Stockholm School of Economics
Department of Management and Organization
Examination for a MSc in Business and Economics
Master thesis, 30 credits

Competencies, Market Knowledge, and Size: How Gazelles Grow Throughout Recessions

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May 2012

Abstract

The purpose of this thesis is to find out how small successful companies; "gazelles", achieve sustainable growth throughout a recession. We (a) search for important factors, (b) find theoretical explanations for these factors, and (c) anchor our explanations to a selection of cases to further explain *how* and *why* these factors are important during a recession.

We find six likely explanations for *why* size, competencies, and market knowledge are important success factors for gazelles during a recession. (1) Company size enables competition for bigger projects; (2) Company size provides slack resources making the company more adaptable to change; (3) Human capital becomes an important source of differentiation; (4) Employees provide a sustainable competitive advantage difficult for competition to mimic; (5) Market knowledge provides an understanding of the environment which enables strategic fit; (6) Market knowledge increases the value the company is able to deliver to customers.

We also find three explanations for *how* our success factors can be established: (1) Increased company size allows an increased focus on employees' core competencies; (2) Dedicated recruitment strategy is the primary source of capturing appropriate competencies; (3) Active collection of customer information builds market knowledge.

Our findings bridges the gap between theories about gazelles and theories about recessions, supported by a model that clarifies the connections between the success factors of gazelles explaining both *how* they can be achieved and *why* they are important.

Advisor: Karl Wennberg

Key words: Gazelles, Recession, Size, Competencies, Market Knowledge

Acknowledgements

We would like to thank everyone who has supported us in the processes of writing this thesis. **Karl Wennberg** has provided excellent supervision, brilliant insights, and continuous feedback – help that has been truly invaluable. **Anna Brattström** has guided us in our case selection and provided insights on how to conduct case research. **Everyone participating in our interviews** for generously sharing their time and showing interest in our work. **Kjell Danell**, **Hartwig Friedl,** and **Elisabeth Bylund Friedl** for your feedback and valuable comments. Lastly, we would also like to thank our better halves **Laura Hamilton** and **Linda Norrman** for their patience.

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1 Introduction

1.1 Background

Organizational theorists believe firms have different abilities to compete with each other. Firms are different and have different sets of resources and capabilities meaning that their level of competitiveness will vary. Competitiveness can take many forms, but growth and profitability are two of the key factors differentiating firms perceived as successful from the rest. (Barnett & McKendrick, 2004)

Growth is a key objective for most companies. Size alone is rarely the only reason, rather the positive effects growth generates: scale economies, experience effects, and network externalities – all drivers of profitability. Additionally, growth counters liabilities of smallness and newness for the smallest and youngest actors on a market, thereby improving survivability – a prerequisite for success (Davidsson, et al., 2010).

New firms are important contributors to national economies by their huge share of job creation, as many as 69 percent of new jobs in the U.S. between 1990 and 1995 were created by new firms. Among the new firms, about 3 to 10 percent of the new firms are responsible for 50 to 80 percent of the aggregate economic effects of new firms (Delmar & Wennberg, 2010). Societally, job creation generates interest to learn more about high-growth firms, since job creation creates tax incomes and reduces welfare costs. In Sweden, approximately one-third of new jobs are created by new entries and two-thirds by expansion of existing firms (Davidsson, et al., 1998). Therefore, growth and high-growth firms in particular are an interesting topic to study (Delmar & Wennberg, 2010).

Much work has been done on the areas of growth and profitability, but there are few studies on small companies that achieve profitable growth during a recession. What do these companies do, that other does not? They are likely to exhibit characteristics that will help them grow against the odds.

1.2 Recession

The global recession which started with the financial crisis in 2008 has by a Nobel laureate been dubbed "The Lesser Depression" (Krugman, 2011). In light of the effects this recession has had on the world economy at large we consider it important to see which small firms have managed not only to survive, but to prosper throughout the entire period.

While a solid definition of when the crisis began has yet to be exactly decided in academia the global economy started slowing down December 2007 (National Bureau of Economic Research, 2008) and took a sharp turn for the worse when Lehman Brothers filed for bankruptcy (Lehman Brothers, 2008) in September 2008.

Deciding an end to the recession is even harder as much of the developed world is still showing little economic growth. As Sweden is our sample of choice we therefore choose to use it as a base for defining the current recession. Using data from SCB we can see that by the end of 2010 the Swedish GDP is back to pre-crisis levels (Statistiska Centralbyrån, 2012), with economic recovery continuing thereafter. With this in mind we choose to define the crisis years as 2008, 2009, and 2010 which we consider a conservative estimate for the crisis in Sweden. This means that we will also include the year 2007 in our study as the base year from which growth is calculated.

1.3 Gazelles

"Gazelle" is a term to describe fast-growing firms who increase turnover and net employment more or less annually. Birch (1981, 1987, 1994) is attributed with creating the terminology around gazelles. In a study containing 5.6 million businesses it was found that two-thirds of new jobs were created by firms with twenty or fewer employees (Birch, 1981; 1987). While there has been some critique of his findings (Davis, et al., 1996) they nonetheless illustrate the importance of small firms. Later studies in the US and the UK found out that the distinction between small and large firms in the sense of job creation was of less importance than a small group of firms which were dubbed "gazelles". These gazelles, making up around four percent of total firms, created a disproportionally large amount of new jobs in the course of their considerable growth (Birch & Medoff, 1994). Later research has shown that high growth is generally concentrated to a few firms, with substantial heterogeneity in growth rates among firm (Delmar and Wennberg, 2010).

Rapid-growth firms can be found in all industries, although growth rates naturally differ between sub-sectors (Davidsson, et al., 1994). However gazelles are on average younger than other firms (Henrekson & Johansson, 2010). Since gazelles aren't limited to certain industries they become important to study when considering small firm success. As they are an important contributor to growth we find them to be the perfect case to study as a representative of successful small firms.

1.4 Purpose

The purpose of the thesis is to find out how small successful companies; "gazelles" achieve sustainable growth throughout a recession. To do this we have decided to perform an inductive study where we (1) search for important factors, (2) find theoretical explanations for these factors, and (3) anchor our explanations to a selection of cases to further explain *how* and *why* these factors are important during a recession. The hope is that the thesis will help in providing a road map for how entrepreneurs can act to grow during a recession.

2 Methodology

A key to a successful study is to be aware of various methods of conducting research, select an appropriate methodology that one believes in and that is appropriate to the research question posed. Here, we will explain our stepwise methodological approach, but also outline and discuss the general structure of our research design.

The overall aim of our study is to identify important drivers explaining *why* and *how* gazelles achieve growth and profitability during an economic recession. Surprisingly, there is a lack of theoretical understanding of these mechanisms within an otherwise fairly well-studied research area.

Our research process had four steps: (1) we performed a pre-study to find patterns in success factors, (2) a literature review on the identified patterns, (3) we created a model by integrating previous research with our pre-study patterns, (4) we gathered empirical data to test and improve our model through a multi-site case study. These steps will be described in detail below, but first we will discuss our chosen research design consisting of the following elements: an inductive study, the qualitative main study, a deep case-based approach, a multi-case study and finally data collected based on semi-structured interviews.

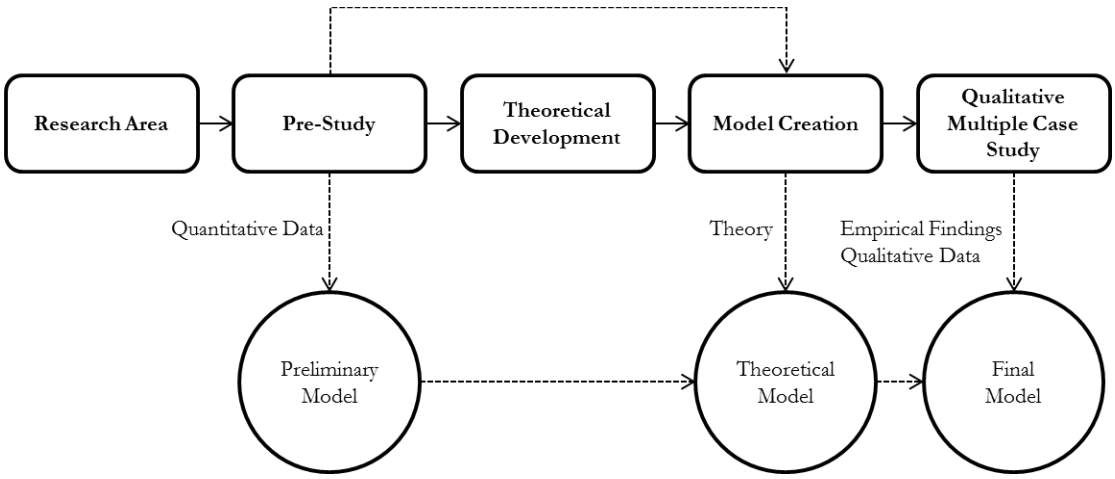

Figure 1 Research Process Overview

2.1 Research design

2.1.1 Inductive Study

Since our research topic lacks a well-established theoretical fundament that we could test, we decided against the deductive approach. Instead, we decided to perform a study with an inductive foundation, starting with empirical observations to develop a theoretical model in order to better

understand the phenomenon (Trost, 2010). A literature review of the research area indicated that there are several studies on successful small firms; however, they are mainly of quantitative nature. Therefore, we ruled out the grounded theory type of theory building study. Such a study would have been more suitable if the studied phenomenon was less known (Flick, 2009).

2.1.2 Qualitative Main Study

We have chosen a qualitative over a quantitative methodology to explore our research questions (Flick, 2009), because we are not primarily interested in quantitative estimates of the different success factors. Instead, we aim to *understand how* firms are able to grow despite harsh economic conditions, *explain how* the factors identified in the pre-study operate, and to *describe* the patterns and linkages between those factors. A qualitative case study is suitable for explaining quantitative findings for building theory (Meredith, 1998).

2.1.3 Deep, Case-based Research Approach

We have decided to perform a deep, case-based study since we want to generate an understanding of the reality by actual practices. We want to draw normative conclusions from our study with the purpose to generate valuable insights for theory and practitioners. Our focus is to outline a theoretical understanding on what makes gazelles successful during an economic recession. This does not only include the interactions between people in the firm, but also the interaction between the firm and its environment. We see that environment as posing boundaries and opportunities which firms react to and have to deal with; it is something 'real' beyond the perceptions of the individuals. Therefore, we decided against applying ethnomethodological or constructionism approaches, which imply the reality is molded by individual own perception and understanding of reality (Flick, 2009).

In our early literature review we found a large number of potential success factors suggested as fostering small firm growth. Therefore, we decided to perform a quantitative pre-study as to narrow down and find patterns for some of the success factors. This resulted in three main factors being identified. Later on, this focus also enabled us to use the interview time more efficiently. We could ask several questions related to each factor, thereby gain a more in-depth understanding. This was extremely valuable for our purpose. Further, combining qualitative and quantitative methods is generally beneficial since they complement each other in a triangulating approach (Jick, 1979; Flick, 2009).

2.1.4 Multi-case study

Since we aim at building theory, four qualitative methods are recommended: (a) a few focused case studies, (b) in-depth field studies, (c) multi-site case studies and, (d) best-in-class case studies (Voss, et al., 2002). We have chosen to perform a qualitative multi-site case study of gazelles that, by definition, grew during the last recession, which we previously defined as the years 2008 to

2010. Using multiple cases increases the external validity and helps guarding against observer bias, but more resources are needed and less depth per case can be expected (Voss, et al., 2002). Since we study the most successful small firms; gazelles, we also perform a best-in-class study. Because we aim at building theoretical fundament, we decided against an in-depth field study since studying several firms will provide more generality towards the results.

2.1.5 Semi-structured interviews

The data-collection process for the case interviews was semi-structured interviews by combining prepared questions with improvised questions and open discussion. We conducted semi-structured interviews because of our research approach (Flick, 2009), the strong element of discovery they provide (Gillham, 2005) and, the usefulness of interviews for case studies (Yin, 2009). We followed the guidelines on semi-structured interviews by Gillham (2005): (a) ask same questions to all involved, (b) the kind and form of questions passing through a development process (in our case, the pre-study played a large role here), (c) interviewees are provided supplementary questions if they do no directly deal spontaneously with one of the sub-areas of interest, (d) approximately equivalent amount of time per interview, (e) open questions and, (f) usage of probes if interviewer judges there is more to be disclosed at particular points in the interview.

Semi-structured interviews provide a good balance between flexibility and structure compared to structured and unstructured ones. For our purpose, semi-structured interviews give us the possibility to explore specific topics or patterns that arise during interviews and contribute to the reliability of our findings. Advantages of our approach includes that we learn more about the connections between the factors identified as important for growth, which is important for the theoretical contribution of this paper. Applying the same structure across the interviews make them more comparable and enabled us to gather data on all areas of our model from every interview. Open-ended questions lower our interference with the interviewee's perception of the reality and historical events, since asking questions in an unbiased manned is one of the key responsibilities of the interviewer (Gillham, 2005). A second challenge of interviews is bias from the interviewees' ability to recall events accurately and articulate them (Yin, 2009). By asking open questions and triangulating the data collection we attempted to mitigate the challenge of bias.

The main drawback of semi-structured interviews is their cost of time, both for construction of questions and interviewing. Our pre-study mitigated this issue to some extent by giving us three patterns that we could focus our interviews around. A second potential drawback is requirement of certain skill and practice to achieve adequate performance. With some previous experience with both research and interviewing and support of methodological literature we decided that

this was a difficulty we could overcome (Gillham, 2005). When conducting the interview, one person was responsible for posing the primary question and noting answers. The other person was focusing on the respondent, at time asking for clarifications and posing follow-up questions.

2.2 Quantitative Pre-study

2.2.1 Pre-study Background

We chose to start our study of gazelles with a broad quantitative pre-study. By including a multitude of factors that could potentially impact firm profitability as well as growth and estimate their relative importance, we managed to narrow our field of research significantly. Using the pre-study we were able to conduct much more structured interviews, searching for specific patterns between key factors and, making the most out of our interview time.

Besides narrowing our research into a more manageable task, the quantitative study lends increased validity to our findings. Kerlinger (1986) discussed the limitations of solely using case studies when making generalizations about firm growth. While qualitative methods offer excellent tools for providing actual scientific explanations, posing follow-up questions, and hence reach more nuanced results and conclusions, they often do not lend themselves towards generalizing the patterns detected. (Flick, 2009)

By having a quantitative background to our qualitative research we aim to strengthen the validity of our findings through triangulation of methods and provide better grounds for generalizing our research. Together the different methods are able to counterbalance the weaknesses of the other and provide a better overall result (Flick, 2009).

2.2.2 Data Sample

For our pre-study we used a recent survey from ALMI[1] containing 252 interviews with CEO's of different small firms in Sweden. ALMI is a state owned company and run enterprise with the goal of supporting Swedish corporations with capital and various types of counseling (mentors, coaches, etc.). Their data was collected over phone by CMA Research[2] and included a control group of 81 IT-companies. In its unedited form the database included 87 variables per company (some of which were redundant), including both dependent (profitability, size, CEO gender, etc.) and independent (questions about risk, market knowledge, etc.) variables.

[1] (ALMI, 2012)

[2] (CMA Research, 2012)

The database has a large enough sample to be useful in conducting statistical analyses. There are some challenges in the usefulness of the data are. First, the questions measure the CEOs' opinions about certain areas, i.e. how good do they think their company is in various areas. This means that correlations will be formed based on CEO *opinions* of themselves and their companies rather than facts that can be verified by outside sources. This is not necessarily a significant problem since attitudes has been found to be among the most important predictors of small firm growth (Wiklund & Shepherd, 2003), but this is nevertheless worth considering when analyzing the conclusions. From a research design perspective the ALMI survey suffers from 'common method bias' – i.e. that both attitudes (independent variables) and outcomes such as growth and profitability (dependent variables) are measured in the same survey at the same point in time. It is therefore recommended to supplement this data with other data (Lindell & Whitney, 2001).

