UNIVERSITY OF GOTHENBURG
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Master Degree Project in Innovation and Industrial Management

Causes to Financial Distress in the Swedish Construction Industry

A quantitative study identifying the main causes to financial distress in the Swedish construction industry

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ABSTRACT

Background The construction industry is an important industry for Sweden. The industry employs over 300 000 people and the total investments in constructions amounts yearly over 300 billion SEK. The construction industry is also that industry where the most bankruptcies in Sweden occur. The reason why this industry is especially exposed is unclear. The available research is ambiguous and is mainly focused upon bankruptcies in general, without taking into account differences between industries and countries. Yet, a better understanding of industry related causes to bankruptcies is essential for the construction industry's entrepreneurs' ability to prevent them. There are few groups of professions that have an independent and objective insight of the construction industry and its bankruptcies. However, accountants may qualify as one of those groups.

Purpose As a bankruptcy is always preceded by financial distress, the purpose of this study is to identify what accountants believe are the driving causes to financial distress in the Swedish construction industry.

Method The study applied a quantitative approach, which were executed through a questionnaire. The respondents of the questionnaire are 90 accountants within the Swedish construction industry.

Result The survey shows that accountants believe that some causes are considerably more important than others.

Analysis When comparing the identified driving causes to financial distress with previous research, many differences are encountered. One reason may be that most previous researchers´ respondents have been former business owners which tend to answer subjectively, while independent accountants tend to answer more objectively.

Conclusion This report found that the causes perceived most important by accountants in bankrupted companies were weak financial control, poor cash flow planning, improper budgeting and financial planning, poor knowledge in business administration, and poor pricing, which in several ways differ from previous research. It also seems to be an industry that contains some dishonest entrepreneurs. The industry characteristics may also attract a few entrepreneurs whose main objective is to make some easy money.

Keywords: *Financial distress, bankruptcy, accountants, and construction industry*

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1. INTRODUCTION

Chapter one provides the reader with an overview of the background and the problem formulation this study portrays. The problem formulation leads the reader into the purpose and research question of this thesis project. The introduction ends with a description of the delimitations of the study along with the study´s disposition.

1.1 BACKGROUND

A well-working construction industry is essential for a country's development and affects many parts of society. For instance, a well-functioning construction industry is a vital requirement for a well-developed business environment and infrastructure, making the situation in the construction industry an important indicator of country´s prosperity (BI Analys, 2013). The Swedish construction industry is one of the cornerstones of the Swedish economy and in 2012, the industry employed over 300 000 people and the investments in constructions amounted to 309 billion SEK, or nine percent of the Swedish GDP. Construction companies amounts for eight percent of all Swedish companies (BI, 2015a).

The construction industry differs from many other industries. In general, the industry consists of large projects, where each project often requires high investments in relations to construction companies' assets. Furthermore, the industry has a high degree of business owners that have taken the step from being competent blue-collar workers to starting their own businesses. One reason may be the relative low level of entry barriers, making it fairly easy for carpenters to start up their own businesses without too much paperwork and governmental regulations (Informant, 2015).

Even though the construction industry's importance, the industry is overrepresented by companies filing for bankruptcy each year. Actually, the construction industry is the industry where, in absolute terms, the most bankruptcies in Sweden occur (BI Analys, 2013). In 2014, the number of bankruptcies in Sweden was 6 563 and the construction industry amounted for 1 036 of them, or 15.8 percent (Ekonomifakta, 2015). In other words, an industry that amounted for eight percent of all Swedish companies stood for 15.8 percent of all bankruptcies. It is not only the bankruptcies themselves that cause trouble for the construction industry, but also the high level of financial distress. A bankruptcy is always preceded by financial distress. Conversely, financial distress is a clear signal that a company is in the risk zone for a future bankruptcy (Folkesson, 2007). There are many definitions of financial distress, but one of the most commonly used is: a situation where a company lacks ability to pay off its external financial obligations, where this inability is not only temporary (Koponen, 2003).

Financial distress creates costs for the affected company, which generally can be divided into two groups: direct costs and indirect costs (Altman, 2006). Examples of direct costs are overdue fees on invoices, higher costs for financing i.e. financial distress increase the business risk which affects the interest paid to the bank, and loss of credits towards suppliers (Berk & DeMarzo, 2007). Examples of indirect costs are the opportunity cost for the inability to invest

in new profitable projects, reduced motivation among employees i.e. employees in financially distressed companies tend to be less motivated, and loss of customers (Altman, 2006). If a situation of financial distress turns into bankruptcy, further costs arise such as legal advisory, impairments of assets, and the time spent on bankruptcy administration (Berk & DeMarzo, 2007). Financial distress and bankruptcies does not only cause costs for the company itself but also for the Swedish society. These costs can also be divided into the two groups of direct and indirect costs. An example of a direct cost is governmental wage guarantees, whereas an example of an indirect cost is a more insecure business climate (Länsstyrelsen, 2015).

Even though bankruptcies, in some cases, can be something necessary i.e. bankruptcies are a natural way to clear out those companies that are not market sufficient, it would be of great value if entrepreneurs in the construction industry got a better understanding of what causes that typically leads to financial distress and bankruptcies within their industry. This knowledge could help entrepreneurs to avoid bankruptcies, which would have a positive effect on the Swedish business climate (Altman, 2006).

1.2 PROBLEM FORMULATION

The reason why the construction industry is especially exposed to financial distress and bankruptcies is unclear. Available research is ambiguous and is mainly focused upon bankruptcies in general, without taking into account differences between industries and countries. Furthermore, available research is often highly influenced of those who have been involved in the bankruptcies, such as business owners and top managers, which according to Koponen (2003), potentially biased researchers´ results, disclaiming the responsibility of the aforementioned groups. Yet, a better understanding of the causes to financial distress is essential for entrepreneurs' ability to prevent and mitigate risk of bankruptcies (Koponen, 2007). Because of these reasons, a study is needed where the focus lies upon objective respondents with significant insight in the construction industry and its bankruptcies.

The number of external and independent groups of professions, which have expert knowledge about the current situation in the Swedish construction industry, is limited. One profession that may qualify are accountants. Accountants' work is to objectively examine their clients' businesses. In order to conduct their work properly, the accountants are required to have a deep understanding about each of the companies they audit (Revisorsnämnden, 2015). Actually, Kuronen (1992) performed a study on main causes to financial distress, where she argued that accountants with their expertise, where appropriate respondents in order to overcome the potential objectivity problems.

1.3 PURPOSE & RESEARCH QUESTION

By expanding the field of research, managers and business owners could be more aware of which causes that are more likely to lead to financial distress than others, which would help them mitigate future problems in terms of financial distress and bankruptcies. Therefore, the purpose of this thesis is to: *Increase awareness about which causes, an independent and objective group within the Swedish construction industry, believe are the main causes for financial distress.* Furthermore, the research question is to identify: *What do accountants believe are the main causes for financial distress within the Swedish construction industry?*

1.4 DELIMITATIONS

It would be desirable to include all accountants with experience from the construction industry. However, due to unfeasibility, the study is focused on those accountants that have been accountant for a limited construction company that have finished a bankruptcy process between year 2012 and 2014. The reason for this selection is that accountants with recent experience are more likely to have more accurate perceptions of the industry than accountants with experience from the past. Furthermore, due to the scope of the study, including accountants from more than the past three years would be beyond the study´s resources.

1.5 DISPOSITION

Chapter 2: The Swedish construction industry
This chapter aims to introduce the reader to the Swedish construction industry. The chapter ends with a brief description of the industry characteristics and the challenges within the industry.

Chapter 3: Theoretical framework
This chapter aims to explain theories, models and expressions used in the study, which helps the reader to understand the concept of financial distress and which causes that are likely to lead to financial distress. The chapter ends with a conceptual framework that has been developed by examining previous research.

Chapter 4: Method
The method chapter illustrates and discusses the logic the thesis use in order to answer the research question. The chapter starts with a description of the research design, followed by a description of how relevant data is gathered, processed and evaluated and ends with reflections on the study´s validity and reliability.

Chapter 5: Results
This chapter aims to present and explain the result of the survey. The first section presents an overview of typical characteristics of limited companies in the construction industry, which went bankrupt between 2012 and 2014, whereas the second section presents the collected result from the responding accountants. The last section shows the answers of the open questions where the respondents were able to add additional causes to bankruptcies or contribute with other feedback.

Chapter 6: Analysis
In this chapter, the empirical findings from the survey are analysed and compared with previous research. The purpose of this report is to identify driving causes to financial distress, why the top-twelve causes constitutes the main focus of the reports´ analysis. In order to compare the findings with relevant research, the analysis is based upon three previous researchers whose research methods comprises several similarities with this thesis, i.e. focusing on Swedish companies or using accountants as respondents.

Chapter 7: Conclusion
In this chapter, final conclusions are drawn along with a discussion of the thesis´ contribution to this field of research. The chapter ends with suggestions for future research that would be beneficial to the field of financial distress and bankruptcies within the Swedish construction industry.

2. THE SWEDISH CONSTRUCTION INDUSTRY

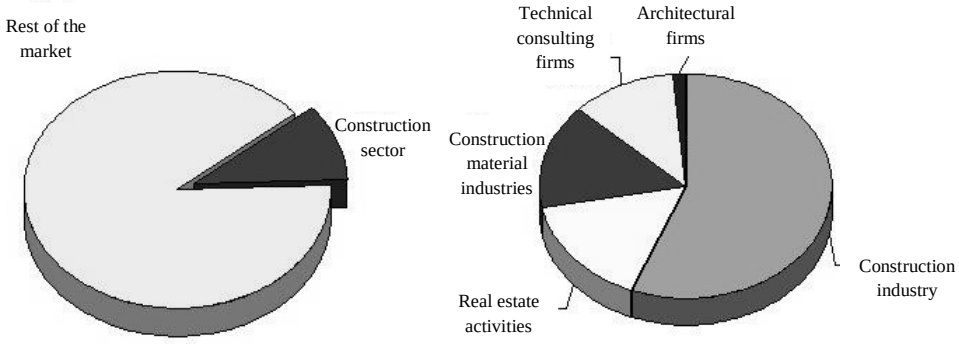
This chapter aims to introduce the reader to the Swedish construction industry. The chapter ends with a brief description of the industry characteristics and the challenges within the industry.

The construction industry is a cornerstone of the Swedish economy where it substantially contributes to the economic development of the country. The investments made in construction cause positive effects in supply and demand of both products and services in society long after the construction project is finished (BI Analys, 2013). The industry is one of the largest in the Swedish economy and in 2012 there was a total of 1 307 000 registered companies in Sweden, where eight percent of them worked within the construction industry (BI Analys, 2013). This means that over 93 700 companies in Sweden were active within the construction industry in 2012, and the definition of such company is:

"A *company which mainly focusing on construction, for them or by contracting projects to a third party"* (Nordstrand, 2008. trans.)

All Swedish companies are classified into various groups sorted on SIC-codes. SIC is an abbreviation for *Standard Industrial Classification*. The construction industry constitutes of SIC: 41 - *"Construction of buildings"*, 42 - *"Civil engineering"*, and 43 – *"Specialized construction activities"*. These SIC-codes are divided into several sub-groups. For instance, SIC 41 contains of 41.100 – "*Development of building projects*" and 41.200 – *"Construction of residential and non-residential buildings"* (BI, 2015b). A company can be active within several areas, but is only included in the construction industry if the company's main activity is within the frames of the construction industry´s SIC-classification (BI, 2015b). There is a distinction between the construction industry and the construction sector. The construction sector is a broader notion which includes branches with other SIC-codes such as *"Architectural and engineering activities e.g. technical testing and analysis"* (SIC 71) and *"Real estate activities"* (SIC 68) (SCB, 2015). The construction sectors' share of the entire market and the distribution among industries within the construction sector are presented in Exhibit 1.

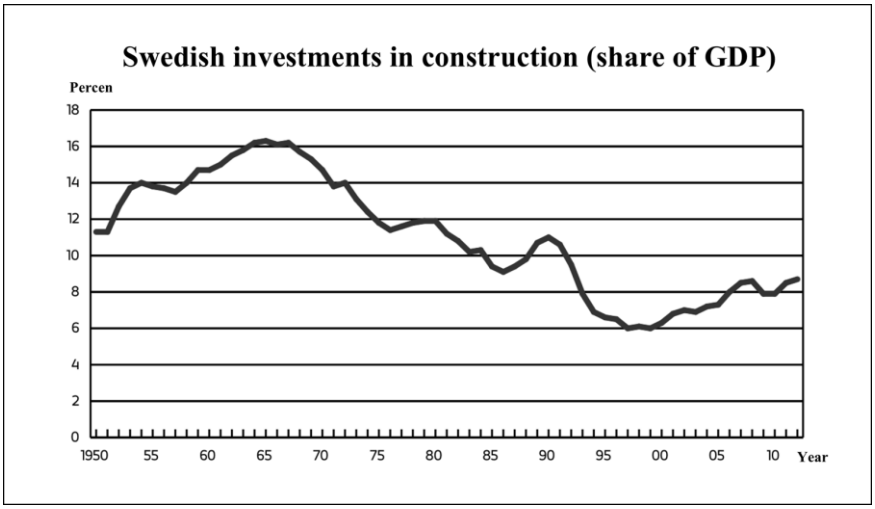
Exhibit 1 – The Swedish construction sector (BI, 2015b)



A more detailed description of what type of companies that are included in the construction industry is provided in Appendix 1.

The investments in the construction industry amounts for a substantial part of the Swedish GDP and exceeded 16 percent during the 1960s, declined steadily to 6 percent in the late 90s, but have during the later years increased. In 2014, the industry constituted of 9 percent of the GDP, which is illustrated in Exhibit 2 (BI, 2015). In 2012, the industry employed 312 000 people, had a net turnover of over 500 billion SEK and construction investments of 309 billion SEK (BI, 2015a).

Exhibit 2 – Swedish investments in constructions (share of GDP) (BI Analys, 2013)



2.1 INDUSTRY CHARACTERISTICS

The construction industry differs from many other industries in the Swedish economy, and one characteristic is that it constitutes of such high share of small enterprises. Actually, 99 percent of all companies in the construction industry are within the borders of micro, small, and medium sized companies (MSMEs) (BI Analys, 2013; European Commission, 2006). The definition of an MSME differs among countries (Jahur & Quadir, 2012). However, within the European Union, an MSME is defined on three determinants, the number of employees and the turnover or the total assets (European Commission, 2015).

Table 1 – Definition of MSMEs (European Commission, 2015)

Type of company	Employees	Turnover or	Total assets
Medium sized	< 250	≤ 50 M€	≤ 43 M€
Small	< 50	≤ 10 M€	≤ 10 M€
Micro	< 10	≤ 2 M€	≤ 2 M€

In Table 1, the three determinants of micro, small and medium sized companies are listed. A micro sized company is a company that has less than ten employees and has a turnover or

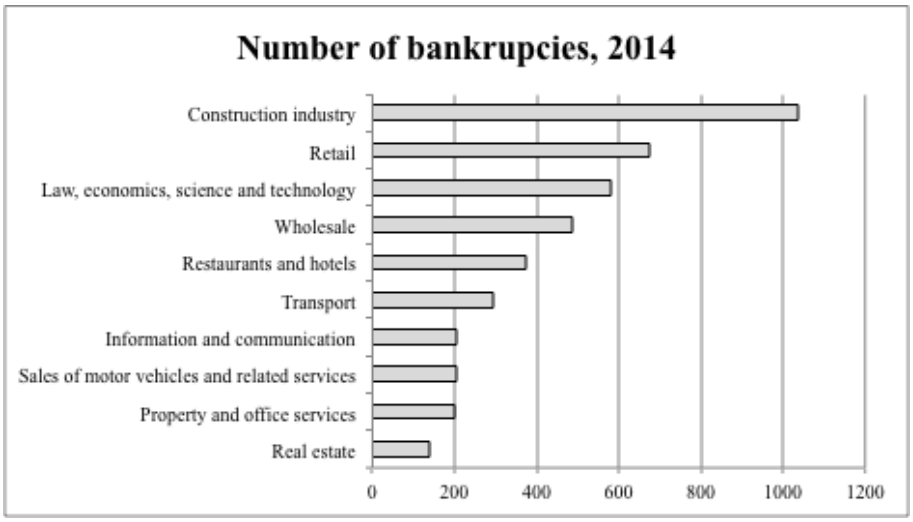
total assets less or equal to two million euro. If a company has between ten and 49 employees and a net turnover not exceeding ten million euro, or if the total assets are ten million euro or less, the company is considered small. For a medium sized company, the number of employees is between 50 and 249, the net turnover is more than 10 million and equal or less than 50 million euro, or the total assets are more than 10 million and equal or less than 43 million euro (European Commission, 2015).

Another characteristic is that the industry, in general, is capital intense in relation to construction companies´ assets, where the costs for each project often exceeds small construction companies' total value. The explanation is that most projects handle large amounts of material costs as well as stretches over long periods of time (Informant, 2015). Partially due to the capital intensity, long projects and many bankruptcies, the industry has somewhat of a bad reputation, which results in difficulties to get financing from banks. The result is more challenging market conditions (BI Analys, 2013).

