

# Controlling Cash Management in the context of trade receivables

*A case study in large international manufacturing company*

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## PREFACE

This thesis is an important part of our master degree at the Business Administration Programme at Luleå University of Technology. We would like to show our sincere gratitude by thanking those who have helped and guided us through the writing of this thesis. We would like to dedicate a special gratitude to the company where the research has been conducted and also to our supervisor at the company. They have patiently answered our question and have been very helpful during the whole process. We would also like to thank our opponents for their contribution by sharing their opinion with us. Last but not least, we would like to thank our supervisor at the university Mats Westerberg who has been great in guiding us through this thesis. Without his help, this thesis would certainly have proven to be much more difficult to accomplish.

We hope that this thesis will motivate the readers to make further research within the problem area and that the thesis will be interesting and useful reading material for other students.

Luleå University of Technology  
2005-01-07

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Erik Nilsson

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Maria Åström

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## **ABSTRACT**

The main ambition of most organisations is today to present good financial results. One important part of this is to in an effective way managing liquid capital, or in other words cash management. It is important for international organisations that cash management is controlled effectively between the business units in the organisation so that the work with cash management can be as effective as possible. One of the purposes of this report was therefore to describe the differences and similarities that might be found between managers cash management in an international group that is operating in different countries and also explain why the control of cash management has its present design. The research was conducted through a case study where thirteen respondents in seven sales units, situated in different European countries, filled in a questionnaire. One conclusion from the analysis is that the organisation has great potential with cash management. Furthermore the analysis shows that many of the differences that were found in the control of cash management were caused by cultural differences between the sales units. The conclusions of this report can only be considered to apply in the organisation included in the case study and further investigations are needed to confirm and generalize the conclusions of the report.

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## 1 INTRODUCTION

*The first chapter will give the reader a background to what this thesis is about and then narrow it down to the research problem of interest. We will begin with a brief description of management control, and then continue with a discussion about cash management. After this we will state our research purpose and finally, the chapter ends with a presentation of the layout of this thesis.*

### 1.1 Management control

Anthony and Govindarajan (2003) define management control as the process by which managers influence other members of the organisation to implement the organisation's strategies. To make management control more efficient, goal congruence is of the essence (Anthony & Govindarajan). Goal congruence means that, insofar as is feasible, the goals of the organisation's individual members should be consistent with the goals of the organisation itself (ibid). When designing a management control system, Anthony and Govindarajan suggests that the principle of goal congruence should be considered.

What kind of control system that should be implemented by the organisation depends on several factors, such as organisation structure and culture. Different geographic areas have different cultures (Hofstede, 2001), and this is something that international organisations have to consider when developing a management control system. Different areas may therefore need different control systems.

Large manufacturing businesses, according to Olsson and Skärvad (2001) businesses with more than 500 employees, that consists of several sales units requires a greater focus on management control since decentralised organisations needs a more comprehensive management control which controls the units towards the goals of the organisation. Without a comprehensive management control, the goals of the units may differ from the goals of the organisation and suboptimisation may occur (Anthony & Govindarajan, 2003). Burns (1999) note that it is important in this situation that the managers of the units copes with controlling their employees so that they are working in the direction decided by the organisation. Cash management is a tool for the organisation for controlling the sales units, e.g. by recommending certain terms of payment to the sales units.

### 1.2 Cash management

The main ambition of most organisations is today to present good financial results. An organisation's financial result is, for example, strongly influenced of the efficiency in an organisation's value chain. According to Larsson (2000) the efficiency in the value chain can be improved, if organisations control and perhaps adjust their financial routines. One part of an organisation's financial routines with great potential, but which often is neglected, are organisations managing their liquid capital, or cash management (ibid).

Cash management is, according to Larsson (2000), not a new phenomenon and organisations have always considered how their liquid capital in the best way should be managed. Even though managing liquid capital always has been done, the term cash management has brought

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new light to managing liquid capital with focus on the time-dimension of cash flow (ibid). During the fifties the first cash management-models were presented and the concept cash management was taken in use (ibid). Larsson (2000) holds that cash management can be defined as *“theories and methods for handling liquid capital”*. According to Cash Management Report 580, which Larsson discusses, cash management consists of e.g. handling liquid capital and cash flow. Larsson holds that many organisations neglect their work with cash management. This neglect arises from the shortcoming of e.g. efficient payment routines and trade receivables (ibid). Larsson describes that these routines easily can be obsolete if organisations don’t focus enough on follow up and developing existing routines.

Trade receivables are a part of the work with cash management that ties up a considerable part of an organisation’s working capital (Larsson, 2000). By improving and making their trade receivable routines more efficient, Larsson holds that organisations can free capital from trade receivables and thereby decrease their interest loss and interest cost. An organisation can make their routines more efficient by e.g. controlling customers’ terms of payment, overdue routines and interest on overdue payment. In other words, making time from sending out invoice to payment as short as possible (ibid). Terms of payment, overdue routines and interest on overdue payment can also be used as a means of competition. In this thesis, trade receivables are the only part of cash management that will be closely examined.

### **1.3 Controlling cash management**

Sales units can work independently with cash management and it is important for organisations that their sales units are working towards the main goals of the organisation. To achieve a homogeneous work with cash management in the organisation, a comprehensive control where clear goals and strategies are stated is necessary. These goals and strategies defines what expectations the organisation has on its’ sales units. In this way the managers can work with cash management in the most effective way for the organisation. If the control in a sales unit between manager and employee doesn’t results in goal congruence, the organisations handle with liquid capital will diverge from the organisations cash management-goals. This situation will also occur if there is goal incongruence between the organisation and the sales units’ managers.

#### *1.3.1 Problem with controlling cash management*

According to Larsson (2000) the purpose with cash management is to increase the return on the moving capital by setting capital free from the payment chain and to plan an organisation’s liquidity. When doing this, other factors must be considered (ibid). In our opinion organisations must consider customer satisfaction in their work towards increased return on their moving capital. If the organisation’s effort to increase moving capital will lead to reduced customer satisfaction, they have to evaluate if this work is profitable or not. Customer satisfaction is a wide concept and this thesis will handle the organisation’s interest in that the customer satisfaction in the work with trade receivables is not damaged. According to the above, one important concept for organisations to consider is customer sensitivity, i.e. how sensitive the customer is for e.g. pressure considering overdue payments.

According to Sunder (2002) it is also important for organisations to balance stakeholders’ expectations with the satisfaction the organisation bring to the different stakeholders.

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Dissatisfaction will occur and damage the relations between the organisations and the stakeholders if the expectations are too high. If the satisfaction is higher than one specific stakeholder expects, e.g. customers, other stakeholders, e.g. stockholders, will be dissatisfied. Matching stakeholders' expectations with organisations service in return is therefore an important part for all organisations to consider (ibid).

According to institutional theory humans need order in life and since structure creates order, structure is necessary for all humans (Scott, 1998). Institutional theory consists of three pillars or levels of institutions; cognitive, normative and regulative structures and activities (North, 1993). The three pillars provide stability and meaning to social behaviour (ibid). The levels can both facilitate and complicate control of e.g. cash management. Problems can occur when levels of institutions conflict with each other. If e.g. the cognitive level, things we take for granted, aren't unanimous with the organisations normative and regulative level, a conflict between the organisations interest and the deviant cognitive behaviour of the individuals will arise.

These conflicts may occur if managers and employees have different opinions about the organisations task variety and task knowledge. If differences in these opinions last, the managers will control their employees in a way that the employees don't agree with. Perrow's model (in Macintosh, 1994) for control with different technologies defines the most suitable control for an organisation in a given situation. It is important that organisations are aware of this model so that they are able to control their sales units in, for the organisation, most efficient way.

Depending on how effectively the employees in the sales units are controlled by cash management, the return on moving capital, but also customer satisfaction, will vary between the sales units. It is therefore important for organisations to effectively control their sales units so that they are working in the direction of the organisations cash management-goals. The sales units' managers must on the other hand also control their employees towards goal congruence.

### *1.3.2 Differences in controlling cash management*

The manager's assignment includes making the employees working in the same direction as the organisation. Previous studies implicate that employees don't consider their work with overdue payments (cash management) as the most important task and that it is something that can be disregarded and put aside in favour for other assignments (Nilsson & Åström, 2004). Due to this it is important for organisations to analyse whether this situation descends from either that the control from the manager doesn't work in the most favourable way or that the managers doesn't see the importance of the task.

Since cash management is extensive, expensive and risky, organisations need to consider if working with cash management is necessary or perhaps even harmful. Due to the above, organisations must identify the potential with cash management before they decide whether to focus on cash management or not.

There are many different ways for organisations to control their sales units and the different ways all have various success. Depending on the control's efficiency different problems may occur. When the control is inefficient is it possible that goal incongruence occur between the organisation and the managers of the sales units. Differences and similarities in managers'

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way of controlling cash management in an organisation may have both positive and negative consequences. Differences that are noticed might create a debate in the organisation that may lead to improvements in the control of cash management. Differences that are left unnoticed, and not benefits the organisation, may lead to an inefficient control and, in long term, decrease the organisations profit.

Organisations with international spread sales unit must furthermore be attentive to the cultural differences that may exist and affect the control in the organisation. This is why it is of great importance for international organisations to look in to what differences and similarities that exists in the control and how the employees perceive the control. They also have to analyse and understand how this differences and similarities have occurred. This is an important task that enables improvement in the organisation's control and its future.

#### **1.4 Research purpose**

*In view of the above the purpose of this study is to:*

- identify what potential cash management in the context of trade receivables may have in large manufacturing organisations operating in different countries in an international group
- describe differences and similarities that may exist between the managers control of cash management in an international group that is operating in different countries
- describe and compare how managers intend to control their employees work with cash management and how the employees perceives the control from the manager
- describe differences and similarities that may occur between managers' intention and the outcome of their control
- explain why the control of cash management has its' present design

#### **1.5 Definitions**

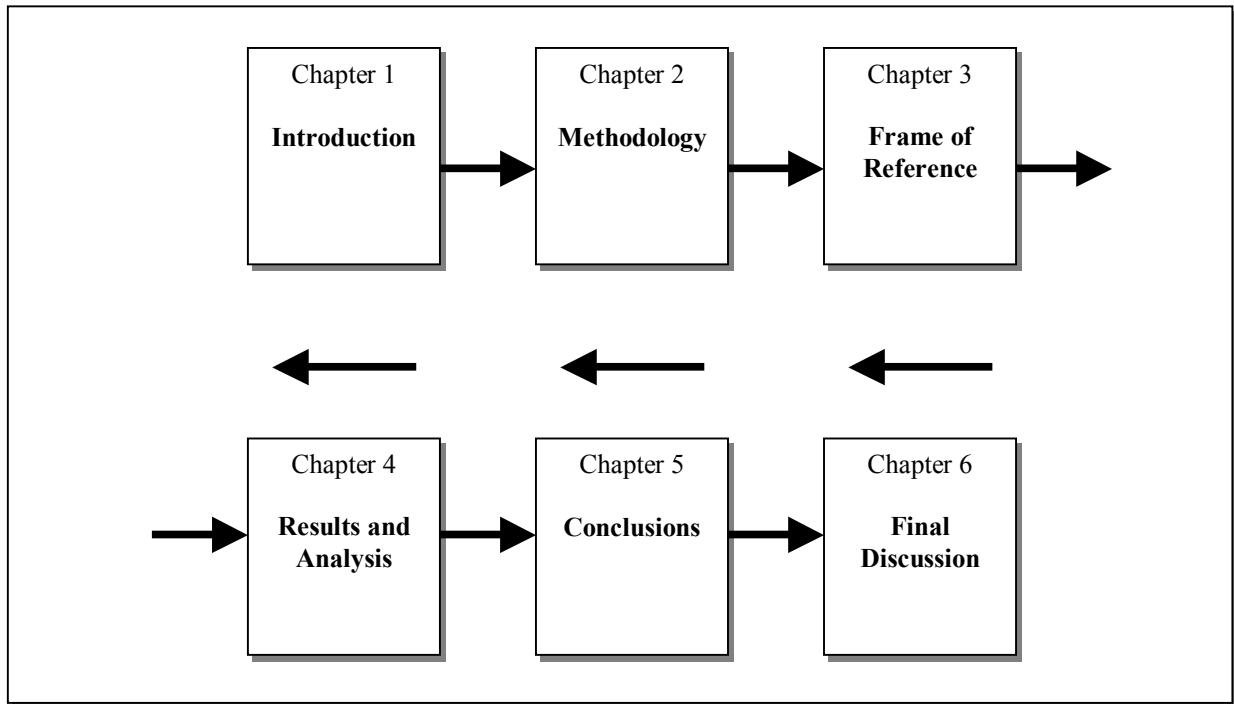
In this thesis, *large organisations* refer to organisations with more than 500 employees.

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## 1.6 Disposition

Figure 1.1 below visualises the disposition of this thesis. The thesis starts out with an introduction to the subject area in chapter one and then the methodology in chapter two describes how the study was conducted. The frame of reference in chapter three conceptualises the theory. The results and analysis is presented in chapter four. Finally, in chapter five and six the conclusions and final discussion are presented.



*Figure 1.1 A schematic presentation of the disposition of the study*

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## 2 METHODOLOGY

*In this chapter the methodology of the study will be presented. The chapter contains a description of the research approach and strategy, data collection methods, sample selection, the general analytical strategy, and it ends with a discussion about the quality standards of the research.*

### 2.1 Research approach

The research approach begins with explaining why the thesis had a classic analytical approach. It continues with describing whether we used an inductive or deductive approach and our choice between a qualitative or quantitative study.

