

## BACHELOR THESIS

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# It's a small world after all

*- The internationalization of Swedish companies*

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## Abstract

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Today, the global market is a fast expanding environment. There are more and more companies that go abroad to compete with companies from all over the world. The barriers between countries have been lowered and trade is encouraged. Therefore, international expansion is an important factor for many companies. The purpose of this dissertation is to study the effect international expansion has on firm performance. Since there is limited previous research within the field of international expansion and performance done on Swedish companies this dissertation tries to fill that gap.

The study is performed on listed Swedish companies. Several factors are used to measure the international expansion and performance of the companies. The relationships between international expansion and firm performance were positive when international expansion was measured as Number of Countries and Market Commitment. When international expansion was measured as Foreign Assets and as the GL-Index (Gerlofstig-Lindstrand Index), support was given to a positive relationship. The relationship between Foreign Board and firm performance as well as Foreign HR (Human Resources) and firm performance was to some extent supported. The remaining two measures of international expansion were Foreign Assets and International ownership. These measures showed no supported relationships between international expansion and firm performance. To conclude, the results of the study indicated that there are some support for a relationship between international expansion and firm performance for listed Swedish companies.

This study contributes to the lack of research on the effect of international expansion on performance of Swedish companies. Swedish managers can use the conclusions drawn from the study as guidelines for international expansion.

**Keywords:** Swedish companies, internationalization, expansion, international diversification, firm performance

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# 1. Introduction

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*This chapter includes the background, problem, purpose, research question, and theoretical limitations. The final part in this chapter gives an outline of the rest of the dissertation.*

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## 1.1 Background

The number of companies going abroad and expanding into new markets is growing at a steady rate. Globalization has created opportunities for new markets and opportunities for companies to expand internationally. It is very common that new companies have an international strategy from the beginning, focusing only on international markets. Significant for the new emerging markets are characteristics like large domestic demand, dynamic transformation, inefficient industry structure, and comparative advantages in production factors (Luo, 1999). Many countries have emerged from opening up its economy to international trade and investments after being under a strict rule where trade was heavily controlled and limited. The transformation from central governmental control to a structure driven by market forces opens up vast market opportunities for both domestic and foreign companies (Luo, 2002a). Although still heavily restricted in some business areas by laws and regulations from the government, the market in such countries are what some authors define as in a transitional state (Buckley, 2007). They are gradually freed from governmental intervention. Research done by Sanyal and Guvenli (2000) suggests that larger companies (both in terms of employees and monetary value) and companies with a long-term perspective do better in establishing and maintaining a good relationship with the governments in a foreign market.

Companies expanding to new markets seek to exploit the opportunities of getting access to a larger market and to reduce production costs. The outcome of this would be to achieve economies of scale (UNCTAD, 2008). Swedish companies are very successful internationally and they have been active on international

markets for several decades (Embassy of Sweden, 2008). The Swedish market is relatively small compared to other markets, which limits the demand for products and services. Therefore, it is crucial for companies that want to grow to expand to new markets on the international arena. Swedish companies long tradition of global expansion and international business resulted in a 12<sup>th</sup> place when countries were ranked by UNCTAD in terms of total outward investment in 2007 (UNCTAD, 2008). The countries that receive these investments are often countries in transit. China, for instance, together with Hong Kong, Bulgaria and Georgia are amongst the 20 countries that are the largest recipients of FDI in the world (*ibid.*).

Swedish companies must also consider the costs and benefits of expanding abroad. Challenges arising from the risk and uncertainty associated with for instance the Chinese market can affect the performance of the company and should not be underestimated (Luo, 1999). The cultural differences between Sweden and China are quite extensive. The way business is done in China differs a lot from the general western way and in particular the Swedish way of doing business (Buckley, Clegg & Tan, 2006; Darby, 1995; Li, Karakowsky & Lam, 2002; Embassy of Sweden, 2008; Demir & Söderman 2007). However, these differences are not limited to China and Sweden. There exist differences even between neighboring countries, with resembling culture and development, which creates both opportunities and challenges for a company. Also the infrastructure, or rather the lack of infrastructure, in a transitional country increases the risks and problems for Multi National Enterprises (MNE) (UNCTAD, 2008; Bartlett & Ghoshal, 1998).