2.2 CHALLENGES IN THE INDUSTRY

One of the challenges the industry struggles with is that it is utterly overrepresented by companies that are going bankrupt each year. In 2014, out of the total amount of bankrupted companies in Sweden, which were 6 563, 1 034 were within the construction industry. In other words, an industry that amounted for eight percent of all Swedish companies stood for 15.8 percent of all bankruptcies (Ekonomifakta, 2015). The numbers of bankruptcies in some of Sweden's largest industries are illustrated in Exhibit 3.

Exhibit 3 – Number of bankruptcies, 2014 (Ekonomifakta, 2015)



The reason why the construction industry is especially exposed to bankruptcies is not clear, but according to the Swedish Construction Federation, there are indications that the construction industry is more risky than many other industries. Firstly, there seem to be a gap between business owners´ knowledge and the knowledge needed for running a business. Due to the industry´s low entry barriers and the low capital requirements to start a business i.e.

each project often requires substantial investments in relation to the company´s assets but the assets can be rather small, most carpenters or stakeholders can start a business if they wish to do so. Low entry barriers in an industry with valuable projects are by many seen as an appealing market to enter, and as a result, many entrepreneurs are tempted to start a business without appropriate knowledge. This results in problems down the line, where many bankruptcies are inevitable (Informant, 2015).

3. THEORY

This chapter aims to explain theories, models and expressions used in the study, which helps the reader to understand the concept of financial distress and which causes that are likely to lead to financial distress. The chapter ends with a conceptual framework that has been developed by examining previous research.

3.1 FINANCIAL DISTRESS

In general, most companies experience some periods of strained profitability and other difficulties during their lifetime. If these situations are not taken seriously, there is a risk that the enterprise will end up in a situation of financial distress. The path towards bankruptcy is a process consisting of several phases, always preceded by a phase of financial distress. Conversely, financial distress is a clear signal that a company is in the risk zone for a future bankruptcy (Koponen 2003). Koponen further equates a fully developed situation of financial distress with insolvency, which according to the bankruptcy law is defined as:

"A debtor that is insolvent shall after one´s own or creditors´ application be declared bankrupted, if nothing else is prescribed. Insolvency means that the debtor is not able to pay its debts and that this inability is not temporary." (Koponen, 2003. trans.)

Furthermore, according to the Swedish bankruptcy act, companies that only have temporary payment difficulties, and therefore not have reached a full level of financial distress, are not allowed to initiate a bankruptcy process (Folkesson, 2007).

3.1.1 DIFFERENT TYPES AND LEVELS OF FINANCIAL DIFFICULTIES

Financial distress may appear due to various types of financial difficulties. According to Folkesson (2007), there are two categories of financial difficulties that can cause financial distress; companies having payment problems or companies having balance sheet problems. Payment problems refer to a company's ability to pay its debts whereas balance sheet problems refer to how a company is financed. As shown in Table 2, the two categories of financial difficulties can appear in various degrees, where level 2 indicates a higher degree of financial problems than level 1.

Table 2 – Types and levels of financial difficulties (Folkesson, 2007)

Payment problems	**Level 1**	**Level 2**
State	Illiquidity	Insolvency
Explanation	Inability to pay its debt (temporary)	Inability to pay its debt (not temporary (forecast))
Balance sheet problems	**Level 1**	**Level 2**
State	Shortage of capital	Insufficiency
Explanation	Equity < 50 % of share capital	Assets<Liabilities

Level 1 of payment problems occurs when a company, temporarily, do not have liquidity enough to pay its debts and therefore have to default their payments. This early stage of financial distress does not necessarily mean any greater problems for a company. Access to new loans, recapitalizations, and freeing up internal capital are some examples of how an illiquid situation can be solved. Even though an illiquid company in level 1 of the payment problems is not allowed to start a bankruptcy process, the requirements for initiating a corporate reconstruction process are reached (Folkesson, 2007).

Furthermore, if an illiquid situation is not only temporary, the company has reached level 2 of payment problems, and the company can be called insolvent. At this stage, a fully developed situation of financial distress has occurred. To determine whether a company is insolvent or not is not easy. Since insolvency is based on a company's future abilities to pay its debts, assumptions and predictions for the future is necessary. According to Folkesson's (2007) definitions, a company can be insolvent but not illiquid. If a company does not have any default payments, it is not illiquid. However, even if none of the payments have been defaulted, it can still be evident that a company will not be able to pay its future obligations, and the company is therefore insolvent.

The balance sheet problems are connected to a company's balance between debts and equity. According to the Swedish companies act, a limited company is not allowed to have equity less than 50 percent of its share capital. According to Folkesson's (2007) definitions, this is also the first stage of balance sheet problems. In this situation, a limited company has two options, increase the equity to a sufficient level or liquidate the company. If none of these measures are taken, the board members may be personally liable for the company's debts. Level 2 of the balance sheet problems is reached if company´s liabilities are valued higher than the company's assets. A company in this situation can be called insufficient. In reality, since companies are not allowed to pay out its restricted share capital, balance sheet problems and negative equity can only arise due to profitability problems (Folkesson, 2007).

The balance sheet problems are not equal to payment problems per se, however, these two categories of financial difficulties are highly linked to each other. Longer periods with negative profitability are likely to result in a weak balance sheet and an insufficient balance sheet creates payment problems. Conversely, a strained balance sheet that is creating payment problems is likely to make it difficult for managers to deliver a high profitability due to the costs that occur as a result of financial distress. According to Folkesson (2007), bankrupt companies do usually suffer from both problems.

3.1.2 PREVIOUS RESEARCH

Previous research of causes to financial distress and bankruptcies is extensive and many books and articles have been written in the field where researchers such as Altman (2006), Stanley and Girth (1971), and Ohlson (1980), have contributed with extensive literature. However, few studies have used objective respondents, been directed towards the construction industry or considered the Swedish business climate. In order to use theories from previous research that is relevant for this thesis, the research selection was made by

considering these aspects. Koponen (2003) and Kedner (1975) have performed previous research focusing on Swedish companies. A researcher that has considered the construction industry and used objective respondents in her study is Kuronen (1992) that focused on Finnish companies, in which accountants stated their perceptions of leading causes to financial distress. To be able to compare the findings of this report with relevant previous research, these three researchers´ findings are presented in the following sections.

Koponen´s research stretches over 14 years between 1990 and 2003 where one purpose was to:

"…identify internal and external along with qualitative and quantitative factors, events and relationships that caused financial distress." (Koponen, 2003. trans.)

By doing so, the aim of the study was to provide practical usage for entrepreneurs who are planning to start their own businesses and increase awareness about the risk factors managers must consider when running a business. Koponen´s main study was based on four case studies in bankrupted Swedish companies in different industries and 36 interviews were made with founders, CEO´s, executives, accountants, union representatives and other key personnel. The findings were based upon their experiences, perceptions and evaluations of past events. The critical events and factors identified showed that the causes of entering a stage of financial distress, and later on bankruptcy, were derived from both qualitative and quantitative factors, along with both internal and external causes. The findings showed that inefficient leadership and lack of such personal qualities from the management had major impact. The lack of these qualities, along with, uncontrolled growth, unprofitable investments, and internal conflicts occurred in all of the case companies. Koponen further emphasized the importance of being able to interpret early warning signs of these factors since some factors are more invisible than others. For instance, lack of management skills is often the reason of more visible causes. For instance, management lacks proper knowledge, which leads to unwise investments, which at a later stage cause substantial losses, which lead to financial distress and so on.

During the 60´s the number of bankrupted companies in Sweden increased with 152 percent from the past decade, which caused the Swedish delegation of SME´s to fund a study to shed light upon the problem and identify the main causes to the bankruptcies. Gösta Kedner, an associated professor at Lunds University, got elected and performed the study during the late 60´s and early 70´s. The approach was quantitative, where the purpose was to identify the most driving causes to bankruptcies and estimate the importance of those factors. By collecting data from insolvency administrators at district courts, Kedner collected data from all the bankrupted companies in Sweden between 1966 and 1970, which totaled 4 447 bankruptcies (Kedner, 1975). By classifying different causes into factors and sorting them in overlying groups, Kedner was able to determine which group and which factors that were the most significant. According to the data collected from the district courts, the main driving factor to bankruptcies proved to be "*Competition*", which was stated as the main cause in 16

percent of all bankruptcies. This factor was followed by "*Neglected budgeting and planning*", which was the main cause in nine percent of the bankruptcies. Kedner´s result is presented in Appendix 2 and is summarized in Table 3.

Table 3 – Kedner's research result (1975)

Kedner (1975)	**Percent**	**Number of cases**
1. Competition	**16**	**705**
2. Neglected budgeting & planning	**9**	**400**
3. Top management lack business education	**8**	**390**
4. Too high costs	**8**	**335**
5. Management change	**7**	**308**
6. Business did not start with enough capital	**5**	**225**
7. Expansion beyond resources	**5**	**222**
8. Economical downturn	**5**	**208**
9. Customers	**4**	**167**
10. Planning & coordination of operations	**4**	**158**

Even though the findings clearly state that some of the causes to bankruptcies are more essential than others, the study has been subject for critique. The weakness of the study was that Kedner based his findings on the input from insolvency administrators. The ability of insolvency administrators to fully understand the underlying causes to bankruptcies is limited, and the administrator's initial contact with the company is not until the company is already suffering from financial distress (Koponen, 2003). For that reason it is often hard for them to evaluate causes that lead to a state of financial distress and bankruptcy. Instead, administrators tend to state factors that are visible during the phase of financial distress and not factors that cause and lead to the situation. As a consequence, insolvency administrators tend to rely on statements from the debtor, which often has proven to be heavily subjective and therefore also misleading. In that situation, debtors tend to blame external events, which the debtor has no chance to cope with and argues that the reason for the bankruptcy simply is due to bad luck (Koponen, 2003).

The general critique regarding studies about financial distress is the same as with the critique against Kedner´s research. By basing studies on managers and owners of companies that has entered a stage of financial distress and are facing or has already filed for bankruptcy, there is a significant risk of obtaining data that is severely biased. By admitting what really caused the bankruptcy, the owners and managers are admitting their own shortcomings. The consensus in the field is that more studies are needed where the focus should be placed on objective respondents where the risk of respondents throwing blame on someone or something outside their control is limited (Koponen, 2003). For that reason, Kuronen (1992) performed a study in Finland during the 90s where she interviewed eleven certified accountants about their knowledge of why eleven specific companies went bankrupt. By focusing on accountants, Kuronen (1992) hoped to overcome previous problems with subjective respondents while she also based her research on a profession that had many years of experience of bankrupted

companies. The case companies of the study was located in several different industries e.g. the construction industry, the car industry, and textile manufacturing. By establishing 33 different factors that may lead to bankruptcy and grouping those into eight groups, Kuronen (1992) identified the following factors to be the most occurring according to accountants, and she also managed to map the emergence and development of financial distress in most companies. The result is presented in Appendix 3 and is summarized in Table 4.

Table 4 – Kuronen's research result (1992)

Bankruptcy factors, Kuronen (1992)	**Number of cases the factor occurred**
1. Competition	**8**
2. Highly cyclical industry	**8**
3. Poor profitability	**7**
4. Risky business	**7**
5. Too high costs	**6**
6. Improper accounting	**6**
7. Weak adaptability to external environment	**6**
8. Expansion beyond resources	**6**
9. Customers	**6**
10. Poor strategy implementation	**5**

Kuronen´s (1992) study found that the most common causes to financial distress among the sample companies were intense competition and the fact that the companies were active in highly cyclical industries. Those were followed by poor profitability and running a risky business.

By reading previous research it is hard to recognize any specific pattern. Even though there have been several studies in the topic, it is hard to come to any general conclusion. Most studies indicate dissimilar factors as being the most driving causes to a stage of financial distress. This can be explained by numerous reasons, such as age of the responding firms, size, small sample sizes, different types of respondents and different classifications on which causes to include in the study (Ericsson and Pakes, 1998). According to Bhattacharjee and Han (2010), the main problem is that studies in the past have seen bankruptcies as being a homogeneous part of the entire business climate. Therefore, researchers have included companies from different industries where the driving causes to financial distress are assumed to be the same across all industries. Bhattacharjee and Han (2010) claim that a researcher instead should focus on one specific industry, since there are several industry specific factors that must be accounted for. If not, the study will lose its validity. By focusing on one industry only, researchers should be able to better identify causes that are industry specific and reach conclusions that are more well-grounded (Bhattacharjee & Han, 2010).

3.1.3 PREVIOUS RESEARCH WITHIN THE CONSTRUCTION INDUSTRY

There have been remarkable few studies about the driving causes to financial distress and bankruptcies in the construction industry. However, the Swedish Construction Federation has

performed general studies within the industry, which have indicated that the problems of many bankruptcies within the industry are related to some of the industries' characteristics (BI Analys, 2013).

First of all, the risk of a bankruptcy is related to the size of the firm. The smaller the firm, the larger the risk of getting problems that leads to bankruptcy. Since the construction industry consists of many small companies, the percentage of companies filing for bankruptcy should naturally also be higher. Secondly, since the industry is characterized by long projects, which often require much capital in relation to companies´ assets, the industry risk is high compared to several other industries (BI Analys, 2013). The uncertainties in the industry have shown to make it difficult to get loans from banks (Lundgren, 2015). In a survey performed by the Swedish Construction Federation, 20 percent of the responding companies within the construction industry answered that the main obstacle that hampered development and caused poor profitability was financial restrictions, where the problem of raising capital from banks was the main issue. This can be compared with the manufacturing industry were only two percent of the respondents argued that fund raising from banks was one of the main issues causing organizational problems. (BI Analys, 2013)

3.2 CONCEPTUAL FRAMEWORK

Many of the previous studies have not been coherent regarding which causes to include in the research about financial distress and bankruptcies. However, a framework mapping out most of the plausible causes to financial distress is necessary for this study[1]. Therefore, a conceptual framework was developed, *see Exhibit 4*, by comparing and compiling previous research. According to Glaser and Strauss (1967), theoretical sampling *"is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. The process of data collection is controlled by the emerging theory, whether substantive or formal."* The conceptual framework of this report has been created according to this process, where Koponen (2003) and Altman (2006) formed the starting point. These two authors were found by a recommendation from an assistant professor at the Gothenburg University who wrote his dissertation in a similar field. The factors found as driving causes to financial distress were thereafter grouped according to recognized researchers´ models.

The reason for companies to end up in a situation of financial distress is derived from at least one of two categories of financial difficulties, the business is struggling with poor profitability causing balance sheet problems, resulting in financial distress or due to an insufficient balance sheet, creating payment problems, resulting in a situation of financial distress (Folkesson 2007). The underlying reasons for these two categories of financial difficulties can further be divided into three classes. The classes are: firm-, industry-, or macro level causes (Everett &

[1] See the method chapter.

Watson, 1998; Ogden, Jen & O´Connor, 2002). This means that financial distress derives from either internal or external problems, where external problems can either derive from industry specific or macro specific causes.

According to Zulfiqar et al. (2014), the firm specific causes consist of three groups, financial factors, ownership and governance factors, and operational and productivity factors. Some authors, such as Beaver (1998), also claim that accounting, planning, and control factors should be included as a forth stand-alone group within the firm specific causes, since it acts like a link between the three other groups.

According to Grant (2010), the industry specific causes to financial distress can be further divided into the five market forces, which originally were developed by Porter during the late 70s. The five forces Porter describes in his framework are customers, suppliers, new entrants, substitutes, and the competition between existing firms on the market (Grant, 2010).

Furthermore, the macro specific causes can be explained by Francis Aguilar´s PEST-framework from 1967. The framework is a strategic model explaining macro level factors that influences a company. The macro economic factors are political, economical, social, and technological events (Arline, 2014)

In previous research, a total number of 236 plausible causes to financial distress have been identified. However, many of the causes mentioned in previous research are similar or identical and could therefore be merged in to few more general causes. Accordingly, the 236 causes have been merged into 37 more general causes. Yet, some of the 236 causes have no strict boundaries that distinguish them and could therefore be classified in to several of the 37 general causes. The classification of the original 236 causes has been made after the authors´ best abilities. The conceptual framework has thereafter been scrutinized and adjusted by an employee at the Swedish Construction Federation together with other specialists in the field. By doing so, the researchers were able to exclude some original causes that were not considered applicable to the construction industry e.g. poor weather conditions, which may be more applicable within the agricultural industry. An overview of the 37 general causes as well as examples of some of the original causes, are presented in Table 5. Table 6 provides an overview of where the original causes have been found. A full overview of all causes and their classification is available in Appendix 4. The conceptual framework is presented in Exhibit 4, illustrating a company's way to bankruptcy.

