, they refer to the transaction exposure since this is a part of their daily business. The most common example of transaction exposure arises when companies have receivables, payables or loans denominated in foreign exchange, which usually result in profit or loss for the concerned companies. Receivables and payables are what Bennet (1996) refers to as short-term transaction exposure, whereas currency loan is long-term transaction exposure.

Company X's transaction exposure is only short-term since it arises when it makes its payables to its suppliers in China, France, Portugal and Spain, and when it gets receivables from its customers in Denmark, Great Britain and Germany. Company Y has similar transaction exposure. It makes payables to ten countries and gets receivables from twelve countries denominated in foreign exchange. Further, Company Y has historically raised loans DEM and is currently planning to raise loans in EUR. The plan to raise loans in EUR refers to the long-term transaction exposure. Both companies have deliberately created situations where they are exposed to transaction exposure; for example when they buy (or bought) forward exchange contracts in order to secure other transaction exposure. In other words, a secured transaction eliminates the potential of favourable movements in exchange rates.

Company X and Y's short-term transaction exposure consists of quotation, backlog and billing exposure. This is illustrated in Figure 6.1 where we used

a business situation in Company X as an example. This figure is to some extent modified from the figure 4.3, and can also be applicable in a similar business situation in Company Y.

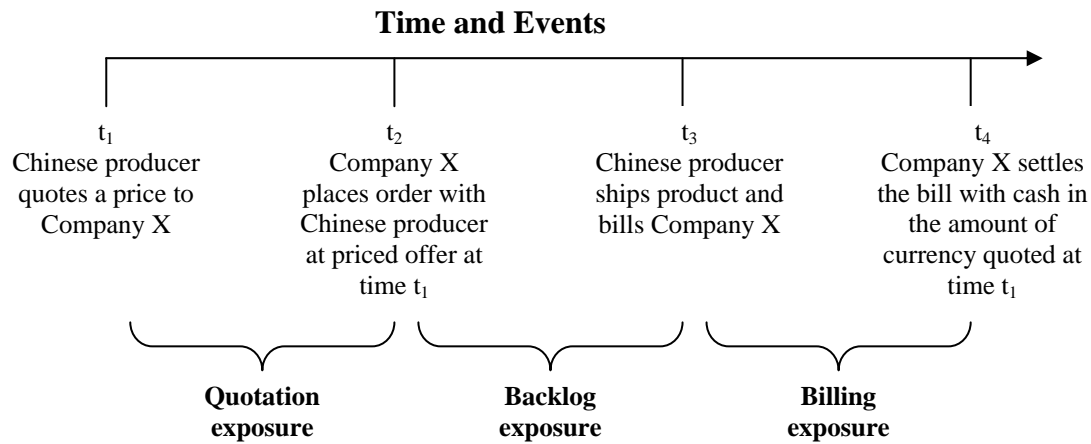


Figure 7.1 The Life Span of a Transaction Exposure in Company X.

The total transaction exposure remains from t_1 until t_4 . Hence, the transaction exposure for Company X starts already when the company and the Chinese producer quote the price.

7.2.2.2 Translation Exposure

Translation exposure refers to companies that have foreign subsidiaries or real assets in foreign countries. Company X and Y are, therefore, not exposed to this risk at all. On the other hand, there is one important distinction between the companies since Company Y belongs to a group of companies with a common owner. However, the companies in the group are separate from each other and Company Y is, therefore, not concerned with translation exposure.

7.2.2.3 Economic Exposure

Economic exposure affects all companies' long-term competitiveness; therefore, it also concerns Company X and Y. However, when Company X

and Y talk about their foreign exchange exposure they do not consider the economic exposure. Therefore, they do not deal with this exposure.