#### 2.1.1 Classic analytical approach

One purpose of this thesis was to describe and explain the differences and similarities that could be found between managers way of controlling their employees work with cash management in the different sales units, and with that establish causal relationships between variables. We also tried to distinguish different variables in and between the different sales units in the analysis, and explain how these variables have occurred.

The analytical approach aims, according to Holme and Solvang (1997), at recognising and isolating causal relationships between variables. The analytical approach shall make it possible to, in an analytical way, work with the collected data (ibid), i.e. analysing the collected data. With the above mentioned course of action, our thesis had a classic analytical approach.

#### 2.1.2 Inductive and deductive approach

Since the purpose of this thesis was to describe control of cash management we used theories about control and theories about cash management. This was necessary because of the lack of theories concerning control of cash management. With this as a starting point we tried to build up new theories in this thesis about problems with controlling cash management. Our collected empirical data were used in the analysis to apply it on the theories as far as feasibly. The theories about control and theories about cash management have not been tested but were instead used for understanding the problem. Our thesis had according to this line of argument mainly an inductive approach since Patel and Tebelius (1987) suggest that thesis with its main focus in empirical data and thesis that aren't testing existing theories are inductive. Though, our thesis contained some deductive approaches, the calculations that where made for testing the potential with cash management and the comparison between our earlier study and the empirical data from this study. The calculations were based on existing formulas and were tested on the studied organisation and this is according to Wiederheim-Paul and Eriksson (1999) similar to the deductive approach. Since the comparison with our earlier research were based on existing theories and compared with the studied organisation, this is also a deductive approach according Wiederheim-Paul and Eriksson (1999).

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### 2.1.3 *Qualitative approach*

The purpose with our research was to gain understanding in how sales units may, and not should, control cash management. Our opinion was because of this that a qualitative approach corresponded to the purpose with our research and we therefore chose a qualitative instead of a quantitative approach. Qualitative approach is a way to proceed with the analysis of collected information (Denscombe, 2000). Holme and Solvang (1997) holds that a qualitative approach, first and foremost, should create a deeper understanding of the problem that is studied, as the purpose of the thesis refer to, and not try if the information is of general character. In spite of the thesis qualitative approach, both a qualitative and a quantitative method were used to create the deeper understanding of the problem. The qualitative method was represented by interviews and the quantitative method by a questionnaire.

## 2.2 Research strategy

Our research was based on one case with seven research units. The problem was complex and multiple aspects had to be studied so that we would be able to draw a conclusion about the problem. Denscombe (2000) holds that the concept of a case study refers to a research where a limited number of cases are thoroughly studied from multiple aspects. This description was well suited for the purpose of our research. According to Lundahl and Skärvad (1999) case studies are frequently used within organisation research since many researchers holds the case study as the most precise method to understand the full complexity of an organisation. With this in mind we considered that a case study would help us understand the problems within and between the sales units.

## 2.3 Literature review

Our work with this thesis started with a review of suitable literature for our purpose, this included our previous study on the topic of controlling cash management. All of this gave us necessary knowledge about the chosen topics and ideas about how to continue with our thesis. This review made us realise what kind of knowledge controlling sales units and working with cash management demanded. The different databases that we used to locate the relevant literature were: Ebsco Host, EconLit, Emerald, Libris and Lucia. The keywords used when searching the databases were: cash management, institutional theory, Hofstede, culture, business culture, expectations, Perrow, Abernathy, Sunder. We also used these keywords in combination with each other and their Swedish match.

## 2.4 Data collection methods

Yin (2003) holds that data for case studies can arrive from many different sources. According to Eriksson and Wiederheim-Paul (2001), there are two different categories for data collection, primary and secondary. Primary data are collected for the first time by the researchers, while secondary data are information already collected from previous researchers (ibid). Our collected data was mainly primary data but some secondary data, from our previous research, has been used.

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We have used three different sources of evidence in our study; questionnaire, interviews and documentations. According to Saunders, Lewis and Thornhill (2003) questionnaires can be used for explanatory research. We started our research with e-mailing out a questionnaire (appendix A) to six sales units managers and seven sales units employees. We only send the questionnaire to six managers because the sales unit in France no longer had a manager. The questionnaire had the purpose of finding interesting themes in the control of the different sales units for the following interviews. After the respondents had answered the questionnaire, they faxed it back to us. The questionnaire mainly consisted of category questions that according to Saunders, Lewis and Thornhill (2003) are particularly useful if the questionnaire wants to collect data about behaviour or attributes, which were our intention with the questionnaire.

Concerning primary data Yin (2003) states that interviews is one of the most important data collection method in a case study. In the sales units that had the most and least overdue days, we followed up with interviews. Our interviews could not be carried out through personal interviews due to the distance to the respondents since they were situated in different countries around Europe. Instead we used telephone interviews since we thought this was the next best alternative to personal interviews. To make it possible for the respondents to express their thoughts beyond the asked questions we used semi-structured interviews. We didn't use an open question interview because we wanted to guide the respondents towards specific subjects, which we introduced to them. Yin (2003) claims that by an open dialog in the interviews with the respondents where they get the opportunity to express their thoughts beyond the asked questions, the respondents becomes more like an "informant" then a respondent, which we thought were suitable in our research. Information that was needed for making the calculations about the potential with cash management, we received from the company situated in the north of Sweden.

#### *2.4.1 Choosing case and respondents to study*

The organisation that we chose to use in our case study was a large international group with one company located in the north of Sweden. This company with seven sales units with six different managers was the one chosen for our empirical study. The reason for choosing this company and sales units was that we had access to information in this specific part of the international group. The sales units and managers that the research contained were situated all around Europe and more specific: England, France, Germany, Italy, Netherlands, Scandinavia and Spain.

The questionnaire was sent out to the same employees as our previous study, with the exception of the employee in sales unit England where the permanent employee had returned from maternity leave. In our previous study we interviewed these employees since they worked most with trade receivables and therefore were suitable for our study. The tasks of the employees were for example to control customers' payments of products produced by the company situated in the north of Sweden. The questionnaire was also sent out to the sales unit managers except to France where the manager recently had left his employment and no replacement were employed during the time for this thesis.

The logistic manager in the company sent an e-mail to the employees and managers where they were informed about our study and that we were going to send them a questionnaire about their work with trade receivables. They were also informed about that we were going to make short interviews with the sales units where we found interesting themes. Short after the

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logistic manager had sent the e-mail the questionnaire was sent out to each respondents e-mail address by our supervisor at the company.

The informants that we interviewed after the questionnaire was conducted were situated in Germany and Spain. We chose these sales units for our interviews due to their overdue days. With an average of 2,5 overdue days sales unit Germany had the least overdue days except from sales unit France which we chose not to interview due to their lack of manager. Spain was chosen due to their high overdue days that were at the top of all sales units with an average of 14,6 days. Both the employee and the manger were interviewed in both sales units.

#### *2.4.2 Questionnaire*

The questionnaire began with an introducing letter where we introduced ourselves and the purpose of the questionnaire. We also pointed out that no individual names of respondents were going to be displayed in the final thesis. The introducing letter explained how the respondents should proceed with answering the questions and send it back to us by fax and also how to contact us if they had any questions. The questionnaire that was sent out to each respondents e-mail address consisted of 32 questions regarding the respondents work with trade receivables. The questionnaire began with three open questions; two questions about how much the respondents work with trade receivables and one question about how long they have been working with trade receivables. Then followed 29 category questions where the respondents answer only could fit one category. The category questions each had five categories, from disagree (1) to agree (5). Each questionnaire was coded with numbers that differed between the questionnaires. This was made so that we could identify if the respondent was a manager or an employee, and from which country the questionnaire came. The manager in England did not fill in part one and three, and due to his illness we where asked not to remind him to do so.

#### *2.4.3 Interview*

After the analysis of the questionnaire where we had identified interesting themes with a factor analysis, we contacted concerned informants for a short interview (appendix B). We contacted two informants situated in Germany and two informants situated in Spain and the interviews normally lasted for ten minutes. During the telephone interviews we were both present and we had specific topics that we wanted the informants to talk about. Before beginning the interviews, we reminded the informants that their names would not be displayed in the thesis. We also asked if we could tape the interviews, and all informants agreed to this. All interviews were conducted in English. After each interview we asked if we could return to the informants if there were any uncertainties with the interview, and all informants agreed to this. A short interview was also made with the employee in sales unit Scandinavia to get clarification about some of her answers in her questionnaire.

A short interview with the planning manager of the company was conducted in April, 2004, and was a part of our bachelor thesis. The interview dealt with the purpose of the overdue report and lasted for about ten minutes. The interview was open and the manager talked freely about the overdue report and its' purpose. We were both present during the interview and instead of taping the interview, we both took notes. In December, 2004 we contacted the planning manager again to see if this interview still was of value and if there had been any changes to his answers. The planning manager said that the purpose of the overdue report hadn't changed and therefore the interview was still of current interest for our master thesis.

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## 2.5 General analytical strategy

For analysing the potential of cash management, we used Larsson's (2000) model (appendix C and D) to calculate freed capital and interest income of the different sales units. When a qualitative, non-numeric, variable is data processed, it's "values" needs, according to Dahmström (2000), to be replaced with numbers, i.e. be coded. To make it easier for our analysis of the collected data we coded the alternatives in the questionnaire. When analysing the collected data, we made a factor analysis in the computer program Statistical Package of Social Science, SPSS 13.0 with the help of our supervisor. This analysis helped us to discover interesting themes to proceed with in the interviews. The information from the interviews was used in order to clarify and to get a better understanding of the information in the questionnaire. By doing a factor analysis of the collected data, we reduced the number of questions by paring related questions together. The factor analysis helped us to discover nine logical variables, which are displayed in the figures in section 4.3. When the figures where designed we subtracted all the answers with 1 in order to make the figures design more fair to the reader, since the lowest answer in our questionnaire was 1. Where the respondents had marked the lowest alternative in the questionnaire, the figures in section 4.3 now display 0,2 to make the bar visible. The nine variables that we found were:

*Need for uncertainty avoidance:* consists of question 5, 6, 7, and 8 in part 2.

These questions dealt with how the employees and the managers prefer to have the work with trade receivables controlled. The answers on question 7 were reversed since the correlation was negative to the other questions, i.e. to be able to analyse this question, we had to recalculate the answers by subtracting the number 6 with the answer on the question (e.g. if a respondent agreed to this statement, the number in our analysis became  $6-5=1$ ).

*Written directions:* consists of question 11 and 12 in part 2.

Both questions concerned how much the employees work with trade receivables are influenced by written directions.

*Non-written directions:* consists of question 13 and 14 in part 2.

Both questions concerned how much the employees work with trade receivables are influenced by non-written directions.

*Information exchange:* consists of question 2 and 7 in part 4.

These questions dealt with how much the employees and managers exchange information with each other in the context of discussions and targets/goals.

*Participation in the context of trade receivables:* consists of question 3 and 8 in part 4.

Both questions concerned with how much the employees can participate in the decision-making process concerning trade receivables.

*Participation in the context of terms of payment:* consists of question 1 and 2 in part 2.

Both questions dealt with how much the employees can participate in the design of customers terms of payment.

*Customer slack:* consists of question 3 and 4 in part 2.

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These questions together displayed how much the customers' terms of payment can be reduced.

*Employees work with trade receivables:* consists of question 9 and 10 in part 2.

These questions displayed how much the employees can rely on knowledge and experience in their work with trade receivables.

*Complexity:* consists of question 1, 2, 3, 4, 5 and 6 in part 3.

All questions in part 3 concerned the complexity of the different sales units work with trade receivables.

The questions that are not included in these variables didn't, according to the factor analysis and our own opinion, contain any useful information for the analysis and the purpose of the study.

The connection between the different variables were then displayed in a correlation table (table 4) where the correlation between the nine variables were showed. Out of table 4 we chose to make a further analysis of the connections between variables that had a correlation stronger than  $\pm 0,4$ . We chose to include the variables with a correlation stronger than  $\pm 0,4$  in order to include the strongest correlations and also to limit the number of variables to analyse.

## **2.6 Quality standards of the research**

When a research is conducted certain method problems may occur, which can lead to that the result doesn't give a true and fair view of the problem studied. These method problems can, according to Wiederheim-Paul and Eriksson (1999) be divided into validity and reliability.

### *2.6.1 Validity*

Validity is, according to Wiederheim-Paul and Eriksson (1999) defined as a measuring instrument's ability to measure what the research has intended. In order to strengthen the validity of our research we used multiple sources of evidence, questionnaire, interview and documentation. We studied relevant theories and our earlier study and, based on these, designed a questionnaire. We handed our questionnaire to our supervisor at the university and to the contact person at the company, before e-mailing it to our respondents, to make sure that the questions were clear and made sense. The e-mail had an explanation about how the respondents were to fill out the questions and send it back to us. We gave the respondents one week to fill out the questionnaire so that they had the time to think about the questions. In order to strengthen the validity further, we enclosed our e-mail addresses so that the respondents could contact us if they had any questions regarding the questions. The questionnaire was followed by interviews, which should strengthen the validity further because they gave us explanations to the answers in the questionnaires. When conducting the interviews, we were both present and recorded all the interviews so that we wouldn't miss any useful information. The interview guide that we used should also have strengthened the validity since it prevented us from missing important questions.