Table 5 – Factors causing financial distress

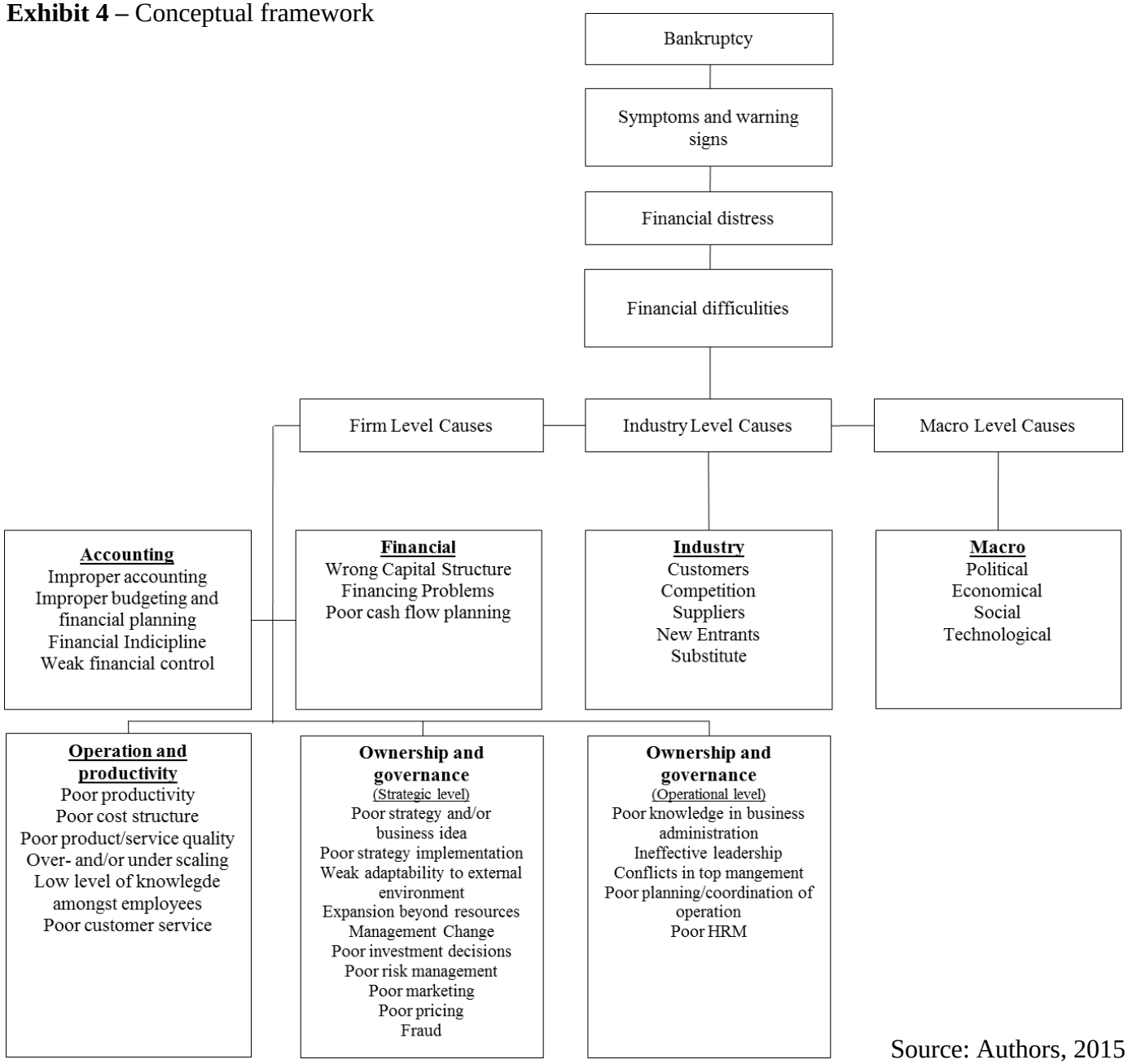
INTERNAL CAUSES (FIRM SPECIFIC)	
Operation and productivity	
Poor cost structure	E.g. high cost structure **(h)**, high distribution costs **(c)**, increased costs for labor, goods, rents etc. **(f)**.
Poor productivity	E.g. lack of balanced experience **(a)**, poor maintenance system **(c)**, lack of commitment by employees **(c)**.
Poor product/service quality	E.g. weak production and quality control **(c)**, deteriorating quality **(c)**.
Over- and/or under scaling	E.g. Uneconomic plant size **(c)**, over staffing **(c)**.
Low level of knowledge amongst employees	E.g. employees lack appropriate education **(f)**.
Poor customer service	E.g. poor customer service (c, g)
Ownership and governance (operational level)	
Poor knowledge in business administration	E.g. top management lack appropriate education **(f)**, top management uninterested in management control **(g)**, poor general administration **(j)**.
Ineffective leadership	E.g. poor supervision **(f)**, nepotism **(j)**, autocratic management **(g)**.
Conflicts in top management	E.g. personal problems **(f)**, trouble between partners **(j)**, conflicts amongst key personnel **(c)**.
Poor planning/coordination of operations	E.g. poor planning and coordination of operations **(f)**, poor communication between manufacturing and sales **(j)**, poor internal communication **(j)**.
Poor human resource management	E.g. high turnover of workers **(h)**, poor labor relations **(c)**, unmotivated employees **(g)**.
Ownership and governance (strategic level)	
Poor strategy and/or business idea	E.g. lack of diversification **(j)**, change hysteria **(d)**, business idea is not competitive **(g)**.
Poor strategy implementation	E.g. small number of big decisions turned out bad **(e)**, poor implementation of business idea **(g)**, insufficient capital **(i)**.
Weak adaptability to external environment	E.g. poor business development **(f)**, technological failures **(c)**, misdirected product development **(f)**.
Expansion beyond resources	E.g. too quick expansion **(d)**, uncontrolled expansion **(g)**, compny entered new segment **(d)**.
Management change	E.g. struggles after management succession **(f)**, changed owner structure **(d)**, poor structural change **(f)**.
Poor investment decisions	E.g. too big investments in fixed assets **(f)**, too small investments in fixed assets **(f)**, lack of information on own market **(j)**.
Poor risk management	E.g. contingency problems **(h)**, unexpected financial problems **(f)**, the industry was risky **(g)**.
Poor marketing	E.g. inadequate marketing **(f, g)**, lack of marketing policy **(c)**.
Poor pricing	E.g. too low prices **(f)**, irrational price structure **(c)**.
Fraud	E.g. thefts, embezzlements and fraud **(f)**, fraud **(a)**, ”tricky” company formations **(d)**.
Financial	
Financing problems	E.g. the business started with too small equity **(f)**, lack of access to credit **(h)**, capital intense industry **(g)**.
Wrong capital structure	E.g. high interest expenses **(f)**, excessive borrowings **(c)**, improper capital decisions **(h)**.
Poor cash flow planning	E.g. bad cash planning and control **(c)**, poor management of receivables **(c)**.
Accounting	
Improper budgeting and financial planning	E.g. poor planning and control **(f)**, lack of financial policies **(c)**, improper tax planning **(c)**.
Improper accounting	E.g. insufficient external accounting **(f)**, poor accounting records **(h)**, poor practice of accounting standards **(e)**.
Financial indiscipline	E.g. financial indiscipline **(h, c, e)**, CEO with excessive purchase behavior **(d)**.
Weak financial control	E.g. lack of financial control **(h)**, weak budgetary control **(c)**, lack of expenditure control system **(c)**.

EXTERNAL CAUSES	
Macro-level causes	
Political	E.g. the business is suffering from patent litigation **(j)**, policy changes from government **(e)**, deregulation of key industries **(b)**.
Economical	E.g. the business suffered from high interest rates **(b)**, the industry was highly cyclical **(g)**, unforeseen factors outside managers´ control **(f)**.
Social	E.g. shortage of skilled manpower **(h, e)**, social constrains **(g)**.
Technological	E.g. poor development of new technology **(c)**.
Industry specific causes	
Competition	E.g. low turnover due to high competition **(f)**, international competition **(h)**, over capacity within the industry **(b)**.
Customers	E.g. a change in customers taste and preferences **(c)**, dependent on one single customer **(g)**, counter party default **(e)**.
Suppliers	E.g. a change in the lending policies of financial institutions **(c)**, dependent on one supplier **(g)**.
New entrants	E.g. entry of large number of firms and thereby sudden increase in the industry capacity **(c)**, high business formation rates in certain periods **(b)**.
Substitutes	*Non of the causes in the previous research refered directly to financial distress due to substitute*

Table 6 – Overview of previous researchers

ID	Author	Number of causes
a	Altman (1969)	6
b	Altman (2006)	7
c	Sasidharan (2009)	49
d	Folkesson (2006)	15
e	Jahur & Quadir (2012)	27
f	Kedner (1975)	38
g	Kuronen (1960)	42
h	Memba & Jobs (2013)	24
i	Stanley & Girth (1971)	7
j	Woodruff & Alexander (1958)	21
	SUM	**236**

Exhibit 4 – Conceptual framework



Source: Authors, 2015

4. METHOD

The method chapter illustrates and discusses the logic the thesis use in order to answer the research question. The chapter starts with a description of the research design, followed by a description of how relevant data is gathered, processed and evaluated and ends with reflections on the study´s validity and reliability.

4.1 RESEARCH DESIGN

A well-formed research design is intended to provide good answers to the research question (Bryman & Bell, 2011). Based on the following aspects, this study is based on a quantitative research approach; firstly, a quantitative study enables the authors to handle large amounts of data, which can be processed and then used to generalize the target population. Secondly, the purpose of this report is to collect and analyse accountants´ experiences from bankruptcies within the construction industry. The authors aim to gather general opinions from accountants, why a quantitative approach to handle large amounts of data is appropriate (Bryman & Bell, 2011). Previous researcher Kedner (1975) claims that there are issues when investigating shortcomings connected to the respondents. By performing a study based on business owners´ perceptions, the study would suffer great risk of becoming severely biased. To overcome such issues, the study is directed towards accountants of bankrupted construction companies. The authors of this report believe that accountants of companies that have filed for bankruptcy in the Swedish construction industry during the last three years possess valuable knowledge about the industry. Moreover, they are able to answer more objectively than business owners or managers, who are more likely to perceive statements as incriminating and therefore cause more bias. Lastly, a deductive approach is coherent with a quantitative method and enables the authors to test a framework, which is in line with the conceptual framework the authors intend to test (Creswell, 2009). Instead of only finding plausible causes to financial distress in the construction industry, this study also intends to find causes that are generally more essential than others.

4.2 RESEARCH INSTRUMENT

The instrument used for gathering data is a questionnaire. By using a questionnaire, the researchers are able to gather large volumes of data. Questionnaires are the most popular method of gathering quantitative data, due to the fact that it is cheap, provides anonymity, and are easily used (Creswell, 2009). Previous researchers as Jahur & Quadir (2012) and Memba & Job (2013) have approached the same type of research questions in a similar way with satisfying outcome. The questionnaire was constructed at the website www.webropol.com and the answers were gathered and processed through the website.

4.3 QUESTIONNAIRE DESIGN

In order to answer the research question, the questionnaire was based on the conceptual framework developed by the authors, *see section 3.2*. By scrutinizing previous research, the authors were able to detect a total of 236 causes to financial distress. These causes were merged into 37 more general causes, which constituted the questionnaire base. According to an Informant (2015) at the Swedish Construction Federation, three of the general causes should be excluded, due to their limited impact on the industry. The excluded causes were

"Technological market changes", "Substitutes" and "New entrants". Technological market changes and substitutes were excluded due to the absence of significant technological developments and the lack of threat from substitutes. New entrants were excluded since the threat of new entrants is not likely to cause financial distress itself. However, if new entrants actually enter the market, it is classified as being part of the market competition (Informant, 2015).

The questionnaire, consisting of 34 Likert scale questions, asked the respondents how important each of the 34 causes from the conceptual framework was to financial distress in the construction industry. For each cause, the respondents were offered five alternatives: "*N/A*", "*Not significant*", "*To some extent*", "*Significant",* and "*Highly significant*". The lack of a mid-alternative made the respondents to choose whether each factor was significant or not. According to Tsang (2012), there is a risk of providing respondents with a mid-alternative since this can be seen as a neutral alternative and respondents are more likely to make neutral answers when submitting questionnaires. Since the objective is to investigate causes to financial distress, counteracting response alternatives has been excluded and causes that may mitigate financial distress is covered in the "*Not significant*" alternative. Two open questions were also included in the questionnaire. The purpose of using two open questions was to detect any important causes that previous research had overseen, resulting in shortcomings in the conceptual framework, and receive general feedback regarding the structure of the survey. The survey is shown in Appendix 5.

4.4 PILOT TEST

As suggested by Zikmund et al. (2013), that argue that a pretest of a questionnaire survey is essential in order to detect flaws, a convenient sample was used to identify problems in the questionnaire design and to ensure that any ambiguities were detected. The sample consisted of ten respondents, which included students, lecturers and experts in the field. All respondents answered the survey and minor adjustments were made. The survey was initially supposed to be sent to one of the most profound Swedish researchers in the field, Anja Koponen, but unfortunately she passed away some time ago. Instead, the authors of this report send the survey to her mentor, Evert Gummesson, a professor at the University of Stockholm, with many years of experience in similar research, which provided the study with many insightful thoughts on how to approach the research question.

4.5 SAMPLE DESIGN

The sample design describes the population, the sample selection and how the empirical data is gathered (Bryman & Bell, 2011).

4.5.1 POPULATION

The target population is all accountants with experience of bankruptcies within the Swedish construction industry.

4.5.2 SAMPLING METHOD

The selected sample is the accountants of limited companies that went bankrupt between 2012 and 2014. By focusing on these accountants, the respondents have a recent experience of construction companies, financial distress, and bankruptcies. Since other business types, such as sole proprietorships, often lacks accountant and have few obligations to provide public information such as annual reports and information about their accountant, these types of companies have been excluded from this survey. The selected sample was gathered by using Retriever's database and the sample was found using the following criteria:

Enterprise type; "limited companies"
Bankruptcy closed; from 2012-01-01 to 2014-12-31
SIC code: 41.100-43.999

Every Swedish company can have several registered SIC-codes. However, in accordance to the Swedish Construction Federation, a company which is active within several branches, is only included in the substrate to the sample if the company has registered that the company's primary activity is within the frames of the construction industry (BI, 2015b). As seen in Table 7, 241 of the companies fulfilling the three sample criteria was still excluded since SIC code 41.100 – 43.999 was not registered as primary activities.

Table 7 – Overview of the sample selection

Sample	**2014**	**2013**	**2012**
Bankrupt companies	863	740	512
Excluded due to SIC-code	-107	-82	-52
Total number of limited companies in the construction industry which went bankrupt between 2014 and 2012		**1874**	
Number of cases excluded since there was no accountant, accountant occur more than once, and/or no available e-mail address		-943	
Sent E-mails		**931**	
Invalid E-mail addresses		-21	
Sent to wrong recipent (verified)		-3	
Sample size		**907**	
Numbers of responses		**90**	
Response rate		**9.9%**	

The accountants´ name and the accountants´ auditing firms were gathered by using the Retriever database. The e-mail addresses were gathered by manually searching for each accountant using Internet. Out of the 1874 remaining companies, 943 did not have any accountant, the same accountant was accountant for at least two of the companies, or there was no available e-mail address to the accountant. This meant that a total of 931 surveys were sent out. 21 of the e-mail addresses were not valid and did not reach any receiver. In three cases, the e-mail address was confirmed to not have reached the right person. Summing this

up, the survey can be assumed to have reached 907 accountants, representing our sample size. According to Gummesson (2015), a response rate for these kinds of surveys, surveys sent out via e-mail and without any prior contact, can be expected to be close to 10 percent. Indeed, 90 of the accountants did respond, resulting in a response rate of 9.9 percent.

Bryman and Bell (2011) discuss in their book *Business research methods* that a low response rate may raise questions about the representativeness of the answers. However, Bryman and Bell (2011) continue their discussion referring to several prominent researchers that based their research on surveys with low response rates, yet with successful results. Bryman and Bell (2011) conclude that it is important to acknowledge a low response rate, but the risk of a low response rate should not put off the use of such techniques.

4.6 DATA COLLECTION

The empirical primary data collection was made through e-mail, where a link to the survey at www.webropol.com was attached. In order to increase the response rate, the authors constructed a cover letter that presented the authors and the subject in a concise and polite way, which was intended to give the accountants a positive attitude towards the concept and the survey. To those who received e-mail and did not answer within a week, a reminding e-mail was sent out. For those who did not answer after the first reminder, a second reminder was sent out one week later. All accountants had a minimum of two weeks to respond. Furthermore, empirical secondary data about the construction companies that went bankrupt during the past three years was gathered by using the Retriever database. This was made to provide the reader with an understanding of the characteristics of a general bankrupted construction company.