7.2.3 Risk Attitude

There are mainly three kinds of attitudes a company can apply: neutral, paranoid and asymmetrical. It is very difficult to categorise companies into the different attitudes, since it sometimes differs depending on the situation the companies face. For example, when Company X experienced a gain and when Y experienced a loss in foreign exchange they both stated that they changed their attitude towards risk and became more risk paranoid. One factor that affects Company Y's risk attitude is that the company has increased its margins on the main product. This has resulted in a more risk neutral attitude. Today, Company Y does not deal with its foreign exchange risk at all, which is also a sign of its risky attitude. However, Karl does not feel comfortable in this situation, which is contradictory to the company's actions. Company X secures some of its foreign exchange transactions and also uses documentary letters of credit in order to secure the commercial risk. These activities reflect the company's asymmetrical risk attitude.

7.3 Currency Risk Management

Company X and Y are in different ways exposed to foreign exchange risk. When Stefan and Karl talk about the companies' foreign exchange exposure it is the transaction they refer to.

7.3.1 Hedging

Hedging is often mentioned as a way to manage foreign exchange risk. Hedging is said to be a method of transferring risk in which an action taken to hedge one's exposure to loss also causes one to give up possible gains (Bodie et al., 2000). When Company X and Y manage its foreign exchange risk it is mostly the hedging methods that are used. A way of hedging is to use financial instrument, such as forward foreign exchange contracts.

Company X and Y are familiar with this instrument, although there a number of other instruments available on the financial market.

There is discussion whether the market for financial instruments serves a purpose for the society or not. However, it is clear that it serves a purpose for Company X and Y since they can transfer their foreign exchange risk.

7.3.2 Internal Techniques

7.3.2.1 Choice of Invoicing Currency

Company X and Y have three different choices when it comes to their invoicing currency: the domestic, the trading partner's or a third country's currency. A company can eliminate its transaction exposure by choosing its domestic currency. By doing this, the foreign exchange risk is automatically transferred to the counterpart. The outcome of this may be that the company loses its customers, since the customers do not find the agreement attractive enough when they suddenly become responsible for the foreign exchange risk. This is also the reason why Company X and Y do not use its domestic currency in their international transactions. Hence, both companies are flexible and let their counterparts decide what currency to use in the invoices. However, if both companies' made an active choice of the invoicing currency it could decrease the amount of trading currencies, which would facilitate their CRM, irrespective of the fact that the relation to their counterparts is affected. This concerns Company Y especially since it trades in more currencies than Company X. In addition, Company Y has a good relationship with the company group, which could make it possible for the company to only invoice in one currency when it trades with the company group.

7.3.2.2 Foreign Exchange Clauses

Company X establishes clauses in all contracts, which prescribes that changes out of the company's control make it possible to renegotiate the contract. However, Stefan in Company X does not view this as a way to

reduce the transaction exposure, since this could impair the relationship with its customers. Therefore, Stefan considers the foreign exchange clause only as a formality. Karl in Company Y does not mention anything about foreign exchange clauses but it could be an alternative for the company in some cases, especially when it trades within the company group where the relationship is good.

7.3.2.3 Shared Rate Risk

Shared rate risk is an agreement between two parties to share any potential profit/loss of foreign exchange rate variations. Neither Company X nor Y use this as a solution to cover transaction exposure, although there are opportunities for Company Y to use it in some of their business deals. This is because the company is a part of a company group with a common owner. An implementation of a shared rate risk would be facilitated because of the close relationship between the companies within the company group.

7.3.2.4 Cost Increases

Companies can cover the increased costs of adverse effects of exchange rate variations by increasing the price of a product. Neither Company X nor Company Y uses this method. Company X is in a line of business where the level of competition is high, which means that a price increase would deteriorate its competitiveness. On the other hand, Company Y has increased its margins on the main product, which may indicate a favourable competitive situation. Thus, it could facilitate a price increase as a method for managing the foreign exchange risk.