Further, the ALMI data is not precise in the measures. Most variables are formed into ordinal groups, which lose some of the inborn differences in the data. While many statistical analyses make use of ordinal data samples it would have been useful to also have raw data on profitability and turnover to compare with.

Overall, the database provides a very interesting starting point for our research. While not rigorous enough to be useful in drawing conclusions, it provides an excellent way for us to find patterns in how CEOs think, and what makes small companies profitable. We made use of these findings when drawing upon the theories used to formulate our interview guides.

2.2.3 Variable Construction

To make the database more useful for establishing patterns for factors of success we used the existing variables and created new composite variables to illustrate how different views and skills affected profitability in our sample. Since our research is inductive, correlation analyses are an integral part of our statistical analyses. Using correlation analysis may lead to a multitude of difficulties, among them the risk of inflations of correlations by common method variance. (Lindell & Whitney, 2001)

In order to mitigate some of the above-mentioned risks from using correlation analysis we decided to produce two separate sets of variables. One set was constructed in a linear format that added different questions together and the other was set in an exponential format that multiplied the same questions to create composite variables. Having both sets assisted in testing the validity of the results for more extreme outliers and in testing the normality assumption which is important when conducting correlation analyses (Newbold, et al., 2007).

2.2.4 Statistical Analyses

The nature of the data from ALMI made rigorous analyses problematic. Partly because it was difficult to determine the direction of potential relationships, and partly because most answers were opinions ordered in an ordinal form. Also multivariate analyses tended to favor specific variables to an extent that rendered the other variables insignificant.[3] The lack of more rigorous analyses precludes making any conclusions from the data alone, but the use of correlation analyses is still appropriate for finding patterns that can later be tested with more in depth case studies.

2.3 Theoretical Study

The goal of the theoretical study was to improve our understanding of the area and establish how the results of our pre-study can be linked to patterns in previous research. The pre-study thus helped narrow the field of our theoretical study and allowed us to study the specific variables for which he had found correlations. With the theoretical study, we have been able to adjust our theoretical model by combining the insights from the pre-study with the literature review.

2.3.1 Literature Search

Literature was searched in the major scientific databases such as JSTOR, Business Source Premier, ScienceDirect and Google Scholar. Books were found in Libris and borrowed from the libraries at Stockholm School of Economics and Uppsala University. Additionally, we searched Mediearkivet and Affärsdata Företagsfakta for newspaper publications on our selected companies. Key-words have been combinations of SME[4], growth, profitability, success, recession, competencies, size, market knowledge and, qualitative methodology.

2.4 Theoretical Model Creation

Based on the patterns from our pre-study and the review of theory we derived a conceptual model for success during a recession defined as achieving both above average growth and profitability. The model is important in the sense that it clarifies the goals of the qualitative research for both the reader and the researchers. Once the properties and components of the models are explored using our in-depth case studies, it also becomes important as one of the main contributions of this paper. This will then be modified depending on the results of our qualitative study that will help both in testing and developing the model. The model developed after the pre-study can be found in 3.5, with modifications after the theoretical study in 5.3 and the final model in the analysis 7.4.

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[3] Profitability 2010 -> Profitability 2011 for instance

[4] SME = Small and Medium sized Enterprises

2.5 Qualitative Study

A case-study method is suited for our purpose. The most important findings in our study are generated from our qualitative study. Using in-depth case studies at multiple sites we aim to test and expand the model that our quantitative and theoretical research built.

We performed our case study in accordance to Schramm (1971, cited in Yin, 2009, p.17): "The essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result", trying to explore how and why the gazelles were successful. A case study research is of significant relevance when exploring real-life phenomenon in depth. (Yin, 2009) Benefits of case studies include their ability to detailed capture phenomenon in an exact way (Flick, 2009), lead to new and creative insights, development of new theory and, have high validity among the practitioners (Voss, et al., 2002). To counter the challenge of case studies, the ability to generalize conclusions drawn from studies of a single or a couple of cases, we applied a multi-case method since evidences from such studies is considered as more convincing and robust (Herriott & Firestone, 1983). Another challenge of case studies is how results are dependent on the interviewees' interpretation of reality (Flick, 2009; Yin, 2009).

2.5.1 Case Selection

For theory building, theoretical sampling of cases is preferable to statistical sampling from the population. Random selection is neither necessary nor preferable. Since only a limited number of cases can be studied, demands are placed on the researcher to select appropriate cases (Eisenhardt, 1989; Yin, 2009). Therefore, it makes sense to select extreme situations or polar opposites since the cases should be chosen to predict similar or contrasting results (Eisenhardt, 1989; Flick, 2009; Yin, 2009). The goal of theoretical sampling is to select cases likely to replicate or extend emergent theory (Eisenhardt, 1989).

Table 1 Population Sampling

	Change	Total
Population of Gazelles 2008-2010		624
Conveniance Sampling	-422	202
Industry Sampling	-1	201
Threshold Sampling	-78	123
Profitability Criteria	-51	72

Since we study Swedish gazelles, we began our case selection from the list of gazelles published by the business newspaper Dagens Industri (Dagens Industri, 2011). This list contained 624 companies from all of Sweden. All firms satisfy the gazelle growth criterion of a compound annual growth rate (CAGR) of at least 20 percent per year. Next, we applied a convenience sampling by a geographical limitation to the Stockholm region, where we are based. Our selection

was limited to service firms through an industry sampling since they differ significantly in their basic functioning from manufacturing firms and should be analyzed separately (Delmar & Wennberg, 2010). There is also a very small amount of Swedish manufacturing gazelles prohibiting a study of only manufacturing gazelles. After this a size threshold of 10 million SEK at the start of the period was included to counter the survivability issues (see section 2.5.4.1). Finally, we added our profitability criterion: an EBIT of a minimum of five percent per year with the aid of annual report data through Affärsdata Företagsfakta. The remaining 72 firms represent our population of successful gazelles as seen in Table 1.

From our population of gazelles, we selected five cases using theoretical sampling, since between four and ten cases are recommended for multiple case studies (Eisenhardt, 1989). Our pre-study results indicated that size matters for success, leading us to studying gazelles of different sizes (both in terms of turnover and number of employees). Our second sampling parameter was to choose cases from industries with different levels of uniqueness in products between firms because our objective is to build theory applicable across industry boundaries, since gazelles can be found in all industries (Davidsson, et al., 1994) and the role of resources is likely to vary between industries. An alternative method for our theoretical sampling would have been based on market knowledge and competencies (the two other factors found in the pre-study), both of which are qualitative in nature and difficult to measure.

2.5.2 Data Collection

We have adopted a triangulating data collection method. Since qualitative research is disadvantaged to quantitative research in generalization of results, triangulation can be used to mitigate the challenges created by blind spots in the methods (Flick, 2009). We combine quantitative and qualitative methods and use both interview data and secondary data on our cases as means for triangulation.

Triangulation is to combine different types of methods or sources of data which enables the researcher to make more accurate conclusions, address more complicated issues and collect stronger evidence compared to a single type of data and method (Flick, 2009; Yin, 2009). Jick (1979) suggests that the most important strength of multi-method design is allowing researchers to be more confident in their results. In addition to this triangulation assist when developing new theories and enriching explanations for research problems. By using different methods a higher demands of creativity is placed on the researcher in the design of research but when successful stimulate a better definition and analysis of problems because of the greater variability in data (Jick, 1979) (Bryman & Bell, 2007).

2.5.2.1 Anonymization

We have respected the demands of participating companies by anonymization in this paper with a couple of exceptions. We list the companies in the empirical section in a table and both interviewee name and company in the list of interviews. One company wished to be fully anonymous without exceptions, for which we have modified the data given in Table 4 slightly.

2.5.2.2 Primary Data

We conducted thirteen face-to-face interviews and one telephone interview. The fourteen participants represented five companies; four of the companies providing three interviewees and the final company two. Our objective was to interview three persons from every company, but no less than two. Interviewing no less than two people gives multiple perspectives on the reality of the company which is beneficial since the topics of our research is unlikely to be exhaustively answered by a single person (Voss, et al., 2002). In every company, we aimed at meeting the CEO, someone from the management team and a third person outside the management team. The purpose of the interviews was to get the interviewees interpretations of the reality as data on our cases. Each interview lasted between 30 to 60 minutes. All interviews were conducted in Swedish since it was the language most comfortable for the interviewees. The same questions were asked to all persons, although with different follow-up questions, improving the reliability of data while still providing an acceptable amount of richness in the answers (Voss, et al., 2002).

Initial contact with the companies was conducted through e-mails to the CEOs who gave us access to their co-workers. Initial contact included a description of the purpose and a brief overview of our interest areas. The above approach is recommended by (Voss, et al., 2002) for studies on relatively simple topics.

We used multiple investigators, the two authors, for every interview improving confidence of the findings by the convergence of our observations. Two interviewers also decrease the risk of observer bias (Voss, et al., 2002).

We followed the interview methodology described by Gillham (2005). Every interview began with a *preparation phase* that includes selecting a suitable location. Our aim was to use a location comfortable for the interviewees with as little disturbance as possible. They all preferred to be in conference rooms or offices at their headquarters, which was in line with our objective. We followed the Gillham's recommendations by starting every interview with small-talk.

After the *preparation phase* we moved to the *orientation phase* by introducing our project, informing them about anonymization, explaining the interview process, asking if the interviewees had any

questions or hesitations, and started the interview by asking questions about the interviewees' role at the company.

Towards the end of the interview, the *closure phase*, we explained that we felt happy to have been able to ask our questions and asked if the interviewees had any clarifications, comments or questions.

In addition to our face-to-face interviews, we conducted one telephone interview with a person we were unable to meet physically. We believed the person we interviewed was suitable to conduct a telephone interview with because of his experience in sales by telephone and we had met two of his colleagues face-to-face. The telephone interview was conducted similarly to the face-to-face interviews and was designed in accordance to the guidelines of Gillham (2005). Design included scheduling a time suitable for the interviewee with sufficient time to fulfill the interview and notifying the interviewee about the purpose and topic of the interview. Telephone interviews have the advantage that they make it easier to reach busy people and to clarify misunderstandings compared to other distance methods such as e-mails or text messages. However, in comparison to face-to-face interviews, telephone interviews are disadvantaged because of the impossibility of picking up visual cues and an increased difficulty in building interpersonal chemistry with the interviewee (Gillham, 2005).

We decided not to record the interviews. Recording makes the interviewees feel less comfortable about the confidentiality of researchers (Gillham, 2005). We were still able to take good notes by being two persons at every interview, one leading the interview and the other taking notes.

2.5.2.3 Secondary data

We have used secondary data on our cases to triangulate the empirical data. We used Affärsdata Företagsfakta to gain access to the annual reports of the different companies and searched for business press publications on the firms through the database MediaDirekt.

2.5.3 Case Analysis

We prepared our analysis by reviewing our written records of the interviews and discussed if we really had captured the content and how some key-phrases should be translated. The next step was to print all records and begin the within-case analysis (Eisenhardt, 1989; Voss et al., 2002). We grouped respondents by company and made intra-company comparisons of the answers to find a common view of their perceived reality. Since our interview records were exhausting given the amount of time spent interviewing, we believed the write-up and notes of our intra-company analysis were sufficient as documentation of our within-case analysis. We worked with the cases

until we felt familiar with each case on a stand-alone basis (Eisenhardt, 1989). Aggregated company answers were compared question-by-question and topic-by-topic in search for similarities and differences between our cases to establish patterns. Such a cross-case analysis improves the internal validity (Voss, et al., 2002). The cross-case analysis was driven both by the structure provided by the model created after combining insights from the pre-study with the theoretical development, and by the groupings provided by our case selection criterion (Eisenhardt, 1989). We searched for causality and triangulated our interview data with secondary data to get a second reference point on the reality. Initial patterns in our model were established and then tested by comparing with our case data, theoretical background and pre-study results. The patterns were refined in an iterative manner (Voss, et al., 2002) by repeating the process multiple times until we felt certain that we had captured the true essence of our qualitative data. The final model was then reviewed against literature to put it into a perspective asking what is different, similar and why (Eisenhardt, 1989).

2.5.4 Limitations of the Study

We have worked with four important limitations: (1) no focus on survivability, (2) no focus on the entrepreneur, (3) A theoretical perspective distinctively focusing on resources, competencies, and market knowledge. Below we explain why we chose not to make these limitations.

2.5.4.1 Survivability

We have excluded firms with a turnover level of 10 million SEK at the start of the period from the study. Survival is necessary for growth (Delmar & Wennberg, 2010). For very small firms, the survival of the firm can be a primary motivator for growth. For slightly larger firms, there might be trade-offs for growth goals such as profitability and survival (Greve, 2008). We assume that firms with a turnover of 10 million SEK have overcome the initial challenge for start-ups of simply surviving on the market. Profitable firms are able to survive on the market because they can generate their own cash-flow and accumulate slack resources (George, 2005). When studying the interrelationship between growth, profitability and survival using 11 884 firms in the Swedish knowledge intensive industry between 1995 and 2002, Delmar & Wennberg (2010) found that profits seem to be an important predictor for survival rather than directly leading to growth. It therefore makes sense to distinguish between firms trying to survive and those having survived trying to grow.

2.5.4.2 The Entrepreneur

In this study, we will not deal with the important issue of the entrepreneur and the entrepreneur's growth attitude. The entrepreneurs have been found to be important for firm performance (Storey, 1994; Davidsson et al., 2010). Delmar and Wennberg (2010) found through a literature review that firms self-select to grow and all firms cannot be assumed to have growth as a strategic option. Few firms are run by entrepreneurs with growth ambition (Garnsey, et al.,

2006). Since we are interested in the interactions between the firm and its environment and internal dynamics inside the firm, studying the ambition to grow among entrepreneurs and managers is beyond the scope of this study. Such as study would have been better suited with a psychoanalytic approach (Flick, 2009) applied on agency and gender theories, for example.

2.5.4.3 Alternative research perspectives

In this paper, we take a resource-based view of the firm defined by Barney (1991), Peteraf (1993) and Wernerfelt (1984) with early origins in Penrose (1959). The most natural alternative would have been to use an industrial organization view, e.g. Porter (1980), but that framework is more centered on studies of industry dynamics. We believe gazelles can succeed in all industries. An industrial organization approach would have focused on where to find gazelles among different industries and positions in value-chains. Another possible approach on gazelles would have been to study their internal dynamics by approaching a gazelle as a social system (Stern & Barley, 1996). Such an approach would have been more suitable for older firms with more established internal structures, where the informal structure becomes more important (Meyer & Rowan, 1977). It is well known in research that as firms age and become older, they establish structures and routines and no longer functions as an ad-hoc organization (Mintzberg & Westley, 1992). Over time, those structures tends to lead to decoupling of the social system from the functional system (Weick, 1976) and increased emphasize on adhering to established rules and norms of behavior (Meyer & Rowan, 1977). If we had chosen to study growth among older firms, such a theoretical perspective would have been valuable.

It is important to remember that the resource-based view is not an uncontested theory. It is criticized for resting on partial, implicit and problematic assumptions (e.g. on the trading process in markets) and the necessary conditions for the existence of sustained competitive advantages have not been identified (Foss & Knudsen, 2003). For these reasons, we see it as crucial also to complement our theoretical model with insight from the knowledge-based view of the firm (Kogut & Zander, 1992).

2.6 Quality of research

The quality of a qualitative study is dependent on the results being based on empirical material, methods and theories are suitable for the purpose and a variety of approaches and methods have been applied (Flick, 2009). The key issues to solve for a case study are the lack of controls and the need for triangulation (Meredith, 1998). For elaborations and discussions on trade-offs between alternatives, see the above sections with more detailed research design descriptions. This section summarizes the key factors in terms of quality of research.

2.6.1 Validity

Validity regards the question if the researchers see what they think they see (Flick, 2009). Internal validity considers how valid the concluded relationship between different factors are, external validity considers how generalizable the results are and construct validity concerns if the correct measure is used for the purpose (Mills, Eurepos, & Wiebe, 2010; Yin, 2009; Flick, 2009).