4.7 DATA ANALYSIS

Each cause in the empirical section is evaluated and presented individually. Moreover, the causes are later grouped and analyzed according to its corresponding group. Since the purpose of the thesis is to identify driving causes to financial distress, the focus of the data analysis will be on the top twelve causes found in this report. Additionally, a discussion of the twelve least driving causes to financial distress will also be made. The statistical method used is primarily descriptive statistics. By using a survey consisting of questions with ordinal Likert scale answers together with a low response rate, it is hard to reach conclusions based on statistical significance e.g. confidence interval, why a descriptive approach is of greater use (Rasmussen, 1989; Bryman & Bell, 2011). The descriptive statistics presents the results from two perspectives. The first perspective analyses the results by dividing the answers in two groups. "*Irrelevant*" and "*To some extent*" are considered to be less significant causes to financial distress whereas "*Significant*" and "*Highly significant*" are considered to be of greater importance. The "*N/A*" alternative is considered a missing value. However, this perspective entails a potential risk. By calculating the ratio of "*Significant*" and "*Highly significant*" answers, the result will not consider fluctuations within the two types of answers, resulting in a risk that one of the two alternatives in each group could be overrepresented. Therefore, this is considered by also presenting the mean of each factor and group. Therefore,

the response alternatives are converted into a numerical scale that ranges from zero to three. "*N/A*" is considered a missing value, "*Irrelevant*" is graded zero, "*To some extent*" as one, "*Significant*" as two and "*Highly significant*" as three. Furthermore, the mean value is calculated as the sum of the causes' values divided with the number of respondents (n) where the missing values have been excluded. The advantage with this perspective is that it takes into accountant the differences between all answers. However, the disadvantage is that this perspective is based on an assumption of equal distances between alternatives, which is a common critique of Likert scale surveys (Rasmussen, 1989).

4.8 RELIABILITY & VALIDITY

Reliability refers to the consistency of a test whereas validity refers to the tests´ ability to measure the intended concept (Bryman & Bell, 2011). Considering the reliability aspect, relevant theory about financial distress and bankruptcies consists of several expressions and terms that are common to researchers and academicians, but not well known to the large crowd. It is of great importance that each and every of the respondents fully understand every cause listed in the survey, and this is mitigated by explicitly explaining terms that the authors believe that every respondent may not be familiar with, *see Appendix 5.* Furthermore, by focusing on accountants, this reliability problem is mitigated. In general, many business owners and top managers in small companies within the construction industry lack higher education, which may result in difficulties to fully understand academic expressions and the meaning of different causes (BI Analys, 2013). Accountants come from academic backgrounds and are therefore more likely to understand expressions derived from academia, which should result in more coherent perceptions of the survey´s questions (Kuronen, 1992). Another reliability issue is the company selection of limited companies. If accountants of other types of companies, such as sole proprietorships, would have been included in the study there is a risk that the result would differ. However, this limitation was necessary due to feasibility reasons where information about accountants were more accessible in limited companies.

Considering validity, one problem is if the conceptual framework covers all plausible causes to financial distress, which has been inadequate in previous research. By compiling causes to financial distress from several researchers, the authors hope that the developed conceptual framework is more accurate, resulting in increased validity. Open questions were added to the survey where respondents could state causes they considered overlooked. Another risk is that some accountants may over-estimate the importance of causes within their field of expertise resulting in causes focused on areas such as business administration, finance, and accounting would be considered more relevant than they in fact are.

5. RESULT

This chapter aims to present and explain the result of the survey. The first section presents an overview of typical characteristics of limited companies in the construction industry, which went bankrupt between 2012 and 2014, whereas the second section presents the collected result from the responding accountants. The last section shows the answers of the open questions where the respondents were able to add additional causes to bankruptcies or contribute with other feedback.

5.1 COMPANY OVERVIEW

The purpose of the company overview is to provide the reader with an understanding of how a typical bankrupt company in the Swedish construction industry looks like. Exhibit 5 illustrates how bankruptcies of limited companies in the construction industry are divided between branches. The graph shows that the majority of the bankruptcies occurred within the frames of specialised construction activities (66.6 percent). Only 1.5 percent of the companies were classified within civil engineering.

Exhibit 5 – Bankruptcies among the industry's branches

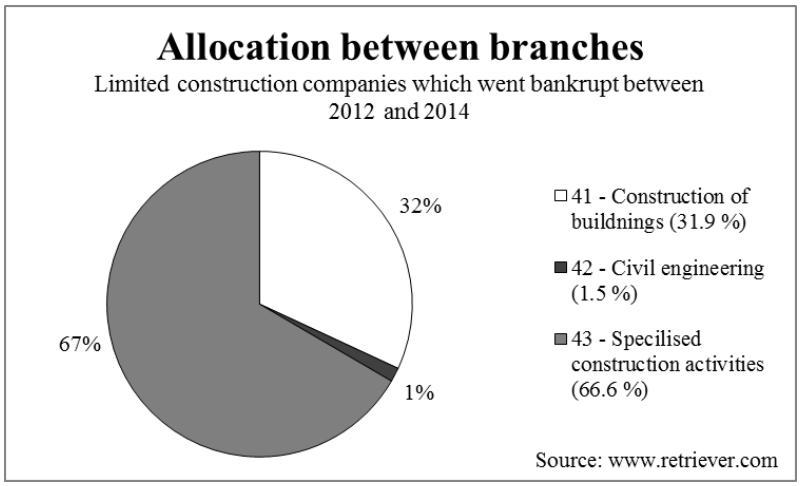


Table 8 provides a further overview of the bankrupted companies in terms of size and which type of problems they were facing. The data is based on the companies´ last submitted annual reports, and does therefore not provide an overview of the financial numbers of the company at the time of the bankruptcy.

Table 8 – Bankruptcy statistics (limited companies in the construction industry between 2012 and 2014)

	2014	2013	2012	SUM
# Bankrupt companies in the construction industry	756	658	460	1874
# Companies without any registered transactions	129	158	112	399
# Adjusted number of bankrupt companies	627	500	348	1475
Company Size (Thousands SEK)				
Average turnover	6,462	5,373	4,455	5,619
Median	2,946	2,230	1,906	2,440
1 quartile	1,006	636	639	760
3 quartile	6,579	5,801	4,733	5,894
Highest turnover	242,325	127,411	63,448	242,325
Lowest turnover	0	0	0	0
Balance sheet problems				
# Companies having equity < 50% of share capital	213	119	122	454
# Companies having assets < liabilities	191	107	106	404
Payment problems				
# Companies having current ratio < 1	268	163	170	601
Profitability				
Average ROA (%)	-0.71	-5.59	-2.73	-2.73
# Companies with negative ROA (Thousands SEK)	338	249	180	767

Table 8 shows that the average turnover of a bankrupted construction company during the specified period was 5.6 million SEK. The median turnover differs from the average turnover with more than 3 million SEK and was equal to 2.4 million SEK. Furthermore, 75 percent of the examined construction companies had a turnover less than 5.9 million SEK. Even though some of the bankrupted companies had a turnover up to nearly a quarter of a billion SEK, Table 2 shows that the majority of the companies had a turnover within the range of a micro sized company (0 - ≈ 18.5 million SEK). The financial state of the bankrupted companies, were in many cases severe. In 454 cases, the construction companies' equity were less than 50 percent of the share capital, indicating they reached the first level of the balance sheet problems. 404 of them had also reached level two of the balance sheet problems, having assets valued less than their liabilities. Balance sheet problems occurs when companies struggles with their profitability. The average profitability for the companies were -2.73 percent, and more than half of the companies had a negative return on assets.

Furthermore, the current ratio measures a company's ability to pay off its short-term debts, where a ratio less than 1 indicates potential problems for a company. Over 40 percent, or 401 companies, had a current ratio less than 1. These companies are in the risk zone to reach level one of the payment problems. Since these companies have finished their bankruptcy, all of them can be assumed to have reached level two of the payment problems, meaning they lack the ability to pay their debts in a longer period of time.

5.2 SURVEY RESULT

A summary of the accountants' answers is presented in Table 9. As seen in the table, the total number of responding accountants was 90. However, in a few cases, accountants skipped or missed to answer some of the questions. For instance, when answering how significant the accountants considered political aspects to be for bankruptcies in the construction industry, five out of 90 accountants did not answer, resulting in (n) to be equal to 85. Furthermore, Table 9 shows how answers are allocated between the Likert-scale's response alternatives: "*N/A*", "*Irrelevant*", "*To some extent*", "*Significant*", and "*Highly significant*".

Table 9 – Summary of survey result

Causes	N/A	Irrelevant	To some extent	Significant	Highly significant	n
Macro level causes						
Political	9	41	24	8	3	85
Economical	4	24	25	28	4	85
Social	6	42	30	7	0	85
Total	**19**	**107**	**79**	**43**	**7**	**255**
Industry level causes						
Customers	4	7	33	33	8	85
Competition	3	13	41	20	9	86
Suppliers	6	39	37	3	1	86
Total	**13**	**59**	**111**	**56**	**18**	**257**
Accounting						
Improper accounting	3	22	39	19	7	90
Improper budgeting and financial planning	2	3	27	43	15	90
Financial Indicipline	4	49	21	13	3	90
Weak financial control	2	3	16	41	28	90
Total	**11**	**77**	**103**	**116**	**53**	**360**
Operation and productivity						
Poor customer service	15	24	41	7	2	89
Poor cost structure	2	4	34	42	7	89
Poor product/service quality	6	18	31	26	7	88
Low level of knowledge amongst employees	11	25	38	13	2	89
Poor productivity	5	12	45	22	4	88
Over- and/or under scaling	5	11	43	25	5	89
Total	**44**	**94**	**232**	**135**	**27**	**532**
Ownership and governance (strategic level)						
Poor strategy and/or business idea	12	19	49	10	0	90
Poor strategy implementation	14	18	51	6	0	89
Weak adaptability to external environment	7	13	40	28	2	90
Poor investment decisions	5	29	35	19	2	90
Expansion beyond resources	5	9	35	28	13	90
Management Change	9	42	30	8	1	90
Poor risk management	4	2	35	46	3	90
Poor pricing	3	7	31	34	15	90
Poor marketing	12	43	26	8	0	89
Fraud	16	32	30	7	5	90
Total	**87**	**214**	**362**	**194**	**41**	**898**
Ownership and governance (operational level)						
Poor knowledge in business administration	2	2	34	41	11	90
Ineffective leadership	7	8	41	31	3	90
Conflicts in top management	11	25	40	13	0	89
Poor planning/coordination of operation	6	4	33	40	5	88
Poor HRM	8	18	44	19	1	90
Total	**34**	**57**	**192**	**144**	**20**	**447**
Financial						
Wrong Capital Structure	2	3	39	30	15	89
Financing Problems	2	6	31	40	9	88
Poor cash flow planning	2	4	19	43	21	89
Total	**6**	**13**	**89**	**113**	**45**	**266**

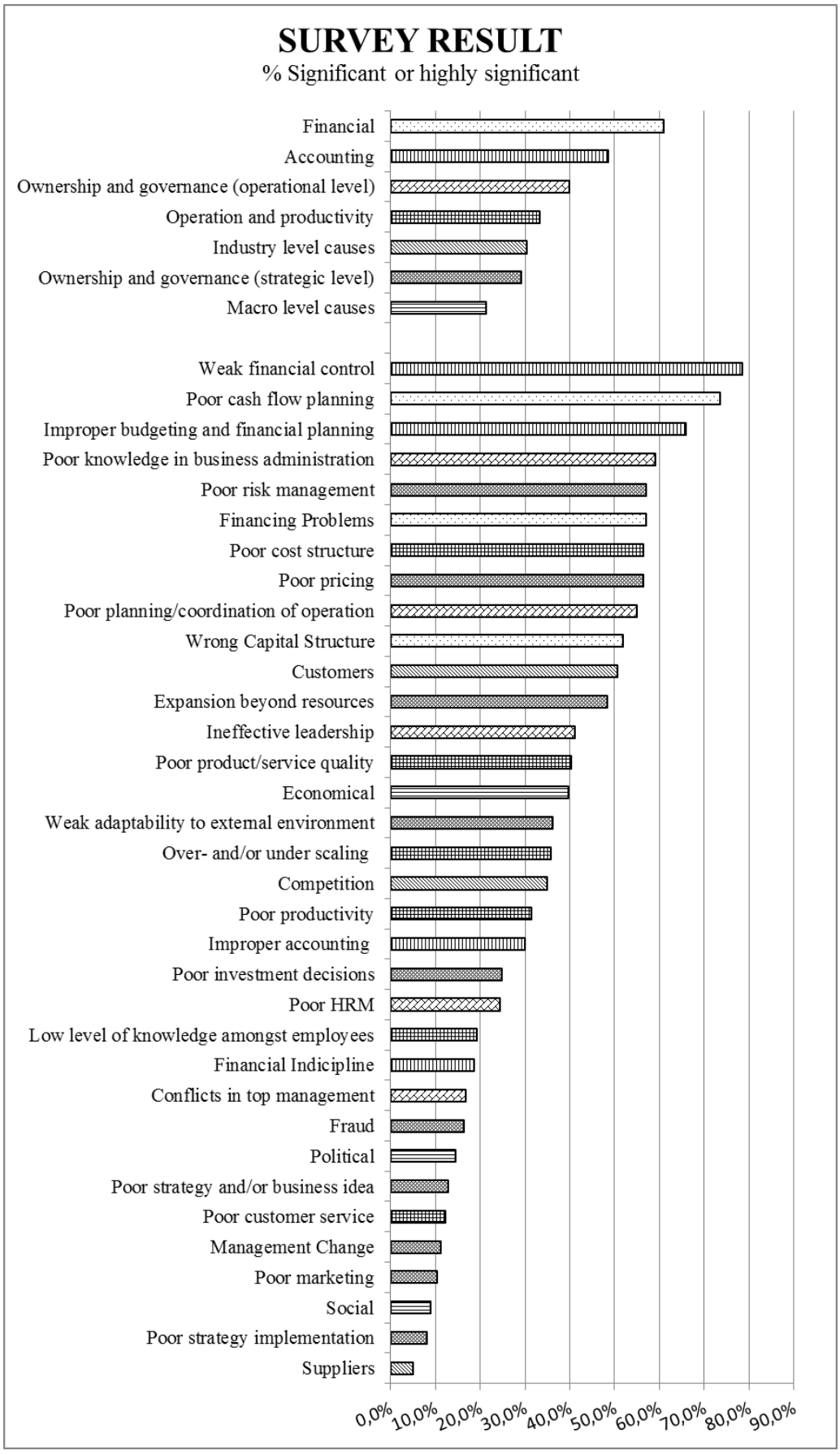
The survey result is presented from two perspectives. The first perspective analyses the results by dividing the answers in two groups. *"Irrelevant"* and *"To some extent"* are considered to be less significant causes to financial distress whereas *"Significant"* and *"Highly significant"* are considered to be of greater importance. The *"N/A"* alternative is considered a missing value. Table 10 and Exhibit 6 illustrate the answers in term of the ratio of significant or highly significant answers.

Table 10 – Survey result, share of significant and highly significant answers

Causes	Significant or highly significant	n (excluding "N/A")	% Significant or highly significant
Macro level causes			
Political	11	76	14,5%
Economical	32	81	39,5%
Social	7	79	8,9%
Total	**50**	**236**	**21,2%**
Industry level causes			
Customers	41	81	50,6%
Competition	29	83	34,9%
Suppliers	4	80	5,0%
Total	**74**	**244**	**30,3%**
Accounting			
Improper accounting	26	87	29,9%
Improper budgeting and financial planning	58	88	65,9%
Financial Indicipline	16	86	18,6%
Weak financial control	69	88	78,4%
Total	**169**	**349**	**48,4%**
Operation and productivity			
Poor customer service	9	74	12,2%
Poor cost structure	49	87	56,3%
Poor product/service quality	33	82	40,2%
Low level of knowledge amongst employees	15	78	19,2%
Poor productivity	26	83	31,3%
Over- and/or under scaling	30	84	35,7%
Total	**162**	**488**	**33,2%**
Ownership and governance (strategic level)			
Poor strategy and/or business idea	10	78	12,8%
Poor strategy implementation	6	75	8,0%
Weak adaptability to external environment	30	83	36,1%
Poor investment decisions	21	85	24,7%
Expansion beyond resources	41	85	48,2%
Management Change	9	81	11,1%
Poor risk management	49	86	57,0%
Poor pricing	49	87	56,3%
Poor marketing	8	77	10,4%
Fraud	12	74	16,2%
Total	**235**	**811**	**29,0%**
Ownership and governance (operational level)			
Poor knowledge in business administration	52	88	59,1%
Ineffective leadership	34	83	41,0%
Conflicts in top management	13	78	16,7%
Poor planning/coordination of operation	45	82	54,9%
Poor HRM	20	82	24,4%
Total	**164**	**413**	**39,7%**
Financial			
Wrong Capital Structure	45	87	51,7%
Financing Problems	49	86	57,0%
Poor cash flow planning	64	87	73,6%
Total	**158**	**260**	**60,8%**

Exhibit 6 is a clarification of Table 10, which illustrates the perceptions of the 34 causes and their groups. On the group level, the findings shows that *financial causes* got the highest ratio of significant or highly significant answers, where 60.8 percent of the accountants considered *financial causes* to be significant or highly significant. *Financial causes* were followed by *accounting causes* (48.4%) and causes related to ownership and governance on the operational level (39.7%). At the factor level, the findings show that "*Weak financial control"* got the highest ratio of significant or highly significant answers (78.4%) followed by *"Poor cash flow planning"* (73.6%), *"Improper budgeting and financial planning"* (65.9%), *"Poor knowledge in business administration"* (59.1%), and *"Poor risk management"* (57.0%). In Exhibit 6, the causes of each group are marked with the same pattern in order to visualize differences and similarities of causes within every group.