A factor that may have affected the thesis validity negatively is that sales unit France during the time of the research didn't have a manager. Due to this we could not identify any

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similarities or differences between the manager's intention with cash management and the outcome of the manager's control in sales unit France. The fact the manager in England didn't respond to all parts of the questionnaire may also have affected the validity negatively since we could not identify any similarities or differences between the manager's intention and the outcome.

The interviews were made by telephone which meant that we couldn't see the informants' body language and facial expressions. All interviews were conducted in English which led to that some informants had difficulties in understanding some questions. We tried to solve this by rephrasing the questions and with this clarify what we were referring to. All informants seemed to be positive about participating in our interviews.

A factor that may have affected both the validity and reliability of the thesis negatively was the fact that we couldn't be sure that the intended respondents did fill out the questionnaire. The validity is weakened if the "wrong" respondent fills out the questionnaire since the questionnaire, according to the company, were sent out to the most suitable respondents. If someone else filled out the questionnaire, it may have given us less valid answers. If this occurred, the reliability was also affected since it may be difficult to contact the same respondents in another study. To prevent this, we e-mailed the questionnaire directly to the respondents individual e-mail addresses.

### *2.6.2 Reliability*

Reliability is according to Yin (2003) a test with the objective to be sure that the same findings and conclusions made by one investigator should arrive from another investigator that followed the same procedures and conducted the same case study all over again. In order to strengthen the reliability, we used mainly category questions in the design of the questionnaire. Using category questions instead of open questions should make the respondents give similar answers if another case study was to be conducted. By using factor analysis when analysing the questionnaire the reliability is strengthened since a factor analysis should draw the same conclusions if another investigator conducted the same case study.

We used an interview guide as support during the interviews, and the guide contained questions based on fact, which should lead to that the informants' answers would be the same in another, similar case study. The interview guide was semi-structured and was based on findings from SPSS 13.0, which should strengthen the reliability of the study since SPSS 13.0 is likely to draw the same conclusions if another investigator conducted the same case study. The guide prevented us from missing important information from the informants and made us certain that all informants talked about the same topics. However, since people's perceptions and views are individual and may change over time, it may be difficult for another researcher to achieve the same results as we did from the interviews, even if it is made on the same sample.

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### 3 FRAME OF REFERENCE

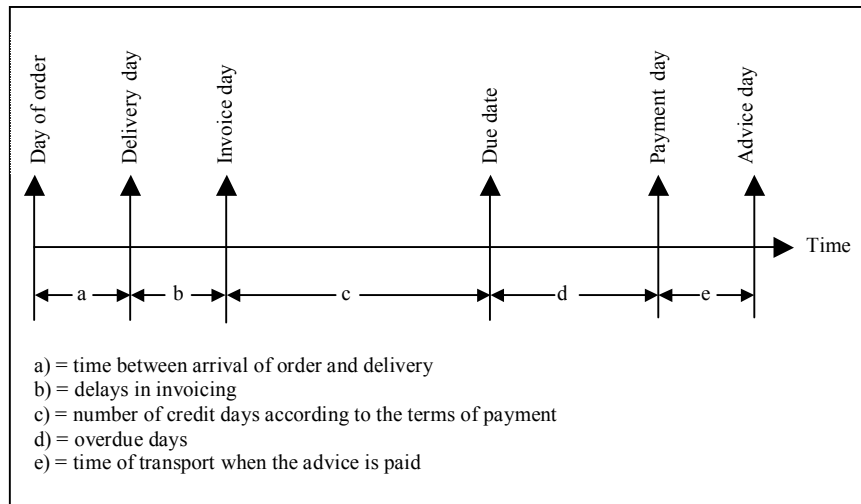
*In order to answer the research purpose stated in chapter one, the frame of reference presents a theoretical description of the problem area. The frame of reference will constitute a base when analysing the collected data connected to the relevant variable of each part of the purpose. The chapter begins with describing cash management as a tool for handling liquid capital. This is followed by institutional theory, Sunder's theory about expectations, Hofstede's research about cultures and the chapter finally ends with a concluding model of the frame of reference.*

#### 3.1 Cash management

According to Larsson (2000) cash management means handling liquid capital and includes i.e. managing cash and cash flow in an organisation. Effectively managing e.g. trade receivables and payment routines is important for all organisations to avoid unnecessary restricted capital (ibid). Since an efficient work with cash management can generate free capital it is of great importance for organisations to control their managers into working more efficient with cash management. This control of cash management can be concentrated into different parts of an organisations handle of liquid capital. Larsson holds that stock, that restricts a large part of the moving capital, isn't normally managed by financial departments. This is one explanation to the fact that stock normally isn't assigned to cash management. The goal with managing cash management is to maximise free capital in order to maximise stockholders return on invested capital without decreasing other factors, such as customer satisfaction. Trade receivables restrict a large part of the moving capital and are therefore an important part of an organisations work with cash management (ibid). Another part of an organisations work with cash management that restricts moving capital is trade creditors. For a manufacturing organisation, due to the value added in production which leads to a higher sales price then the purchase price, trade creditors shouldn't have the same importance as trade receivables.

##### 3.1.1 Trade receivables

Larsson (2000) states that it is important for an organisation to make the time from receiving an order from a customer until the payment arrives as short as possible. By dividing this process with trade receivables, an organisation can control the work with cash management towards the parts where improvements are necessary. Shortened time when managing trade receivables leads to less restricted capital, which brings interest profit and interest income. Figure 3:1 shows that organisations can decrease the restricted capital in trade receivables in many different ways. By improving in figure 3:1 showed routines, organisations can receive a more efficient management of trade receivables and thereby decrease the restricted capital.



*Figure 3:1 Restricted time of capital in trade receivables*

*Source: Adapted from Larsson (2000)*

In order for organisations to improve their routines concerning trade receivables it is of importance that organisations use sales ledger (Thomasson, Arvidsson, Lindquist, Larsson, Rohlin, 2000). Sales ledger is a part of the subsidiary ledgers and contains accounts for each of the organisations customers (ibid). Larsson (2000) means that organisations can receive information about receivables out of the sales ledger that normally is difficult to receive out of the “normal” book-keeping. In purpose of making the sales ledger easier to monitor, organisations are tending to computerise the systems (ibid).

A possibility for organisations to decrease their restricted capital and controlling cash management is according to Larsson (2000) making their managers overlook customers’ terms of payment and possibly shorten customers’ period of credit. Since terms of payment is of the essence for the restricted capital in trade receivables (Larsson) the terms gives an opportunity for organisations to effectively control cash management. Customers often deviates from the terms of payment, which leads to longer credit periods then what has been agreed upon. This behaviour from customers is one reason that organisations restricted capital is larger then necessary (ibid) and that organisations need to control cash management.

### *3.1.2 Balancing cash management and customer satisfaction*

The main purpose with cash management is according to Larsson (2000) to increase the return on moving capital by setting capital free from the payment chain and to plan an organisation’s liquidity. When doing this other factors must be considered (ibid). An important factor to consider in the context of trade receivables is, according to Nilsson and Åström (2004), customer satisfaction. Kohli and Jaworski (1990) holds that it is of importance for organisations to have one or more departments that tries to develop an understanding for customers’ current and future need and the factors that are affecting these needs. If the organisations effort to increase moving capital will lead to reduced customer satisfaction, they have to evaluate if this work is profitable or not. Nilsson and Åström holds that it is more important for an international group, with few customers that purchases large volumes, to keep customers satisfied than to make use of cash management optimally. Hence to this, it is costly for these kinds of organisations to keep their customers satisfied since the customers’

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demands long terms of payment. Due to the importance of customer satisfaction it is important for organisations to consider this when controlling cash management (ibid). Nilsson and Åström further states that the control of cash management never can be efficient if the organisations customers aren't satisfied.

### 3.1.3 Terms of payment

In a contract between purchaser and salesman Larsson (2000) states that it is suitable to carefully define the terms of payment. Terms of payment can e.g. include: granted credit period, granted discount when invoice is paid in advance and also from which date the credit period begins (ibid). Organisations are using many different terms of payment and to illustrate how these effects organisations cash management calculations will be made. Before these calculations, two common terms of payment will be explained.

*30 days net:* Invoice shall be paid within 30 days from e.g. delivery or invoice date.

*10 days ./ 2 %:* Invoice shall be paid within 10 days for the customer to receive a 2 % discount.

These terms of payment can be combined so that the customer can choose between paying within 10 days and receive a discount, or paying within 30 days and then pay the total amount, i.e. there is an alternative term of payment.

Depending on which term of payment the organisation gives to its' customers, the organisations restricted capital will vary a lot. For example, if an organisation with a turnover of €100 million reduces the customers credit period with one day, the free capital will increase with €280 000 (for calculations, appendix C). According to this, an organisation with a cost of capital of 15 % will be able to increase their return on investment with €42 000.

Giving customers discounts to reduce credit periods is according to Larsson (2000) a very expensive form of financing. If an organisation gives a term of payment of 14 days ./ 2 %, it will in comparison with 30 days net give the customer an annual interest of 45 %. Giving customers long credit periods is also an expensive form of financing since this is equal to interest-free loans to the customers.

## 3.2 Institutional theory

Scott's (1995) definition of institutions is: "*Institutions consists of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers – cultures, structures, and routines – and they operate at the multiple levels of jurisdiction*". This definition can be explained by that an institution is one form of structure that defines how individuals are allowed to act within the institution. Institutions limit, according to North (1990), the number of choices for the individual and also reduces the insecurity by providing structure to the everyday life.

Institutional theory has risen to prominence as a popular and powerful explanation for organisational action (Dacin, Goodstein & Scott, 2002). The theory consists of three pillars or levels, identified as making up or supporting institutions (Scott, 1998). The three levels of institutions are: regulative, normative and cognitive (Scott, 1995). According to Scott the

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regulative level constrains and regularises behaviour. The normative level specifies how things should be done and defines goals or objects but also designate the appropriate ways to pursue them (ibid). Scott further states that the last level, the cognitive, is defined as values in an institution that is taken for granted. Scott (1998) states that the institutional theory descends from different sciences, and in particular economics, politics and sociology. The author further means that economists points out rules as the best way to explain social stability, while sociologists and political scientists persists that norms and cognitive values as important parts for structure. Institutional theory holds that individuals need order and structure, i.e. social stability and control, in their everyday life (ibid). The author further states that organisations are open systems that are strongly influenced by their surroundings, which mean that norms and cognitive values in the society, exercise great control over organisations. Based on this, international organisations should consider that different norms and cognitive values exist in different countries. The organisations control of cash management should therefore be designed individually for each country.

How different processes in an organisation are accomplished can be derived from the institutional theory, i.e. rules, norms and cognitive values. Due to this managers should be observant that rules don't always result in that the employees are working in the direction of the rules. If a rule disagrees with norms or cognitive values, this may lead to a conflict between the organisation/managers and the employees. To avoid this problem it should be important that managers are aware of existing norms and cognitive values in the organisation. If the managers are aware of these, it is possible that new rules are designed so that they aren't contradictory with existing norms and cognitive values.

Based on the above, rules that have been implemented in the organisation may transform into a norm for the employees. If the employees always know how to act in different situations, i.e. they take the rule for granted, the rule has transformed into a norm. If the employees no longer know why they act in a certain way in a specific situation, the norm has transformed into a cognitive value.

### *3.2.1 Technologies*

According to Macintosh (1994) there is a strong relationship between the technology of a work unit and the characteristics of management accounting and control systems that managers require to perform effectively. Mismatches between the characteristics and work unit technology account for a large percentage of control difficulties (ibid). To make it easier for organisations to match their control system with the technology of the unit, the sociologist Charles Perrow has developed a model where different business activities have been divided in to four different technologies (Macintosh, 1985). Due to this, organisations with sales units should match their control of cash management with the technology of the different sales unit in order to achieve the most effective control of cash management.

The four technologies are, as Macintosh (1985) states, based on the combination of the two dimensions, task variety and task knowledge. Task variety is the frequency of unexpected events that occur in business activities and task knowledge is defined as how analysable a business activity is (Machintosh, 1994). The four different technologies are as figure 3:2 displays: routine technology, craft technology, professional technology and research technology. For each of the four technologies there is a control style that seems appropriate to

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the specific technology (Macintosh). The four different control styles are as figure 3:2 displays: close control, results control, comprehensive control and prospects control.

TASK VARIETY	TASK KNOWLEDGE	
	<i>Analysable</i>	<i>Unanalysable</i>
<i>Low</i>	<i>Routine technology</i> Close control	<i>Craft technology</i> Results control
<i>High</i>	<i>Professional technology</i> Comprehensive control	<i>Research technology</i> Prospects control

*Figure 3:2 Technology and control style, (adapted from Macintosh, 1994)*

#### *Close control for routine technologies*

Routine technologies are characterised by little task variety and high analysable tasks, i.e. the task is monotonous and the knowledge of how to solve the task is high (Macintosh, 1985). The work is typically done by routine and requires a close control system style (Macintosh, 1994). Working with cash management should tend to be a routine technology but can be influenced by other technologies. The close control system style includes frequent reporting, upper management influence over target setting and rewards coupled to measurement (ibid). For control and management accounting reports, budget, statistical summaries and standard cost report are issued frequently (ibid). According to the above, sales unit with routine technology should control their cash management with close control, i.e. reports and statistical summaries, to achieve the most effective control of cash management.