2.6.1.1 Construct validity

To ensure construct validity, we have selected a research design appropriate for our purpose (see section 2.1) with awareness of the shortcomings of the methods by using multiple methods and types of data. Additionally, our pre-study establishes that our selections of theories are appropriate for the phenomenon (Flick, 2009; Yin, 2009).

2.6.1.2 Internal validity

We have been careful in our research design to ensure the internal validity. The quantitative pre-study shows that a relationship between different variables exists (we find correlations that are statistically significant at the 5 % level). In turn, the qualitative case studies establish the temporal precedence of these effects, i.e. which factor affects which. Case selection is important for the internal validity and our case selection supports the purpose of this paper. The choice to use multiple cases with different firm size operating in different industry types help to control for factors such as industry and size effects. Triangulated data give a fairly coherent view on our conclusions validity (Voss, et al., 2002). In the interview process, we approached the same topic from several angles by asking several different questions on each topic, thereby lowering the bias It is therefore our opinion that the internal validity of our findings is strong, despite the lack of a control group of less successful firms. Perhaps the same factors will be found in all firms in our geographical and size limitation irrespective of performance. The lack of a control group is mitigated by the strong theoretical support for our results.

2.6.1.3 External validity

We believe our ability to generalize our findings, the external validity, is acceptable. Case studies in general offer a weak basis for generalization (Yin, 2009; Flick, 2009). Our usage of multiple cases gives higher external validity than single cases (Flick, 2009; Voss et al., 2002). Generalization is externally valid if the same population parameters are valid in other situations (Meredith, 1998).

Our population parameters in the case selection process enable a higher external validity for the generalization of our findings from the industries of our cases to gazelles in any service industry since it controls for industry effects. Since selected cases are of different size, generalizations can be made across different sizes of gazelles, except the very smallest, with turnovers of less than 10

million SEK. There is an unknown in the validity of our study-results outside of Stockholm for entire Sweden or for other large cities.

2.6.2 Reliability

Obviously, the nature of a qualitative study makes it impossible for another researcher could repeat the study and arrive at the same results and conclusions, therefore qualitative reliability is concerned with minimizing errors and biases in the study (Yin, 2009).

To ascertain that our case study data were we interviewed three different people at each organization included in our case study. We made an effort to get interviewees from in different positions in the company who had been there during the entire time period we are interested in. For each company our goal was to interview: (a) the CEO, (b) someone from the management team and, (c) someone outside of the management team, i.e. the persons best informed about our research topic. We asked the same set of questions (Voss, et al., 2002). We believe this selection reinforces the reliability of our significantly since we were given different perspectives on the business and were not forced to accept one person's view as the reality. We allotted similar amounts of time to each person irrespective of position to further increase reliability (Gillham, 2005).

A potential bias in the study is Swedish being the language of the interviews with English the language of our paper, creating a risk of losing important facets in the language. To minimize the risk of bias, we reviewed each other's documentation from the interviews and translations from Swedish to English, after having discussed how to translate the records. Additionally, we crosschecked our findings with available secondary data to make sure that we had been given an accurate representation of the companies in question.

Another potential source of bias is if the interviewees consciously or unconsciously constructed biased versions of the reality, or their version only to a low extent corresponds with their true experiences (Flick, 2009). We were well prepared for the interviews and followed the procedures outlined by Gillham (2005). However, we did not discuss the method of the interview with the interviewees after the interview. This was a conscious decision from us since we did not want to use the time, generously set aside, of the interviewees for topics of little interest to them. Instead, we discussed the methods during the orientation phase, which we believe was sufficient. No interviews were recorded for confidentiality reasons. We believe the reliability of the secondary data is acceptable, although they are not peer-reviewed; the articles are from well-known sources.

2.6.2.1 Objectivity, trustworthiness, credibility and dependability

To improve our trustworthiness and dependability we took two important actions: (a) triangulated our methods, data and researchers, and, (b) held peer discussions with a researcher in innovation about our case selection. The interviewees were not involved to examine the credibility (Flick, 2009). We made no attempt to prove the objectivity of our research by having an independent researcher analyzing the same data material to draw his or her conclusions from it (Flick, 2009).

2.6.3 Research Contribution

As stated in our purpose we want to find out how small successful companies; "gazelles" achieve sustainable growth throughout a recession. We think our research has the potential to increase knowledge about how small firms can succeed during recessions; an area which we consider undeveloped despite the wealth of research available about small firms. Our research contributes with an important piece of the puzzle to becoming a gazelle during a recession.

The empirical contribution from our research comes mainly in the form of the qualitative material that we collect during the course of our case studies. As judged from out literature review, predominant research on small firm growth has been based on quantitative data. In addition, the quantitative analysis we perform also adds weight to the empirical contribution Our qualitative approach therefore provides theoretical contribution by increased insight into the actual *processes* and *interconnected factors* that facilitate small firm growth.

3 Pre-study Results

3.1 Overall Results

The most important findings from the pre-study came when we conducted a correlation analysis between the different variables. While correlation analyses tend to be difficult to use to form general conclusions due to the weak nature of the test, they do however provide an excellent way of finding interesting phenomena to explore further. We have chosen to include only the variables that proved especially interesting in this section. For a full list of variables we refer to the appendices.

We created two different sets of variables to better examine the potential effects. Most of our findings are consistent between the two sets although in some cases they differ slightly. The strongest correlations are between the two measurements for company size, revenue and number of employees. There is also an exceptionally strong correlation between profitability 2010 and 2011. This is in line with research suggesting that profitable growth will lead to continued high profits (Davidsson, et al., 2009), indicating that keeping a healthy profit margin is likely to help you continue doing so, especially during a crisis.

Table 2 Correlations for Exponential Variables

Correlations Exponential Variables

		Wish for New Corporate Governance	Wish for External Competence	Market Knowledge	Company Revenue	Amount of Employees	Profitability 2011 (Ordinal)	Profitability 2010 (Ordinal)
Wish for New Corporate Governance	Pearson Correlation	1	.227**	-.080	-.029	.029	-.051	.000
	Sig. (2-tailed)		.000	.220	.656	.654	.483	.999
	N	245	240	234	245	245	191	221
Wish for External Competence	Pearson Correlation	.227**	1	-.207**	-.211**	-.178**	-.220**	-.120
	Sig. (2-tailed)	.000		.001	.001	.005	.002	.076
	N	240	246	234	246	246	190	221
Market Knowledge	Pearson Correlation	-.080	-.207**	1	-.019	.019	.192**	.166*
	Sig. (2-tailed)	.220	.001		.769	.768	.008	.014
	N	234	234	240	240	240	188	218
Company Revenue	Pearson Correlation	-.029	-.211**	-.019	1	.626**	.134	.116
	Sig. (2-tailed)	.656	.001	.769		.000	.061	.082
	N	245	246	240	252	252	195	226
Amount of Employees	Pearson Correlation	.029	-.178**	.019	.626**	1	.167*	.133*
	Sig. (2-tailed)	.654	.005	.768	.000		.019	.046
	N	245	246	240	252	252	195	226
Profitability 2011 (Ordinal)	Pearson Correlation	-.051	-.220**	.192**	.134	.167*	1	.565**
	Sig. (2-tailed)	.483	.002	.008	.061	.019		.000
	N	191	190	188	195	195	195	188
Profitability 2010 (Ordinal)	Pearson Correlation	.000	-.120	.166*	.116	.133*	.565**	1
	Sig. (2-tailed)	.999	.076	.014	.082	.046	.000	
	N	221	221	218	226	226	188	226

**. Correlation is significant at the 0.01 level (2-tailed).*. Correlation is significant at the 0.05 level (2-tailed).

Table 3 Correlations for Linear Variables

Correlations Linear Variables

		Wish for New Corporate Governance	Wish for External Competence	Market Knowledge	Company Revenue	Amount of Employees	Profitability 2011 (Ordinal)	Profitability 2010 (Ordinal)
Wish for New Corporate Governance	Pearson Correlation	1	.303**	-.075	-.027	.053	-.031	.004
	Sig. (2-tailed)		.000	.252	.674	.413	.666	.950
	N	245	240	234	245	245	191	221
Wish for External Competence	Pearson Correlation	.303**	1	-.252**	-.225**	-.160*	-.187**	-.133*
	Sig. (2-tailed)	.000		.000	.000	.012	.010	.048
	N	240	246	234	246	246	190	221
Market Knowledge	Pearson Correlation	-.075	-.252**	1	-.006	.018	.166*	.136*
	Sig. (2-tailed)	.252	.000		.932	.786	.023	.045
	N	234	234	240	240	240	188	218
Company Revenue	Pearson Correlation	-.027	-.225**	-.006	1	.626**	.134	.116
	Sig. (2-tailed)	.674	.000	.932		.000	.061	.082
	N	245	246	240	252	252	195	226
Amount of Employees	Pearson Correlation	.053	-.160*	.018	.626**	1	.167*	.133*
	Sig. (2-tailed)	.413	.012	.786	.000		.019	.046
	N	245	246	240	252	252	195	226
Profitability 2011 (Ordinal)	Pearson Correlation	-.031	-.187**	.166*	.134	.167*	1	.565**
	Sig. (2-tailed)	.666	.010	.023	.061	.019		.000
	N	191	190	188	195	195	195	188
Profitability 2010 (Ordinal)	Pearson Correlation	.004	-.133*	.136*	.116	.133*	.565**	1
	Sig. (2-tailed)	.950	.048	.045	.082	.046	.000	
	N	221	221	218	226	226	188	226

**. Correlation is significant at the 0.01 level (2-tailed).*. Correlation is significant at the 0.05 level (2-tailed).

3.2 Competencies and Market Knowledge

In an effort to examine how companies viewed their competencies, and also their desire to improve these through external help either in the form of new corporate governance or competencies (consultants etc.), we formed the three variables:

- Wish for new corporate governance
- Wish for external competence
- Market knowledge[5]

For additional information about the variables and their creation we refer to Appendix A Variable Creation and Statistics.

In both of our sets we managed to find a positive correlation between market knowledge and profitability. This indicates that understanding the market and having confidence in that understanding tends to lead to better profitability.

[5] This is perceived market knowledge, i.e. how good the CEOs thought they and their company knew their markets

A wish for external competencies also correlates with profitability, however here the correlation is negative, meaning that companies with a lower profitability are more likely to want external help of some form. This could be because there are enough competencies within the companies that perform well, or simply because companies performing badly are more likely to seek external help.

Desire for new corporate governance fails to show significance when correlated with profitability. We have still chosen to include it because it has other impacts we consider interesting. There is a very strong correlation between companies desiring external competence and those desiring new corporate governance showing that companies which desire external competence are also interested in replacing some or all of their management. This implies that companies which feel that they are lacking in competence are likely to want replacement across the board.

Since companies that want more external competence have also been doing worse in terms of profitability we find it likely that a high competence level within the company is important for doing well during a crisis. Essentially those seeking help are worse off in terms of internal competences and are forced to act reactively to solve problems by hiring external help. (Cyert & March, 1963)

3.3 Company Size

Using our two measurements for company size we found a correlation between amount of employees and profitability. Surprisingly we failed to find significance at the 5 % level when company revenue was correlated with profitability. Since the correlations are still significant at the 10 % level we are unwilling to draw any conclusions regarding the absence of increased profitability. We do however find it interesting that there is a stronger correlation when using amount of employees as our measurement. In research spanning all Swedish firms between 1994 and 1998 it was found that there is variability between different growth measures (Shepherd & Wiklund, 2009) indicating that it is an interesting area to explore. Our findings could mean that a larger base of employees enables a company to possess a wider set of important skills and capabilities, empowering them to maintain a healthier profit margin. This is to some extent reinforced by the fact that bigger companies are much less likely to wish for external competence.[6] A larger employee base and to some extent higher turnover should therefore be helpful in handling a crisis.

[6] See correlation between Wish for External Competence and the variables for company size.

3.4 Pre-study Conclusions

The nature of the pre-study only allows for tentative conclusions. Nonetheless the study has provided several interesting areas for us to further probe. The first finding relates to the competencies possessed by different startups, both in terms of the entrepreneur/CEO and the employees. While the study is somewhat inconclusive; the correlation shows that it is definitely an interesting area to consider. What competencies have been the most important for growth, when could external competence have been helpful, and how has growth affected the base of competencies within the firm? An important thing to note about profitability measures in research is that most new firms have limited assets and tend to try to minimize their accountable profit for tax reasons. (Delmar & Wennberg, 2010) This means that in some cases the results may be slightly skewed towards lower profitability, but overall this effect should be manageable.

In addition to this we note that market knowledge appears to be a very important factor for company profitability. Companies that consider market knowledge an important factor and who believes they have a good understanding of the market generally performs much better that the average small company.

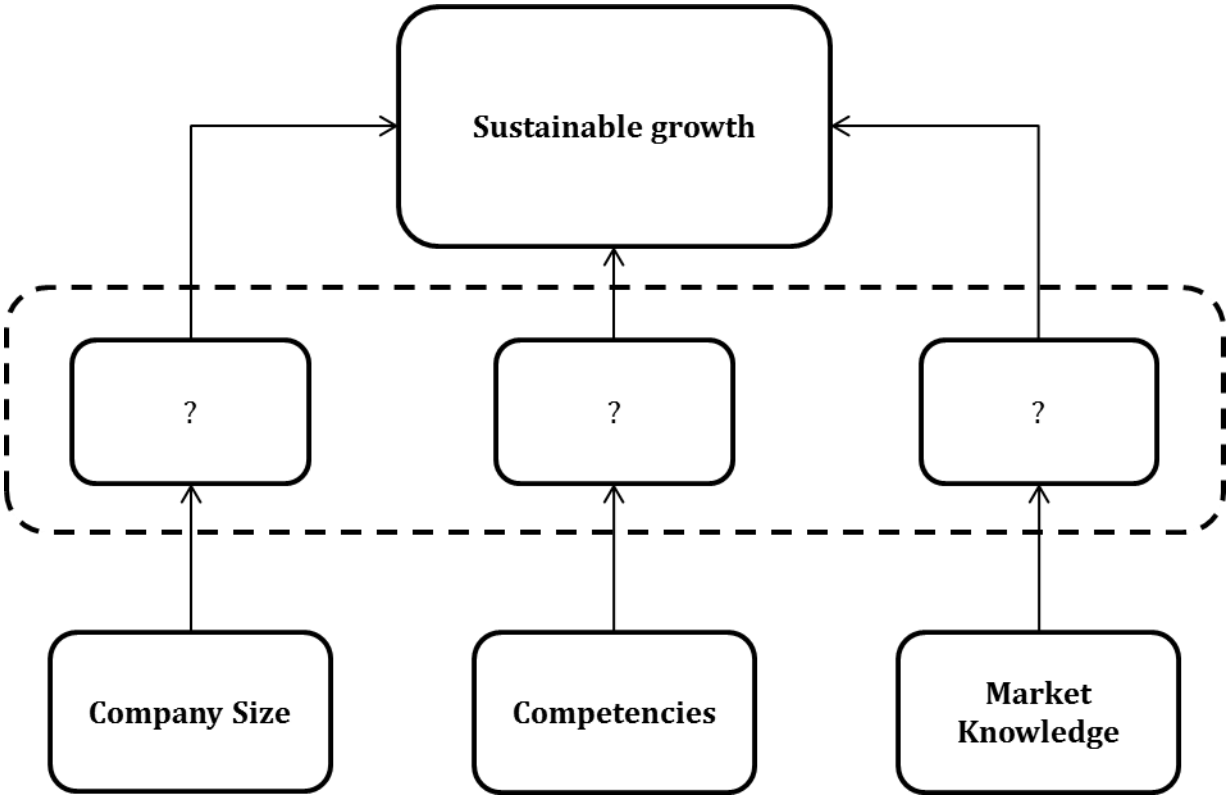
Finally we see that the size of the company affects profitability. We believe there is a connection between size and profitability but that the causality isn't straight but rather dependent on other important factors. This leads us to pose the questions: How have competencies within successful firms been developed and how has recruitment been handled? Is an increased profitability a result of growth or has the growth actually been spurred on by a high profit margin?