Exhibit 6 – Survey result, share of significant and highly significant answers



As explained in *section 4.7*, there is a risk that this way to present the result is misleading. By calculating the sum of *"Significant"* and *"Highly significant"* answers and compare them with the *"Irrelevant"* and *"To some extent"* answers, the result will not consider fluctuations within the two types of answers. Since each of the two alternatives within each type of answer is considered equal, there is a risk that one of the two alternatives in each group could be overrepresented. Therefore, this is taken into account when presenting the second perspective - the mean of each factor and group. In order to calculate the mean, the response alternatives are converted into a numerical scale that ranges from zero to three. *"N/A"* is considered a missing value, *"Irrelevant"* is graded zero, *"To some extent"* as one, *"Significant"* as two and *"Highly significant"* as three. Furthermore, the mean value is calculated as the sum of the factors' values divided with the number of respondents (n) where the missing values have been excluded.

Table 11 – Survey result, mean

Causes	Irrelevant	To some extent	Significant	Highly significant	n (excluding "N/A")	Mean
Macro level causes						
Political	41	24	8	3	76	0,64
Economical	24	25	28	4	81	1,15
Social	42	30	7	0	79	0,56
Total	**107**	**79**	**43**	**7**	**236**	**0,79**
Industry level causes						
Customers	7	33	33	8	81	1,52
Competition	13	41	20	9	83	1,30
Suppliers	39	37	3	1	80	0,58
Total	**59**	**111**	**56**	**18**	**244**	**1,14**
Accounting						
Improper accounting	22	39	19	7	87	1,13
Improper budgeting and financial planning	3	27	43	15	88	1,80
Financial Indicipline	49	21	13	3	86	0,65
Weak financial control	3	16	41	28	88	2,07
Total	**77**	**103**	**116**	**53**	**349**	**1,42**
Operation and productivity						
Poor customer service	24	41	7	2	74	0,82
Poor cost structure	4	34	42	7	87	1,60
Poor product/service quality	18	31	26	7	82	1,27
Low level of knowledge amongst employees	25	38	13	2	78	0,90
Poor productivity	12	45	22	4	83	1,22
Over- and/or under scaling	11	43	25	5	84	1,29
Total	**94**	**232**	**135**	**27**	**488**	**1,19**
Ownership and governance (strategic level)						
Poor strategy and/or business idea	19	49	10	0	78	0,88
Poor strategy implementation	18	51	6	0	75	0,84
Weak adaptability to external environment	13	40	28	2	83	1,23
Poor investment decisions	29	35	19	2	85	0,93
Expansion beyond resources	9	35	28	13	85	1,53
Management Change	42	30	8	1	81	0,60
Poor risk management	2	35	46	3	86	1,58
Poor pricing	7	31	34	15	87	1,66
Poor marketing	43	26	8	0	77	0,55
Fraud	32	30	7	5	74	0,80
Total	**214**	**362**	**194**	**41**	**811**	**1,08**
Ownership and governance (operational level)						
Poor knowledge in business administration	2	34	41	11	88	1,69
Ineffective leadership	8	41	31	3	83	1,35
Conflicts in top management	25	40	13	0	78	0,85
Poor planning/coordination of operation	4	33	40	5	82	1,56
Poor HRM	18	44	19	1	82	1,04
Total	**57**	**192**	**144**	**20**	**413**	**1,31**
Financial						
Wrong Capital Structure	3	39	30	15	87	1,66
Financing Problems	6	31	40	9	86	1,60
Poor cash flow planning	4	19	43	21	87	1,93
Total	**13**	**89**	**113**	**45**	**260**	**1,73**

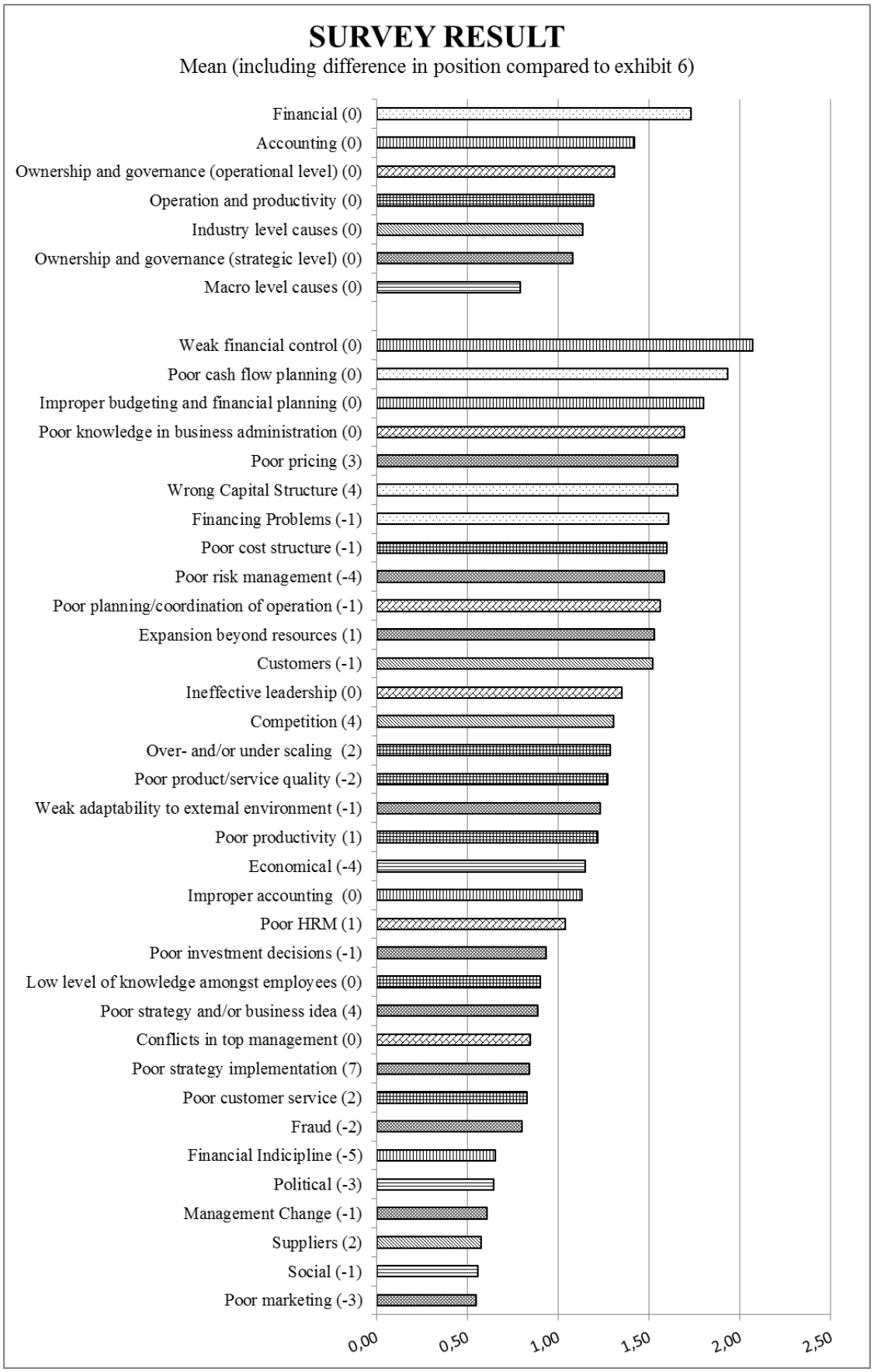
Calculation of mean: N/A = Missing value, Irrelevant = 0, To some extent = 1, Significant = 2, and Highly significant = 3

Table 11 presents the mean of each cause as well as the mean for every of the seven overlying groups. When comparing the causes´ mean, it is clear that there are large differences of the causes' perceived importance. Looking at the seven groups, the financial causes clearly have the highest mean, which equals 1.73. The accounting causes are second with 1.42 followed by causes related to ownership and governance on the operational level (1.31), operations and productivity causes (1.19), industry level causes (1.14), causes related to ownership and governance on the strategic level (1.08), and macro level causes, which have a mean of merely 0.79.

The cause with the highest mean is *"Weak financial control"* (2.07) followed by *"Poor cash flow planning"* (1.93), *"Improper budgeting and financial planning"* (1.80), *"Poor knowledge in business administration"* (1.69) and *"Poor pricing"* (1.66). The causes considered least important are *"Poor marketing"* (0.55), *"Social"* (0.56), *"Suppliers"* (0.58), *"Management change"* (0.60) and *"Political"* (0.64). This is further illustrated in Exhibit 7.

In Exhibit 7, the causes of each group are marked with the same pattern in order to visualize differences and similarities of causes within every group. Furthermore, the number within brackets shows the factor´s position in comparison with the ranking in Exhibit 6. The comparison shows that there are small differences between the two perspectives. The twelve factors with the highest mean also have the highest ratio of significant and highly significant answers. Furthermore, the twelve factors with the lowest mean also have the lowest ratio of significant and highly significant answers.

Exhibit 7 – Survey result, mean



5.3 OPEN QUESTIONS

The intention of the conceptual framework developed in section 3.2 was to cover all potential causes to financial distress. However, two open questions were added to the survey, which gave the respondents the opportunity to add causes they believed the conceptual framework had overseen and further elaborate their answers. The total number of answers was 33, where 24 respondents answered the first open question and nine respondents answered the second question. All additional comments about reasons to financial distress in the Swedish construction industry were covered by the conceptual framework. However, it is clear that the accountants wanted to emphasize certain causes. Three causes that were particularly referred to were *"Customers"*, *"Fraud"*, and *"Poor risk management"*. All answers are available in Appendix 6.

In seven of the 33 answers, accountants pointed out customers to be influential to financial distress in the Swedish construction industry.

"*The clients I work with in the construction industry, all small businesses, have major problems that customers do not want to pay their bills. The industry has small margins due to price pressure from foreign workers and unreported employments (although it has decreased since the ROT reform) and there are small spaces for customer losses. Non-payment is the single most important factor to bankruptcies among my clients - mainly as a result of disputes.*" (Answer 8a)

"*A construction company's invoices tend to amount large sums and sometimes does customers use this in order to bargain on the price retrospectively, claiming there are some minor construction errors which they exaggerate the importance of. When construction companies' customers are private individuals, the buyers´ knowledge is usually low and construction companies tend to have difficulties to bridge this knowledge gap and must therefore sometimes adjust the price to avoid a costly litigation..." (*Answer 11a)

"... I can only speak for the builders I have worked with, but during my 25 years in the business, I have only encountered a dishonest builder once. Unfortunately, I have in several occasions seen dishonest and ignorant customers, who after the job is finished, haggle on the price since they think they have not received what they ordered, or that the job was conducted in a wrong way" (Answer 4b)

Fraud and dishonest entrepreneurs were mentioned as relevant causes to financial distress in six answers.

"*This industry has a higher degree of entrepreneurs without serious intentions than other industries. There are low entry barriers and no skill requirements.*" (Answer 15a)

"*I have personally observed that the construction industry is characterized by significant economic crime and lack of ethics, and my view is supported by several court orders. As the legal requirements of having an auditor was removed, a construction company without*

bookkeeping and with fake annual reports distorts the competition. Since no one annually checks companies´ accounting, several limited companies save millions by neglecting bookkeeping and good order. These villain companies which previously were operated as sole proprietorship and partnership companies is nowadays operated as limited companies, giving the companies improved protections, which makes it more difficult to stop them." (Answer 22a)

"*An industry with many shady business owners*" (Answer 2b)

Causes that refers to *"Poor risk management"* was often mentioned as relevant for financial distress in the construction industry. Since many companies apply fixed pricing on their projects, small cost increases leads to deteriorating profitability.

"*The management has poor knowledge about which projects that are too large and/or risky or how profitable they are. This makes some construction companies accepting projects which they lack proper resources and capabilities for.*" (Answer 9a)

"Not much needs to go wrong in a construction project and the costs increases and there will be losses. Generally, there is a high risk the construction companies take." (Answer 12a)

"*In their eagerness to get a big job, construction companies tend to accept jobs at a too low fixed price rate. Poor ability to assess the possibilities to finish the project at fixed price. Often: large project with losses = bankruptcy."* (Answer 18a)

6. ANALYSIS

In this chapter, the empirical findings from the survey are analysed and compared with previous research. The purpose of this report is to identify driving causes to financial distress, why the top-twelve causes constitutes the main focus of the reports´ analysis. In order to compare the findings with relevant research, the analysis is based upon three previous researchers whose research methods comprises several similarities with this thesis, i.e. focusing on Swedish companies or using accountants as respondents.

When familiarizing oneself with previous research of driving causes to financial distress and bankruptcies, it is hard to come to any general conclusion. Researchers such as Koponen (2003) argues that inefficient leadership, poor knowledge in business and administration and expansion beyond resources are the most relevant causes while others argue that competition and macro-economic causes are the ones that are the most important and need the most consideration and focus (Kedner 1975; Kuronen, 1992). The more research that is being read, the more important factors are being found. One problem is that most previous research lacks a common framework that considers and covers all relevant causes. Often, different researchers implements frameworks that significantly differ from each other where the studied causes are far from the same. Examples of different researchers and their findings of driving causes to financial distress are illustrated in Table 12. The causes are listed according to relevance.

Table 12 – Comparison of causes to financial distress

Koponen (2003)	Kedner (1975)	Kuronen (1992)
1. Ineffective leadership	**1.** Competition	**1.** Competition
2. Poor knowledge in business administration	**2.** Neglected budgeting & planning	**2.** Highly cyclical industry
3. Expansion beyond resources	**3.** Too high costs	**3.** Poor profitability
4. Poor investment decisions	**4.** Top management lack business education	**4.** Risky business
5. Conflicts in top management	**5.** Management change	**5.** Too high costs
	6. Business did not start with enough capital	**6.** Improper accounting
	7. Expansion beyond resources	**7.** Weak adaptability to external environment
	8. Economical downturn	**8.** Expansion beyond resources
	9. Wrong investments	**9.** Customers
	10. Customers	**10.** Poor strategy implementation

There is a discrepancy among researchers regarding how some factors should be approached. Kuronen´s research state profitability as the third most relevant factor and too high costs as number five (Kuronen, 1992). One could easily argue that too high costs is included and affects the company´s profitability, resulting in aggregated factors are seen as more important than the more specific factors, e.g. too high costs is seen as less important than poor profitability. The aim of the conceptual framework was to identify all relevant causes to financial distress, where the factors were at the same hierarchical level. This means that e.g. poor profitability is seen as an effect of other factors rather than an original cause that leads to financial distress, and was therefore excluded in the conceptual framework. Even though the authors to their best abilities have tried to avoid this problem, some factors are yet quite similar or correlate.

The ranking made in this report, both in regards of mean and the ratio of significant or highly significant answers, indicates which causes that are perceived more important than others in a financial distress context. A factor with a low mean or a low degree of significant or highly significant answers is not equal to a cause being unimportant, it only illustrates that some causes are even more important. In order to run a healthy business, it is often crucial to be able to manage each of the 34 factors listed in this report. However, some factors are more likely to cause financial distress within the Swedish construction industry than others. Based on mean and the ratio of significant and highly significant answers, the twelve most relevant causes that leads to financial distress within the Swedish construction industry, according to this study, is shown in Table 13. Depending on which perspective i.e. mean or the ratio of significant and highly significant answers, there are minor differences of the factor's ranking, but the twelve most important causes are the same regardless the measurement method.

Table 13 – Most significant causes to financial distress

The twelve most driving causes to financial distress	Mean	% significant or highly significant
1. Weak financial control	2.07	78.4 (1)
2. Poor cash flow planning	1.93	73.6 (2)
3. Improper budgeting & financial planning	1.80	65.9 (3)
4. Poor knowledge in business administration	1.69	59.1 (4)
5. Poor pricing	1.66	56.3 (8)
6. Wrong capital structure	1.66	51.7 (10)
7. Financing problems	1.60	57.0 (6)
8. Poor cost structure	1.60	56.3 (7)
9. Poor risk management	1.58	57.0 (5)
10. Poor planning/coordination of operations	1.56	54.9 (9)
11. Expansion beyond resources	1.53	48.2 (12)
12. Customers	1.52	50.6 (11)

Section 6.1 briefly discusses the twelve most driving causes to financial distress in the Swedish construction industry and their presence in previous research. The numbers within brackets shows the causes´ ranking according to their ratio of significant or highly significant answers. In order to facilitate further discussion, the factor's ranking based on mean is used.