Previous researches have shown that by diversifying internationally to new markets companies can increase their performance. However, this research is not conclusive. Researchers argue that international diversification has a negative effect on firm performance; some argue that the relationship is positive (Chari, Devarai & David, 2007), and others argue that the relationship is curvilinear (Bobillo, Iturriaga & Gaité, 2008). Riahi-Belkaoui's (1998) findings suggest that there is a dual threshold relationship, in which the first and last stages have a negative effect, and the middle stage has a positive effect on firm performance.



Since almost all the existing research done on the relationship between international diversification and firm performance is done either on US companies or other European companies there is a lack of research done on Swedish companies. This dissertation will try to fill this gap by analyzing Swedish companies and the relationship between the degree of international diversification and firm performance.

## **1.2 Problem**

The process of international diversification does not come without problems for companies (Bartlett & Ghoshal, 1998; Bobillo *et al.*, 2008; Dunning, 2000; Gomes & Ramaswamy, 1999). International diversification requires management to coordinate a company's activities across national borders (Luo, 1999). To be able to understand the various effects international diversification has on firm performance several researchers have analyzed the relationship. However, the research done on primarily on North American companies has been contradictory. The results show both a negative relationship and a positive relationship (Bobillo *et al.*, 2008; Chari *et al.*, 2007; Riahi-Belkaoui, 1998). In previous research the term international diversification is used but in this dissertation the term international expansion is used. The terms explain the same concept. The problem is that there is limited research done on Swedish companies and their international expansion (diversification). Although some similarities exist, it is assumed that the difference in the way business is done, between North American and Swedish companies, is still profound and the conclusions drawn from previous research should not be generalized on Swedish companies.

## **1.3 Purpose**

The purpose of this dissertation is to explain the effect of an international expansion and how it influences the firm performance in Swedish companies. Research in this field of business study is limited to only North American and some European companies (Sullivan, 1994; Gleason, Lee, & Mathur, 2002; Gomes & Ramaswamy, 1999; Bobillo *et al.*, 2008; Capar & Kotabe, 2003); hence, we find it important to look at how international expansion affects the

performance in Swedish companies. With a rather small domestic market, Swedish companies must successfully expand to international markets in order to grow (UNCTAD, 2008).

#### **1.4 Research question**

The problem of limited research done on Swedish companies and their international expansion leads to the purpose of this dissertation. This study aims to explain the effect of an international expansion and how it influences the firm performance in Swedish companies. Thus, the research question is:

*How does international expansion affect firm performance?*

#### **1.5 Theoretical limitations**

The theories used in this dissertation are limited to a few well-known and established theories concerning internationalization. The origin of the scholars and their theories are quite diverse. However, the lack of research in Swedish companies is profound. Most research is done on the relationship between international expansion and firm performance in American or European companies.

The research in this study is limited to investigating the relationship between international diversification in a company and its performance. It will not study the reasons why a company decides to expand internationally. Nor will it look at other outcomes than the firm's performance.

The theory on Entry Modes depicts the commitment a company has in a foreign market. The dissertation is limited to two categorized approaches for the company in their market commitments. However, there are many entry modes available for a company to choose from but the lack of time and the lack of clarity in a company limit our research in investigating the impact of these differentiated market commitments.

Regarding the theory on Cultural Distance and Cultural Diversity this study is limited to two areas that are investigated. The Cultural Distance theory looks at the cultural differences between the foreign human resources and the home country of the company. Due to the time limit for this dissertation foreign human resources is grouped as one and thus is not compared country by country. The grouping of foreign resources limits the study to only compare the degree of foreign human resources. The theory on Cultural Diversity focuses on the national diversity of the board of directors of a company. In contrast to other research, cultural diversity in top management teams will not be investigated.

### **1.6 Outline**

This dissertation consists of six chapters. The first chapter presents the background, problem, purpose, research question and the theoretical limitations. This is followed by chapter two in which the reader is introduced to the research philosophy, research approach, choice of theory, and finally choice of methodology. In chapter three the theoretical literature is reviewed and the hypotheses are presented. Chapter four presents the research design, data collection, and the operationalization of the hypotheses. Chapter five contains the empirical findings which are analyzed and discussed. The last chapter, Chapter six, presents the conclusion of the dissertation, practical implications and suggestions for future research.