#### *Results control for craft technologies*

Craft technologies involve a predicable stream of activities, and the tasks have a low analysability (Macintosh, 1994). There is no store of procedures and techniques to apply to problems that arise (ibid). Craft technologies can, according to Macintosh (1985), be considered the most difficult technology to match with an appropriate control system because efficiency is difficult to measure. However, the desired result can be determined in advance and the appropriate controls are basic effectiveness tests i.e. the focus is on results (ibid). Management accounting and control reports in craft technologies tend, according to Macintosh (1994) to be general rather than detailed and they are issued less frequently then in the case with routine technologies. Due to this, sales units with craft technology achieve the most effective control of cash management by using results control. When doing this the sales units should focus on measuring results where reports are issued less frequently and are of more general character.

#### *Comprehensive controls for professional technologies*

Professional technologies tend to be complex since there is a high variety in the tasks performed, but the various problems can usually be handled by referring to a store of established knowledge and techniques (Macintosh, 1985). According to Macintosh (1994) the style of control for professional technologies is almost the opposite of the control for craft technologies. Due to the wide variety of tasks the control for professional technologies are

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complicated and attempts have therefore been made to develop comprehensive and elaborate controls (ibid). The author further states that the control reports in professional technologies are highly detailed and one example of the comprehensive control is statistical reports, which are issued more frequently. When a sales unit with professional technology is controlling its' cash management they ought to, according to the above, consider that the control should be comprehensive and use highly detailed statistical reports frequently in order to achieve the most effective control of cash management.

#### *Prospects-oriented controls for research technologies*

Research technologies have a high task variety and low analysability, i.e. the correct solution to a problem is not usually identifiable through an established store of analysable knowledge and procedures (Macintosh, 1994). The control is less detailed and reporting is less frequent and is used more for planning and coordination than for measuring performance and allocating rewards (ibid). Macintosh holds that employees in the organisation have a lot of influence in setting the targets in control reports, but the targets tend to be set at an ambitious level. This causes the overall satisfaction with prospects-oriented controls to be lower than for other technologies (ibid). To attain the most effective control of cash management, a sales unit with research technology should focus more on planning and coordination of the different parts of cash management instead of measuring performance.

### **3.3 Sunder's theory about expectations**

Expectations are defined by Sunder (2002) as *thinking about and anticipate the future* and he further states that our expectations are tinged with hope, leaning towards the future we prefer.

Human expectation formation is complex and not well understood (Sunder, 2002). Sunder further holds that social psychological constructs do not necessarily correspond to frequency statistics gathered in the field. Organisational contracts themselves are defined as expectations (ibid). A customer who buys a product has expectations about e.g. its performance, durability and terms of payment. An individual who accepts a job has expectations about e.g. work, compensation and advancement that extend beyond the explicit promises made by the recruiters. According to Baxter (2004) there are a number of common pitfalls that can lead to a gap between expectations and what is finally delivered, a gap that can be disastrous to those involved. The author further states that to avoid this gap, decision makers have to be clear about their objectives.

According to Sunder (2002) employees manage what other expects from them. They must create appropriate expectations, and meet them. If the expectations are too great, a contract will be breached, and others will turn away in disappointment (ibid). This line of argument can according to Sunder also be applied on organisations. If stakeholders expect more than the organisation delivers, their disappointment may encourage them to leave the organisation (ibid). If stakeholders get more than what they expect, resource constraints will make other stakeholders disappointed with what remains for them to claim (ibid). In either case, Sunder holds that failure to deliver on expectations, and managing expectations at realistic levels, threatens the ability of the organisation to continue.

Based on the above, it is critical for sales units to meet the expectations of their stakeholders. If e.g. the employees have expectations about how to accomplish their work assignments, the

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managers need to meet the expectations when controlling the employees work with trade receivables. It is also critical for sales units to meet the expectations of their customers. If e.g. the customers' credit times are longer than they expect, stockholders will be disappointed since this leads to lower profits and the customers' expectations on credit times will increase until their next purchase. If the customers' credit times are shorter than what they expect, disappointment may encourage them to find a new supplier.

### **3.4 Hofstede's research about cultures**

According to Kluckhohn (in Hofstede, 2001) culture can be defined as: *"culture consists in patterned ways of thinking, feeling and reacting, [...] the essential core of culture consists of traditional ideas and especially their attached values"*.

Hofstede (1991) states that it is of great importance for organisations that operates internationally to have good knowledge about cultural differences between countries. For international organisations it should be important that its' control is adjusted to the different cultures in the countries where it operates. This can also be applied on cash management in organisations that operate internationally since cultures may affect customers' collection pattern in different ways. In the late 1970 Hofstede carried out a research project about how national cultures affected a cooperation, which was operating in more than 40 countries (Hofstede, 2001). When analysing his study, Hofstede (1991) found systematic differences between national and sub national cultures. Hofstede discovered four dimensions of differences between the studied nations (ibid). The four dimensions were power distance, uncertainty avoidance, individualism and masculinity (Hofstede, 2001). Mulder (1977) defines power distance as *"the degree of inequality in power between a less powerful Individual (I) and a more powerful Other (O), in which I and O belong to the same social system"* i.e. in what extension individuals are willing to accept an unequal allocation of power. Uncertainty avoidance deals e.g. with how societies have learned to handle uncertainty (Hofstede, 2001). Individualism is according to Hofstede (2001) in what extension individuals in a culture can be expected to act, independently of other members in the culture. Finally, Hofstede (1991) holds that masculinity deals with dividing society's gender roles.

This thesis will focus on the dimensions of uncertainty avoidance and power distance because of their connection to the institutional theory, i.e. rules norms and cognitive values. The stronger a culture's tendency to avoid uncertainty, the greater its need for rules (Hofstede, 2001) and cultures with weaker tendency to avoid uncertainty should be more depending on norms and cognitive values. According to this line of argument, a sales unit should when controlling cash management consider if the employees have a strong or weak tendency to avoid uncertainty and adapt the control of cash management in a suitable way. If the tendency to avoid uncertainty is strong, employees should have clear rules and manuals about how to work with cash management. If the opposite occurs, weak tendency to avoid uncertainty, employees should be controlled by fewer rules and instead their manager should let them use their experience and knowledge when working with cash management.

Power distance is connected to institutional theory and control of cash management because of the fact that high power distance leads to that rules will be frequently used by managers in sales units. Due to high power distance, managers are using a formal control i.e. rules and manuals to control the employees work with cash management. If power distance is low it is likely that the control of the employees work with cash management is more informal and

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managers will focus more on controlling its' employees through other aspects than rules e.g. conversations and the employees' experience and knowledge i.e. norms and cognitive values.

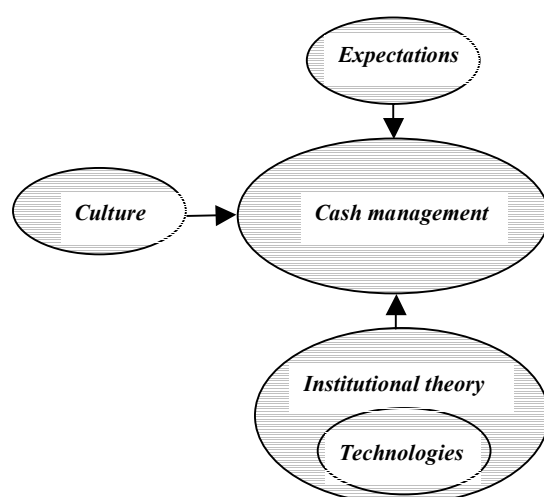
The different nations power distance and their tendency to avoid uncertainty can be divided in to three levels; low, medium and high as table 1 display.

*Table 1 Uncertainty avoidance and power distance in the countries where the sales units are situated in, (adapted from Hofstede, 1991)*

	<i>England</i>	<i>France</i>	<i>Germany</i>	<i>Italy</i>	<i>Netherlands</i>	<i>Scandinavia</i>	<i>Spain</i>
<b><i>Uncertainty avoidance</i></b>	<i>Low</i>	<i>High</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>	<i>Low</i>	<i>High</i>
<b><i>Power distance</i></b>	<i>Low</i>	<i>High</i>	<i>Low</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>	<i>Medium</i>

### 3.5 Concluding model of the frame of reference

The concluding model of the frame of reference (figure 3:3) describes how the different theories are linked together in the thesis.



*Figure 3:3 Concluding model of the frame of reference*

When the thesis deals with cash management and how it is controlled in large manufacturing organisations operating in different countries in an international group, the starting point of the model are theories about cash management. The other theories in the model, institutional theory, technologies, Hofstede's theory about culture and Sanders theory about expectations displays what organisations needs to consider when controlling cash management. Institutional theory shows which pillar that dominates the organisation and how this affects the control of cash management. The theory about technologies displays how different technologies demands different control of cash management. This theory has a strong connection to institutional theory which is mentioned in section 3.2.1. Hofstede's theory about culture shows that different cultures influence how organisations should control their cash management. Finally, Sanders theory about expectations shows that the control of cash

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management in organisations should be adjusted to the different stakeholders' expectations on the organisations cash management.

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## 4 RESULTS AND ANALYSIS

*This chapter will begin with a presentation of the studied company and the potential with cash management. After that, the results of the collected data will be presented and then analysed. The data collection was conducted through a questionnaire and four interviews. The data from the questionnaire has been sorted with the help of a statistical computer program. After the presentation of the data collected from the questionnaire and interviews, an analyse is made with the help of the frame of reference.*

### 4.1 The company

The studied company, situated in the north of Sweden, is a part of an international group which is one of Europe's largest organisations in its branch. Most of the company's production is exported to other countries. The sales of the company's products are distributed through sales units situated around Europe. The sales units consist of a manager and one or several employees. Their work assignments consist of, except sales, trade receivables that have arisen from the sales of the company's products. The company uses an internal debit system so there are no overdue payments within the different sales units in the international group.

Four of the studied sales units are applying a system for credit control which facilitates the work with trade receivables. Before the system for credit control was taken in use, lists were sent from the company situated in the north of Sweden to the sales units where overdue payments were listed. These lists are still sent to the sales units that aren't using the credit control system. The three units that aren't using the system are likely to implement it in the future. As a part of the work with trade receivables, an overdue report is sent out every month to the sales units from the company situated in the north of Sweden. The report contains information about how different customers are paying their invoices. The overdue report is sent to all sales units which mean that all units can follow each others results.

#### 4.1.1 Overdue-report

An overdue report or as it is called in the studied organisation, *executive credit days*, is sent each month from the planning manager to all sales units and the market management of the group. This report has been sent out the last four years and the informant says that "*it is going in the right direction*". With this statement the planning manager means that there is a gradual improvement in the number of overdue days.

The overdue report contains information about customers collection pattern and the overdue-situation are changing from month to month, see table 2. Except the overdue days of the sales units, the report also displays comments and analyses of the units' payment situation. The reports purpose is according to the informant to work as "*an alarm clock*" and is not supposed to be as a substitute for the daily work with overdue payments but as a complement to this.

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Table 2 Average overdue days at the sales units

	<i>England</i>	<i>France</i>	<i>Germany</i>	<i>Italy</i>	<i>Netherlands</i>	<i>Scandinavia</i>	<i>Spain</i>
<i>Average overdue-days/12 months</i>	12,3	(-1,5) <sup>a</sup>	2,5	5,8	5,9	3,9	14,6
<i>Overdue-days October</i>	16,1	5,6	1,8	1,9	(-12,3)	3,9	19,4
<i>Average terms of payment (ATP)</i>	60	60	14 ./. 2%	90	60	30	90

<sup>a</sup>Sales unit France's customer pays in average 1,5 days in advance before invoice is due.

## 4.2 Potential with cash management

The potential with cash management can be displayed by first calculating how much capital that can be freed if the units can decrease their overdue days with one respectively all their overdue days and then calculating how much this would generate in interest incomes. Table 3 shows which interest incomes the sales units could generate. First, the interest income that the sales units could generate if they could reduce their terms of payment with one day is displayed. The second row shows the interest income if the sales unit can eliminate all their overdue days. Sales unit France doesn't have any average overdue days and this makes it impossible to calculate the annual interest income if the unit eliminates all overdue days. The third row displays the annual interest income in percentage of the sales units' net sales. The last row of the table shows the interest income if the sales units can reduce their average terms of payment (ATP) to the norm of terms of payment (NTP) which is set to 30 days and is custom in Scandinavia. The average terms of payment in sales unit Scandinavia doesn't exceed 30 days and is therefore not included in the last calculation. For calculations see appendix D.

Table 3 Potential interest incomes of the sales units

	<i>England</i>	<i>France</i>	<i>Germany</i>	<i>Italy</i>	<i>Netherlands</i>	<i>Scandinavia</i>	<i>Spain</i>
<i>Annual interest income (EUR) / per day</i>	17 970,64	8 151,89	32 097,88	7 891,77	18 160,59	27 183,19	16 515,76
<i>Annual interest income (EUR) / overdue.days</i>	220 300,84	-	80 244,70	45 772,26	107 147,51	106 014,44	241 130,15
<i>Interest income in % of net sales</i>	0,51	-	0,10	0,24	0,25	0,16	0,61
<i>Annual interest income(EUR) if ATP is NTP</i>	537 319,12	244 556,5	154 069,82	473 506,1	544 817,88	-	990 945,81

The discount that sales unit Germany gives to their customer can be considered to correspond to 48 days of interest income with a cost of capital of 15% (for calculations see appendix C). The annual interest income in sales unit Germany, if ATP is NTP, is the difference between what sales unit Germany gains if they remove the discount and what they loose if they extend the term of payment from 14 to 30 days (for calculations see appendix D).