6.1 THE TWELVE MOST DRIVING CAUSES TO FINANCIAL DISTRESS

According to this study, the most driving cause to financial distress is *"Weak financial control"*. By not using proper financial control where the business owner do not continuously control and evaluate the business´ financials, the business is exposed to the most likely cause to financial distress in the Swedish construction industry. This factor proved to be the most driving cause with a mean of 2.07, 0.14 units above the second most important. The number of accountants who believed the factor to be a significant or highly significant cause to financial distress was 78.4 percent. Looking at the results from Koponen (2003), Kedner (1975) and Kuronen (1992), it is clear that most focus has been on budgeting and planning whereas control and monitoring to some extent has been neglected. For that reason, the three previous researchers do not emphasize *"Weak financial control"* as an important factor.

The second most important cause proved to be *"Poor cash flow planning"* with a mean of 1.93, where 73.6 percent of all respondents perceived the cause to be a significant or highly significant cause to financial distress in the Swedish construction industry. When not implementing proper cash flow planning or understanding the importance of such behavior, the business will be exposed to the second most likely cause to financial distress. *"Poor cash flow planning"* is in line with Kedner´s (1975) research as being one of the ten most important causes to financial distress. Kedner (1975) mention the cause as a part of *"Neglected budgeting and planning"*. This cause is not included in either Koponen´s (2003) or Kuronen´s (1992) work. Out of the 42 different causes used in Kuronen´s study, no one included *"Poor cash flow planning"*.

The third most driving cause to financial distress according to this study is *"Improper budgeting & financial planning"*, with a mean of 1.80 where 65.9 percent of the responding accountants perceived the cause to be a significant or highly significant cause to financial distress. Just as with *"Poor cash flow planning"*, this cause is included in Kedner´s factor *"Neglected budgeting and planning"*. This cause is aligned with his results as being one of the most important causes to financial distress (Kedner, 1975). However, Kuronen (1992) has no factor that directly refers to short term planning.

The results shows that *"Poor knowledge in business administration"* is the fourth most important cause and obtained a mean of 1.69 where 59.1 percent of the respondents perceived the cause to be a significant or highly significant cause to financial distress. When business owners lack fundamental understanding, education or interest in business administration, this problem arises. This cause has been included and stated highly relevant in Koponen´s (2003) research. Kedner (1975) also found this factor to be important and included the factor in*"Top management lack business education"*.

This study shows that *"Poor pricing"* is a highly relevant cause to financial distress and was ranked number five, with a mean of 1.66, where 56.3 percent of the respondents perceived the cause to be a significant or highly significant cause to financial distress. However, this factor is not mentioned by any of the three previous researchers.

Another cause that appeared relevant for financial distress in the Swedish construction industry was *"Wrong capital structure"*. The mean was 1.66 and 51.7 percent of all respondents claimed that an improper capital structure were a significant or highly significant cause to financial distress. This factor is not stressed by Koponen (2003) nor Kuronen (1992), who appear to have less focus on issues related to financing. In Kedner´s (1975) research, there is focus on financing problems in general but less attention is given the business´ capital structure.

The study shows that the cause "Financing problems" was the seventh most important cause to financial distress with a mean of 1.60, where 57.0 percent of the responding accountants perceived the cause to be significant or highly significant. Kedner (1975) included several factors related to financing, where his results showed that the most important was *"Business*

did not start with enough capital" which was the sixth most important cause to financial distress.
A *"Poor cost structure"* was the eighth most important cause to financial distress. With a mean of 1.60, where 56.3 percent of the respondents' perceived the cause to be of significant or highly significant importance, the result strengthened both Kedner´s (1975) and Kuronen´s (1992) research where *"Too high costs"* was found to be of great importance.

"Poor risk management" was ranked the ninth most important factor to financial distress with a mean of 1.58, where 57.0 percent of the responding accountants believed the cause to be of significant or highly significant importance. Neither of Koponen (2003), Kedner (1975) nor Kuronen (1992) included risk management as a factor in their research. However, Kuronen claims that running a *"Risky business"* was one of the ten most important causes to financial distress. This should not be mixed together with *"Poor risk management"* since Kuronen argued that the meaning of *"Risky business"* was the characteristics of the industry, while *"Poor risk management"* refers to the managements´ ability to manage risks internally, e.g. assess projects (Kuronen, 1992).

In this study *"Poor planning/coordination of operations"* was the tenth most important cause to financial distress with a mean of 1.56. 54.9 percent of the respondents believed the cause to be of significant or highly significant importance. Even if Kedner´s findings do not state *"Poor planning/coordination of operations"* as one of the ten most important causes to financial distress, his research showed that this was the eleventh most important cause. Accordingly, this report strengthens Kedner´s result. In Koponen´s (2003) and Kuronen´s, (1992) research, poor planning and coordination of operations was included as a factor, but was not seen as a highly important cause to financial distress.

One important cause to financial distress that was found in this study that is in accordance with all three previous researchers was *"Expansion beyond resources"*. This was the eleventh most important cause with a mean of 1.53, where 48.2 percent of the respondents perceived the cause as significant or highly significant.

Lastly, the twelfth most important cause was problems related to customers with a mean of 1.52 where 52.6 percent of all respondents perceived the cause as significant or highly significant. This cause is in line with Kedner´s (1975) and Kuronen´s (1992) research that showed that problems related to customers was one of the ten most occurring causes.

6.2 COMPARISON WITH PREVIOUS RESEARCH

Table 14 illustrates the most important causes to financial distress found by Koponen (2003), Kedner (1975), and Kuronen (1992) and compare them with how this report has ranked the same causes.

Table 14 – Comparison of previous research

Koponen (2003)	Ranking	Kedner (1975)	Ranking	Kuronen (1992)	Ranking
1. Ineffective leadership	13	**1.** Competition	14	**1.** Competition	14
2. Poor knowledge in business administration	4	**2.** Neglected budgeting & planning	2, 3	**2.** Highly cyclical industry	19
3. Expansion beyond resources	11	**3.** Too high costs	8	**3.** Poor profitability	-
4. Poor investment decisions	22	**4.** Top management lack business education	4	**4.** Risky business	N/A
5. Conflicts in top management	25	**5.** Management change	31	**5.** Too high costs	8
		6. Business did not start with enough capital	7	**6.** Improper accounting	20
		7. Expansion beyond resources	11	**7.** Weak adaptability to external environment	17
		8. Economical downturn	19	**8.** Expansion beyond resources	11
		9. Wrong investments	22	**9.** Customers	12
		10. Customers	12	**10.** Poor strategy implementation	26

When comparing the results of this study with Koponen´s (2003) research, several differences can be found. Koponen argues that ineffective leadership is the main driving factor to financial distress. However, this study shows that ineffective leadership is ranked as number thirteen, with a mean of 1.35 and is not considered as relevant as her study argues. *"Conflicts in top management"* and *"Poor investment decisions"* are two factors that are seen as highly important causes by Koponen, but which are less important according to this study. Both factors are placed in the lower half in the factor's ranking, *"Conflicts in top management"* in 25th place, (0.85) and *"Poor investment decisions"* in 22nd place, (0.93). However, similarities can be seen in terms of *"Expansion beyond resources"* and *"Poor knowledge in business administration"*. In Koponen´s study, both factors are placed as top-five causes and this study strengthens these factors as being important. Both *"Poor knowledge in business administration"* and *"Expansion beyond resources"* is part of the top-twelve causes in this study, which is illustrated in Table 13.

The main cause to financial distress according to Kedner (1975) is intense competition within industries. The critique against Kedner´s research was that the study was based upon insolvency administrators and their perceptions of the causes to bankruptcies. Critics argued that their opinions are based upon former business owners´ explanations of why their companies went bankrupt. Since people tend to blame failures outside their control external causes are likely to be over represented.

This study indicates that the critique to Kedner´s study may be justified. Competition was considered the most important factor in his research. In this study, the factor was ranked as number fourteen in relevance, with a mean of 1.30 where 34.9 percent of the respondents perceived the cause as being a significant or highly significant cause to financial distress, which indicates a considerable difference compared to Kedner´s study. Furthermore, *"Management change"* e.g. deaths or sickness, and an *"Economic downturn"* are two other factors Kedner argue are more relevant than this report implies. It is reasonable to believe that these factors are over represented due to the objectivity problem of business owners tending to blame failures on something outside their control. However, similarities with this report´s results can be seen, as five of the ten factors Kedner found as main drivers for financial distress were encountered among this report´s most relevant factors.

The previous study made by Kuronen (1992) focused on in depth interviews with eleven accountants and the factors they perceived to be most important causes for financial distress.

Even though the same type of respondents is used in this report, the results differ in many ways. In line with Kedner´s findings, Kuronen claim that intense competition is the most common cause for companies to enter a stage of financial distress. Furthermore, factors such as *"Highly cyclical industry*", *"Improper accounting"*, *"Weak adaptability to external environment"*, and *"Poor strategy implementation"* are also stressed as important in Kuronen´s research. However, none of these five causes to financial distress are among the top twelve causes identified in this study. Three reasons for the differences in the results could be that Kuronen based her findings on in depth interviews, a small sample size, and included several industries in her study. Kuronen stated that having *"Too high costs"* was one of the main causes to enter a stage of financial distress. In this study, *"Poor cost structure"* received a mean of 1.60 where 56.3 percent of the respondents perceived the cause as being significant or highly significant, which is the eighth most relevant cause and her argument, is therefore strengthened. Another cause that Kuronen found relevant was problems related to *"Customers"*. In accordance to Kuronen, this cause was identified as the twelfth most important cause to financial distress.

Kuronen´s factor *"Risky business"* is based on the fact that certain industries are more risk exposed than others (Kuronen, 1992). In this study, industry specific causes have been divided according to Porters model about the five industry forces. Therefore, a reasonable comparison would be to compare the factor *"Risky business"* with this report´s aggregated industry causes on a group level. The mean for industry level causes is 1.14, which place it as the fifth most relevant group out of the seven, indicating that the group is not highly relevant. This is presented in Table 15.

Table 15 – Result at group level

Driving causes to financial distress (group level)	Mean	% significant or highly significant
1. Financial	1.73	60.8
2. Accounting	1.42	48.4
3. Ownership & governance (operational level)	1.31	39.7
4. Operation & productivity	1.19	33.2
5. Industry level causes	1.14	30.3
6. Ownership & governance (strategic level)	1.08	29.0
7. Macro level causes	0.79	21.2

6.3 THE TWELVE LEAST DRIVING CAUSES TO FINANCIAL DISTRESS

The results of this report shows that the following causes to financial distress, based on mean, were considered the least relevant. This is illustrated in Table 16. As shown, there are minor differences in the ranking when comparing mean with the number of respondents who believed the causes to be of significant or highly significant importance. If the causes were ranked based on the percent of significant or highly significant answers, the ranking would be slightly different, as indicated by the numbers within brackets.

Table 16 – Least significant causes to financial distress

The twelve least driving causes to financial distress	Mean	% significant or highly significant
34. Poor marketing	0.55	10.4 (31)
33. Social	0.56	8.9 (32)
32. Suppliers	0.58	5.0 (34)
31. Management change	0.60	11.1 (30)
30. Political	0.64	14.5 (27)
29. Financial indiscipline	0.65	18.6 (24)
28. Fraud	0.80	16.2 (26
27. Poor customer service	0.82	12.2 (29)
26. Poor strategy implementation	0.84	8.0 (33)
25. Conflicts in top management	0.85	16.7 (25)
24. Poor strategy and/or business idea	0.88	12.8 (28)
23. Low level of knowledge amongst employees	0.90	19.2 (23)

The positive aspect by using accountants as respondents is that the results are likely to be less biased and provide a higher degree of objectivity than by directing the questionnaire to business owners and top management. One the other hand, the issue with using accountants as respondents is that there is a risk that they lack insight and information about some of the causes to financial distress. When a respondent lack information of some causes, it is reasonable to believe that those causes are considered less important than what they in fact are. When comparing the most driving causes with the least driving ones, this risk is visualized. Of the study´s top-four causes, *"Weak financial control"*, *"Poor cash flow planning"*, *"Improper budgeting & financial planning"*, and *"Poor knowledge in business administration"*, all causes are related to fields in which accountants´ possess expertise. Looking at the least driving causes, which are illustrated in Table 16, these causes are further from the accountants´ expertise. One must consider that this coincidence could have been caused due to bias, where accountants perceive their field of expertise especially important.

6.4 ANALYSIS OF OPEN QUESTIONS

The open questions show that there are some causes the accountants wish to emphasize. Firstly, just as mentioned by the Swedish Construction Federation, accountants seem to believe that there is a gap between the knowledge needed for running a business and the knowledge held by some business owners (Informant, 2015). A high knowledge level is especially crucial when a former carpenter, who started his own business, expand and employs more people. By doing so, the business transforms and put a new set of expectations on the business owner. There is a large difference between being self-employed and managing a limited company with several employees. It seems like many business owners with former blue-collar experience lack competence within these fields, and this is precisely what the Swedish Construction Federation argues (Informant, 2015). Furthermore, several respondents argue that the construction industry has more dishonest entrepreneurs than most other industries. Once again, this is consistent with the information provided by the Swedish Construction Federation. Since there are low entry barriers and the industry consist of capital intense projects, where there are low requirements on proper education, it is reasonable to assume that such industries attracts people that wish to make easy money. As three different accountants expressed themselves in the open questions;

"This industry has a higher degree of entrepreneurs without serious intentions than other industries. There are low entry barriers and no skill requirements." (Answer 15a)

"… the construction industry is characterized by significant economic crime and lack of ethics."
(Answer 22a)

"An industry with many shady business owners" (Answer 2b)

"Fraud" received a mean of merely 0.80 and 16.2 percent of the respondents perceived the cause as being significant or highly significant. Accordingly, it is placed as number 28 in relevance and it is reasonable to argue that this cause is less relevant as a driving cause to financial distress than most other causes. However, it is worth to point out that out of the *"Irrelevant"*, *"To some extent"*, *"Significant"*, and *"Highly significant"* answer alternatives, "*N/A"* excluded, 32 out of 74 accountants believed the cause to be *"Irrelevant"*. This means that 42 out of 74 (57 percent) accountants thought that the cause was *"To some extent"* driving or more. It may not be a driving cause towards financial distress itself, due to the low mean, but it is still an indication that the industry is suffering from such issues.

When compiling the results of the open questions the authors found *"Customers"* as one cause that was frequently emphasized by the respondents. This cause got a mean of 1.52, where 50.6 percent of the accountants perceived the cause as being significant or highly significant, which place it as the twelfth most relevant cause. Furthermore, in the open questions six out of 23 answers argued that customers were a major part of the problems with bankruptcies within the industry, which indicates that this cause is important.

In this report, lack of knowledge among business owners has shown to be an important cause to financial distress. However, it seems that lack of knowledge among customers has large impact as well. Some customers appear to sign contracts where they lack appropriate knowledge of what the contracts include and what additional costs that may arise. This causes problems later on in the construction process where the entrepreneur and the customer cannot agree upon price. The responding accountants mention problems with customers several times in the open questions, e.g.:

"… customers do not want to pay their bills." (Answer 8a)

"… Customers use this in order to bargain on the price retrospectively, claiming there are some minor construction errors which they exaggerate the importance of." (Answer 11a)

"… I have in several occasions seen dishonest and ignorant customers, who after the job is finished, haggle on the price since they think they have not received what they ordered, or that the job was conducted in a wrong way." (Answer 4b)

As shown in Table 13, poor risk management is seen as one of the twelve most driving causes to financial distress, with a mean of 1.58. This cause is also stressed in the open questions. Since the construction industry is characterized by capital intense projects, which include all processes from procurement, purchasing material, and establish the construction, the company risk is high. Especially in combination with customers that lack knowledge, and their unwillingness to pay full price, which increase the importance of liquidity risk management.

"… The management has poor knowledge about which projects that are too large and too risky…"
(Answer 9a)

"… Not much needs to go wrong in a construction project for the costs to increase, resulting in losses. Generally, the construction companies take high risks." (Answer 12a)

"*In their eagerness to get a big job, construction companies tend to accept jobs at a too low fixed price rate. Poor ability to assess the possibilities to finish the project at fixed price. Often: large project with losses = bankruptcy."* (Answer 18a)

7. CONCLUSION

In this chapter, final conclusions are drawn, along with a discussion of the thesis´ contribution to this field of research. The chapter ends with suggestions for future research that would be beneficial to the field of financial distress and bankruptcies within the Swedish construction industry.

Due to the fact that the Swedish construction industry is overrepresented by bankruptcies every year, the aim of this report was to identify which causes that were the main drivers to financial distress within the industry. Financial distress always precedes a bankruptcy. By identifying the driving causes, business owners can be more aware of high-risk causes and recognize destructive patterns in an earlier stage, which can reduce the high bankruptcy ratio. This study encountered causes that, according to accountants in bankrupted construction companies, were more driving than others. The twelve most relevant causes are illustrated in Table 17.