7.3.2.5 Matching

Matching means that a company tries to match its inflows and outflows in the same currency, and in this way minimize the transaction exposure. There are some requirements for this method to be effective: two-way cash flow in the same foreign currency, budgeted flows in the currency spread over time, foreign exchange account and an active matching procedure. Company X

has foreign exchange accounts in USD and EUR, but only two-way cash flows in EUR. Further, the inflows and outflows in EUR are not spread over time. Matching is therefore not an optimal method for Company X, even though the company tries to match to some extent. Company Y has a foreign exchange account in EUR, where the company tries to match the inflows and outflows as much as possible. However, since Company Y does not choose the currencies in the foreign exchange transactions, the cash flows in one specific currency get out of balance and, thus, difficult to match. So, Company Y's current situation makes the matching method inefficient. On the contrary, Company Y has budgeted inflows and outflows in USD and EUR currencies spread over time. So, if the company decreased the number of currencies it deals with and opened a foreign exchange account in USD, matching as a method could be improved.

7.3.3 External Techniques

External techniques imply external costs for companies, since it involves a third party. Company X spends approximately 10 000-20 000 SEK annually. Stefan thinks it is a reasonable price since that will give the company a stable cash flow. However, both companies believe that the usage of external instruments would increase if they were easier to use and cheaper.

7.3.3.1 Foreign Exchange Account

Foreign exchange accounts are especially appropriate for companies that have inflows and outflows in the same currency. Company X has foreign exchange accounts in USD and EUR, where the company tries to match its inflows and outflows in foreign exchange to some extent. Company Y has only foreign exchange accounts in EUR. But if Company Y, for example, decides to develop a matching system in USD it would be necessary for the company to open an account also in that specific currency. To have foreign exchange accounts are a necessity in order to improve the companies' CRM.

7.3.3.2 Forward Foreign Exchange Contract

A forward foreign exchange contract is an agreement between two parties to exchange one currency for another at some future date. Company X and Y are well aware of the forwards' function. Company X secures its purchases from China by using a forward. This instrument is well suited for the situation since the company knows exactly when to make the payables. Today, Company Y does not use forward foreign exchange contracts at all, even though the company did use it three years ago. The company stopped using forwards since the instrument was not suitable for its transactions (the company does not know in advance when the future transactions will occur). For example, if Company Y gets a receivable before the forward foreign exchange contract expires, then the forward contract does not cover the transaction exposure.

7.3.3.3 Foreign Exchange Option Contract

A currency option contract gives the holder of the contract the option to buy or sell shares at a specified price on or before a specific date in the future. Company X has used a currency option once, but since Stefan knows when he gets the receivables and makes the payments an option is an unnecessary expense for his company. It is better for Company X to use a forward since it covers the same exposure to a cheaper price. Company Y has never used a currency option, even though the instrument in some cases could be more suitable for its transactions in foreign exchange. For example, if Company Y gets a receivable before the currency option expires, the company can close the contract directly and, thus, eliminate the transaction exposure. On the other hand, if the currency option contract expires before the company gets the receivable, the option will not cover the transaction exposure.

7.3.3.4 Money-Market-Hedge

Money-market-hedge basically means that a company raises a loan in the same foreign exchange as the company expects future payables or receivables, in order to eliminate the transaction exposure. Neither Company X nor Company Y uses money-market-hedge, even though

Company Y has future plans to do so. Money-market-hedge is definitely a method that could be beneficial for both companies, especially Company Y since the future dates of its payables and receivables are uncertain.

7.3.3.5 Currency Swap Contract

A currency swap contract is an agreement where two companies swap loans or cash flows with each other, due to favourable loan conditions in their domestic currency in their local bank. Neither Company X nor Company Y uses currency swap contracts. However, it could be an interesting alternative for the companies since it is flexible, inexpensive and easy to use.

7.4 Foreign Exchange Policy

A foreign exchange policy is a set of guiding principles determining what and how things should be done when it comes to a company's foreign exchange exposure, which can make the CRM more effective. To establish a foreign exchange policy requires knowledge about CRM and the different foreign exchange exposures. Today, Company X manages some of its foreign exchange exposure but has not prepared any policy. The company does not have the time to assimilate new knowledge, thus, it needs external help to develop a suitable foreign exchange policy. Company Y is totally unsecured when it comes to its foreign exchange exposure; hence, it does not have any prepared foreign exchange policy. Karl is aware of some of the risks it is exposed to in the current situation, which makes him feel uncomfortable. Company Y is in this situation due to lack of knowledge and time. However, a well-defined policy would facilitate both companies' CRM remarkably.