Based on these questions and our findings we chose to formulate three research questions as follows:

- **How have competencies been built to foster growth throughout a recession?**
- **In what way does company size affect sustained growth throughout a recession?**
- **How does market knowledge help a company grow throughout a recession?**

3.5 Preliminary Theoretical Model

Based on our pre-study findings we can begin to construct a theoretical model for growth during a recession. From previous studies we know that profitability is conducive to growth. A study containing a total of 5031 businesses in Australia and Sweden establish that profitable small firms are more likely to achieve a state of high growth and profitability. (Davidsson, et al., 2009) We can therefore assume that our findings about profitability will also likely affect growth, and will together lead to profitable growth. Without further research we are unable to explain *why* our categories lead to profitable growth, but we can establish that there seems to be a connection. We therefore now turn towards looking specifically at theories of firm growth to help explain the *why* for our three factors as presented in the model below. Unearthing potential theoretical mechanisms related to firm size, competencies, and market knowledge will allow us to design the in depth qualitative study to shed further light on these issues.



4 Theoretical development

In this section, we explore some important theoretical concepts emerging from our pre-study and by reviewing previous research. Small firm growth, small firm profitability, and recession impact on firms are all explored in this study due to their connection to our research area. The section on resources connects to the other theories since we are applying a resource-based and a knowledge-based view of the firm to our study. Sections on competencies, market knowledge and size are motivated by the pre-study findings indicating the need to explore these topics. It is necessary to study the environment and not only the firm because of our research approach and it also connects to market knowledge and its applications.

4.1 Small Firm Growth

Much research on firm growth takes its starting point in the work of Penrose (1959). Her definition on growth contains two parts:

> The term 'growth' is used in ordinary discourse with two different connotations. It sometimes denotes merely increase in amount; for example, when one speaks of 'growth' in output, export, and sales. At other times, however, it is used in its primary meaning implying an increase in size or improvement in quality as a result of a *process* of development, akin to natural biological processes in which an interacting series of internal changes leads to increases in size accompanied by changes in the characteristics of the growing object" (Penrose, 1959)

The first part concerns the simple increase of an amount; in the context of studies on small firm growth this is often turnover or number of employees (Garnsey, et al., 2006).

The second part focuses on the resource base which can be viewed as a cumulative process where a firm builds knowledge and competence. This connects to Penrose's idea on the process of growth from the firms' perspectives. Here a cumulative process of interactions between the firms' productive resource bases and the available productive opportunities on the market drives growth (Penrose, 1959). Firms' ability to capture these opportunities and changes in the landscape of opportunities is determined by their organizational capabilities and entrepreneurial judgment (Garnsey, et al., 2006). The organization's limit to growth is its ability to see the productive opportunities, its willingness to act upon them and its ability to respond upon them (Penrose, 1959).

4.1.1 Effects of Growth

Relatively few firms experience significant growth (Delmar & Wennberg, 2010). Some firms manage to generate resources that in turn attract further resources, thus starting an accumulation process that enhances their market position. With expanding resources a firm is more able to position itself to changes in opportunities since the new resources can be put into productive use in new areas. Thereby increasing their chances of success against competitors and continuing their growth process. Reversely, failure to grow makes firms vulnerable because of their lack of slack resources to counter changes in their internal or external environment (Garnsey, et al., 2006).

Growing firms have to attract new resources to support growth but often faces planning and coordination problems with the new resources since it is difficult to precisely synchronize resources in a dynamic system (Dávila & Foster, 2007). The internal coordination therefore has a key effect upon the rate the productive opportunities on the market can be pursued. (Garnsey, et al., 2006) See section 4.4.2 for a continued discussion on the administrative consequences of resource organization.

4.2 Small Firm Profitability

At the core having profitability is the reason for most businesses to exist. Without at some point generating profits investors will never get a return on the capital they have invested. So while companies are able to take short term losses and periods of low profitability, at some point they need to reach a profitable stage. Many small firms will try to grow initially without much regard for profitability assuming that profitability will come later, indications exist however that pursuing growth at a low profitability is likely to lead to both low growth and low profitability in the long run (Davidsson, et al., 2009).

Studies have shown that small firms' profitability increases with growth which is contrary to larger firms where profitability tends to decrease with size (Storey, et al., 1987). The connection between size and profitability can thus be established as twofold. High profitability can lead to high growth, and growth in turn seems to generate profitability. Delmar & Wennberg (2010) argue that profitability is not necessarily a forerunner to growth but rather increases survivability which in turn is necessary to create growth. While this means that a linear relationship between the variables cannot be established it indicates that growth alone is not a good enough measurement but rather needs to be considered in conjunction with profits and company survival (Delmar & Wennberg, 2010).

4.3 Recession Impact on Firms

The field of research on how to handle a recession is surprisingly thin (Pearce & Michael, 2006). This despite the fact that it has been clearly established that recessions have a distinct impact on the performance of individual firms (Zarnowitz, 1985). During a recession the economic environment is very different from during normal times. Customers are unwilling to spend money, unemployment is rising, and credit becomes less available. Failure to adapt to a recession tends to lead to business failure as shown by the disproportionately high amount of bankruptcies that happen during recessions (Pearce & Michael, 2006).

Focusing only on efficiency is rarely the solution to a recession and instead has the potential to hurt the firm. Studies instead show that an increased focus on sales and marketing along with an increased breadth of production can be conducive to both surviving and prospering during a recession (Pearce & Michael, 1997).

While a recession is often dangerous and can lead to a large degree of difficulties if not planned for sufficiently it also provides opportunities for those positioned to exploit them. A recession can potentially reward firms who act correctly enabling them to increase their market shares at the expense of unprepared competitors. They can also steal top talent who might under normal circumstances not be willing to consider the firm (Bigelow & Chan, 1992).

4.4 Resources

A resource-based view on growth of firms begins with a view of the firm as a collective of productive resources and an administrative organization (Penrose, 1959). There are three major types of resources a firm can use to achieve competitive advantages: (1) physical capital such as plants, equipment and finances, (2) organizational capital such as structure, planning and HR systems and, (3) human capital resources such as the skills, judgment and intelligence of the firm's employees (Barney & Wright, 1998). These are valuable to the firm since resources built up that are heterogeneous or difficult to copy can be used to build a competitive advantage against competing firms (Alvarez & Busenitz, 2001).

The firm's general purpose is to organize the use of its internally held and produced resources with externally provided resources in order to create goods and services sold at a profit (Penrose, 1959). The link between a firm's resources and growth has been found to be important to study in research on small firms (Barney, 1991).

4.4.1 Physical Capital

The most generic physical resource is the financial resource since it is the easiest to transfer into other types of resources (Bamford, et al., 1996). Financial capital is essential since it provides

resource slack enabling the firm to capture productive opportunities. Availability of capital, particularly external, is often mentioned as a key challenge from a societal point of view to aid the growth of small firms (Carlsson, 2002). There are plenty of challenges surrounding external financing, which all are beyond this paper, but it is clear that small firms may decide against growth unless it can be financed by retained earnings or bootstrapping (Winborg & Landström, 2001), which is consistent with the three requirements for growth: the ability to see, act upon and respond to productive opportunities (Penrose, 1959).

4.4.2 Organizational Capital

Penrose's (1959) second constituent part of a firm beyond the resources is its administrative function of the resources. To be able to exploit the opportunities for growth firms need good systems to organize the resources into productive use (Thakur, 1999). Administrative structures are the result of the managers and do not need to be a fixed, they can be a dynamic framework adapting to the present conditions. The quality of a firms managerial ability is a function of their entrepreneurial ability and interest – how much growth are they pushing for and able to reach (Penrose, 1959). Larger organizations have been found to require a larger organizational capital such as HR structures (see section 4.1.1) (Bridges & Villemez, 1991) and decision-making structures (Baker & Cullen, 1993), with the increased structural complexity leading to decision making inertia (Chen & Hambrick, 1995).

New firms are often unprepared for changes and shortages of resources since they often lack the management procedures necessary for anticipation. If the firms lack slack resources, interruptions will have a significant effect on revenues (Garnsey, et al., 2006).

Dávila and Foster (2007) found that implementation of different types of management control systems positively influences growth with the first three types of systems to be implemented in small firms being financial, human resource and strategic planning. (Dávila & Foster, 2007)

4.4.3 Human Capital

Human capital is often separated into employee human capital and management human capital. Employees are of importance for all firms and even more so for service based firms with few other productive assets than their human capital. Few firms are able to 'just grow' without making any conscious effort to do so. Successful firms spend some amount of their available resources on investigating possibilities of profitable expansion, for which human competence is necessary (Penrose, 1959). The perspectives on what human capital is have moved from the top-management perspective of Penrose and her contemporaries towards including the full number of employees at a firm by more modern scholars (Wright, et al., 1994).

In a context of growth, managerial human capital is the knowledge, skills and experience that assist in successfully growing the business (Alvarez & Busenitz, 2001). More capable and entrepreneurial managers give the firm better prospects for growth because of their higher probability to take advantage of productive opportunities (Penrose, 1959). Both aspects of human capital are important and need to be considered when recruiting.

4.5 Competencies

In our pre-study, we established that competencies are an important area of research for small firms. They can be categorized as a resource in the resource based theory pioneered by Penrose (1959). Competencies cover a wide range of sectors but can be defined as distinctive skills, organization and knowledge (Wernerfelt, 1984). Competencies have the advantage that they are difficult for competitors to copy meaning that a sustained competitive advantage can be achieved if they are carefully gardened, forming an important cornerstone for company strategy (Foss, 1993).

4.5.1 Management of Human Capital

Human resource practices are activities that are directed towards managing the pool of human capital and ensuring that the capital is employed toward the fulfillment of organizational goals. Such activities include selection, appraisal, training and compensation systems (Wright, et al., 1994).

For firms trying to actively work with their human capital to build competitive advantages from it, organization of the efforts is instrumental. Rather than focusing on single HR practices, success seems to be connected to focus on applying a coherent system of HR practices within a firm (Barney & Wright, 1998). Having the correct mix of HR practices is a necessary condition to gain the maximum from the human capital base. Here it is important to notice that HR practices as such do not directly build sustained competitive advantages because of their fairly imitable nature. Practices can indirectly build sustained competitive advantages by influencing the human capital base, which is hard to imitate (Wright, et al., 1994).

4.5.2 Recruitment of Human Capital

For small and growing firms it might be difficult to make large changes in the quality of their human capital because they often lack the necessary HR practices, largely because the challenge of having the systems in place. Therefore, what constitutes the human capital base becomes more important. The tool for achieving this is the selection program, which almost universally aims at ensuring the organization hires only the highest available individuals (Wright, et al., 1994). Effective screening to find the people best able to work in a new environment, most capable of learning and developing and, needing least supervision pays of for firms. Screening also has a

symbolic effect, if a person passes through a rigorous screening process; the person is more likely to feel it joined a professional organization. A well-functioning screening and recruitment process has been found to be important for the success of fast-growing firms (Pfeffer, et al., 1995). There is extensive literature on the recruitment topic by HR scholar for more detailed descriptions of effective recruitment processes.

4.5.3 External Competencies

As an alternative to hiring people to add to the human capital base, external competencies can be attracted to the firm. When firms want to grow, especially from a status quo position, insiders are less likely than outsiders to see the actions necessary to change the path of the firm. This is the opposite of when firms pursue mature strategies, in which case insiders knowing the firm and industry are more useful (Schuler & Jackson, 1987). External advice can be expected to fill knowledge gaps inside firms on one-off tasks or to assist building the know-how internally. High growth firms should be expected to have more such gaps because of the pressure on adapting structures to the expanding size (Robson & Bennett, 2000).

Surveying the almost 2500 small firms on their use of external competence, Robson and Bennett (2000) found a significant and positive relationship between small firm performance and external advice in the fields of business strategy and staff recruitment. Accountants, banks and lawyers were the most common sources of advice with business friends and relatives being frequent sources. Additionally, consultants, supply chain, customers, local networks, business associations and government-backed sources can provide advice. The authors found a causality problem; is the improved performance a consequence of the advices or are higher performing firms more likely to take external advice? (Robson & Bennett, 2000)

4.6 Size

We found a pattern in our pre-study that larger companies had more success during the recession. Size is identified in previous research to affect firm performance indirectly with benefits of size showing covariance with size (Barnett & McKendrick, 2004). This implies that size by itself is no guarantor for success but rather that size can give a firm advantages which, if used correctly, will lead to increased performance.

4.6.1 Financing

Access to financial resources is a determinant for growth. Smaller firms have less access to external capital (Beck & Demirguc-Kunt, 2006) (Binks & Ennew, 1996) while internal financing is unrelated to size. Every extra unit of internally generated capital will both grow the firm in size and generate more units of financial capital in return to re-invest. If a firm can access external capital, it can further increase the growth rate since the internal financing constraint is broken (Carpenter & Petersen, 2002).

Fixed transaction costs and information asymmetries lead to small firms suffering from relatively higher transaction costs and higher risk premiums because they are more opaque and can offer less collateral (Beck & Demirguc-Kunt, 2006). This is not an effect of the growth of a firm, but rather of its size or low age (Binks & Ennew, 1996). Small firms typically retain all of their incomes rather than paying it out as dividends and use relatively little external financing, or have little access to it. Financing is thus dependent on generation of internal capital through cash-flow. Size and cash flow does not exhibit a linear relationship, meaning that firms can experience similar constraints on internal financing irrespective of size (Carpenter & Petersen, 2002).

4.6.2 Competitive Advantages

Some of the main competitive advantages co-varying with size are well known. Davidsson et al. (2007) reviewed the topic and found scale economies (Gupta, 1981), experience effects (Stern & Stalk, 1998), and network externalities (Lieberman & Montgomery, 1988) to be directly related to the size of the firm. Additionally, minimum efficient scales (Hill, 1988) are dependent on firm size as a threshold for competitiveness in a market, even if the threshold can be low.

4.6.3 Critique Against Importance of Size

Despite the many theoretical arguments for the positive connection between size and growth, empirical evidence remains mixed. There is an established effect, but studies remain inconclusive about the direction of the effect (Storey, 1994; Davidsson, et al., 2009).

In the process when firms grow large they can eliminate competition. Firms in a monopoly situation may aim at preserving the status quo, e.g. by not making radical innovations risking to change the situation (Barnett & McKendrick, 2004). Additionally, they may try to buffer certain parts of the organization from the external environment; particularly if it is dynamic (Meyer & Rowan, 1977). Such behavior would risk their ability to change. At the same time, passive large organization leave gaps in the market where competitors through entrepreneurial guile can enter the market from a niche (Barnett & McKendrick, 2004). In essence the advantages of being large can potentially become directly detrimental to growth. Being large clearly provides benefits but the increasing organizational size does come with some challenges.

4.7 Market Knowledge

The term market knowledge abounds in literature and is often ascribed many positive characteristics. Despite this there is an absence of concept definition as well as empirical studies. (Li & Calantone, 1998) Efforts have been made to define exactly what *Market Knowledge* is and Li & Calantone define it as organized and structured knowledge about the market. Organized refers to the knowledge being a result of systematic processing whereas structured refers to it being endowed with useful meaning. They also go on to define *Market Knowledge Competence* as the processes that generate and integrate knowledge. (Li & Calantone, 1998) This distinction becomes useful for small firms in separating the native knowledge of the entrepreneur and the structured approach a firm might take to acquiring new knowledge about the market.

The process of developing Market Knowledge through Market Knowledge Competence can be closely tied to research about market driven organizations. Day (1994) argues that market sensing and customer linking can be improved by: diagnosing current capabilities; anticipating future needs for capabilities; redesigning underlying processes; top-down direction and commitment; creative use of information technology, and; continuous monitoring of progress (Day, 1994). Research thus suggests that there are methods by which companies can develop and nurture their market knowledge.

4.8 The Environment

The amount of growth in a firm is influenced by factors external to the firm. Industry effects are common and significant for the individual firm, even though on average, industry effects are relatively small (Hawawini, et al., 2003). Rapidly growing firms are more often found in faster growing industries (Davidsson & Delmar, 2006). Many firms grow because their industry as a whole grows, spilling over on individual firms. Fast growing firms in stagnant industries often occupy a dynamic niche that gives larger possibilities for growth and frequently these growing small firms have created these dynamic niches (Wiklund, 1998).