## 2. Research Method

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*In this chapter, the choices available in methodology are presented. It includes research philosophies, research approach, choice of theory and choice of methodology. The purpose of this chapter is to give an overview of the method used in this dissertation.*

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### 2.1 Introduction

In Saunders, Lewis, & Thornhill (2009) the reader is introduced to a model called the Research Onion. This model consists of several different layers, like an onion, that helps the reader understand the different stages of research methodology and how they are dependent on each other. The first layer consists of research philosophy, the second layer introduces the research approaches, which is followed by research strategies, research choices, research time horizon and finally in the centre the model introduces data collection and data analysis. The intention with the Research Onion model is to start with the outer layers of research philosophy and research approaches and work your way in towards the centre with data collection and analysis. In this dissertation a similar structure will be used.

### 2.2 Research philosophy

It is very helpful to have a clear research philosophy when conducting research. The adoption of a research philosophy allows the researchers to make assumptions about the way they view the world. These assumptions will then support the research strategies and the methods the researchers employ. The different and most commonly used philosophies are Positivism, Realism, Interpretivism and Pragmatism (Saunders *et al.*, 2009). The first research philosophy, Positivism, allows the researchers to work with an observable social reality and the end result of such a research can be a law-like generalization. Within this philosophy the researchers are likely to use already existing theories to

construct highly structured and replicable hypotheses that are then tested (*ibid*). The central part of the philosophy of Realism is that what we perceive as the world through our senses is the reality. This philosophy shares some characteristics with Positivism, which also assumes a scientific approach to the development of knowledge (*ibid.*). In the third philosophy, Interpretivism, it is suggested that the positivist approach is lacking in explaining the complexity of the social world of business and management. The researchers cannot make law-like generalizations about humans as ‘social actors’ since the actions and roles of individuals are highly differentiated (*ibid.*). When a positivist researcher measures details about a vast number of people and test for laws, an interpretive researcher spends several years living with a number of people to get a more in-depth understanding (Neuman, 1994). The last philosophy, Pragmatism, allows the researcher to freely choose a mixture of the different philosophies because it is unrealistic to choose and follow just one philosophy (Creswell, 2007; Saunders *et al.*, 2009).

This dissertation will adopt a Positivistic research philosophy because the research will be conducted within a highly structured model. One or several hypotheses will be constructed and tested. These hypotheses will be replicable and based on existing theories within the subject. The result will be generalized on a large, quantitatively and measurable sample independent of social actors.

### **2.3 Research approach**

There are two different research approaches; the Deductive and the Inductive approach (Saunders *et al.*, 2009). The Deductive approach utilizes already existing literature and theories to develop new theories or hypotheses. This approach formulates a research strategy that starts out with existing theories and then the researchers use the theories to build one or several hypotheses. These hypotheses are then tested through analysis of the data collected. If the hypotheses are rejected or confirmed, the theories can be reformulated (*ibid*). Thus, the Deductive approach starts out with theory. Then it moves on to data collection and analysis to translate the hypotheses to operational terms and finally confirm or reject the constructed hypotheses (Bryman, 2008). When having an Inductive

approach, the researchers start in the other end compared to the Deductive approach (see figure 2.1 for a comparison of the two approaches on the relationship between theory and research). The researchers begin by collecting and analyzing data about a phenomenon, and then the researchers formulate a theory based on the data collected (Saunders *et al.*, 2009).