7.5 An Overview of the Swedish Banks' Purpose

Company X and Y have satisfactory contacts with their personal advisors in Swedbank, which both of the companies find very important. Stefan and Karl trust the personal advisors completely when it comes to the advice and information they give. Company X has recently changed bank and Stefan is satisfied with its new personal advisor. Company Y has developed a close

relationship with its advisor during several years. For Company Y, the relationship with the personal advisor is more important than the bank in itself. The company has, therefore, chosen to move with its advisor when he started to work for another bank. Both Company X and Y have changed banks several times for different reasons. For example, Company Y experienced a loss of 20 million SEK because of communication problems with the bank, which made the company change bank.

The banks should provide companies with the possibility to minimize, reallocate and distribute risks, for example the foreign exchange risk. They do this by offering different methods and instruments to manage the foreign exchange risk, but the problem is that neither Company X nor Company Y have sufficient knowledge about them. The banks should not only supply the techniques, they should also make it possible for the companies to use them. The companies do not get any information and guidance about CRM from the local banks, which can indicate that the knowledge about CRM also is too poor in the local banks. However, the knowledge exists on a central level in the banks, but Company Y believes that the information it receives centrally is too complex to understand.

An important task for the bank is to evaluate the credit risk in companies. Company X experienced this when the dollar decreased in value. Then, the bank advised the company to secure its foreign exchange transactions. However, this is the only time the bank has advised the company. On the contrary, Company Y has never received any advice from the bank when it comes to CRM, which the company found strange since the company raises large credits in the bank.

Company X and Y want the CRM to be of mutual interest for the companies and the banks, despite the credit risk.

7.6 Hypotheses

Since we have not conducted a statistical research, we cannot accept nor reject the hypotheses. However, we can get an indication if they are accepted or rejected.

H₁: Mid-corps perceive the foreign exchange risk as an important risk to consider.

The theory states that the foreign exchange risk is one of the most important risks to consider when it comes to international business in foreign exchange. This corresponds with the mid-corps since they are well aware of the foreign exchange risk and perceive it as their biggest risk in international business. In addition, they have experienced the effects of the foreign exchange risk. This is one reason why they consider the risk to be important.

H₂: Mid-corps are not fully aware of the existing methods and instruments that can be used to manage their foreign exchange exposure.

There are a variety of different methods and instruments available to manage the foreign exchange exposure. The mid-corps only have practical experience from forward foreign exchange contracts (Company X once used an option). Even though there is a wide range of different techniques available the two mid-corps have not evaluated them so they can understand the advantages. This indicates that the mid-corps are not fully aware of the existing techniques.

H₃: Mid-corps do not deal with their foreign exchange exposure as much as they ought to, due to lack of time and knowledge.

The mid-corps claim that the foreign exchange risk is the most important risk in international business, although they do not deal with it as much as they ought to. These facts are contradictory, and the mid-corps state that a

significant reason for this is that the time and knowledge are insufficient. An indication that shows their lack of knowledge when it comes to the available methods and instruments is that the mid-corps cannot account for all of them. Time is always a limited resource, especially in smaller companies where activities outside the commercial business are usually neglected. Lack of knowledge in a complex field like CRM requires a lot of time, and if there is a lack of time it will result in that companies do not deal with the foreign exchange risk as much as they ought to.

H₄: Mid-corps' need for information about CRM ought to be provided externally.

Information about CRM can be provided internally or externally. If the information were to be provided internally it would require time and knowledge. However, this is exactly what the mid-corps lack. Hence, the mid-corps would need new employees that only focused on CRM, but this would imply that the mid-corps need to grow and this is not of present interest. The banks should provide companies with the possibility to minimize, reallocate and distribute risks, for example the foreign exchange risk. They do this by offering different methods and instruments to manage the foreign exchange risk, but the problem is that neither Company X nor Company Y have sufficient knowledge about them. Therefore, the banks should not only supply the techniques they should also make sure that the companies can use them. Further, the banks have insight into the mid-corps and the required knowledge about CRM (at least on a central level). Hence, the banks are the natural and obvious external source that should provide the mid-corps with the information about CRM.