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### 4.3 Variables

Out of the 32 questions in the questionnaire we have found nine variables that, according to us, is interesting in our ambition to answer to the purpose of the study. In the following sections we will describe these variables and explain how they affect the work with cash management in the studied organisation with the help of the conducted interviews and the theories described in the frame of reference.

#### 4.3.1 Need for uncertainty avoidance

The variable need for uncertainty avoidance, see figure 4:1, describes whether or not the respondents prefer to have clear directions in the work with trade receivables. The employees answer shows if they want clear directions or not from the manager, and the managers answer shows if they prefer to give clear directions or not to their employees.

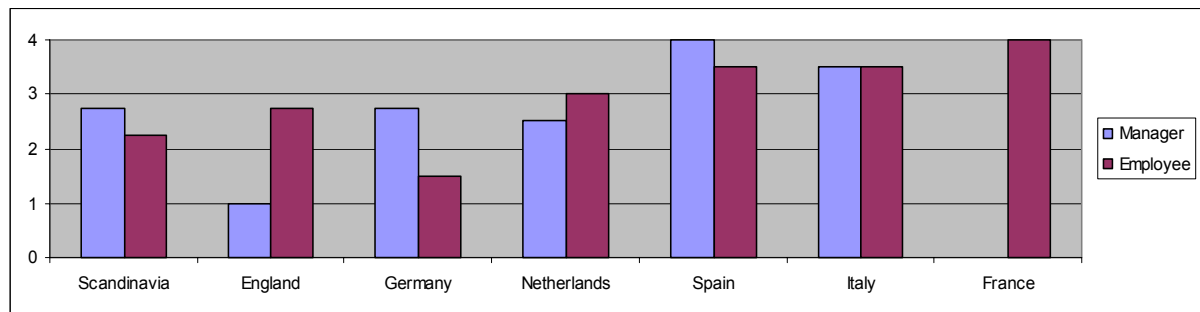


Figure 4:1 Need for uncertainty avoidance

Figure 4:1 shows that the different sales units need for uncertainty avoidance matches Hofstede's theory (2001) about uncertainty avoidance quite well, see table 1. The level of need for uncertainty avoidance is strongly connected to cultural differences. The sales units situated in the south of Europe i.e. Italy, Spain and France have the highest level of need for uncertainty avoidance which corresponds well with Hofstede's theory. This strong need for uncertainty avoidance leads to that the managers in the south European sales units should give their employees clear rules and manuals about how to work with cash management. The sales units situated in the north of Europe i.e. England, Germany, Netherlands and Scandinavia have a lower level of need for uncertainty avoidance which also corresponds well with Hofstede's theory. With this weaker tendency to avoid uncertainty the sales units in north of Europe and their managers should control their employees with fewer rules, but as the employee in sales unit Germany said *"I think that there should be some written rules, just to have something generally to hold on to"*. Though, the managers in the sales units situated in the north of Europe should allow their employees to use their experience and knowledge when working with cash management.

Figure 4:1 also displays what expectations the employees have on their managers' control concerning the employees work with cash management. This is, in line with Sanders theory about expectations, important for the managers to consider when they control their employees work with cash management. The managers' control must meet the employees' expectations on the control of the work with cash management in order to achieve the most effective cash management.

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#### 4.3.2 Written directions

Figure 4:2 displays how much the managers perceive that their employees work with trade receivables are controlled by written direction and how much the employees consider their work with trade receivables to be controlled by written directions.

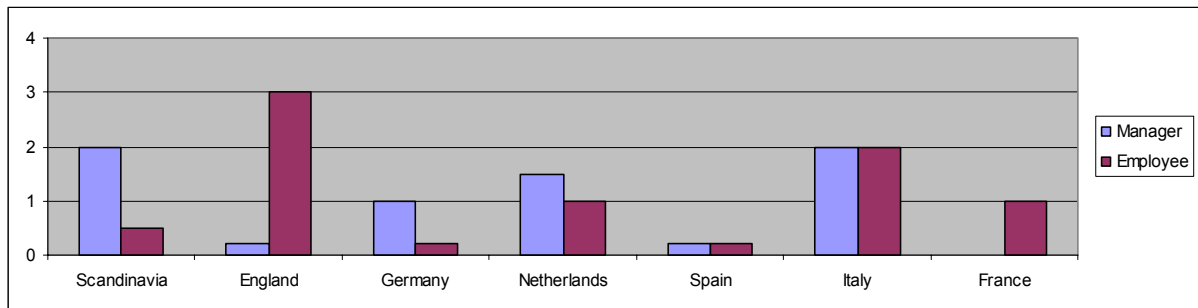


Figure 4:2 Written directions

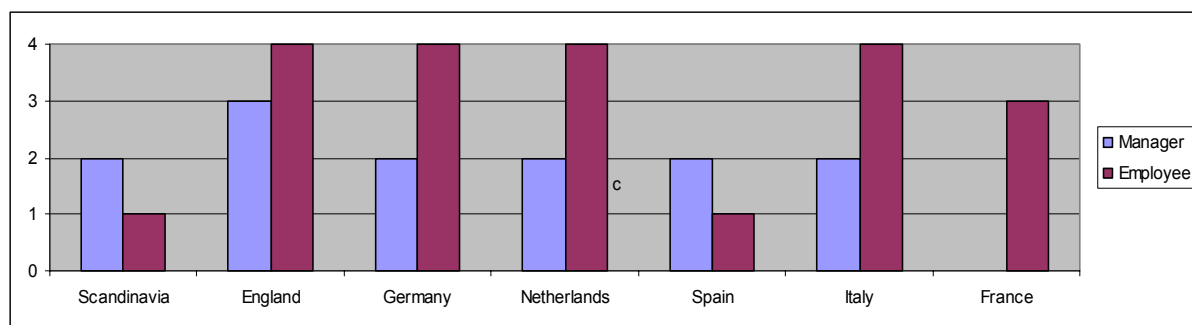
The different sales units generally don't, according to figure 4:2, seem to have many written directions in the work with trade receivables. The managers and their employees appear to have the same opinion about the amount of written directions in the work with trade receivables, with the exception of England. Due to the manager's illness, the employee in England may have taken on work tasks that she normally is not responsible of and to manage this, more written directions might have been needed.

Based on figure 4:2 it seems as the sales units have got few written directions in their work with trade receivables. The quotation from the employee in sales unit Germany "*there should be some written things as well, but I haven't seen anything like that*" confirms the lack of written directions in sales unit Germany. As figure 4:1 and Hofstede's theory (2001) about uncertainty avoidance shows, the south European sales units should have more written directions, i.e. rules and manuals, to achieve a more effective control of cash management. The amount of written directions that the north European sales units have is more in line with what they desire and what Hofstede's theory prescribes.

#### 4.3.3 Non-written directions

This third variable that is displayed in figure 4:3 is named non-written directions. This variable displays how much the managers perceive that their employees work with trade receivables is controlled by non-written directions, and how much the employees consider their work with trade receivables to be controlled by non-written directions. With controlled by non-written directions we mean that the employees are controlled by norms, i.e. they don't need written rules or manuals in their work with trade receivables.

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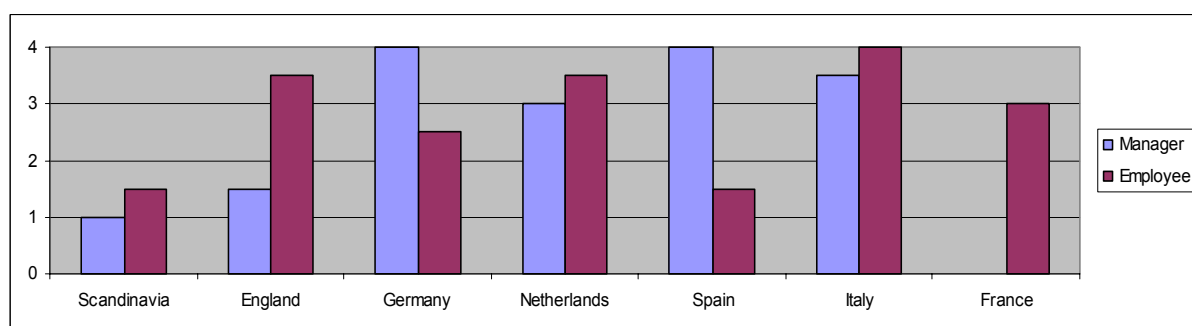
*Figure 4:3 Non-written directions*

This variable, displayed in figure 4:3, shows that the employees in the different sales units generally consider their work with trade receivables to be heavily influenced by non-written directions. Even though the managers don't consider their employees work with trade receivables to be influenced by non-written directions in the same extent as their employees, the managers still perceive that their employees work is controlled by non-written directions to some extent.

The result from this variable points to the fact that some sales units that now are controlled by non-written directions should implement more written rules in the control of cash management in order to get a more effective way of controlling cash management. This according to figure 4:1 that displays what kind of control the employees and the manager prefer, and also Hofstede's theory about uncertainty avoidance. Based on the above, the south European sales units have a strong desire to be controlled by clear directions and should therefore consider having more written directions in their work with cash management.

#### *4.3.4 Information exchange*

Figure 4:4 displays the level of information exchange between manager and employee concerning trade receivables in the different sales units. The variable shows how much information exchange the manager perceives that he has with the employees in the context of discussions, targets and goals and also how the employees perceive the information exchange with their manager in the same context.



*Figure 4:4 Information exchange*

The result of figure 4:4 shows that most of the sales units have a high level of information exchange between manager and employee. The level of information exchange can be connected to Hofstede's (2001) theory about power distance. A high level of information exchange can be related to low power distance since a high information exchange should

result in an informal control between the manager and employee. The north European sales units generally have a high level of information exchange, except sales unit Scandinavia which may be explained with that the manager and employee aren't situated in the same country. Due to their locations it may be difficult for them to have a high information exchange. The north European sales units have, due to their high level of information exchange, a low power distance in line with Hofstede's study. The informal control that these sales units have leads to that the control of cash management mainly should consist of non-written rules and the employees experience and knowledge. This is how the control mainly is practised today.

The south European sales units also have a high level of information exchange which leads to a low power distance. This is not in line with Hofstede's (2001) study where the countries that the sales units are situated in should have medium and high power distance. This indicates that the control in the south European sales units might be too informal since they according to figure 4:1 prefer a more formal control. This is further strengthened by the manager in sales unit Spain that says *"we are a very small office"* and *"it is full communication in this office"* and that they have a familiar atmosphere in their sales unit.

#### 4.3.5 Participation

The following variables that are displayed in figure 4:5 and figure 4:6 shows how much the employees can participate in their sales units in the context of trade receivables and terms of payment. The figure also displays how much the managers let their employees participate in the context of trade receivables and terms of payment.

The sales units have different levels of participation as shown in figure 4:5 and 4:6. The level of participation can be connected to Hofstede's (2001) theory about power distance (see table 1). A high level of participation can be related to low power distance since high participation should result in an informal control which is in line with the theory about power distance.

##### *Participation in the context of trade receivables*

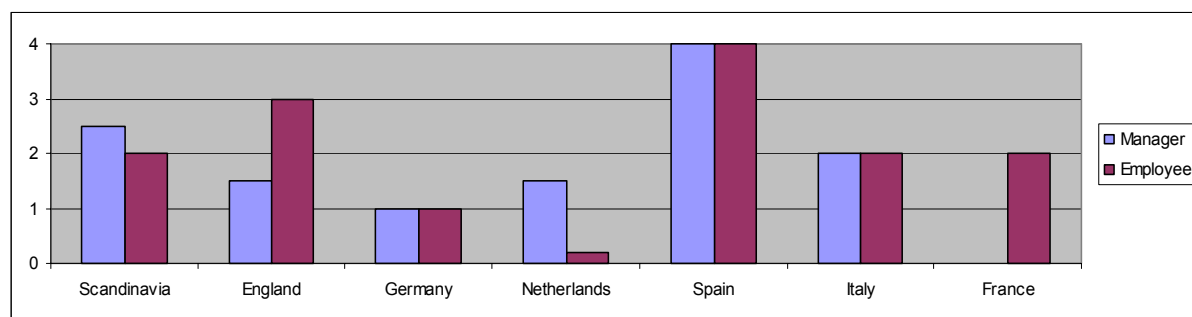
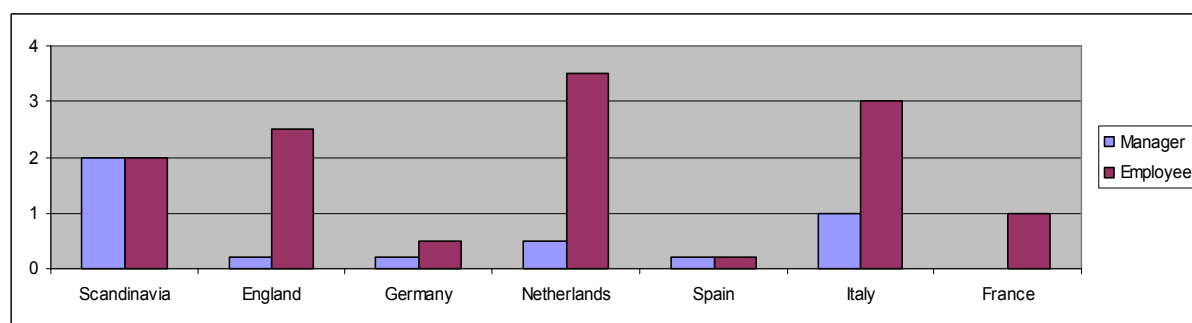


Figure 4:5 Participation in the context of trade receivables

The level of sales unit Italy's power distance in the context of trade receivables is the only level that is in line with the theory. All other sales units' levels of power distance differ from respective countries power distance. We find it very interesting that most of the sales units' power distance differ from the national culture i.e. what level of power distance each country have according to Hofstede (2001). The low level of power distance in sales unit Spain can be explained with the fact that they work in a very small sales unit with only three people and

that they according to the manager have a familiar atmosphere. This leads to an informal control and therefore low level of power distance. Opposite the theory, sales unit Germany shows a high level of power distance. This may be explained with that the manager by himself determines how the employees should work with the different customers but within these frames the employees can work independently, *“the work with trade receivables is quite independent from my manager”*. The formal control that sales unit Germany has lead to a high power distance. Differences in level of power distance, between figure 4:5 and the theory, in the rest of the sales units may have logical explanations. It is though hard for us to find explanations to these differences since we didn’t interview these sales units.