Since growing firms are more often found in growing industries or dynamic niches, some conclusions can be drawn about environmental characteristics being more favorable than others. Small firms have better chances in dynamic environments that are instable and changes continually, with opportunities being created through social, political, technological and economic changes. Additionally, in environments where there are many different market segments with varying demands to serve small firms have better chances to find profitable niches. Concentrated industries dominated by large firms are unfavorable for small firms because of the rivalry between firms (Wiklund, et al., 2009). Dynamic industries and regions are more difficult to survive in, but the firms that do tend to have higher growth rates than other firms

(Davidsson, et al., 2010). Similarly, innovative industries have higher growth and survival rates among the firms that have survived the first few years compared to other industries (Audretsch, 1995).

4.9 Strategic Fit

The value of establishing a strategic fit has been well founded in research and argued by numerous author s (Andrews, 1987). No strategy is applicable to any situation; rather companies must approach their environment with a view of what their capabilities are. By achieving alignment between resources and environment the organization will be able to operate at peak efficiency, making maximum use of their resources (Chorn, 1991).

A large advantage to looking at companies from a strategic fit perspective is that it allows for an interactive style of observation. Management simultaneously create and respond to situations within their environment rather than taking actions before or after events (Chorn, 1991). This highlights the importance of acting with the company environment in mind, considering customers, competitors, and suppliers when taking action instead of considering situations in a vacuum. The strategic fit perspective thus allows us to gain greater insights into the actual reasons behind success and growth than simply by considering how specific resources are used, or which traits a leader possess.

5 Development of Theoretical Model

5.1 Process

In developing our model we aim to combine the areas that we found to be interesting in our pre-study with our theoretical research. The theoretical research provides valuable insights into how our factors can be interpreted, enabling us to create a richer and more nuanced model than if we only relied on the ALMI survey data. Previous research also allows us to theorize about the potential antecedents to our factors. This can then be examined through the use of our qualitative study which will examine both how the different factors are helpful and how they can be brought about.

5.2 Research Areas

5.2.1 Competencies

Previous research clearly establishes the importance of competencies within the firm (See section 4.4.3). Defined as human capital in resource based theory, competencies are considered to be an important source of sustainable competitive advantage as detailed in section 4.5. Since previous research is clear about the value of competencies for companies, it becomes important for us to consider how they play a role in gazelles during a recession. It also becomes valuable to consider how these competencies are built within gazelles to make our research understandable for entrepreneurs and other stakeholders; if competencies are important, then how are they created? (Markowska, 2011)

HR practices can be connected to the correlation we found between a high wish for external competencies and negative results in our pre-study. A company with insufficient HR systems in place might be more likely to want to use external competencies. The causality thus indicates that insufficient HR systems yield poor profitability and also makes companies more willing to use external competencies as internal systems are unable to provide the competencies necessary. The poor profitability and high willingness to use external competencies are therefore both possible *symptoms* of insufficient HR practices which are a key component in developing internal competencies. This allows us to theorize about the antecedents to achieving the right competencies within the company. Are HR practices (which falls under the category of organizational capital in resource based theory (Penrose, 1959)) critical to establishing the right competencies within gazelles? Since this isn't confirmed in previous research it becomes an important area for our qualitative study to consider.

5.2.2 Size

While size isn't an advantage in itself it does covariate with numerous advantages. As a company becomes bigger it gains more resources in the form of physical capital. A larger pool of physical capital gives the company some leeway in the form of slack resources which is especially useful when handling change. This comes into play both for exploiting opportunities and for meeting threats.

When it comes to establishing an antecedent to company size the situation naturally becomes complicated. Company size is derived from the growth it to some extent creates. This isn't necessarily a problem, additional resources will create the potential for additional growth as long as the appropriate administrative functions are created (as established in sections 4.1.1 and 4.4.2). Sustainable growth therefore increases company size which if done correctly will lead to even more growth. An important thing to consider is that growth does not necessarily need to be a sign of sound development (Davidsson, et al., 2009) indicating that sustainable growth including both profitability and growth is the most beneficial.

5.2.3 Market Knowledge

When computing our variable for market knowledge three separate areas were considered:

- Knowledge about which customers/customer segments are the most profitable
- Knowledge about which products/services are the most profitable
- Knowledge about which sales and marketing activities most contribute to overall profitability

Taken together we would therefore like to define market knowledge in our study as: *Knowledge about which customers, products, and services drive profitability and how sales and marketing activities best contribute to company success.* This encompasses the suggestions of Li & Calantone but becomes more specific by considering especially the areas deemed important by our pre-study (Li & Calantone, 1998).

Our first step in making use of our definition for market knowledge was to see how this definition could be useful when combined with previous theoretical research. Wiklund et al (2009) developed an integrative framework for small business growth which contains two aspects that are of particular interest to the market knowledge perspective. The first concerns itself with the environment that the firm operates in which is detailed in section 4.8. What we can see when considering the environment is that when small businesses are successful and have managed to achieve growth this is often because they have developed profitable and expanding market niches. (Storey, 1996) (Wiklund, et al., 2009) In order to find and develop these niches we believe that our definition of Market Knowledge plays a very important part. Understanding what

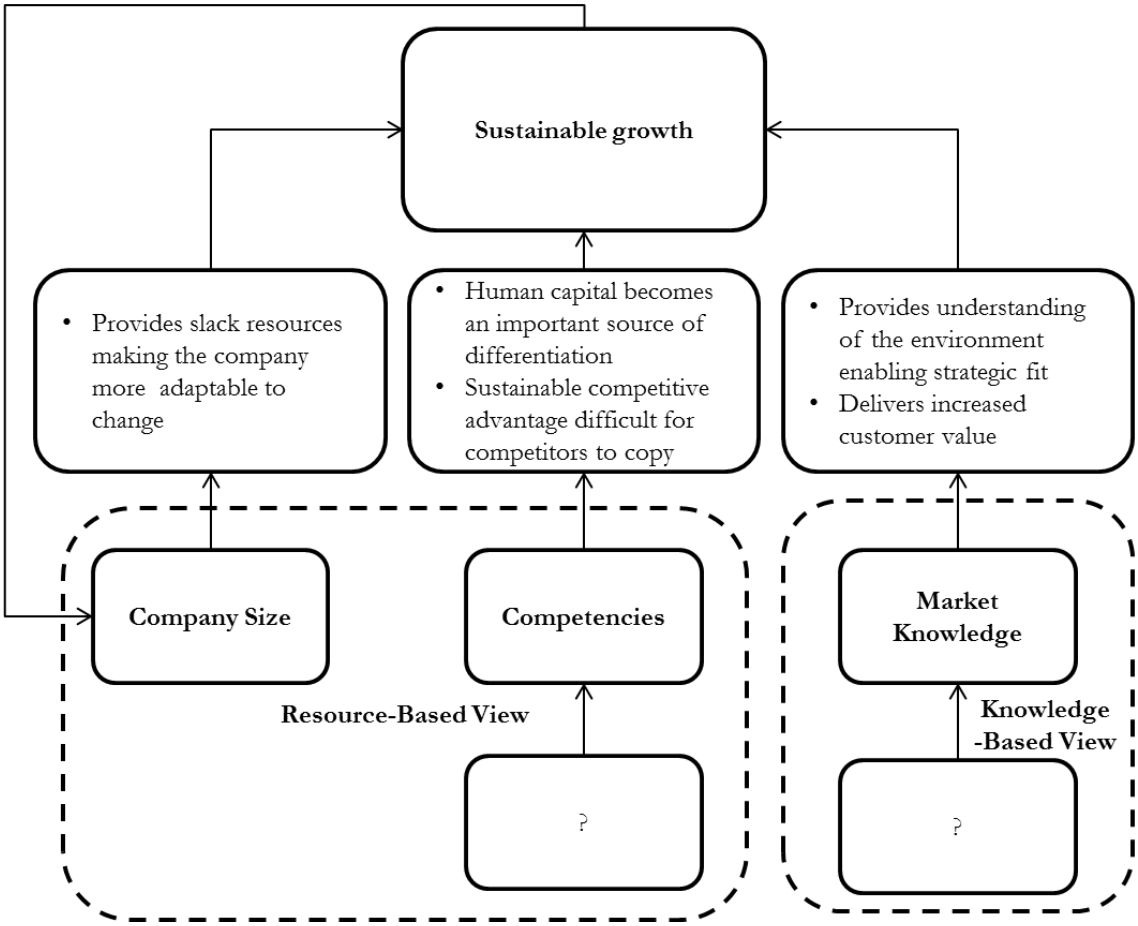
customers want and how a company can deliver products or services to them is critical in establishing a sustainable competitive advantage by delivering superior customer value (Doyle, 2008). Market Knowledge thus becomes an integral and important part in successfully handling the environment around the firm.

The second perspective concerns itself with the strategic fit of small businesses. This pertains to achieving a fit between the characteristics of the firm and the environment in which it competes (Andrews, 1987) (Wiklund, et al., 2009). This naturally is dependent on the environment but also ties into the second part of our definition of Market Knowledge; *knowledge about how sales and marketing activities best contribute to company success.* Said knowledge should assist in developing the correct strategic fit to the environment providing a venue for both growth and profitability.

When considering our research question (How does market knowledge help a company grow throughout a recession?) it becomes important to find out how market knowledge is operationalized on the firms behalf. But it is also important to consider the *Market Knowledge Competence*, i.e. how said knowledge can be acquired and internalized within the firm. Without the second aspect our research becomes less useful for entrepreneurs in that it would indicate a state which it is desirable to be in, but no guidance in how to achieve this state.

5.3 The Theoretical Model

Considering our three research areas we now begin to see a more complete model. The theoretical research provides valuable insights into how our factors help produce sustainable growth, and also provides some ideas about the antecedents to our factors. The model is helpful in providing a guide for our qualitative study both to verify our findings and to further explore the antecedents for our factors.



6 Empirical Findings

6.1 Case Descriptions

Our cases were selected using the criteria set in our method. Naturally they were not the only ones contacted as some firms said no, in which case a similar company was contacted to maintain a similar theoretical sampling in our cases. This section will give more data about our cases as well as point out potential issues with the selection. Note that according to our anonymization agreement we have hidden which companies say what in most of the tables as indicated in section 162.5.2.1.

6.1.1 Company Data

Table 4 describes the development in terms of size and profitability among the five cases. We see some distinct differences between the companies both in terms of growth and absolute size. As noted by previous research (e.g. Shepherd & Wiklund, 2009), there is a positive association between turnover and amount of employees but it is far from linear. Profitability among the 5 companies is also quite different, allowing us to prod into the notion whether profitability precedes growth, is a consequence of growth, or if there is a trade-off between the two (Davidsson, et al., 2009). Important to note is that for our anonymous case, data has been skewed in the range of +/- 10 percent to preserve anonymity (see section 2.5.2.1).

Table 4 Turnover, Employees and Profitability by Case

Turnover (MSEK)	2007	2008	2009	2010	CAGR
Titania Bygg & VVS AB	36	95	150	205	78%
Konsultbolag1 AB	13	26	36	38	42%
Svensson Jfm AB	10	13	14	26	37%
FindCourses Global AB	11	15	22	28	39%
Anonymous Firm	50	75	110	132	38%
Employees	**2007**	**2008**	**2009**	**2010**	**CAGR**
Titania Bygg & VVS AB	20	40	67	76	56%
Konsultbolag1 AB	31	40	43	53	20%
Svensson Jfm AB	10	15	14	16	17%
FindCourses Global AB	13	20	23	28	29%
Anonymous Firm	11	13	14	15	11%
Profitability (by EBIT)	**2007**	**2008**	**2009**	**2010**	**Overall**
Titania Bygg & VVS AB	5%	5%	8%	6%	6%
Konsultbolag1 AB	2%	8%	8%	5%	7%
Svensson Jfm AB	0%	11%	11%	15%	11%
FindCourses Global AB	21%	8%	15%	15%	14%
Anonymous Firm	36%	24%	12%	8%	16%

For each gazelle our goal was to interview the CEO, someone from the upper management with strategic insight, and someone with more administrative responsibilities in running the day to day business. Overall this worked out well, since some who are managers today were not at the beginning of our time period. At the our anonymous firm we only got to interview two persons, the CEO and one person in the upper management with both strategic and administrative responsibilities. All our cases are of similar age and can be classified as fairly young.

Table 5 Company and Interviewee Descriptives

Company	Titania Bygg & VVS AB	Konsultbolag1 AB	Svensson Jfm AB	FindCourses Global AB	Anonymous Firm
Industry	Construction industry, mainly renovating pipe systems in large properties	Consulting and Educational company specializing in risk, requirements analysis, and testing for IT systems	Advertising Agency	Provides a sales channel for educational companies through a variety of internet portals	Provides internet security
Year Founded	2005	2004	2001	2004	2002
Interviewee Positions	CEO, one person in the top management with stratigic responsibility, and the CFO with administrative responsibilities	CEO, the head of the education part of the company, and a person from marketing & sales support	CEO, the Office Manager, and a Copywriter	CEO, CIO for Sweden, a Business & IT Development Executive	CEO and the Customer Relations responsible

6.1.2 Size and Uniqueness

When selecting our cases (see 2.5.1), we especially sought for cases with some degrees of variation in two areas. The first was size, which we chose to measure as amount of employees in line with our pre-study findings (section 3.3) and our theoretical research (section 4.4.3 & 4.6). The second was product or service uniqueness which we found important because it would skew our data if all companies operated in very general or very specific industries. Since we are studying a period of recession we believe that a sample covering a variety of industries and sizes will more accurately help us find factors of a general nature contributing to small firm growth. Our cases are illustrated in Figure 2 which sorts them according to size and uniqueness.

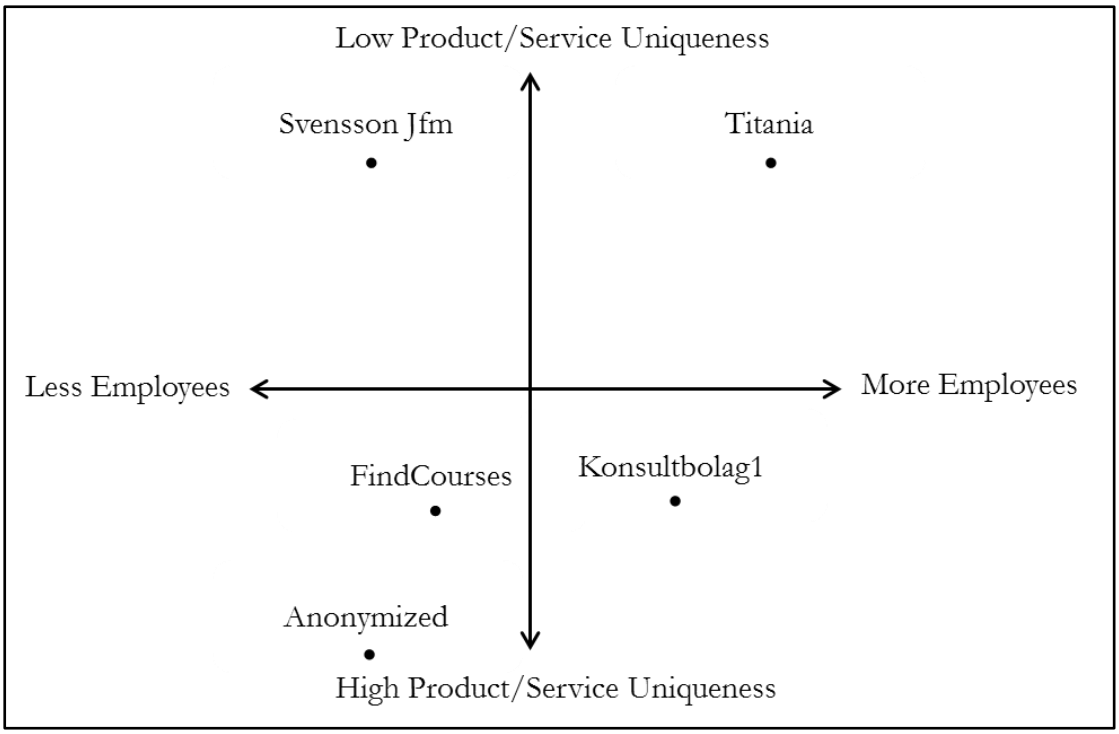


Figure 2 Selection Matrix

6.1.3 Case Issues

While we believe that our case selection presents an accurate sample of the population of gazelles there are some issues with them that we would like to point out. (1) Our anonymous firm has a very unusual structure where the owners are also the customers of the firm. As such it is mostly unaffected by business cycles. Despite this it still provides an interesting contrast to our other cases, in particular in terms of their recruitment strategy and how this relates to firm growth. This made us include it in our study. (2) Our cases mostly work on a business to business market (with Titania working both B2B and B2C). Since there are more business to business companies overall this isn't a huge problem but should be considered. (3) Since we are trying to establish *how* to be successful during a recession we only consider success cases. This is a clear limitation and an important area for further research since any findings in this study could theoretically be found in every firm, successful or not. (4) As mentioned in our method, we consciously chose to exclude manufacturing firms and to focus on the geographical area of Stockholm. (5) None of our case companies have a female CEO which is explained by the CEOs of gazelles being predominantly male. Finding the reasons for this would be an interesting area for future research.