7.7 Synthesis

The synthesis combines the theoretical frame of reference, empirics and analysis, in order to see if there is a solution that can be implemented in reality.

The foreign exchange risk is inevitable for companies that do business overseas in foreign exchange. However, there is a wide range of techniques available to manage the risk. The mid-corps perceive foreign exchange risk as a major risk in international business, although they do not deal with it as much as they ought. The situation must be improved; however, the mid-corps do not have sufficient time and knowledge to manage their foreign exchange exposure. Therefore, the need ought to be provided externally.

The banks are the natural and obvious external source that should improve the companies' CRM. The reasons for this are following:

- The banks have knowledge about CRM. The knowledge does not always exist on a local level; however, every bank has a centralised department where experts in the currency field are available.
- The banks already have an established relationship with the companies concerned.
- One of the banks' main tasks is to provide companies with the possibility to minimize, reallocate and distribute risks, for example the foreign exchange risk. They do this by selling external techniques (financial instruments). The banks can also contribute information about internal techniques. They do not directly earn money from this but it is in the banks interest to provide good service and to have financially stable customers.
- Risk-taking is an essential part of the banks' business, and it is in their own interest to carefully evaluate the customers' credit risk. The foreign exchange risk affects the company's financial situation to a great degree,

and by that the banks' credit risk. Even though the companies do not imply any direct credit risk for the banks, it is in the banks' interest to have financially stable customers. Hence, it would also be of great interest for the banks to make sure that the companies handle the foreign exchange risk in the best way possible.

The personal company advisors in the banks are the main link between the mid-corps and the bank, but they do not always have sufficient knowledge in the CRM field. However, the knowledge exists a central level within the bank. Mid-corps cannot expect the banks to take the total responsibility for the mid-corps' CRM. What they can expect is that the banks provide them with the techniques and information that is required to manage their foreign exchange exposure. A tangible proposal for a solution could be for the banks' personal company advisors to invite the companies concerned to a seminar with an expert within the currency field. In the seminar, the expert can describe the different techniques available to manage the foreign exchange risk and in which situation they are appropriate. The aim of the seminar is to start a dialogue between the banks and the companies and in this way improve the companies' knowledge. When companies gain knowledge externally from the banks they do not have to invest so much time, which certainly would result in an improved CRM.

In conclusion, the mid-corps have a need for CRM that must be satisfied. The banks have knowledge and products to satisfy the need, at the same time as it is in their own interest to sell the products and have a financially stable customer base. Hence, a win-win situation would be possible to achieve.

8. Conclusions

In this chapter we will present the problem and the main findings of our research. In addition, we will discuss suggestions for further research.

Today, international trade is of great importance for Swedish companies, since the Swedish market is limited in terms of resources and growth possibilities. The globalisation has implied new opportunities for Swedish companies since they can reach totally new markets all over the world. However, the new opportunities also involve new risks that have to be considered. One of them is the foreign exchange risk. There are a variety of techniques available to manage the foreign exchange risk.

All companies that do international business in foreign exchange are affected by currency fluctuations. We got the perception that large companies handle the risk professionally and that smaller companies do not deal with it to a great extent. Therefore, we aimed to describe how a company could manage its foreign exchange exposure. In addition, we aimed to evaluate and describe the current foreign exchange activities in two Swedish mid-corps and suggest how the usage of the different methods and instruments can be improved.

To fulfil the purpose of the dissertation, we developed four hypotheses and research questions that have permeated the whole process. We conducted semi-structured interviews in two mid-corps, in order to get a descriptive view of the problem from the companies' perspective.

In the analysis, different findings emerged that gave us an indication of how a solution could be achieved. Our findings are as follows:

- The foreign exchange risk is the risk of a change (gain or loss) in the company's future economic value resulting from a change in foreign exchange rates (Oxelheim, 1984). The mid-corps perceive

the foreign exchange risk as the most critical risk to consider in international business.