#### *Participation in the context of terms of payment*



*Figure 4:6 Participation in the context of terms of payment*

Figure 4:6 also displays different levels of participation in the sales units but this time in the context of terms of payment. All sales units differ from Hofstede’s theory (table 1) about power distance. The sales units generally seem to have a higher level of power distance in the context of terms of payment compared with power distance in the context of trade receivables. This phenomenon might be explained with the fact that the managers want to be in control over customers’ terms of payment so that they don’t become longer than they need to be in order to reduce overdue days and increase sales. The high level of power distance in sales unit Spain may further be explained by the national terms of payment, which according to the employee in sales unit Spain *“Normally is 90 or 120 days in Spain”*, and is difficult, according to the manager, to influence for the sales unit, *“It’s the Spanish way”*. The high level of power distance in sales unit Germany can be explained in the same way as regarding trade receivables. The manager determines how the employees should work with their customers and terms of payments are including in these directions.

#### *4.3.6 Customer slack*

The variable, displayed in figure 4:7, shows in what extent it should be possible for the sales units to reduce their customers’ terms of payment. If the sales units consider their customers to have a high level of satisfaction and the units believes that it is possible to reduce their customers’ terms of payment, there is a slack between present terms of payment and future, reduced, terms of payment.

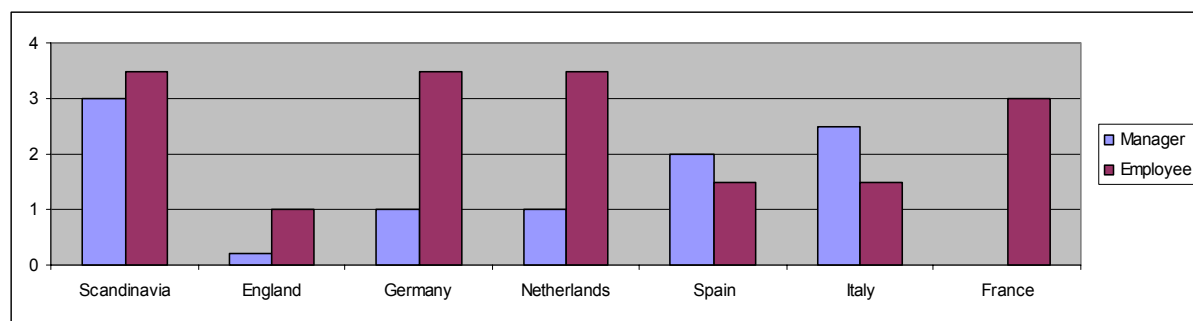


Figure 4:7 Customer slack

Based on figure 4:7 it seems that most sales units have a significant level of slack, which should mean that they should be able to reduce their customers' terms of payment. The only sales unit where both employee and manager think that there is no significant slack is sales unit England. In all other sales units, at least one respondent thinks that slack exists. This result points out that it might be a slack between the customers' expectations about terms of payment and what they are given by the sales units, which the quotation "we can improve a little bit in some cases" from the manager in sales unit Spain confirms. It should therefore be of great interest for these sales units to look over their customers' terms of payment to see if it possible to reduce them. This is in line with Sunder's (2002) theory, and therefore something for the company to consider since they, for the moment, aren't meeting the customers expectations about terms of payment.

If the sales units want to reduce customers' terms of payment, they should be, in line with Kohli's and Jaworski's (1990) conclusion, aware of the customers' current and future need. If customers' needs are known it will be easier for the sales units to make an accurate calculation about how much shorter the customers' terms of payment can be, without significantly decreasing the customer satisfaction.

#### 4.3.7 Employees work with trade receivables

Figure 4:7 displays to what extent the employees work with trade receivables is done by the employees experience and knowledge. The employees have answered questions concerning the level of how much they need to think about how to perform their work and the managers have answered questions about how their employees work is performed

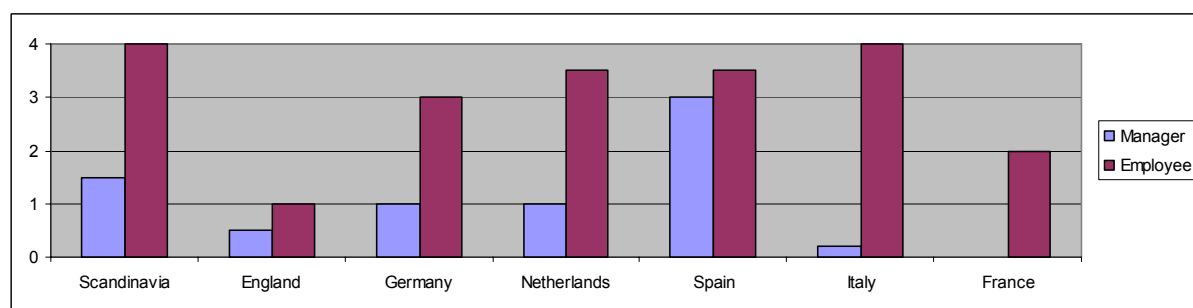


Figure 4:8 Employees work with trade receivables

As shown in figure 4:8 there is generally a significant difference between the employees and managers answers. It seems that the managers think that the work tasks of the employees are more complex compared with how the employees finds them, with the exception of sales unit

England. This may be explained by that the employees are learning how to perform their tasks quicker than what the managers expect, as the employee in sales unit Germany said “*we have learned how to deal with this*”. This on the other hand may origin from that the employees work tasks are less complex than what the managers believe. The result from figure 4:8 indicates that the managers can give their employees more complex work tasks, which would give the employees more responsibility. With the increased responsibility, the level of formal control should be high until the employees have learned how to perform the new assignments. If the managers choose not to give their employees more responsibility, the level of formal control should be low, since the employees clearly doesn’t have any difficulties in dealing with their present work tasks.

#### 4.3.8 Complexity

Figure 4:9 displays to what extent the managers and employees perceive their sales units work with trade receivables to be complex or not, i.e. if they consider their sales units work with trade receivables to be a routine work with well analysable tasks.

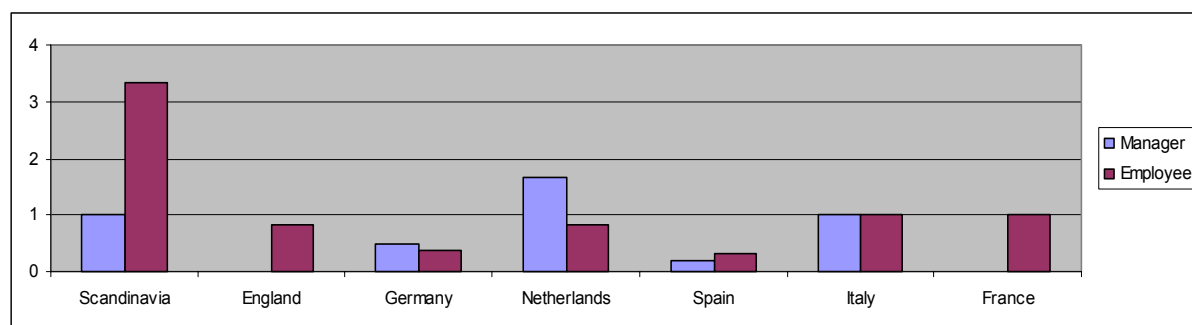


Figure 4:9 Complexity

The complexity in the different sales units, displayed in figure 4:9, shows that the sales units generally perceives their work with trade receivables to be a low-complexity task, with the exception of the employee in sales unit Scandinavia. The manager in England didn’t answer to the six questions that this variable consists of, which is the reason to why he doesn’t have a bar.

Since all sales units, except the employee in Scandinavia, have low complexity, they all consider there work in their sales units to be routine. The variable includes questions that cover the factors, task variety and task knowledge in Perrow’s theory about technologies and the respondents tended to answer “low” in both factors. This means that the respondents didn’t separate the two different factors. The different technologies that can be found are therefore reduced from four to two, routine or research technology. The fact that all respondents, except one, thought their work in the sales unit to be out of routine corresponds well with our expectations. The work with trade receivables should be quite similar from day to day and there probably aren’t many problems that the employees or the managers don’t know how to handle. This all together point to the fact that the work with trade receivables should be routine which also figure 4:9 shows.

The employee in Scandinavia sees her work with trade receivables as a complex task, and therefore it becomes more a research technology. Since this answer had a significant deviance we contacted the respondent to get a clarification. The respondent told us that the complexity

in her work task is high when a problem occurs, but in her everyday work the complexity normally is low.

Due to the routine technology that the sales units have they need, according to Macintosh (1994), a close control system. The control system requires frequently issued reports and statistical summaries in order to achieve the most effective control of cash management. This close control system is already in use within the organisation with the help of the credit control system, overdue report and the overdue lists that are sent out the sales unit that doesn't use the credit control system.

#### 4.4 Correlations between variables

To better understand the sales units' different ways in controlling cash management it is important to see all parts of the sales units work in their entirety and how they influence each other. For us to be able to do this we have made a correlation analysis (see table 4) where the connection between the different variables is displayed. We found six connections between the different variables that were particularly strong and they are going to be explained below.

*Table 4 Correlation table*

	1	2	3	4	5	6	7	8	9
<b>written directions (1)</b>	1,000	0,135	-0,097	-0,374	0,151	0,240	0,309	-0,022	<b>0,589</b>
<b>non-written directions (2)</b>	0,135	1,000	-0,037	0,113	<b>-0,405</b>	-0,060	<b>0,579</b>	-0,324	0,348
<b>customer slack (3)</b>	-0,097	-0,037	1,000	<b>0,474</b>	0,244	0,181	-0,134	-0,220	0,390
<b>emp. work with trade receivables (4)</b>	-0,374	0,113	<b>0,474</b>	1,000	0,128	0,210	-0,047	0,100	0,350
<b>complexity (5)</b>	0,151	<b>-0,405</b>	0,244	0,128	1,000	-0,283	-0,372	-0,189	0,342
<b>uncertainty avoidance (6)</b>	0,240	-0,060	0,181	0,210	-0,283	1,000	<b>0,477</b>	<b>0,462</b>	0,138
<b>information exchange (7)</b>	0,309	<b>0,579</b>	-0,134	-0,047	-0,372	<b>0,477</b>	1,000	-0,144	0,144
<b>participation in the context of trade rec. (8)</b>	-0,022	-0,324	-0,220	0,100	-0,189	<b>0,462</b>	-0,144	1,000	-0,287
<b>participation in the context of terms of p. (9)</b>	<b>0,589</b>	0,348	0,390	0,350	0,342	0,138	0,144	-0,287	1,000

##### 4.4.1 Information exchange – non-written directions

As table 4 shows the variables non-written direction and information exchange has a strong positive correlation between each other. This means that if the employees have a high level of non-written directions in their work with trade receivables, their information exchange with the manager is extensive. If this correlation is applied on Hofstede's theory (table 1) about uncertainty avoidance it suggest that if the employee's work with trade receivables is controlled by non-written directions, the employee will seek other sources of direction e.g. through conversations with the manager.

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#### *4.4.2 Information exchange - need for uncertainty avoidance*

The same line of argument as above is adaptable on the positive correlation between the variables information exchange and need for uncertainty avoidance. When the level of need for uncertainty avoidance is high the employees want to have clear directions about how to work with trade receivables. This reasoning is in line with Hofstede's theory about uncertainty avoidance. To gather clear directions and to reduce the need for uncertainty avoidance, a high level of information exchange with the manager is necessary.

#### *4.4.3 Employees' work with trade receivables - customer slack*

The positive correlation between the variables employees' work with trade receivables and customer slack is strong according to table 4. If the employees' work with trade receivables is less complex and they can base their work on experience and knowledge, the level of customer slack tends to be high. In this situation when the employees find the work assignments less complex, new work assignments may be introduced to the employees with the purpose to reduce the customer slack, i.e. reduce customers terms of payments. When introducing more complex work assignments, a more formal control with e.g. written directions and rules probably is needed.