6.2 Obstacles to Growth

All firms reported the same main obstacle to growth, *finding the right people*. They believed they could have grown faster if they had better access to the right people at the right time. One firm reported liquidity as an additional key obstacle. The nature of their industry required them to build large amounts of working capital before they are able to bill their customers. As a

consequence, the firm was for a significant amount of time dependent on selling their invoices to raise cash on time. Later, the profits generated internally enabled the firm to improve their liquidity.

6.3 Competencies

The companies we studied all identified aspects related to human capital as a key-success factor. A summary of our key findings can be found in Table 6.

Table 6 Company Competencies

	Recruitment Importance	Recruitment System	Development of Competencies	Recession effect on Competencies
Company A	Very Important	Focus on fit with company culture and broadening competencies within the firm	Initial schooling to fit in the company followed by whatever customers would find valuable. Not much development overall.	Made recruitment easier
Company B	Very Important	Focus on fit with company culture and broadening competencies within the firm	Dedicated competency days, but no overall strategy.	Made recruitment easier
Company C	Very Important	Dedicated recruitment branch actively seeking out potential employees	Occasional courses to secure top competencies, sharing of competencies internally between staff	Made recruitment easier
Company D	Very Important	Rigourous structure around core values	Dedicated competency days, but no overall strategy.	Made recruitment easier
Company E	Very Important	Employee Networks and Recommendations	Little focus on development, competence level already very high	Little Effect

6.3.1 Recruitment in Gazelles

Since human capital is a key-success factor for all companies, they also identified recruitment to be important. All gazelles spoke about the need to find people with a cultural fit, irrespectively if they had a well-defined culture or not. Competence was a hygiene factor for recruitment, a must-have, with cultural fit the decision-criterion. In one instance the cultural fit was framed in terms of nationality, or at least linguistic requirements, since the operational part of the firm were from another EU country speaking the same language, which was not Swedish.

All gazelles, except one, said they were looking for deeper and more specialized competencies now than a couple of years ago. Earlier, when they were smaller, people with more general skill-sets were needed because of the higher amount of different tasks per person. Now, the gazelles are trying to become more specialized in what they do, either to capture a larger part of the value-chain or to improve their offering. The odd firm was since day one world-class in their

industry, forcing them to focus on recruitment of senior and very skilled people already great in their field.

For one firm, more than the others, recruitment was more than finding the right competence and cultural fit. Timing was of significance. They have been looking for 'the right competence, at the right place, at the right time' because of very long periods of adjustment even for highly skilled recruits.

6.3.2 Recruitment Systems

Interestingly, all gazelles handled all recruitment activities internally and were careful to do so. Recruitment was perceived as a key-activity and therefore they wanted to build up their own competence within the field and maintain control. One firm was initially not very concerned about their recruitment system, but realized they got problems with cultural integration and turnover, leading to an implementation of a recruitment system, which solved their issues and was the starting stone for even higher growth rates. There were differences among the recruitment systems: (1) an employee exclusively assigned to search for and meet potential candidates, about two per day. Then the CEO and concerned managers met the promising candidates; (2) hiring exclusively from co-workers personal networks since they believed 'good people have good networks', and; (3) recruitment including training and certification to immediately fit into corporate structure.

6.3.3 External Competence

Attitudes towards using external competencies were mixed. In one case, the use of external competence was not even discussed internally while the belief was the company knew their objective and had the resources to reach them. Another firm was the opposite with in total ten to twenty times more persons working with their product externally as than there were employees in the firm. The other gazelles were positioned somewhere in between, making use of external competencies for situations with a specific need, e.g. to fill gaps in knowledge they have been unable to fill, or by outsourcing some functions such as the bookkeeping. Common for all gazelles is that *none of the firms outsourced or relied on external competencies for any core activities*. Two of the gazelles believed having outsiders in the board was valuable.

6.3.4 Important Competencies

Not surprisingly, all companies reported different key competences, which given the diverse nature of industry and niches is to be expected. Answers were all connected to what generates value for their respective customers: (1) flexible skills, (2) ability to help the customer to take the next step, (3) sales, (4) ability to order external services, and (5) skills in competence areas.

6.3.5 Developing Competencies

All gazelles believed it was important to continuously build and develop competencies, but they were differently systematic and committed about it. One gazelle primarily focused on educating and certificating their staff in adjunction to the recruitment, but did not have any other specific development practices we could find. Another allowed their staff to take courses or full programs if they wished to. A third said it was impossible for their staff to take a course and learn more, but they could go to conferences or see firms in the same industry in other countries. One case is special; they operate in the competence development industry which logically means that they also have a competence development program within the firm.

Beyond competence development, it was unclear to what extent other HR practices were applied. In one case, they had recently set up new and integrated systems for performance reviews.

6.3.6 Effects on Human Capital of Recession

One firm said that certain key-competencies were more accessible on the labor market during the recession, because the recession creates turbulence. In another case, it was important that employees accepted to perform other tasks than their original assignment during the recession, because the firm really wanted to keep hold of them but the customer demand for their original assignments was too low. All firms believed their ability to hold onto key personnel was important to remain highly competitive in the market during the recession.

6.4 Size

The interviewees thought increased size brought advantages to the firm. We break this down into five areas; Thresholds for Projects, Organizational Capital, Financing, Competencies, and Recession.

Table 7 The Influences of Size

	Thresholds for Projects	Organizational Capital	Financing	Competencies	Recession
Company A	Size Positive in gaining big projects	Increased Size made the company need more structure around recruitment	Size Very Helpful	Size allowed specialization for employees	Size Gave Security in Financing
Company B	Size Positive in gaining big projects	Increased Size made the company need more structure around recruitment	Size Somewhat Helpful	Size allowed specialization for employees	Size Gave Employee Security
Company C	Size Positive in gaining big projects	Increased Size made the company need more structure around recruitment	Size Somewhat Helpful	Size allowed specialization for employees	Size Gave Employee Security
Company D	N/A	Increased Size made the company need more structure around recruitment	Size Somewhat Helpful	Size allowed specialization for employees	Size Gave Security in Financing
Company E	N/A	Increased Size made the company need more structure around recruitment	Size Very Helpful	Size allowed specialization for employees	Size Gave Security in Financing

6.4.1 Size Thresholds for Projects

For three of the gazelles there were clear thresholds where a firm had to be of a certain size to get certain projects. While we cannot find specific research relating to thresholds it does connect to the importance of resources in the firm. The projects requiring a certain size were usually larger which would have enabled the firm to grow more. Additionally larger projects had better margins something we observed across industries. A second aspect made larger projects attractive, more complicated projects were more demanding and therefore more developing for the employees while more complicated projects was an enabler for the gazelles to move up the value chain.

6.4.2 Size and Organizational Capital

Another aspect of increased size was the need for more organizational capital in form of better structures and routines in particular for recruitment. When the amount of people in the firm increased the need for coordination and structure in the recruitment process increased as well. There was only one gazelle who did not mention this. They were however the company who had the least amount of employees in line with what the others had at the beginning of the study.

6.4.3 Size and Financing

From a financing perspective, firms believed it was positive to be larger. Only one firm had been dependent on bank financing, because of the cash-flow demands of their industry, but they found it far easier to negotiate with the banks once the firm was larger. It can be noted that all firms have chosen to grow organically, without acquisitions or major sources of external capital.

6.4.4 Size and Competencies

Larger firm meant that there was a larger pool of competence and more room for both seniors and specialists, who helped the firm to improve their margins. All firms were consistently trying to add more specialized people to their ranks as compared to when they were small, partly because their competences were needed and partly because it was easier to attract senior people to a larger firm.

6.4.5 Size and Recession

The effects of size were primarily psychological for the people working in the gazelles. One firm viewed size as something that gave a sense of security in terms of financing, since there were more internal resources available. Another firm believed having a buffer of own financial resources creates independence from the owners, which can be valuable in a recession if the owners are strained by the external events. Having more financial resources enabled the firms to keep key-personnel, which was very important when the market conditions turned more favorable.

6.5 Market Knowledge

The gazelles all exhibited a good level of market knowledge and found it valuable for different but similar things. Findings are summarized in Table 8 and then expanded upon under the different headings.

Table 8 Market Knowledge

	Value of Market Knowledge	Level of Market Knowledge	How was Market Knowledge Built	Market Knowledge Effect during Recession
Company A	Finding the right strategic fit and being able to move depending on how the market changes, being able to deliver what the customer wants	Very Good	Interactions with customers	Allowed the company to move to more profitable niches using products specifically requested by customers during a recession
Company B	Being able to deliver what the customer wants focused offerings to the right customers	Good	Surveying customer satisfaction and inquiring about how to improve	Enabled the company to steal customers from competitors due to delivering increased customer value
Company C	Opportunity to shift employees between sections to target those in highest current demand	Good	Improved CRM system allowing better storage of knowledge	Enabled the company to steal customers from competitors due to delivering increased customer value
Company D	Functions as a nexus for knowledge about the market, making customers come to them for advice about the market	Extremely Good	Comprehensive database about the market, constant discussions both with customers and non-customers	Beneficial but no pronounced difference from normally
Company E	Understand how to react to environment	Good	Discussing product with customers and how it can be improved	Beneficial but no pronounced difference from normally

6.5.1 Value of Market Knowledge

All firms held a common view on market knowledge as important, valuable and linked to success. Market knowledge was regarded as something useful for how to compete on the market. How to do this varied: (1) market knowledge helps you understand who to build good relationship with, which in turn generates good business; (2) that market knowledge as such is not very hard to get, but if you adapt your business to your knowledge you will get more and happier customers; (3) market knowledge enables the firm to better approach customers through the right persons and having a better understanding of how to do sales; (4) high market knowledge gives and aurora of professionalism and authority toward the customers since the

firm becomes the expert, employees feel more self-confident since they can tell customers interesting facts, and; (5) high market knowledge helps a firm to react better towards changes in the environment.

6.5.2 Level of Market Knowledge

All firms believed themselves to have good market knowledge on what they define as their market. Interviewees in four of the firm all were identifying their firm's level of market knowledge as 'good' or 'very good' market knowledge. One firm's view their knowledge as 'world-class' and mentioned they have had representatives from two of the top-global consulting firms there to learn more about the market from the firm. One firm serves as the industry's key source of information by publishing a bi-annual report on industry trends, opinions, statistics etc. and has customers approaching them to learn how they can become more successful in the industry.

6.5.3 Building Market Knowledge

Interaction with customers was important to build market knowledge. The firms viewed building market knowledge as a continuous process with only one company recalling a specific event as an effort to build the market knowledge – implementing a better CRM system. Methods to gather market knowledge varied. One company spends significant amounts of time discussing their product with the customers to ensure they offer exactly what the customers need while another also had frequent discussions with the potential customers that had decided not to be customers to the firm. Gazelles worked with systems, albeit differently, to gain market knowledge. In one case; the CRM system enabled the gazelle to store and analyze a lot of data on the sales processes and save information on what their customers needed. In another case the gazelle gathers all kinds of information from the end-users of the product they offer their customers, gaining significant amounts of statistics of the market. Yet another had their project managers spending significant amounts of time with customers to learn their needs and communicate those to the industry experts.

6.5.4 Adapting to Market Knowledge

One firm explained how they adapt better than competitors to the market knowledge. Their customers often have good knowledge of what they want, but do not like to coordinate a multitude of industry experts to deliver their demands. Therefore, this firm hires persons with specific competence in listening to customers and understanding their needs. Then the firm organizes all logistics and coordination to deliver what the customer wants.

6.5.5 Market Knowledge and Recession

One firm said that during the recession, the market became more turbulent with customers changing suppliers when making cutbacks. That firm identified their market position as a key

success factor, a result of the market knowledge for understanding the value-for-money trade-off demanded by customers. Another firm said that market knowledge is useful to understand how to adapt to the changes and how changes are larger during a recession when a lot of people inside and outside the firm are nervous about the events.

6.6 Other Findings

6.6.1 Other Effects of Recession

The effects of the recession on our case studies varied. Two firms believed that their market was not affected by the recession. One of those firms had actively moved into that niche just before the crisis while the other gazelle is the slightly different firm which has their owners as their customers. Two gazelles stated they operated in markets affected by the crisis, but could prosper through their superior value proposition. In the final gazelle one division remained unaffected by the recession while the other was significantly affected, this lead to an internal restructuring of competencies between the divisions to match market demand.

6.6.2 Motivations for Growth

Throughout the interviews, there was a multitude of different motivations of growth and there was no clear pattern between motivators and positions. Motivators included for fun, money, to build something big and to be proud of, to have a good place to work, to develop their career and, how a larger firm is more challenging as a professional.

6.6.3 Need for External Financing

We also found that the firms had a low dependence on external financing, apart from short-term liquidity for which they used financial institutes. The firms grew organically and no faster than they could afford. They recruited people at a pace that allowed them to constantly have full productive use of their human capital. Only one firm, dependent on the development of their technical platform to generate any sales, needed external financing from their owners but is today self-sufficient.

7 Analysis

Our empirical data gives us the opportunity to analyze and draw conclusions about *why* our factors are important for gazelles in achieving sustainable growth. As described in the methods section, our analysis is based on within-case analysis and cross case analysis. The interview data also allows us to make suggestions about *how* companies can achieve growth by considering the different aspects of our model and taking appropriate action. Our findings are analyzed in this section and reinforced with quotes from our interviews were appropriate.

7.1 Letting Market Knowledge Guide Company Strategy

Market Knowledge was the factor most strongly correlated to profitability in our pre-study. When we explored the area further we saw that theory suggested that a high degree of Market Knowledge could be helpful in establishing a strategic fit, and in correctly handling the environment (4.6-4.8). We further theorized that valuing market knowledge highly and consciously using market knowledge in the formation of strategy could be a key component in achieving sustainable growth during a recession (5.2.3).

When considering our case studies we saw a large degree of similarity between the cases in the market knowledge of the different gazelles. All firms had a very clear and precise knowledge about what their customers wanted. This took various forms (see section 6.5), but was consistently used as a starting point for company strategy. Using this knowledge companies were able to establish or operate in profitable niches within their industry enabling them to prosper during the recession.

"Since we were able to deliver something that the customers actually wanted, the recession did not matter, they simply had to have our services."

When considering the impact of market knowledge during the recession we found that it was exceptionally important. Three of our gazelles claimed that customers became more selective about whom they bought products and services from, gaining the companies that had positioned themselves well an even greater advantage than they normally would outside of the recession. Additionally, it seems that the recession made a share of the customer companies less willing to buy some services. Therefore, providing greater value than competitors became integral to the offerings during a recession, which seemed to have been a pronounced success factor for two of our cases.