- The foreign exchange risk can be managed by internal and external techniques. However, the mid-corps are not fully aware of the different techniques available.
- The mid-corps do not deal with their foreign exchange exposure to a great extent, although they perceive the foreign exchange risk as the most important risk to consider. The reason for this is lack of time and knowledge.
- We believe that the current situation in the mid-corps can be improved by an external push, where the banks are the natural and obvious external source that should provide the mid-corps with information about CRM. The external push will start a dialogue between the mid-corp and the bank and together they can improve the situation in the mid-corps.

Of course, there are other factors that can improve the current situation in the mid-corps; the mid-corps mention a price reduction of the hedging instruments as a potential incentive to increase the usage. This is correct from an economic point of view. On the other hand, a price reduction in itself will not increase the usage if the knowledge about the instruments is inadequate. Moreover, a price reduction would decrease the banks' incentive to supply the instruments and the earlier mentioned win-win situation would disappear.

When we discuss the improvement of the mid-corps' CRM, we refer to the hedging techniques already available on the Swedish hedging market. We do not believe that the mid-corps are in need of an increased number of sophisticated hedging techniques. Instead, the mid-corps need to focus on learning to use the already existing techniques.

Our research has the most important practical implication for the Swedish commercial banks since they, from our result, can improve the service to their customers when it comes to CRM. Further, the banks have a self-interest in improving their service since they can make profit from increased sales in financial products and at the same time get financially stable customers. Our research can also be of help for companies in the same situation as the mid-corps since they can gain knowledge about CRM.

8.1 Further Research

The result of our research from these companies has shown indications that there is a need to improve CRM in Swedish mid-corps and that the information about CRM should be provided externally, where the banks would play an important role. Our research is a preliminary study, thus, it would be of interest to do a quantitative research with a large-scale sample where the result can be statistically significant. Thereby, it would be possible to make generalisations. It would also be interesting to do research from the banks' perspective with the intention to describe their view of the problem. Hence, we would gain a better understanding of the total problem. Moreover, a two-way perspective would facilitate an implementation of possible solutions. It could also be of interest to research if the need of information about CRM in mid-corps could be provided from other external sources than the banks.

References

Books:

- Bennet, S. (1996). *Finansieringsarbetet i företaget*. 2nd ed. Göteborg: Industrilitteratur.
- Bodie, Z. & Merton, C R. (2000). *Finance*. International ed. New Jersey: Prentice Hall International.
- Buckley, A. (1996). *The Essence of International Money*. 2nd ed. England: Prentice Hall International.
- Christensen, L., Andersson, N., Engdahl, C. & Haglund, L. (2001). *Marknadsundersökning*. 2th ed. Lund: Studentlitteratur.
- Dixon, R. & Holmes, P. (1992). *Financial Markets*. London: Chapman & Hall.
- Eiteman, D., Stonehill, A. & Moffett, M. (2007). *Multinational Business Finance*. 11th ed. Boston: Pearson Education.
- Elmér, L., Jakobsson, H. & Lundin, G. (1992). *Internationell finansiering & valutor*. 2nd ed. Lund: Studentlitteratur.
- Grath, G. (2004). *Företagets utlandsaffärer*. 8th ed. Uppsala: Industrilitteratur.
- Hull, J. (2002). *Fundamentals of Futures and Options Markets*. 4th ed. New Jersey: Prentice-Hall International.
- Kinnwall, M. & Norman, P. (1994). *Valutamarknaden*. 2nd ed. Stockholm: SNS Förlag.
- Larsson, C-G. (2000). *Cash Management för företag*. 8th ed. Lund: Studentlitteratur.
- Oxelheim, L. (1981). *Företagens Utlandslån*. Kristianstad: Liberläromedel.
- Oxelheim, L. (1984). *Exchange Risk Management in the Modern Company*. Stockholm: SIFEX.
- Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*. 4th ed. England: Prentice Hall.
- Schuster, W. (2002). *Företagets valutarisk*. Stockholm: EFI.
- Shoup, G. (1998). *Currency Risk Management – A Handbook for Financial Managers, Brokers and Their Consultants*. New York: AMACOM.