Table 17 – Top twelve driving causes to financial distress

The twelve most driving causes to financial distress	Mean	% significant or highly significant
1. Weak financial control	2.07	78.4 (1)
2. Poor cash flow planning	1.93	73.6 (2)
3. Improper budgeting & financial planning	1.80	65.9 (3)
4. Poor knowledge in business administration	1.69	59.1 (4)
5. Poor pricing	1.66	56.3 (8)
6. Wrong capital structure	1.66	51.7 (10)
7. Financing problems	1.60	57.0 (6)
8. Poor cost structure	1.60	56.3 (7)
9. Poor risk management	1.58	57.0 (5)
10. Poor planning/coordination of operations	1.56	54.9 (9)
11. Expansion beyond resources	1.53	48.2 (12)
12. Customers	1.52	50.6 (11)

"Weak financial control" is considered the most driving cause followed by *"Poor cash flow planning"*, *"Improper budgeting and financial planning"*, *"Poor knowledge in business administration"* and *"Poor pricing"*. A summary of all causes is shown in Table 9. The results in this report show both similarities and differences with previous research. *"Poor cash flow planning"* and *"Improper budgeting and financial planning"* have been stressed as relevant and highly important causes to financial distress by Kedner (1975). Furthermore, *"Poor knowledge in business administration"* and *"Expansion beyond resources"* have been found as driving causes by Koponen (2003) and Kuronen (1992). However, this study also detected causes that these three previous researchers did not include in their research. Examples of relevant causes that have not been mentioned are *"Poor pricing"* and an *"Improper capital structure"*. The cause *"Fraud"* is not considered being part of the twelve most important causes to financial distress in this study. However, the survey shows that 42 out of 74 (57 percent) accountants thought that the cause had some impact on the bankruptcies. It may not be a driving cause to financial distress itself, due to the low mean (0.80), but it is an indication that the industry is suffering from such issues.

Furthermore, there seem to be a discrepancy of the knowledge level between entrepreneurs and customers, which cause problematic situations where customers are unwilling to pay their bills. This leads to deteriorating liquidity among companies and was explicitly stressed in the open questions.

It is hard to make any further general comparisons with previous research since there has been an absence of a general framework that consider plausible causes that leads to financial distress. This study also support the endured critique directed to previous research for using subjective respondents. Causes such as *"Competition"* and macro-economic causes show less importance in this study and causes related to shortcomings among business owners and top management such as *"Poor knowledge in business administration"* and *"Poor planning and/or coordination of operations"* are higher ranked. This indicates that this study has overcome some of the previous researchers´ problem with subjective respondents that tend to blame causes outside their control. Previous researchers have also used different frameworks in their research, which have resulted in incoherent conclusions with large discrepancies. Furthermore, previous research have also focused on driving causes to financial distress in a broader perspective, where studies have been based on companies in several different industries with different characteristics, which also may be reasons for varying results.

The Swedish Construction Federation argues that industry problems related to the high bankruptcy ratio derives from a few special industry characteristics. Within the industry there is a high degree of blue-collar workers that have taken the step into running own businesses, mainly because of low entry barriers, which make it easy to start up companies. This entails that many companies lack appropriate knowledge outside the business owner's core competence, i.e. being good at performing carpentry. The causes found as being main drivers of financial distress strengthens this argument. The top four causes all derive from lack of business and financial knowledge, interest, or understanding, which indicates that the low entry barriers attracts new business owners without appropriate knowledge of what it takes to be an entrepreneur. The fact that the highest ranked causes are related to explicit business and financial knowledge is also associated with a potential risk. The respondents of this report are accountants that have experience of bankrupted construction companies from the last three years. By using accountants as respondents, the authors tried to overcome previous research critique that business owners tend to answer highly subjective where answers toward non self-inflicted causes were overrepresented, the answers would be more objective. There is a risk that the respondents have overemphasized the importance of causes associated with their field of expertise, which would increase relevance of causes within accounting, economics, and finance.

This study contributes to previous research in two ways. Firstly, a framework was constructed by mapping important causes to financial distress. The framework provides a holistic overview of leading causes to financial distress, which have been inadequate in previous research. The framework considers causes that several previous studies have overlooked. Secondly, by focusing on one industry only, this report has been able to capture industry-

related insight. The result of this report indicates that industry characteristics have large impact on causes to financial distress. This may explain some of the results´ differences compared to previous research. Previous research has focused on broader perspectives instead of one industry only.

7.1 FURTHER RESEARCH

As suggestion for further research, the authors believe that research related to how to increase the knowledge level among business owners within the industry would be a satisfactory complement to this report. This report has identified crucial causes that business owners and top management must consider in order to mitigate the risk for a future bankruptcy. Even if business owners and top management are aware of certain causes, it is of great importance that they can improve behavior within these fields and that information is easy accessible. If not, the industry-related problems may remain as major issues within the Swedish construction industry.

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- APPENDIX 1 -
SWEDISH STANDARD INDUSTRIAL CLASSIFICATIONS 2007

CONSTRUCTION INDUSTRY (SIC 41 – 43)

41 – Construction of buildings

41.100	Development of building projects
41.200	Construction of residential and non-residential buildings

42 – Civil engineering

42.110	Construction of roads and motorways
42.120	Construction of railways and underground railways
42.130	Construction of bridges and tunnels
42.210	Construction of utility projects for fluids
42.220	Construction of utility projects for electricity and telecommunications
42.910	Construction of water projects
42.990	Construction of other civil engineering projects n.e.c.

43- Specialised construction activities

43.110	Demolition
43.120	Site preparation
43.130	Test drilling and boring
43.210	Electrical installation
43.221	Installation of heating and sanitary equipment
43.222	Installation of ventilation equipment
43.223	Installation of refrigeration and freezing equipment
43.229	Other plumbing
43.310	Plastering
43.320	Joinery installation
43.330	Floor and wall covering
43.341	Painting
43.342	Glazing
43.390	Other building completion and finishing
43.911	Erection of sheet-metal roof covering
43.912	Erection of other roof covering and frames
43.991	Renting of construction or demolition equipment with operator
43.999	Various other specialised construction activities n.e.c.

Source: SCB, 2015 (*http://www.sni2007.scb.se/_pdf/080131snisorteradeng2007.pdf*

- APPENDIX 2 -
KEDNER'S RESEARCH RESULT (1975)

KONKURSORSAKER	Antal fall	Procent
A BRISTANDE UTBILDNING		
A 1 Ledning	335	8
2 Tjänstemän	7	-
3 Anställda	37	1
B OTILLFREDSSTÄLLANDE ORGANISATION		
B 1 Planering och samordning av den löpande verksamheten	158	4
2 Arbetsledning	34	1
3 Personalpolitik	37	1
C FINANSIERING		
C 1 För litet startkapital	225	5
2 För litet tillskott av eget kapital m h t expansion	222	5
3 Bristande kreditmöjligheter inklusive kredit-restriktioner	99	2
4 Stora ägaruttag	86	2
D INVESTERING		
D 1 För stora och felaktiga investeringar i varulager	84	2
2 För stora och felaktiga investeringar i anläggnings-tillgångar	173	4
3 Försummad rationalisering genom för små investeringar i anläggningstillgångar	37	1
E LÖNSAMHET		
E 1 Låg omsatt kvantitet och tryckta priser till följd av hård konkurrens	705	16
2 Tillfredsställande omsatt kvantitet men för låga priser ("omsättningssjukan")	55	1
3 Kraftigt stigande kostnader för löner, varu (råvaru)inköp, hyror etc	390	8
4 Onormala kundförluster	167	4
5 Stora räntekostnader	154	3
F FÖRETAGSUTVECKLING		
F 1 Produktutvecklingen försummad	12	-
2 Produktutvecklingen felinriktad	27	1
3 Marknadsföringen eftersatt	49	1
G PLANERING OCH KONTROLL		
G 1 Intern planering (budgetering, kalkylering m m) försummad	400	9
2 Extern redovisning bristfällig	108	2
H FAKTORER UTANFÖR LEDNINGENS KONTROLL		
H 1 Konjunkturnedgång	208	5
2 Strukturomvandling	79	2
3 Ekonomiska svårigheter efter generationsväxling	5	-
4 Oförutsedda ekonomiska svårigheter (skönss- och eftertaxering, rättstvister i övrigt)	123	3
5 Stölder, förskingringar, bedrägerier	59	1
6 Personliga problem (personliga bekymmer, sjukdom, dödsfall)	308	7
7 Väderleksförhållanden	64	1
SUMMA	4 447	100

Figur 5.28 Tingsrätternas uppgifter om konkursanledningar

Source: *Kedner, G. (1975) Företagskonkurser Problem – Analys – Utvärdering – Åtgärder. Page 159. Lund*

- APPENDIX 3 -
KURONEN'S RESEARCH RESULT (1992)

1. Poor business management	
Autocratic manager	**4**
CEO and the chairman of the board is the same person	**4**
Management lack academic competence	**1**
Management lack industry knowledge	**1**
Passive board of directors	**1**
2. Poor realization of business idea	
Product portfolio is too diversified	**5**
Management lack means to realize the business idea	**3**
Business idea is not competitive	**2**
3. Poor strategic decision-making	
Insufficient flexibility	**5**
No strategic change	**4**
Insufficient planning	**3**
4. Weak business functions	
Too high costs	**6**
Slow/wrong reporting	**6**
Ineffective activities	**4**
Unmotivated personnel	**4**
Management lack interest in management control	**1**
Poor marketing	**1**
Poor customer service	**0**
5. Unsatisfied business performance	
Poor profitability	**7**
The business is risky	**7**
Uncontrolled growth	**6**
Weak financing	**3**
Wrong investments	**1**
6. Weak adaptability	
Lack of market change planning	**6**
Dependent on one supplier	**6**
Dependent on climate-/environment change	**2**
Dependent on one customer	**0**
7. Internal risk factors	
Non sudden	**5**
Sudden	**0**
8. External risk factors	
Intense competition	**8**
Highly cyclical industry	**8**
Social limits	**5**
Saturated market	**4**
The industry is capital intense	**3**
Customer preferences changed	**2**

- APPENDIX 4 -
CLASSIFICATION OF CAUSES TO FINANCIAL DISTRESS (1 of 3)

Accounting

Improper budgeting and financial planning
planning and control
Inadequate internal planning and budgeting
Poor Financial Planning
Absence of responsibility accounting
Lack of financial policies
Weak demand projection
Improper tax planning
Improper accounting
Insufficient external accounting
Inadequate records
Poor accounting records
Lack of financial records
"Activating expenses" (include costs in annual
The accountants
Time point when making annual reports official
Poor practice of accounting standards.
Lack of proper keeping of financial records.
Financial Indicipline
Financial indicipline
A CEO with luxurious purchase behaviour
Lack of financial discipline
Financial Indiscipline
Weak financial control
Lack of financial control
Financial control factor
Weak budgetary control
Lack of expenditure control system
There is inadequate financial control and the senior
Inadequate reporting

Operation and productivity

Poor cost structure
f Increased costs for labour, goods, rents, etc.
j Excessive fiexed cost
h High cost structure (highly geared)
c High distribution cost
e High cost structure for inefficiency in the production
Poor productivity
f Unsufficient organization
a Lack of or unbalanced experiance
h Productivity and profitability
c Poor maintenance system
c Lack of commitment on the part of employees
e Dwindling productivity and profitability
i Business below expectations
i General business failure
g Too high costs
g Unsatisfied output
g Ineffective organization
Poor product/service quality
c Weak production and quality control
c Deteriorating quality
Poor customer service
c Poor customer service
g Poor customer service
Over- and/or under scaling
c Uneconomic plant size
c Over staffing
Low level of knowlegde amongst employees
f Employees lack appropriate education

Ownership and governance
(Operational level)

Poor knowledge in business administration
f Top management lacks appropriate education
f Management lacks appropriate education
f Unsufficient education level
j Neglected tax payments
j Other poor general administration
a Imcompetence
c Managerial incompetencies
e The management team is unbalanced and there are
g Top management lacks academic skills
g Top mangement unintrested in management control
Ineffective leadership
f Poor supervision
j Absentee managemnet
j Management lack technical knowledge
j One man mangement
j Nepotism
h Poor internal management
d Boards composition
c Ineffective leadership
g Autocratic management
g Mangement lacks industry knowledge
g CEO and board is the same person
g Passive board
Conflicts in top mangement
f Personal problems
j Trouble between partners
c Conflict among key personnel
Poor planning/coordination of operation
f Poor planning and coordination of the daily operation
j Poor coordination between manufacturing and selling
j Poor internal communication
Poor HRM
f Poor HRM
h High turnover of workers
c Poor labour relations
c Inadequate human resources
c Irrational compensation structure
e Higher Turnover of workers.
g Unmotivated employees

ID	Author	Number of causes
a	Altman (1969)	6
b	Altman (2006)	7
c	Sasidharan (2009)	49
d	Folkesson (2006)	15
e	Jahur & Quadir (2012)	27
f	Kedner (1975)	38
g	Kuronen (1960)	42
h	Memba & Jobs (2013)	24
i	Stanley & Girth (1971)	7
j	Woodruff & Alexander (1958)	21
	SUM	**236**

- APPENDIX 4 -
CLASSIFICATION OF CAUSES TO FINANCIAL DISTRESS (2 of 3)

Ownership and governance
(Strategic level)

Poor strategy and/or business idea
j Important decision made without market research
j Lack of diversification
d Company dependent on a single "thing"
d Change hysteria
c Improper product positioning
c Wrong product mix
g Too much diversification
g Business idea is not competitive

Poor strategy implementation
e A small number of big decisions have been made
g Poor implementation of business idea
g Management lack resource to realize the business
e Lack of Access to credit
i Insufficient capital

Weak adaptability to external environment
f Poor business development
g No strategic change
g Unsufficeint strategic planning
g Weak adaptability
g Insufficient preparation for changes in the external
c Technological failures
f Neglected product developent
f Misdirected product development
j Lack of product development
e Innovative products from competitors or from
c Poor emphasis on research and development
g Unsufficient flexibility

Expansion beyond resources
j Expansion beyond resources
d Too quick expansion
d Company enter new segment
i Over expansion
g Uncontrolled expansion

Management Change
f Struggles after management succession
f Poor structural change
h Management Succession
d Changed owner structure
e The owner/CEO suffers severe ill health or dies and

Poor investment decisions
f Poor investments
f Too big or improper investments in inventories
f Too big or improper investments in fixed assets
f Too small or improper investments in fixed assets
c Over (wrong) investments in fixed assets
c Unsuitable plant and machinery
c Wrong investment decisions
j Lack of information on own market
g Poor investments

Poor risk management
h Contingent problems
f Unexpected financial problems
j Contracted plant output to single buyer
e The business suffers a catastrophic loss e.g. the
g Risky business
g Internal risk factors
g Non-sudden internal risk facors
g Sudden internal risk factors

Poor marketing
f Inadequate marketing
c Lack of marketing policy
c Inadequate sales promotion
g Poor marketing

Poor pricing
f Too low prices
c Irrational price structure

Fraud
f Theafts, embezzle, and fraud
a Fraud
d "Tricky" company formations

Financial

Financing Problems
f The business strated with too small equity
f Lack of access to credit
h Inadequate financing
h Lack of access to credit
c Fund management and credit crunch
e Inadequate financing - the business did not start with
f High level of bad debts
j Continued in line of bankrupt procedecessor
h Counter party defaults
g Capital intensive industry
g Lack of access to credit

Wrong Capital Structure
f Too high dividend or salaries to CEO/owners
f High intrest expenses
h Improper capital decision
d Too small equity
c Heavy debt burden and resultant service cost
c Wrong capital structure
c Excessive borrowings
b Increased leverage in corporate America

Poor cash flow planning
c Bad cash planning and control
c Poor management of receivables
i Factoring Accounts Receivable

Industry causes

Competition
f Low turnover due high high competition
h Price wars
h Low price overseas
e The business is in a price war.
e Low price overseas competition.
b International Competition
b Over Capacity within an industry
g High competition

Customers
h Policy Changes
c Government policies regarding taxation, power tariff,
c Quota system imposed by the government on raw
h Customer loyalty
c A change in the consumers' tastes and preferences
c Sudden withdrawal by some of the major customers
e Counter party default.
g Dependent on one customer
g Changes in customers preferences

Suppliers
c A change in the lending policies of the financial
g Dependent on one supplier

New Entrants
c Entry of large number of firms thereby sudden
b Relatively high new business formations rates in

Substitute

- APPENDIX 4 -
CLASSIFICATION OF CAUSES TO FINANCIAL DISTRESS (3 of 3)

Macro causes

Economical

f Unforeseen factors outside management's control
f Economical downturn
a Disaster
e The economy has turned nasty, reducing demand,
b High Real Interest Rate in certain periods
g Dependent on environmental changes
g Cyclical industry

Political

j Patent litigation

Wrong level

c Strained relationship with the external government
e Policy changes of Government.
b Deregulations of key industries (health care, airliners)

Social

h Shortage of skilled manpower
e Shortage of skilled manpower
g Socail constrains

Technological

c Development of new technology

Not relevant

Symtoms

d Financial ratios analysis
d Financial transactions (selling estates)
j Trouble with p/v ratio
f Profitability
f Poor profitability
g Poor profitability

Irrelevant

i Other
a Unknown
a Neglect
f Weather conditions

- APPENDIX 5 -
THE QUESTIONNAIRE (1 of 4)

GÖTEBORGS UNIVERSITET
HANDELSHÖGSKOLAN

Konkurser i byggbranschen

Tack för att du tar dig tid att svara på denna undersökning.