"By delivering greater value we were able to steal a large amount of customers from our competitors, who might have stayed if not for the recession. In many ways the recession was a boon to us."

Another effect of high market knowledge is to understand what effects a recession will have on the industry. Two of our cases excelled in the recession because of a deliberate change of strategy toward services less affected by the recession. Their market knowledge enabled them to adjust their strategic fit. Another gazelle only had to make minor changes to their strategy and offering, but still experienced that their market knowledge enabled them to apply better responses in certain critical decisions. Specifically, they changed their strategy to an approach focusing more on customer value. Here, their knowledge about customer preferences seemed to have been of key essence. Also it should be noted, that the effects of solid marketing knowledge should be beneficial after a recession is over even though it might be slightly less pronounced.

"By understanding our customers and how our market operates, we were able to focus on those services that customers most desired during these hard times, we moved from more "luxury" services to those that customers knew they had to have."

7.2 Constant Nurturing of Company Competencies

During our pre-study we found that profitable companies were less likely to use external competencies and theorized that this could be because they had a greater internal supply of competencies, or resources to hire new personnel, -compared to other similar firms. Previous research confirms that competencies are an integral part in company success (See section 4.5) leading us to want to explore their importance further.

All firms in our case studies attributed a majority of their success to recruiting and keeping the right people with the right competencies within the firm. The key mechanism for management of competencies in the firm was the recruitment system. While the systems for recruitment differed widely it was clear that they were an integral part in each company's strategy.

"*Everything comes down to recruitment and having the right people, our employees are our biggest assets."*

From our interviews it is apparent that even though they all had different systems for recruitment, all five case companies were similar in that all the systems were extremely well planned and thought out. All the gazelles considered recruitment to be one of the hardest and most important aspects of their business and took steps to improve and quality control the procedure.

"Over time we have become more careful about our recruitment, we are still looking for ways to improve how we handle it and we think we see the improvements having an effect."

One gazelle stood out in how they in the past had not focused much on recruitment, slowing down growth and impacting the organization greatly.

"Not focusing on recruitment was probably the biggest mistake we ever made, it almost destroyed company culture. Fortunately we realized this in time and were able to make a complete turnaround by instituting strict procedures for how we were to recruit."

As this become evident, the management instituted an extremely rigorous system for recruitment, including multiple interviews at each level of the organization and formal criteria that potential recruits had to fulfill. This undertaking leads to a much better recruitment of employees to the company and also became the starting point of their impressive growth.

As seen in previous research small firms often lack organizational capital such as systems, structures, and routines. We also saw this in our case studies were different types of organizational capital were lacking. However despite this all our gazelles actually had systems, structures and routines around their recruitment practices, exhibiting a large amount of maturity in this specific area. We believe that additional organizational capital will be built up over time but find the focus around recruitment to be a key explanatory factor when it comes to explaining our gazelles' exceptional performance.

During a recession turbulence increases in almost all sections of the business world, including the labor market. What we saw in our case studies was that it presented an exceptional opportunity for the gazelles to get critical competencies that might otherwise have been difficult to recruit, such as attractive specialists. By having a strong recruitment strategy they were able to weed through the labor market to accurately. From a competence perspective, the recession was favorable for the gazelle companies.

"We were able to recruit a lot of people who normally wouldn't have been interested in working here, now that the recession is starting to feel over they are still around and we are working hard to keep them."

When it came to using external competencies the gazelles varied a lot. Some gazelles considered them an integral part of the business, either at board level or for outsourcing, while others made little to no use of them. What was similar between the gazelles was that they all focused on having a solid core of competencies internally. Unlike Robson and Bennett (2000) who found

performance to be positively correlated to external advice on strategy and recruitment, we find no such relationship since strategy and recruitment were areas where the gazelles took no advice. This could be consistent with our pre-study results; more successful firms have a lower wish for external advice than less successful firms since more successful firms have competence in recruitment and strategy, the two areas where external advice is expected to have the largest impact.

7.3 Size and its Relation to Growth

When combining our theoretical research with our pre-study we found that company size was an important factor when considering both profitability and growth. Theory was able to provide us with some indications but not exactly *why* size is important, or what role it plays during a recession. Through our qualitative research we were able to indicate more clearly the intricate relationship size has to our other factors.

Our case studies were able to confirm that size had played an important role throughout the recession. By becoming larger each company acquired a sense of security through increased access to capital as well as the establishment of a buffer of financial resources. Having more financial resources created independence from capital injections by owners who might be struck with capital problems in a recession. It also gave the employees a sense of peace allowing them to focus on the business instead of the potential of bankruptcy.

"I felt pretty comfortable during the recession, we all knew that the company would make it through so I did not worry about it"

In certain industries it also enabled them to compete for bigger projects where the customers required a certain size. In many cases these bigger projects were more profitable for the gazelles giving validity to the economies of scales argument. This is supported in theory where firms grow in order to survive, achieving a minimum efficiency scale. (Reichstein, et al., 2010)

"Without our increased size we wouldn't be able to do a lot of the things we are able to today, not only because of the financing but also because a lot of projects require people we previously didn't have."

Our pre-study indicated that there was a stronger connection between size and profitability when using the factor employees instead of turnover. We theorized that this was because a larger base of competencies was one of the more crucial aspects of size. More competence allow for higher specialization of tasks, leading to higher productivity. Our case studies are supportive of this view. While increased financial resources were certainly a positive aspect, its importance was secondary to the possibility of expanding the competence base of the company in the form of

more employees. These new employees had more specialized skill sets than the existing employees. We also saw that an increased amount of overall competencies within the gazelles allowed each employee to work with the things they were the very best at; their core competencies. Another effect was that increased size forced recruitment to become more structured to ensure that the right people were hired.

"Recruitment wasn't a big problem in the beginning; we personally knew a lot of people who we knew were good, as we grew and exhausted our networks we were however forced to set up more structure around our recruitment"

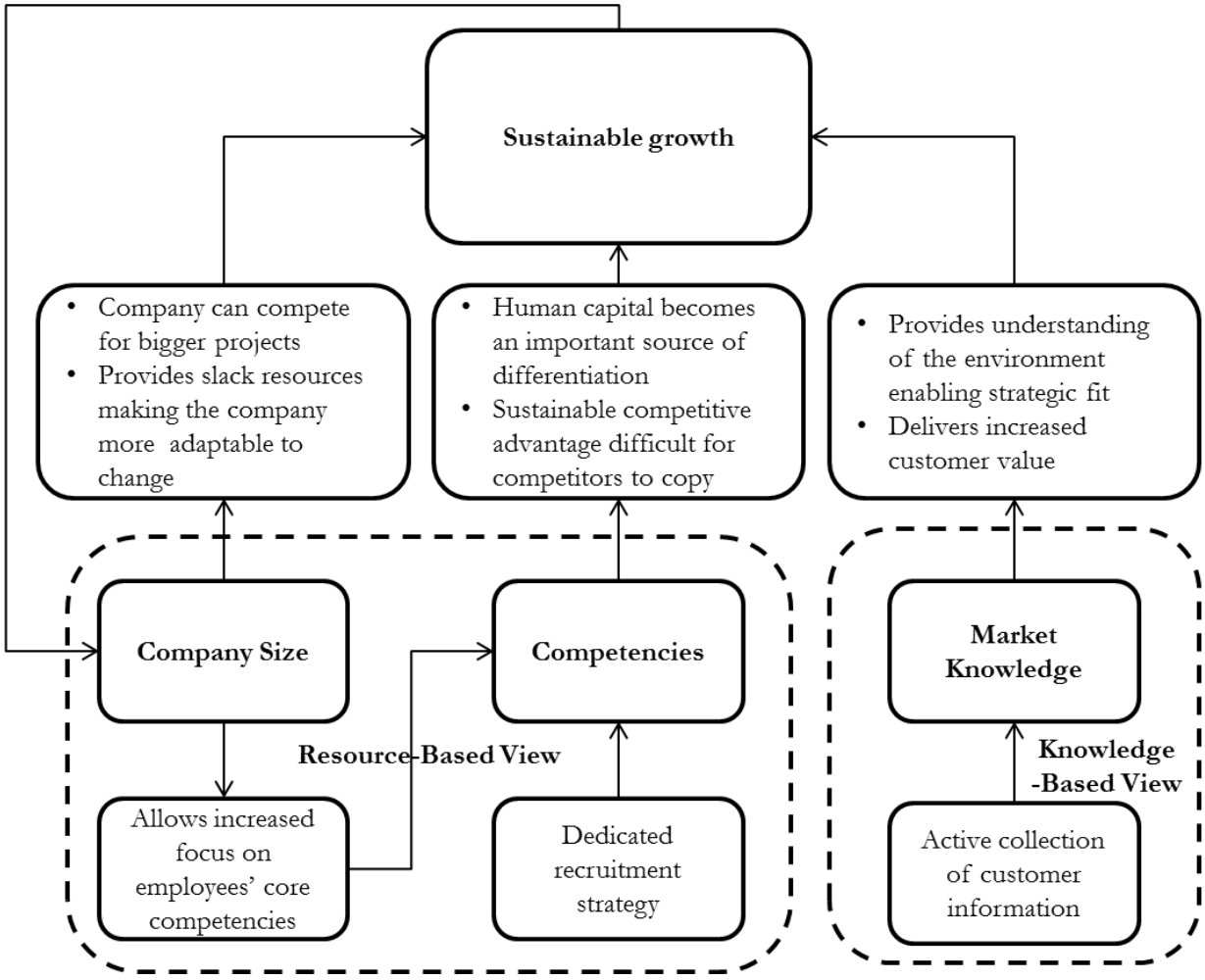
Previous research states likely to use internally generated financial resources for growth as opposed to external financing (e.g. Carpenter & Petersen, 2002). This is consistent with our case findings; a positive cash-flow gave higher potential for growth. The gazelles pursued organic growth strategies and had very low dependence on external financing, except from initial financing and for liquidity management.

"I think growing organically from our own profits has given us a respect for money, nothing is wasted, it is money that we have earned"

When considering size our qualitative findings validate a lot of previous research. Size *is* helpful in many ways. We saw that increased size provides increased financial resources giving the gazelles a sense of security and the potential to take on larger more profitable projects. Perhaps more interesting was how size was closely tied to an increased base of competencies in the gazelles.

7.4 A Model for Sustainable Growth during a Recession

In light of our new findings concerning our three factors we are able to expand our model with additional information about *how* they can be brought about and also confirm *why* they are important.



8 Discussion

8.1 Connection to Previous Research

Our model ties into two important areas of research; the resource-based view and the knowledge-based view. We find the two complimentary to each other in explaining how the gazelles in our case study have managed to achieve sustainable growth despite the recession.

We note that one of the critical aspects of size is that it allows a company's employees to focus more on their core competencies increasing the overall output of the company. While financial factors are also important they are mostly secondary to this. We believe this is because in a firm with a very small competence base everyone is forced to do things outside of their actual skills, slowing them down. When a small firm grows the employees are allowed to focus on what they are actually best at, driving the company forward.

Our research also reinforces the value of proper HR strategies in gazelles. However it contrasts previous research in that the most important thing is recruitment and the structure around it rather than having a full set of HR practices. An explanation would be that the firms we have studied are fairly small while much of the literature about HR practices is developed by studies of larger organizations with more intrinsic organizational capital. Still, we were surprised not to find more extensive competence development practices in the gazelles, since they operate in service industries with human capital as their main productive resource. It is interesting how there seems to be no clear connection in *how* recruitment is done as long as it paid proper attention, and some kind of system is put in place. We also saw that a proper recruitment strategy enabled the gazelles to take advantage of the influx of competencies on the labor market when the recession struck, reinforcing the value of having it in place.

Our findings about market knowledge are supportive of previous research in that understanding the market and delivering what customers want is helpful to company growth. It provides additional insight in that market knowledge becomes *even more important* during a recession when customers are really considering their options.

8.2 Problematization of our Study

Theory building by case studies is often limited by the theory risking becoming narrow or idiosyncratic because of the theory building process with data from specific cases. Since the theory is built from cases in a specific context, the theory might not be generalizable beyond the context in which it was created, even if it ties into existing theories. Probably a multitude of

different studies are necessary to build general theories valid across many settings (Eisenhardt, 1989). This applies to our study as well. The possible degree of generalization is determined by the population parameters. In this study, we have made a convince sampling to the Stockholm region without regards to if specific business dynamics are present in the region. We believe Stockholm is different to other Swedish regions, given its capital status, but experiences drawn from our study should be valid in any region of Sweden and most likely Scandinavia given the many similarities. In addition since the theory on the subject spans most industries, countries, and cultures we believe that it should also be at least somewhat valid on a world stage.

In a multiple-case study, increasing the depth of cases will likely improve the number and quality of insights drawn from the within-case analysis, which in turn affects the quality of the cross-case analysis. There is always room for improvement, but it is difficult to get significant amounts of time from key-members from organizations you are unknown for, which has been situation with our gazelle population.

Further triangulation of our cases would have improved their internal and external validity. A quantitative analysis of financial data or a survey of the gazelle population would have given more information about the population, enabling us to make a better fit between the theoretical model and our case, theory and pre-study data. There were also limited secondary data about the companies beyond their annual report due to their newness. This is unavoidable when performing this type of study.

The key-question about the quality of our theory is whether the connections between the variables and their strength can be measured. Without attempts of measuring the components of the theory, it is hard to determine the applicability of our theoretical model on gazelles beyond our population parameters. Nevertheless case studies are an important way to form theory, and our study does provide additional understanding how factors interrelate to create sustainable growth throughout a recession.

8.3 Relevance for Practitioners

Our findings should be interesting for practitioners and other stakeholders since high growth and profitability are generally positive attributes of firms. The findings are useful for creating sustainable growth, a topic that we feel is especially important during a recession. We have established the importance of internal competencies and how they can be achieved through a rigorous recruitment process. We have also found out about the value of market knowledge and how this can be acquired by engaging in discussions with customers and considering how their needs are best served. Finally we have considered *how* size helps spur sustainable growth and found that it is the most beneficial when it is used to augment internal competencies through systematic growth, rather than growth at any cost.

We think our study should be helpful in establishing priorities for practitioners and other stakeholders who are facing a recession. By considering carefully the key areas we have established they should have a road map that is helpful in achieving success throughout a recession.

9 Conclusions

Our study aimed to find out how some companies had succeeded against the odds and achieved high growth and profitability throughout the recession. We took an inductive approach to the problem and conducted a pre-study to find our research areas. Using our pre-study we identified that company size, competencies, and market knowledge seemed especially important. To explain how our factors affected growth we conducted a theoretical study and applied a resource based view of the firm as well as a knowledge based view. Our theoretical study helped explain why the factors were important and provided guidance in structuring our interviews.

Based on our qualitative study we can conclude that firms who let their market knowledge guide company strategy and day-to-day action will see positive effects on their growth. What then becomes important is to consider *how* this can be brought about. The first thing we found in our case studies was that the gazelles were consciously identifying and targeting specific customer needs. One gazelle made it their goal to become the market leader in information about *their customers' market*, even going as far as to publish a bi-annual report detailing what is happening in the industry. The consequence is that customers feel certain they are getting good value and come to the gazelle for advice on how to run their businesses. Another gazelle realized that customers in their market often had to deal with industry experts who had little understanding for the customers' needs. To get around this problem they chose to have project leaders who dealt with the industry experts on behalf of the customers, making sure that the customers' needs were correctly communicated to the industry experts. In addition project leaders gained valuable insights into what customers were actually concerned about, and how projects could be conducted to maximize customer satisfaction. Interestingly, the interviewees did not perceive this type of customer interaction as a source of market knowledge. All firms were united in that spending time with customers was a key-process for continuously building market knowledge.

All gazelles stated that finding the right people has been the most challenging issue. Why is it so hard to find good people? We do not believe it is an industry effect since all cases, irrespective of which type of service industry, made the same statement. Rather, we believe it is because people matter. How to get these apparently hard-to-find persons to your firm? *Recruitment systems*. The actual system for recruitment can be designed in different ways. It is however critical to carefully consider how recruitment should be done and which competencies are the most important for the company, since they can be a source of differentiation from competition. Can it be that identification of necessary competencies and a recruitment system designed to find those competencies are the most important factors if you want to turn your small firm into a gazelle?