SNS Förlag. (2000). *Modern Finansiell Ekonomi*. Borås: Pearson Professional Limited.

Tjeder, J. (2000). *Optionshandboken*. Borås: Aktiespararnas Förlag.

Wramsby, G. & Österlund, U. (2005/2006). *Företagets finansiella miljö*. Göteborg: Wramsby/Österlund förlag.

Publications:

Svenska Bankföreningen. (2004). *Banker i Sverige*. Internet:
http://www.bankforeningen.se/upload/banker_i_sverige_003.pdf

Internet:

Finansiell globalisering. (March, 5, 1999) Retrieved November 13, 2006 from <http://www.riksbank.se/templates/speech.aspx?id=1742>

Nordea. (2006) Retrieved November 21, 2006, from <http://tf.nordea.dk/sitemod/design/layouts/print/print.asp?pid=680&blnPrintVer=true>

SEB. (2001) Retrieved Oct 24, 2006, from <http://www.seb.se/pow/wcp/index.asp?website=F%F6retag>

Swedbank. (n.d.) Retrieved Oct 14, 2006, from <http://www.swedbank.se/sst/inf/out/infOutWww1/0,,114633,00.html>

Swedbank. (n.d.) Retrieved Oct 12, 2006, from <http://www.swedbank.se/sst/inf/out/infOutWww1/0,,114638,00.html>

Swedbank. (n.d.) Retrieved Oct 12, 2006, from <http://www.swedbank.se/sst/inf/out/infOutWww1/0,,113672,00.html>

Wikipedia Org. (June 28, 2006) Retrieved November 1, 2006, from http://en.wikipedia.org/wiki/private_brand

Personal Contacts:

Håkan Kroon, *Company Advisor*, Swedbank, Karlskrona.

Mikael Runesson, *Company Advisor*, Swedbank, Karlskrona.

Mats Ring, *Currency Advisor*, Swedbank Markets, Malmö.

Telephone Interviews:

Handelsbanken, Nordea, SEB, (no name), Nov 13, 2006.

Företaget

Intervjupersonens utbildning?

Kort historia om företaget. Omsättning. Anställda. Struktur. Ekonomidelen.

Redogör för era utländska affärer/transaktioner. Länder/valutor.

Export/Importandelar?

Handlar företaget med olika typer av värdepapper?

Risk

Vad är risk för er? Hur skulle ni generellt beskriva riskhanteringen i företaget? Största risk med internationell handel? Har ni aktivt uteslutit att handla med vissa länder/valutor pga stor risk?

Valutariskhantering

Hur uppfattar ni behovet av valutariskhantering i mindre företag? Vad tror ni avgör ett företags valutariskhantering?

Redogör för er valutariskhantering och varför den fungerar som den gör. Metoder/finansiella instrument?

Förbättring av situationen

Vad tror ni generellt skulle få mindre företag att öka användandet av olika metoder/instrument? Vad skulle få ert företag att öka användandet?

Känner ni att ni har tillgodosett er/har fått tillräckligt med information om vilka metoder/instrument som finns tillgängliga idag? Om ni skulle vilja ha mer information om valutariskhantering, vem vänder ni er då till?

Company Profile

Education of the interviewee?

Short history of the company. Turnover. Employees. Structure. Finance department.

Describe the international business/transactions. Countries/currencies.

Export/import shares

Other types of security?

Risk

Describe risk and the general risk management in the company.

Biggest risk in international trade? Have you actively excluded any country/currency due to large risk?

Currency Risk Management

Perception of the need for CRM in smaller companies. What determine the company's CRM?

Describe your company's CRM and why it works the way it does.

Methods/financial instruments?

Improvement of the Current Situation

What can increase the usage of different methods/instrument in smaller companies? What would increase the usage of the techniques in your company?

Do you feel that you have assimilated/received enough information about the different methods and instruments available? If you required more information about CRM, to whom do you turn?