Byggindustrin är den bransch i Sverige där det varje år sker flest företagskonkurser. Med detta som bakgrund undersöker vi vilka underliggande faktorer som orsakar konkurser bland företag inom byggbranschen.
Det enkla svaret är ofta att företaget antingen lider av bristande lönsamhet eller bristande likviditet, men undersökningen syftar till att på ett djupare plan undersöka vilka underliggande faktorer som i så fall orsakar denna brist på lönsamhet eller sviktande likviditet.

Vår ambition är att samla den erfarenhet revisorer besitter gällande byggföretag som påbörjat eller avslutat en konkursprocess. Vi är väl medvetna om att det kan vara svårt att som utomstående revisor ta ställning till samtliga faktorer, men undersökningen syftar till att Ni efter bästa förmåga ger Er syn på vilka faktorer Ni anser vara viktiga.

Undersökningen är anonym, tar cirka 5 minuter och består av frågor om 34 faktorer fördelat på sex olika områden. Om du vill ta del av uppsatsmaterialet och slutprodukten finns möjlighet att i slutet av undersökningen fylla i din e-mail adress.

Tack på förhand!

Anders Knutsson & Daniel Olsson
Handelshögskolan i Göteborg

Redovisning, planering och uppföljning

1. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Bristfällig bokföring, redovisning och/ eller rapportering *(t.ex; felaktig bokföring; misskötsel av skatterapportering)*	∫n	∫n	∫n	∫n	∫n
Brister i budgetering och planering *(t.ex; brister i de kortsiktiga målen)*	∫n	∫n	∫n	∫n	∫n
Icke ansvarsfullt köpbeteende *(t.ex; inköp av produkter vilka inte är förenliga med företagets verksamhet; ledning och/eller anställda hushåller inte med företagets resurser)*	∫n	∫n	∫n	∫n	∫n
Bristande kontroll och uppföljning *(t.ex; bristande budgetuppföljning; ledningen är ovetande om hur verksamheten utvecklats)*	∫n	∫n	∫n	∫n	∫n

Företagsledning och beslutsfattande - Strategisk nivå

- APPENDIX 5 -
THE QUESTIONNAIRE (2 of 4)

2. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Affärsidén och/ eller strategin var ej konkurrenskraftig *(t.ex; dåliga strategiska beslut har format strategin; företaget placerat på fel ort, bristande diversifiering av produktsortiment; bristande differentiering av produkter)*	∫n	∫n	∫n	∫n	∫n
Svagt förverkligande av affärsidén och/ eller strategin *(t.ex; bristande implementering av strategin)*	∫n	∫n	∫n	∫n	∫n
Svag anpassningsförmåga till omvärlden *(t.ex; otillräcklig flexibilitet; otillräcklig planering; bristande företagsutveckling; inga strategiska förändringar)*	∫n	∫n	∫n	∫n	∫n
Felinvesteringar *(t.ex; för stora och felaktiga investeringar i anläggningstillgångar)*	∫n	∫n	∫n	∫n	∫n
Obehärskad tillväxt *(t.ex; expanderar för fort i förhållande till till företagets resurser; företaget går in på ny marknad)*	∫n	∫n	∫n	∫n	∫n
Förändring i ledningen *(t.ex; generationsskifte; ändrad ägarstruktur; ny VD eller ledning)*	∫n	∫n	∫n	∫n	∫n
Bristande riskhantering *(t.ex; avsaknad av planering och förberedelser för operationella och strategiska risker)*	∫n	∫n	∫n	∫n	∫n
Bristande prissättning *(t.ex; för höga och/eller för låga priser)*	∫n	∫n	∫n	∫n	∫n
Bristande marknadsföring *(t.ex; satsar för lite på marknadsföring och/eller försäljning)*	∫n	∫n	∫n	∫n	∫n
Oärlig entreprenör *(t.ex; oärliga avsikter med företaget)*	∫n	∫n	∫n	∫n	∫n

Företagsledning och beslutsfattande - Operationell nivå

3. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Företagsledning saknade kunskap inom ekonomi & ekonomistyrning *(t.ex; ledning har bristande utbildning och akademiska kunskaper; ledning vill, kan eller förstår inte ekonomiska aspekter; ledning ointresserad av ekonomistyrning)*	∫n	∫n	∫n	∫n	∫n
Bristande ledarskap *(t.ex; ineffektivt eller frånvarande ledarskap; autokratisk chef; socialt inkompetent ledning)*	∫n	∫n	∫n	∫n	∫n
Bristande relation mellan ägare/ nyckelpersoner inom ledningen	∫n	∫n	∫n	∫n	∫n

- APPENDIX 5 -
THE QUESTIONNAIRE (3 of 4)

Bristande planering och samordning av den löpande verksamheten	∫n	∫n	∫n	∫n	∫n
Bristande hantering av personal *(t.ex; bristande arbetsförhållanden såsom arbetstider och löner; personalen missnöjd med arbetet; bristande kontakt med fackliga organisationer)*	∫n	∫n	∫n	∫n	∫n

Operationell verksamhet

4. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Betydligt signifikant
Bristande kundservice *(t.ex; bristande kundservice på arbetsplats eller efter tjänst/vara levererats)*	∫n	∫n	∫n	∫n	∫n
Bristande kostnadsstruktur *(t.ex; höga kostnader för anställda, material, anläggningstillgångar, distribution, lager; bristande balans mellan fasta och rörliga kostnader; nyligen ökade kostnader för anställda, hyror, material etc.)*	∫n	∫n	∫n	∫n	∫n
Bristande kvalité på varan/ tjänsten *(t.ex; felbygge; bristande produktions- och kvalitetskontroll)*	∫n	∫n	∫n	∫n	∫n
Bristande utbildning/ kunskap bland anställda	∫n	∫n	∫n	∫n	∫n
Låg produktivitet *(t.ex; ineffektiv verksamhet)*	∫n	∫n	∫n	∫n	∫n
Ej optimal produktionskapacitet *(t.ex; över-/underkapacitet; för många fastanställda; för mycket anläggningstillgångar)*	∫n	∫n	∫n	∫n	∫n

Finansiella faktorer

5. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Bristande kapitalstruktur *(t.ex; för lite eget kapital)*	∫n	∫n	∫n	∫n	∫n
Finansieringsproblem *(t.ex; svårt att få lån; ägarna saknar möjlighet eller vilja att finansiera företaget; för litet startkapital)*	∫n	∫n	∫n	∫n	∫n
Bristande likviditetsplanering *(t.ex; bristande hantering av kundfordringar; bristande kassaflödesplanering)*	∫n	∫n	∫n	∫n	∫n

Industrispecifika faktorer

6. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

- APPENDIX 5 -
THE QUESTIONNAIRE (4 of 4)

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Onormala kundförluster *(t.ex; befintlig kund kan/vill inte betala för sig)*					
Hård konkurrens *(t.ex; överkapacitet i industrin; prispress inom industrin; företaget förlorade kunder till andra företag)*					
Bristande relation med leverantörer *(t.ex; leverentörer levererar inte det dem utlovat; bristande produktkvalité)*					

Makroekonomiska faktorer

7. Baserat på din samlade kunskap om byggföretag, hur bidragande anser du följande faktorer vara till byggföretags konkurser?

	Ingen uppfattning	Ingen	Till viss del	Signifikant	Mycket signifikant
Politiskt klimat *(t.ex; förändringar i skattepolitik, import och/eller export)*					
Ekonomiskt klimat *(t.ex; konjunkturnedgång; minskad efterfråga; höjt ränteläge; fluktuationer i växelkurs)*					
Marknadsförändring *(t.ex; kunders inställning till produkterna, företaget eller marknaden har ändrats)*					

8. Är det någon annan bidragande faktor till byggföretags konkurser du anser vara viktig?

9. Övriga synpunkter

10. Vill du ta del av uppsatsen när den är klar? Var vänlig fyll i din e-mail adress

- APPENDIX 6 -
OPEN QUESTIONS (1 of 6)

Question 8 - Is there any other factor you consider to be of great importance considering bankruptcies in the Swedish construction industry?[2] (*Answers: 24*)

1a) "*Foreign competition*"

2a) "*The companies use unreported employments. When this is detected in the auditing process, charges in the form of taxes, payroll taxes, and tax penalties arises, which later make the companies go bankrupt*"

3a) "*Foreign entrepreneurs and their employees' have poor knowledge about our country*"

4a) "*I believe the size of a company is of great importance. Especially when a small construction company with 1-6 employees starts to grow. The business leader has not the knowledge/ability to handle all areas and ensure that employee number 7 (and above) have the same capacity for work/knowledge as the first guys that the owner/manager easily could control. Decreased productivity, and sometimes also the poor product quality, leads to conflicts with customers (resulting in the construction company does not get paid). The liquidity deteriorates and the negative spiral has begun and it is difficult to get out. Often, the owner/leader starts as a carpenter himself and is passionate about that part of the business, not to lead people, plan liquidity, and so on. Those who manage to grow and survive are those who have succeeded to understand their role and are willing to go from being a carpenter himself to be a manager and who also manages the transition.*"

5a) "*Much depends on the low morale within the industry. It goes all the way up to the big, well-known, construction companies. However, the big companies have the resources to cover the costs resulting from the low morale, which the smaller companies may not have.*"

6a) "*Among the smaller construction companies which I have been involved in, it is primarily the lack of budgeting and cost accounting, the intensifying competition from construction companies with foreign labour, and the reduction in wages that cause bankruptcies. The smaller construction companies are also often sensitive to economic fluctuations since they tend to lack enough capital to survive the recessions.*"

[2] *The quotes are translated by the authors. Minor differences in the answers may exist.*

- APPENDIX 6 -
OPEN QUESTIONS (2 of 6)

7a) "*Firstly, to avoid bankruptcies, construction companies should spend more effort to find out how the customer will finance the project. Secondly, in case of construction errors or other errors in the performed work, fix this immediately so you get fully paid and avoid bad reputation. Lastly, be clear about the customer's final price. If one has to deviate from the original contract, be sure to get a written approval from the client.*"

8a) "*The clients I work with in the construction industry, all small businesses, have major problems that customers do not want to pay their bills. The industry has small margins due to price pressure from foreign workers and unreported employments (although it has decreased since the ROT reform) and there is no place for customer losses. Non-payment is the single most important factor to bankruptcies among my clients - mainly as a result of disputes.*"

9a) "*The management has poor knowledge about which projects that are too large and/or risky or how profitable they are. This makes some construction companies accepting projects which they lack proper resources and capabilities for.*"

10a) "*The planned profit erodes due to the need of unpaid extra work. The more knowledgeable customers the less extra work. Inadequate documentation with the customer about the price for the extra work makes it difficult to get fully paid for all the work done. Also, not fully finishing all jobs makes construction companies miss some of the final payments.*"

11a) "*A construction company's invoices tend to amount large sums and sometimes does customers use this in order to bargain on the price retrospectively, claiming there are some minor construction errors which they exaggerate the importance of. When construction companies' customers are private individuals, the buyers knowledge is usually too low and construction companies tend to have difficulties to bridge this knowledge gap and must therefore sometimes adjust the price down to avoid a costly litigation. Unfortunately, some "fortune-hunters" try to enter this, sometimes already overheated, market where the builder lacks proper knowledge about both the production and the required knowledge about business administration. Furthermore, the cause to bankruptcies can also derive from construction companies investing their profit in the real estate market in which they do not get the profit as they had expected - perhaps because they lack the knowledge to manage a combined construction and real estate management firm.*"

12a) "*Due to fierce competition, the construction industry is an industry with very small margins. Not much needs to go wrong in a construction project for the costs to increase, resulting in losses. Generally, the construction companies take high risks.*"

14a) "*LOU (the public procurement act) sometimes gives very unfavourable effects. Short-term political decisions.*"

- APPENDIX 6 -
OPEN QUESTIONS (3 of 6)

15a) "*This industry has a higher degree of entrepreneurs without serious intentions than other industries. There are low entry barriers and no skill requirements.*"

16a) "*Lagging accounting and lack of financial planning, performance monitoring, pricing, and liquidity management.*"

17a) "*It is often a skilled craftsman who starts the business, but who lacks knowledge about business administration and the ability to run a business with good control over the company's finances and prices/quotes.*"

18a) "*In their eagerness to get a big job, construction companies tend to accept jobs at a too low fixed price rate. Poor ability to assess the possibilities to finish the project at fixed price. Often: large project with losses = bankruptcy."*

19a) "*High growth often causes problems with control. Poor project accounting and poor control of it. In some cases "bury their heads in the sand" behaviour. Another reason may be the large up-front expenses for labour and materials which construction companies usually have to bear even though the account receivable is significant, i.e. the company is healthy but fail due to strong dependence on a single customer.*"

20a) "*Accepting projects that they cannot handle*"

21a) "*In general, the construction industry is indeed unserious with very complex contract terms which make it tricky to understand. This makes it easy for small entrepreneurs to fail. Fluctuations in the demand often make it difficult to adapt the scale of the business quickly enough. Large projects with fixed prices, but which turns out worse than predicted – results in unprofitable projects.*"

22a) "*I have personally observed that the construction industry is characterized by significant economic crime and lack of ethics, and my view is supported by several court orders. As the legal requirements of having an auditor was removed, a construction company without bookkeeping and with fake annual reports distorts the competition. Since no one annually checks companies´ accounting, several limited companies save millions neglecting bookkeeping and good order. These villain companies which previously were operated as sole proprietorship and partnership companies is nowadays operated as limited companies, giving the companies improved protections, which makes it more difficult to stop them.*"

- APPENDIX 6 -
OPEN QUESTIONS (4 of 6)

23a) "*Construction companies happily invest time and money on staff and production. However, it is often the wife taking care of the accounting. Accordingly, the quality and follow-up becomes insufficient.*"

24a) "*Miscalculating fixed-price projects. Poor communication with customers, e.g. do not signal if additional costs arises, resulting in the customer refuses to pay. Poor project management and poor production planning. Hires dishonest subcontractors or foreign subcontractors without knowledge about the tax law which may cause significant and unexpected tax fees.*"

- APPENDIX 6 -
OPEN QUESTIONS (5 of 6)

Question 9 –Is there anything else you would like to add?[3] (*Answers: 9*)

1b) "*Based on my experience, I have answered how I perceive the problems in the construction industry.*"

2b) "*An industry with many shady business owners*"

3b) "*Better training of supervisors to follow the prescribed quality regulations is needed.*"

4b) "*You should perhaps also ask questions about dishonest customers and not only focus on the dishonest builders. I can only speak for the builders I have worked with, but during my 25 years in the business, I have only encountered a dishonest builder once. Unfortunately, I have in several occasions seen dishonest and ignorant customers, who after the job is finished, haggle on the price since they think they have not received what they ordered, or that the job was conducted in a wrong way*"

5b) "*Generally, I think that most bankruptcies in the construction industry occur in small, relatively recently established companies. The most important factor is the lack of proper follow up on financial records. Accounting in the construction sector is in many cases complex and it is common that companies do not know how the on-going operation develops. In some cases, this result is that the costs are not kept under control. If the costs are not kept under control and the management believe that the business goes better than it actually does, it may end up in bankruptcy when the reality catches up. For larger companies going bankrupt, it is mainly since a project goes wrong in combination with having too much capital tied up, resulting in problems with liquidity."*

6b) "*Most of the construction companies, regardless if the companies have poor profitability (or even if they have gone bankrupt), have a relatively high capacity utilization ratio. Poor governance, lack of efficiency, and low prices are usually the reason for the poor profitability.*"

[3] *The quotes are translated by the authors. Minor differences in the answers may exist.*

- APPENDIX 6 -
OPEN QUESTIONS (6 of 6)

7b) *"Some comments:*
a) Construction projects are carried out in various levels with several subcontractors. When a company higher up the chain have problems, 10-20 other companies may suffer from unpaid accounts receivable.

b) Many private individuals are dishonest buyers of construction services. They make a verbally order from a one to two man construction company and wait for the right opportunity to complain on the completed work. Often, the construction company cannot afford the money or the time to pursue a judicial process. And even if the construction company go to court, the judiciary do demand higher degree of evidence from the construction companies, rather than vice versa. 100s of bankruptcies have occurred because of dishonest private individuals who use these situations with unclear contracts to save their own money."

c) The basic problem in the construction industry is the big money it is about, that is why both buyers and sellers do business with low own business morals and ethics. "

8b) "*The descriptions of questions are so different that they give different answers. This makes these questions difficult to answer."*

9b) "*The question about access to equity/financing felt a bit too obvious. Lack of capital = bankruptcy, cannot be anything else."*