9.1 Recommendation to Practitioners

Based on our research we are able to make three areas of recommendations for practitioners and other stakeholders. (1) We want to recommend practitioners to focus on finding a suitable recruitment strategy for their firm. We have seen that a variety of systems have worked for our studied gazelles, but all of them have been well developed and integrated into the gazelles' core strategies. Strong recruitment systems aid the search of the right competencies and competencies are an excellent foundation for sustainable competitive advantages and a source for differentiation. (2) We recommend practitioners to evaluate how they can build knowledge about the market in their everyday operations since we found market knowledge to be valuable for the gazelles to react to changes in the environment, such as the recession, and improve their strategic fit to the new conditions. The best way that we saw in our cases was to strive for constant *interaction* with customers. Communicate with customers and find out what the company can do to better serve their needs. (3) Finally, we found that growth creates a re-enforcing system where the increased size allows for increased specialization among the employees that improves productivity while growth also increases the amount of slack resources that help the company to adapt to change. It will also in some cases enable the company to compete for larger potentially more profitable project that might require more competencies and/or financial resources.

9.2 Concluding Remarks

We find six likely explanations for *why* size, competencies, and market knowledge are important success factors for gazelles during a recession. (1) Company size enables competition for bigger projects; (2) Company size provides slack resources making the company more adaptable to change; (3) Human capital becomes an important source of differentiation; (4) Employees provide a sustainable competitive advantage difficult for competition to mimic; (5) Market knowledge provides an understanding of the environment which enables a better strategic fit; (6) Market knowledge increases the value the company is able to deliver to customers.

We also find three explanations for *how* our success factors can be established: (1) Increased company size allows an increased focus on employees' core competencies; (2) Dedicated recruitment strategy is the primary source of capturing appropriate competencies; (3) Active collection of customer information builds market knowledge.

Our findings bridges the gap between theories about gazelles and theories about recessions, delivering valuable practical advice for small firms to consider if they want to achieve high growth and profitability throughout a recession. To support this we provide a model that clarifies the connections between the factors explaining both *how* they can be achieved and *why* they are important.

9.3 Future Research

When considering our research about gazelles we have found two areas that we consider of particular importance for future research. First, in all the gazelles we looked at there were good HR systems in place for handling recruitment. They differed wildly in their structure indicating that there is more than one way to successfully conduct recruitment in a gazelle. Further research into this area could help categorize different recruitment methods and perhaps combine them to find an optimal approach, or find out in which specific cases each system has particular benefits. This would help bring additional clarity to how small firms should conduct their recruitment to bring about maximum benefit.

Second, when conducting our pre-study (see Appendix B Additional Variables) we found that CEO gender had no impact on profitability, making us put the topic aside for our research. There were however some very interesting correlations that are worth exploring further. While female CEOs were just as likely to be successful as male ones there were much less of them. Additionally the ones present were in charge of smaller companies. Also opinions on external competencies and new corporate governance differed from their male counterparts, indicating a difference in leadership style. Exploring these areas would give valuable insights into why there are fewer female CEOs in small firms and perhaps give ideas of how to improve the situation. As there is no difference in performance between the two genders it is also likely that both parts could benefit from the others' leadership styles.

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Carrfors, T. (12, April 17). Copywriter at Svensson Jfm AB. (M. Danell, & S. Hamilton, Interviewers)

Cederkvist, N. (12, April 18). CIO for Sweden at FindCourses Global AB. (M. Danell, & S. Hamilton, Interviewers)

Edborg, F. (12, April 25). IT & Business Development Executive at FindCourses Global AB. (M. Danell, & S. Hamilton, Interviewers)

Gränby, H.-G. (12, April 25). CFO at Titania Bygg & VVS AB. (M. Danell, & S. Hamilton, Interviewers)

Hofstetter, C. (12, April 25). Head of Business Area "Utbildning" at Konsultbolag1 AB. (M. Danell, & S. Hamilton, Interviewers)

Jansson, E. (12, April 25). CEO at Titania Bygg & VVS AB. (M. Danell, & S. Hamilton, Interviewers)

Jansson, M. (12, April 25). Project Manager at Titania Bygg & VVS AB. (M. Danell, & S. Hamilton, Interviewers)

Lennström, A. (12, April 17). Project Leader and Office Manager at Svensson Jfm AB. (M. Danell, & S. Hamilton, Interviewers)

Säker, M. (12, April 18). CEO at FindCourses Global AB. (M. Danell, & S. Hamilton, Interviewers)

Svensson, K. (12, April 25). Sales and Marketing Support at Konsultbolag1 AB. (M. Danell, & S. Hamilton, Interviewers)

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Appendix A Variable Creation and Statistics

Process

The database from ALMI contained a multitude of questions spanning a variety of topics. In order to make the database more useful we grouped the different questions into areas so as to be representative of different areas of management. The values for each question was then added (in the case of linear variables) or multiplied (in the case of exponential variables) together to create our two sets of variables. See below for the questions used to create our two sets.

Market Knowledge

- Knowledge about which customers/customer segments are the most profitable
- Knowledge about which products/services are the most profitable
- Knowledge about which sales and marketing activities most contribute to overall profitability

External Competence

- Need for access to external competencies to better understand what drives company profitability
- Wish for access to Mentors, Coaches, Consultants (with general business competence)
- Wish for access to person(s) with special business, IT or purchasing competence

New Management

- Wish for new members on the board of directors
- Wish for new partners or owners

Variable Statistics

As we can see from the descriptive statistics including both a linear and an exponential version of the variables was beneficial since for some Skewness/Kurtosis was better in logarithmic and for some in exponential form. Acceptable ranges for Kurtosis and Skewness vary but generally up to +/- 1 can be considered very good, +/-2 can be considered acceptable with higher values being undesirable.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Market Knowledge (Lin)	240	4	15	12.02	2.042	-.682	.157	.686	.313
Market Knowledge (Exp)	240	2	125	66.87	32.091	.215	.157	-.883	.313
Wish for External Competence (Lin)	246	3	15	9.37	2.962	-.288	.155	-.529	.309
Wish for External Competence (Exp)	246	1	125	35.17	30.572	1.096	.155	.655	.309
Wish for New Management (Lin)	245	2	10	5.25	2.193	.182	.156	-.781	.310
Wish for New Management (Exp)	245	1	25	7.33	6.219	1.104	.156	.387	.310
Valid N (listwise)	229								

Appendix B Additional Variables

As our study was inductive we also included other variables which we thought might show significance. While we didn't see any correlations with profitability for them, in the interest of completeness we include them here.

Exponential Variables

Correlations

		Profitability 2010 (Ordinal)	Profitability 2011 (Ordinal)	CEO Gender	Amount of Employees	Company Revenue	View on CSR	Market Knowledge	Belief in Business Model	Knowledge About Profitability	IT Knowledge	Attitude to Risk	Wish for External Competence	Wish for New Corporate Governance
Profitability 2010 (Ordinal)	Pearson Correlation	1	.565**	-.009	.133*	.116	.005	.166*	-.094	.089	.032	.108	-.120	.000
	Sig (2-tailed)		.000	.898	.046	.082	.939	.014	.163	.186	.638	.109	.076	.999
	N	226	188	226	226	226	226	218	224	221	217	219	221	221
Profitability 2011 (Ordinal)	Pearson Correlation	.565**	1	-.067	.167*	.134*	-.024	.192**	-.129	.036	.031	.095	-.220**	-.051
	Sig (2-tailed)	.000		.352	.019	.061	.743	.008	.075	.626	.672	.193	.002	.483
	N	188	195	195	195	195	195	188	193	191	188	191	190	191
CEO Gender	Pearson Correlation	-.009	-.067	1	-.187**	-.164**	.061	.105	.068	-.007	-.075	.105	.233**	-.141*
	Sig (2-tailed)	.898	.352		.003	.009	.338	.105	.286	.909	.247	.102	.000	.027
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Amount of Employees	Pearson Correlation	.133*	.167*	-.187**	1	.626**	.084	.019	-.010	-.013	.043	-.047	-.178**	.029
	Sig (2-tailed)	.046	.019	.003		.000	.185	.768	.872	.845	.511	.461	.005	.654
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Company Revenue	Pearson Correlation	.116	.134	-.164**	.626**	1	.105	-.019	.049	.029	-.019	.085	-.211**	-.029
	Sig (2-tailed)	.082	.061	.009	.000		.098	.769	.443	.651	.773	.187	.001	.656
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
View on CSR	Pearson Correlation	.005	-.024	.061	.084	.105	1	-.171**	.173**	-.066	-.163*	-.021	.182**	.194**
	Sig (2-tailed)	.939	.743	.338	.185	.098		.008	.006	.302	.011	.739	.004	.002
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Market Knowledge	Pearson Correlation	.166*	.192**	.105	.019	-.019	-.171**	1	-.078	.421**	.205**	.221**	-.207**	-.080
	Sig (2-tailed)	.014	.008	.105	.768	.769	.008		.231	.000	.002	.001	.001	.220
	N	218	188	240	240	240	240	240	238	236	231	233	234	234
Belief in Business Model	Pearson Correlation	-.094	-.129	.068	-.010	.049	.173**	-.078	1	.057	-.007	.036	.186**	.142*
	Sig (2-tailed)	.163	.075	.286	.872	.443	.006	.231		.377	.915	.578	.003	.026
	N	224	193	250	250	250	250	238	250	244	240	242	245	244
Knowledge About Profitability	Pearson Correlation	.089	.036	-.007	-.013	.029	-.066	.421**	.057	1	.315**	.322**	-.186**	.020
	Sig (2-tailed)	.186	.626	.909	.845	.651	.302	.000	.377		.000	.000	.004	.763
	N	221	191	246	246	246	246	236	244	246	237	238	240	239
IT Knowledge	Pearson Correlation	.032	.031	-.075	.043	-.019	-.163*	.205**	-.007	.315**	1	.195**	-.276**	-.084
	Sig (2-tailed)	.638	.672	.247	.511	.773	.011	.002	.915	.000		.003	.000	.202
	N	217	188	242	242	242	242	231	240	237	242	234	237	235
Attitude to Risk	Pearson Correlation	.108	.095	.105	-.047	.095	-.021	.221**	.036	.322**	.195**	1	.052	-.013
	Sig (2-tailed)	.109	.193	.102	.461	.187	.739	.001	.578	.000	.003		.426	.838
	N	219	191	244	244	244	244	233	242	238	234	244	238	238
Wish for External Competence	Pearson Correlation	-.120	-.220**	.233**	-.178**	-.211**	.182**	-.207**	.186**	-.186**	-.276**	.052	1	.227**
	Sig (2-tailed)	.076	.002	.000	.005	.001	.004	.001	.003	.004	.000	.426		.000
	N	221	190	246	246	246	246	234	245	240	237	238	246	240
Wish for New Corporate Governance	Pearson Correlation	.000	-.051	-.141*	.029	-.029	.194**	-.080	.142*	.020	-.084	-.013	.227**	1
	Sig (2-tailed)	.999	.483	.027	.654	.656	.002	.220	.026	.763	.202	.838	.000	
	N	221	191	245	245	245	245	234	244	239	235	238	240	245

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Linear Variables

Correlations

		Profitability 2010 (Ordinal)	Profitability 2011 (Ordinal)	CEO Gender	Amount of Employees	Company Revenue	View on CSR	Market Knowledge	Belief In Business Model	Knowledge About Profitability	IT Knowledge	Attitude to Risk	Wish for External Competence	Wish for New Corporate Governance
Profitability 2010 (Ordinal)	Pearson Correlation	1	.565**	-.009	.133*	.116	.005	.136*	-.067	.091	.056	.120	-.133*	.004
	Sig. (2-tailed)		.000	.898	.046	.082	.939	.045	.317	.178	.409	.077	.048	.950
	N	226	188	226	226	226	226	218	224	221	217	219	221	221
Profitability 2011 (Ordinal)	Pearson Correlation	.565**	1	-.067	.167*	.134	-.024	.166*	-.130	.027	.021	.097	-.187**	-.031
	Sig. (2-tailed)	.000		.352	.019	.061	.743	.023	.071	.714	.771	.181	.010	.666
	N	188	195	195	195	195	195	188	193	191	188	191	190	191
CEO Gender	Pearson Correlation	-.009	-.067	1	-.187**	-.164**	.061	.109	.073	.001	-.080	.093	.206**	-.112
	Sig. (2-tailed)	.898	.352		.003	.009	.338	.091	.251	.993	.218	.148	.001	.080
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Amount of Employees	Pearson Correlation	.133*	.167*	-.187**	1	.626**	.084	.018	-.013	-.034	.057	.001	-.160*	.053
	Sig. (2-tailed)	.046	.019	.003		.000	.185	.786	.841	.598	.381	.992	.012	.413
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Company Revenue	Pearson Correlation	.116	.134	-.164**	.626**	1	.105	-.006	.043	.011	-.024	.089	-.225**	-.027
	Sig. (2-tailed)	.082	.061	.009	.000		.098	.932	.502	.861	.713	.164	.000	.674
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
View on CSR	Pearson Correlation	.005	-.024	.061	.084	.105	1	-.142*	.174**	-.061	-.154*	-.030	.203**	.189**
	Sig. (2-tailed)	.939	.743	.338	.185	.098		.028	.006	.342	.017	.639	.001	.003
	N	226	195	252	252	252	252	240	250	246	242	244	246	245
Market Knowledge	Pearson Correlation	.136*	.166*	.109	.018	-.006	-.142*	1	.032	.411**	.294**	.282**	-.252**	-.075
	Sig. (2-tailed)	.045	.023	.091	.786	.932	.028		.622	.000	.000	.000	.000	.252
	N	218	188	240	240	240	240	240	238	236	231	233	234	234
Belief In Business Model	Pearson Correlation	-.067	-.130	.073	-.013	.043	.174**	.032	1	.127*	.036	.057	.175**	.164*
	Sig. (2-tailed)	.317	.071	.251	.841	.502	.006	.622		.047	.582	.376	.006	.010
	N	224	193	250	250	250	250	238	250	244	240	242	245	244
Knowledge About Profitability	Pearson Correlation	.091	.027	.001	-.034	.011	-.061	.411**	.127*	1	.390**	.308**	-.206**	.020
	Sig. (2-tailed)	.178	.714	.993	.598	.861	.342	.000	.047		.000	.000	.001	.762
	N	221	191	246	246	246	246	236	244	246	237	238	240	239
IT Knowledge	Pearson Correlation	.056	.021	-.080	.057	-.024	-.154*	.294**	.036	.390**	1	.254**	-.317**	-.067
	Sig. (2-tailed)	.409	.771	.218	.381	.713	.017	.000	.582	.000		.000	.000	.309
	N	217	188	242	242	242	242	231	240	237	242	234	237	235
Attitude to Risk	Pearson Correlation	.120	.097	.093	.001	.089	-.030	.282**	.057	.308**	.254**	1	.025	.023
	Sig. (2-tailed)	.077	.181	.148	.992	.164	.639	.000	.376	.000	.000		.706	.723
	N	219	191	244	244	244	244	233	242	238	234	244	238	238
Wish for External Competence	Pearson Correlation	-.133*	-.187**	.206**	-.160*	-.225**	.203**	-.252**	.175**	-.206**	-.317**	.025	1	.303**
	Sig. (2-tailed)	.048	.010	.001	.012	.000	.001	.000	.006	.001	.000	.706		.000
	N	221	190	246	246	246	246	234	245	240	237	238	246	240
Wish for New Corporate Governance	Pearson Correlation	.004	-.031	-.112	.053	-.027	.189**	-.075	.164*	.020	-.067	.023	.303**	1
	Sig. (2-tailed)	.950	.666	.080	.413	.674	.003	.252	.010	.762	.309	.723	.000	
	N	221	191	245	245	245	245	234	244	239	235	238	240	245

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).