#### *4.4.4 Complexity – non-written directions*

The variables complexity and non-written directions has a strong negative correlation between each other as seen in table 4. This suggests that when the complexity in a sales unit is low the level of non-written directions is high. When performing a work assignment with low complexity the need for written directions becomes low since the employees doesn't need to think about how to perform their work assignments. This shows that a rule with time has become more like a norm or even a cognitive value for the employee, all in agreement with institutional theory. Instead the number of non-written directions will increase since the written directions become unnecessary.

#### *4.4.5 Participation in the context of trade receivables – uncertainty avoidance*

The variables participation in the context of trade receivables and uncertainty avoidance has, according to table 4, a strong positive correlation with each other. This suggest that when the employees can take part in the decision-making process, their need for uncertainty avoidance is high, i.e. they want clear directions in their work with trade receivables. We find this illogical since an employee with the ability to take part in the decision-making process should be enough experienced and have a high level of knowledge to be able to perform the work with trade receivables without the need of clear directions. This connection might be seen as logic if the employee in her higher level of participation wants clear direction since the new work assignments may create insecurity for the employee.

#### *4.4.6 Written directions - participation in the context of terms of payment*

As table 4 shows the variables written directions and participation in the context of terms of payment has a strong positive correlation between each other. This means that if the

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employees work with trade receivables is heavily influenced by written directions, the employee can participate in the design of customers' terms of payment. We find this illogical since an employee with the ability to design customers' terms of payment shouldn't need a lot of written directions in their work with trade receivables. This connection can be seen as logical if it is interpreted as if the manager let the employee be involved in the design of the terms of payment, then he probably wants to give his employee clear directions to control the employee's work.

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## 5 CONCLUSIONS

*This chapter will present conclusions that have been drawn from the analysis. The conclusions will treat all parts of the purpose that the thesis was meant to answer.*

From the analysis we can draw the conclusion that the company situated in the north of Sweden has great potential in decreasing their restricted capital. Our calculations show that the sales units can free a great amount of capital for the company only by marginally decreasing their present overdue payments. The potential of improving the control of cash management should further be large since there are deficiencies in the sales units' managers existing control of cash management. Some of the deficiencies are partially due to causes that exist beyond the managers' control and are therefore difficult to eliminate.

Based on the analysis we can see that it is important for the different sales units to be aware of the fact that it is very expensive to give the customers discounts. If the sales units want to give their customers discount, the terms of payment should be at least 24 days shorter for every percentage that they give to the customer. In sales unit Germany, where the only term of payment is 14 ./. 2%, they should try to remove this discount if they can get their customers to agree to a term of payment that is 62 days or less ( $2\% = 48 \text{ days} + 14 \text{ days}$ ). In sales unit Spain, where the average terms of payment is 90 days, they should offer their customers a terms of payment with a discount that is at least 24 days shorter for every percentage that sales unit Spain gives their customer, for example 42 days or less with a discount of 2%. It is important to remember that these calculations are only valid if the cost of capital is 15 % or more.

One conclusion that we can draw from the results and analysis, concerning differences between managers' way of controlling cash management, is that the sales units in many considerations can be categorised in to north and south Europe. Many of the differences in the control of cash management that we have discovered can be explained with that the business culture of the countries where the sales units are situated in are so strong that the managers can't diverge from it. To make the control of cash management efficient it must be adapted to the business culture in the different countries.

Based on the frame of reference and the analysis we can see that the managers' control of the employees' work with cash management generally is not working optimally. The managers' control of the employees work with cash management though seems, in line with Hofstede's theory, to be better adjusted in the sales units in northern Europe. In the sales units situated in the south of Europe the employees' and managers' expectations on their work with cash management is in line with Hofstede's theory, but the way the managers control and the employees are working is not. This suggest that the sales units situated in the south of Europe, and also the sales unit situated in the north of Europe to some extent, should look over their existing control and make necessary adjustments. Both our bachelor thesis and this study have for example found implications that a comprehensive cash management document is requested by the employees.

One significant difference between the managers and employees opinion about the work with trade receivables is that the managers find the employees work tasks more complex than what the employees find them. The fact that the employees find their work tasks to be less complex indicates that there exists employee slack. This means that the employees should be able to

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handle more complicated work tasks than what they are doing for the moment. This indicates that the managers should give their employees more responsibility and more complex work tasks in order to get their employees to work more effectively with cash management.

All employees and managers found their sales units work with cash management to be of routine character and have low complexity. The credit control system, overdue report and the overdue lists is a suitable way, and in line with Perrow's theory, to control such routine technologies. The similarity in the employees and managers perception of their work with cash management can be seen as a starting point in the design and reshaping of the sales units control of cash management.

To be able to see the entirety of all components, or variables, in the control of cash management it is important for the managers to understand how the components are connected to, and in what way they influence each other. The connection between the variables can be seen as a cause and effect relationship and the managers have to be aware of these relationships when the design of the control is made. All of this is necessary in order to get the most effective control of cash management in the different sales units.

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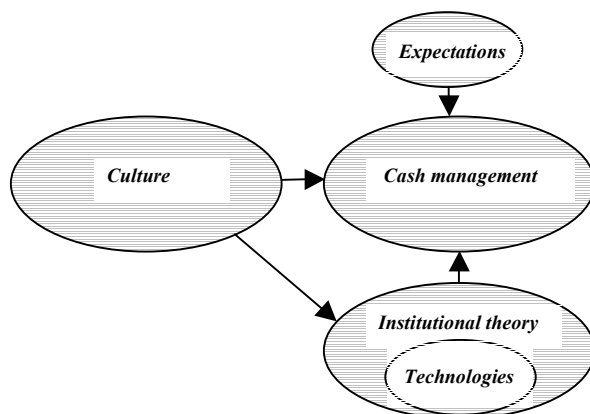
## 6 FINAL DISCUSSION

*This final chapter will treat our thoughts that have arisen during the writing of the thesis and that hasn't been treated in the analysis. This chapter also includes ideas about how further research within the problem area could be conducted.*

Except from the conclusions that we could draw out of the results of the questionnaire and interviews, we have during the writing of the thesis also found a number of interesting aspects that probably also influence large international groups' way of controlling cash management. There is most certainly no organisation that control their cash management in an optimal way. We have noticed that cash management consists of several components where improvements can be made but organisations must be aware of the existence of factors that complicates improvements of the control of cash management. This thesis has strengthened our conclusions from our bachelor thesis about "cultural costs". With this we mean that it is more "expensive" for organisations to sell their products to organisations situated in countries with strong business culture and long terms of payment.

After the analysis of the empirical data we find that one interesting proposal for further research would be to identify how sales units are controlled by the company group management. What instructions the sales unit gets concerning terms of payment and overdue routines is two examples of interesting questions. The results from such a research would be interesting to compare with this study.

During the analysis of this thesis we discovered that culture had more impact on the control of cash management that we had thought. We also found that the culture had a connection to institutional theory, due to the fact that business culture affects the way employees want to be controlled and also how the managers want to control their employees in their work with cash management. Because of this we had to reshape our concluding model of the frame of reference, figure 3:3, and the reshaped model is now displayed in figure 6:1.



*Figure 6:1 Reshaped concluding model of the frame of reference*

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After the writing of this thesis we think that it has been interesting and that the subject contains many aspects that can be explored by further research. Cash management is an important tool with great potential and due to this it must not be neglected by organisations. Today there is a small amount of literature that describes how the control of cash management should be designed to make the control efficient and it should therefore be of interest to continue the research about controlling cash management. Before extensive research has been conducted it is difficult, if not impossible for organisations to know how to control their liquid capital in an optimal way.

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## APPENDIX A      QUESTIONNAIRE

### QUESTIONNAIRE - EMPLOYEE

#### *Part 1 - General questions*

*First, we would like you answer some general questions regarding your work in the [international group].*

1. For how long have you been working with trade receivables or similar work in the [international group].? \_\_\_\_\_ years

2. How many hours (on average) each week do you work with issues related to trade receivables? \_\_\_\_\_ hours

3. How much do you work with the different aspects of trade receivables?

Reminder letter	_____ %
Reminder phone calls	_____ %
[credit control system]	_____ %
Sending invoices	_____ %
Sending interest invoices	_____ %
Other (please specify)	_____ %
_____	_____ %
_____	_____ %

*The different alternatives should sum up to 100%*

4a. What terms of payment do you give to your **most important** customers?

14 days	<input type="checkbox"/>
30 days	<input type="checkbox"/>
60 days	<input type="checkbox"/>
90 days	<input type="checkbox"/>
Other	<input type="checkbox"/> _____ days

4b. What alternative terms of payment do you give to your **most important** customers?  
(e.g. 14 days ./ 2%)

14 days	<input type="checkbox"/>	1% discount	<input type="checkbox"/>
30 days	<input type="checkbox"/>	2% discount	<input type="checkbox"/>
60 days	<input type="checkbox"/>	3% discount	<input type="checkbox"/>
90 days	<input type="checkbox"/>		
None	<input type="checkbox"/>		
Other	<input type="checkbox"/> _____ days	Other	<input type="checkbox"/> _____ %

4c. What terms of payment do you give to your **other** customers?

14 days	<input type="checkbox"/>
30 days	<input type="checkbox"/>
60 days	<input type="checkbox"/>
90 days	<input type="checkbox"/>
Other	<input type="checkbox"/> _____ days

4d. What alternative terms of payment do you give to your **other** customers?  
(e.g. 14 days ./ 2%)

14 days	<input type="checkbox"/>	1% discount	<input type="checkbox"/>
30 days	<input type="checkbox"/>	2% discount	<input type="checkbox"/>
60 days	<input type="checkbox"/>	3% discount	<input type="checkbox"/>
90 days	<input type="checkbox"/>		
None	<input type="checkbox"/>		
Other	<input type="checkbox"/> _____ days	Other	<input type="checkbox"/> _____ %

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**Part 2 – Trade receivables**

*Here we would like you to answer a few questions about trade receivables. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	<b>Disagree</b>	<b>Disagree somewhat</b>	<b>Neutral – don't know</b>	<b>Agree somewhat</b>	<b>Agree</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
					Disagree
					<b>1 2 3 4 5</b>
1. I participate in the design of customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I can influence the customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Customers are generally satisfied with their terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It is possible to reduce customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I prefer to have clear manuals and rules to guide my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I like when my manager gives me clear instructions about how to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I prefer to have non-written guidelines to guide my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I can rely on earlier experiences when performing my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I don't need to think much about how to perform my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. How to perform my work comes naturally to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. My work with trade receivables is heavily influenced by written manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My work with trade receivables is heavily influenced by written rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My work with trade receivables is heavily influenced by non-written guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My work with trade receivables is heavily influenced by non-written rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### **Part 3 – The work with trade receivables**

*This part deals with how you perceive the sales unit's work with trade receivables. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	<b>Disagree</b>	<b>Disagree somewhat</b>	<b>Neutral – don't know</b>	<b>Agree somewhat</b>	<b>Agree</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>The work with trade receivables in my sales unit...</b>					
1. can mainly be seen as routine tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. are being performed through repetitive activities by the unit members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. are the same from day to day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. can be performed by following an understandable sequence of steps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. have a clearly known way of how to be performed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. can be performed by relying on established procedures and practises.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Part 4 – work environment**

*This last part asks you a few questions about your work environment. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	<b>Disagree</b>	<b>Disagree somewhat</b>	<b>Neutral – don't know</b>	<b>Agree somewhat</b>	<b>Agree</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. All employees, including the manager, are normally enjoying their coffee-break together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I often discuss the work with trade receivables with my manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I can take part in the decision-making process concerning trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I find the overdue-report from [planning manager] important for my work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Our sales unit does regular follow-ups on the work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I often report my work with trade receivables to my manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Our sales unit have many targets/goals on the work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I can influence how the targets/goals are designed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your participation!

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## QUESTIONNAIRE - MANAGER

### Part 1 - General questions

*First, we would like you answer some general questions your work in the [international group].*

1. For how long have you been working as the manager in the sales unit or similar work in the [international group]? \_\_\_\_\_ years

2. How many hours (on average) each week do you work with issues related to trade receivables? \_\_\_\_\_ hours

3. How much do you work with the different aspects of trade receivables?

Reminder letter	_____ %
Reminder phone calls	_____ %
[credit control system]	_____ %
Sending invoices	_____ %
Sending interest invoices	_____ %
Other (please specify)	_____ %
_____	_____ %
_____	_____ %

*The different alternatives should sum up to 100%*

4a. What terms of payment do you give to your **most important** customers?

14 days	<input type="checkbox"/>
30 days	<input type="checkbox"/>
60 days	<input type="checkbox"/>
90 days	<input type="checkbox"/>
Other	<input type="checkbox"/> _____ days

4b. What alternative terms of payment do you give to your **most important** customers?  
(e.g. 14 days ./ 2%)

14 days	<input type="checkbox"/>	1% discount	<input type="checkbox"/>
30 days	<input type="checkbox"/>	2% discount	<input type="checkbox"/>
60 days	<input type="checkbox"/>	3% discount	<input type="checkbox"/>
90 days	<input type="checkbox"/>		
None	<input type="checkbox"/>		
Other	<input type="checkbox"/> _____ days	Other	<input type="checkbox"/> _____ %

4c. What terms of payment do you give to your **other** customers?

14 days	<input type="checkbox"/>
30 days	<input type="checkbox"/>
60 days	<input type="checkbox"/>
90 days	<input type="checkbox"/>
Other	<input type="checkbox"/> _____ days

4d. What alternative terms of payment do you give to your **other** customers?  
(e.g. 14 days ./ 2%)

14 days	<input type="checkbox"/>	1% discount	<input type="checkbox"/>
30 days	<input type="checkbox"/>	2% discount	<input type="checkbox"/>
60 days	<input type="checkbox"/>	3% discount	<input type="checkbox"/>
90 days	<input type="checkbox"/>		
None	<input type="checkbox"/>		
Other	<input type="checkbox"/> _____ days	Other	<input type="checkbox"/> _____ %

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**Part 2 – Trade receivables**

*Here we would like you to answer a few questions about trade receivables. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	<b>Disagree</b>	<b>Disagree somewhat</b>	<b>Neutral – don't know</b>	<b>Agree somewhat</b>	<b>Agree</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
					Disagree <b>1 2 3 4 5</b> Agree
1. I give my employees the opportunity to participate in the design of customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The employees can influence the customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Customers are generally satisfied with their terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It is possible to reduce customers' terms of payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I prefer to have clear manuals and rules to guide the employees work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I like to give my employees clear instructions about how to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I prefer that my employees have non-written guidelines to guide their work instead of written manuals and rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The employees can rely on earlier experiences when performing their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I don't think that the employees need to think much about how to perform their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I think that it comes natural for the employees about how to perform their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The employees work with trade receivables is heavily influenced by written manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The employees work with trade receivables is heavily influenced by written rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. The employees work with trade receivables is heavily influenced by non-written guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. The employees work with trade receivables is heavily influenced by non-written rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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*Part 3 – The work with trade receivables*

*This part deals with how you perceive the sales unit's work with trade receivables. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	Disagree	Disagree somewhat	Neutral – don't know	Agree somewhat	Agree	
	1	2	3	4	5	
	The work with trade receivables in my sales unit...					
	Disagree				Agree	
	1	2	3	4	5	
1.	can mainly be seen as routine tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	are being performed through repetitive activities by the unit members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	are the same from day to day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	can be performed by following an understandable sequence of steps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	have a clearly known way of how to be performed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	can be performed by relying on established procedures and practises.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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*Part 4 – Work environment*

*This last part asks you a few questions about your work environment. Please read the statements and mark the alternative that you find most suitable. The alternatives are:*

	Disagree	Disagree somewhat	Neutral – don't know	Agree somewhat	Agree
	1	2	3	4	5
	Disagree 1 2 3 4 5 Agree				
1. All employees, including managers, are normally enjoying their coffee-break together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I often discuss the work with trade receivables with my employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I let the employees take part in the decision-making process concerning trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I find the overdue-report from [planning manager] important for the employees work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Our sales unit does regular follow-ups on the work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The employees often report their work with trade receivables to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Our sales unit have many targets/goals on the work with trade receivables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I let the employees influence how the targets/goals should be designed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Thank you for your participation!*

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## APPENDIX B      INTERVIEW GUIDE

### *Employee Germany*

- Do you think that your customers are satisfied with their terms of payment?
  - Do you think that customer's terms of payment are longer than they need to be?
  - Do you think that your sales unit has a reasonable number of overdue days?
  - Do you think that it is necessary for you to report your work with trade receivables to your manager more often than what you are doing now?
  - Is there is a special reason why you prefer non-written guidelines instead of written rules?
  - What goals or targets does your sales unit have with your work with trade receivables?
  - How are you informed about the sales unit's goals with trade receivables?
  - Do you think that there is something with the overdue report from [planning manger] that can be improved?
-

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***Manager Germany***

- How do your employees know how to work with trade receivables?
  - Is your employees work with trade receivables influenced by non-written rules; is it possible for them to take it for granted about how to work with trade receivables?
  - How do you inform your employees about the targets/goals for the sales unit's work with trade receivables?
  - Do you think that it is necessary for your employees to report their work with trade receivables to you more often than what they are doing now?
  - Do you think that your customers are satisfied with their terms of payment?
  - Do you think that customer's terms of payment are longer than they need to be?
  - Do you think that your sales unit has a reasonable number of overdue days?
  - Do you think that there is something with the overdue report from [planning manager] that can be improved?
  - What advantages does it bring with letting the employees influence how the targets/goals with trade receivables should be designed? Are there any disadvantages?
-

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***Employee Spain***

- What influence you in your work with trade receivables?
  - How does your manager inform you about how to work with trade receivables?
  - What goals or targets does your sales unit have with your work with trade receivables?
  - Who has designed these goals, are they strict or loose, what happens if you achieve a goal, is there a bonus?
  - How are you informed about the sales unit's goals with trade receivables?
  - Do you think that your customers are satisfied with their terms of payment? (If not why)
  - Do you think that your sales unit has a reasonable number of overdue days?
  - Do you think that there is something with the overdue report from [planning manager] that can be improved?
-

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*Manager Spain*

- How do your employees know how to work with trade receivables?
  - Do you think that your customers are satisfied with their terms of payment?
  - Is your employees work with trade receivables influenced by non-written rules; is it possible for them to take it for granted about how to work with trade receivables?
  - How do you inform your employees about the targets/goals for the sales unit's work with trade receivables?
  - Who has designed these goals, are they strict or loose, what happens if the employees achieve a goal, are there a bonus, what if they don't?
  - What advantages does it bring with letting the employees influence how the targets/goals with trade receivables should be designed? Are there any disadvantages?
  - Do you think that your sales unit has a reasonable number of overdue days?
  - Do you think that there is something with the overdue report from [planning manager] that can be improved?
-

## APPENDIX C      CALCULATIONS

Cost of capital: 15%

Net sales: 100 000 000 €

According to Larsson (2000), 360 days per year and 30 days per month are custom in interest context.

**Freed capital (EUR) / one day :**  $100\,000\,000 * 1 / 360 = 0,28\%$  of annual sales

**Interest income:** 0,28% of annual sales = 280 000 €

$$280\,000 * 0,15 \approx 42\,000 \text{ €}$$

**Discount:**  $(2\% / (30 - 14 \text{ days})) * 360 = 45\%$

**The cost for discount in number of days:**

Average terms of payment = A

Cost of capital = C

$$\text{Net sales} = Y$$

Discount = D

$$\text{Cost for discount} = D * Y$$
$$\text{Cost for terms of payment} = A / 360 * C * Y$$

When the cost for discount is equal to the cost for terms of payment, it equals in the equation:

$$D * Y = A/360 * C * Y, \text{ or}$$
$$D = A/360 * C, \text{ or}$$
$$A = D * 360 / C$$

If  $D = 2\%$  and  $C = 15\%$ , gives

A = 48 days

If  $D = 1\%$  and  $C = 15\%$ ,  
gives

A = 24 days

This means that for every percentage that is given in discount the terms of payment should be decreased with at least 24 days.

## APPENDIX D POTENTIAL WITH CASH MANAGEMENT

**ATP:** **Average terms of payment**

**NTP:** Norm of terms of payment

## England

Net sales: 42 985 530,06 €

Cost of capital: 15%

Average overdue: 12,3 days

Average terms of payment (ATP): 60 days

Freed capital (EUR) / one day:  $42\,985\,530,06 * 1 / 360 = 119\,404,25 \text{ €}$

Freed capital (EUR) / average overdue:  $42\,985\,530,06 * 12,3 / 360 = 1\,468\,672,28 \text{ €}$

Potential interest income (EUR) / one day:  $119\,404,25 * 0,15 = 17\,910,64 \text{ €}$

Potential annual interest income (EUR):  $1\,468\,672,28 * 0,15 = 220\,300,84 \text{ €}$

Annual interest income in % of net sales:  $220\,300,84 / 42\,985\,530,06 = 0,51\%$

Freed capital (EUR) if ATP is NTP:  $42\,985\,530,06 * 30 / 360 = 3\,582\,127,50 \text{ €}$

Potential interest income (EUR)

if ATP is NTP:  $3\,582\,127,50 * 0,15 = 537\,319,12 \text{ €}$

## France

Net sales: 19 564 518,64 €

Cost of capital: 15%

Average overdue: -1,5 days

Average terms of payment (ATP): 60 days

Freed capital (EUR)) / one day:  $19\,564\,518,64 * 1 / 360 = 54\,345,89 \text{ €}$

Potential interest income (EUR) / one day:  $54\,345,89 * 0,15 = 8\,151,89 \text{ €}$

Freed capital (EUR) if ATP is NTP:  $19\,564\,518,64 * 30 / 360 = 1\,630\,367,55 \text{ €}$

Potential interest income (EUR)

if ATP is NTP:  $1\,630\,367,55 * 0,15 = 244\,556,48 \text{ €}$

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## Germany

Net sales:	77 034 910,68 €	
Cost of capital:	15%	
Average overdue:	2,5 days	
Average terms of payment (ATP):	14 days ./ 2%	
2% of net sales	1 540 698,21 €	
Freed capital (EUR) / one day:	$77\,034\,910,68 * 1 / 360 =$	213 985,86 €
Freed capital (EUR) / average overdue:	$77\,034\,910,68 * 2,5 / 360 =$	534 964,66 €
Potential interest income (EUR) / one day:	$213\,985,86 * 0,15 =$	32 097,88 €
Potential annual interest income (EUR):	$534\,964,66 * 0,15 =$	80 244,70 €
Annual interest income in % of net sales:	$112\,342,58 / 77\,034\,910,68 =$	0,15%
Freed capital (EUR) if ATP is NTP:	$1\,540\,698,21 - (32\,097,88 * 16) =$	1 027 132,13 €
Potential interest income (EUR) if ATP is NTP:	$1\,027\,132,13 * 0,15$	154 069,82 €

## Italy

Net sales:	18 940 243,08 €	
Cost of capital:	15%	
Average overdue:	5,8 days	
Average terms of payment (ATP):	90 days	
Freed capital (EUR) / one day:	$18\,940\,243,08 * 1 / 360 =$	52 611,79 €
Freed capital (EUR) / average overdue:	$18\,940\,243,08 * 5,8 / 360 =$	305 148,36 €
Potential interest income (EUR) / one day:	$52\,611,79 * 0,15 =$	7 891,77 €
Potential annual interest income (EUR):	$305\,148,36 * 0,15 =$	45 772,26 €
Annual interest income in % of net sales:	$45\,772,26 / 18\,940\,243,08 =$	0,24%
Freed capital (EUR) if ATP is NTP:	$18\,940\,243,08 * 60 / 360 =$	3 156 707,18 €
Potential interest income (EUR) if ATP is NTP:	$3\,156\,707,18 * 0,15 =$	473 506,07€

## Netherlands

Net sales:	43 585 430,72 €	
Cost of capital:	15%	
Average overdue:	5,9 days	
Average terms of payment (ATP):	60 days	
Freed capital (EUR) / one day:	$43\,585\,430,72 * 1 / 360 =$	121 070,64 €
Freed capital (EUR) / average overdue:	$43\,585\,430,72 * 5,9 / 360 =$	714 316,78 €
Potential interest income (EUR) / one day:	$121\,070,64 * 0,15 =$	18 160,59 €
Potential annual interest income (EUR):	$714\,316,78 * 0,15 =$	107 147,51 €

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Annual interest income in % of net sales:	$107\,147,51 / 43\,585\,430,72 =$	0,25%
Freed capital (EUR) if ATP is NTP:	$43\,585\,430,72 * 30 / 360 =$	3 632 119,22 €
Potential interest income (EUR) if ATP is NTP:	$3\,632\,119,22 * 0,15 =$	544 817,88 €

### Scandinavia

Net sales:	65 239 655,55 €	
Cost of capital:	15%	
Average overdue:	3,9 days	
Average terms of payment (ATP):	30 days	
Freed capital (EUR)) / one day:	$65\,239\,655,55 * 1 / 360 =$	181 221,27 €
Freed capital (EUR) / average overdue:	$65\,239\,655,55 * 3,9 / 360 =$	706 762,94 €
Potential interest income (EUR) / one day:	$181\,221,27 * 0,15 =$	27 183,19 €
Potential annual interest income (EUR):	$706\,762,94 * 0,15 =$	106 014,44 €
Annual interest income in % of net sales:	$106\,014,44 / 65\,239\,655,55 =$	0,16%

### Spain

Net sales:	39 637 832,46 €	
Cost of capital:	15%	
Average overdue:	14,6 days	
Average terms of payment (ATP):	90 days	
Freed capital (EUR)) / one day:	$39\,637\,832,46 * 1 / 360 =$	110 105,09 €
Freed capital (EUR) / average overdue:	$39\,637\,832,46 * 14,6 / 360 =$	1 607 534,32 €
Potential interest income (EUR) / one day:	$110\,105,09 * 0,15 =$	16 515,76 €
Potential annual interest income (EUR):	$1\,607\,534,32 * 0,15 =$	241 130,13 €
Annual interest income in % of net sales:	$241\,130,13 / 39\,637\,832,46 =$	0,61%
Freed capital (EUR) if ATP is NTP:	$39\,637\,832,46 * 60 / 360 =$	6 606 305,41 €
Potential interest income (EUR) if ATP is NTP:	$6\,606\,305,41 * 0,15 =$	990 945,81 €

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