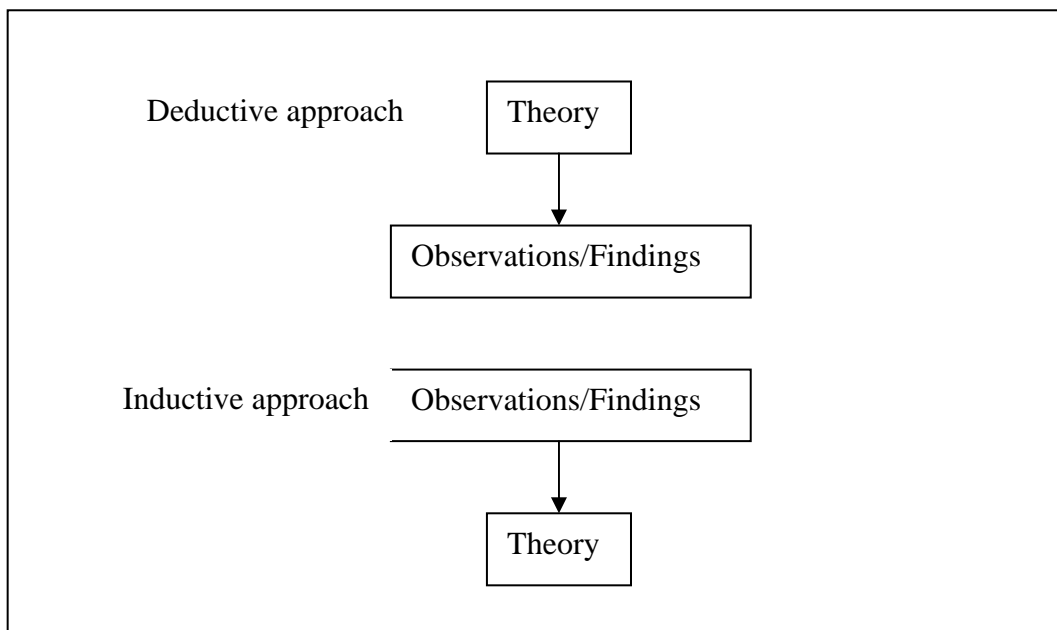


Figure 2.1 Deductive and inductive approaches to the relationship between theory and research (Based on Bryman Social Research methods (2008) p. 11)

In this dissertation the Deductive approach will be used. There is already a large amount of literature in the specific area of international expansion that will be used as a base for this research. The Deductive approach will be followed in this dissertation and hypotheses will be developed through the use of existing theories. These hypotheses will be tested in a quantitative study and result in a generalized outcome.

## 2.4 Choice of theory

This dissertation and the research performed aims at finding new approaches to the existing internationalization theory. With the use of previous research methods the aim is also to apply existing research in a new field of study. Initially, the reader must be introduced to the theory of internationalization. A short historical overview is given before defining the most developed theories on

internationalization such as the Uppsala Stage Model and Transaction Costs theory. The process of internationalization is divided into three sections: why, how, and where in which the theories are presented. Further, theory on cultural differences is discussed with Hofstede's Cultural Dimensions as one of the main theories. Finally, the connection between the theory on internationalization and the effect it has on firm performance is discussed.

## **2.5 Choice of methodology**

The aim of this dissertation is to be able to explain relationships, draw conclusions, and generalize the results by using existing research but in a new study field. Therefore, the positivistic research philosophy is applied in a deductive research approach. The dissertation will start in an overview of the existing literature that will lead to a number of stated hypotheses. These hypotheses form our model that is tested on the empirical findings, which is a classic deductive approach.

## 3. Literature Review

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*This chapter includes the theoretical review. A selection of internationalization theories are discussed as well as theory on entry modes, and cultural dimensions. The chapter ends with a number of stated hypotheses.*

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### 3.1 Historical overview

The theoretical history of international trade started with Adam Smith who lived during the 18th century in The United Kingdom. His theory was the first of its kind depicting international trade as a result of absolute advantages. This theory is one of the bigger pieces in the foundation of international trade. The absolute advantage model states that countries have different advantages in producing different goods. Hence, trade is a result between two actors who are good at producing different goods and the surplus of this production is then traded (Landes, 1999). Later, David Ricardo developed a new theory built on Smith's theory saying that countries had comparative advantages. In this model Ricardo explores and describes the relationship between two actors in which one of them has absolute advantages in all the production. Even though one actor is more efficient at producing all the goods it is still more beneficial for both to produce the good they are most efficient at (*ibid.*).

### 3.2 Why do companies expand?

International trade and an open free market lead to growth according to many studies (Sachs & Warner, 1995; Frankel & Romer, 1999; Dollar & Kraay, 2001). An updated investigation of the same research of Sachs and Warner, conducted over a longer time span, was done by Wacziarg and Welch who concluded that countries adopting an open market system increase their average economical growth by 1.5 – 2 % compared to before the adoption occurred (Wacziarg & Welch, 2008). The studies presented by these authors show that a more liberalized and open economy leads to a higher growth in income level and living standards.



The companies are aware of the advantages of higher income levels and living standard and seek to exploit these opportunities. Creating growth in a limited market is quite difficult; therefore, the step towards internationalization is not that far in the minds of top managers. However, going international with a company is not always that easy and many companies fail in their expansion and sometimes even their survival is at risk. The causes of this are many. Bartlett and Ghoshal (1998) argue that the organisational structure or rather the lack of a functioning structure in an internationalized company could have a strong effect on firm performance. Nevertheless, growth is still a key motive for companies to internationalize. Growth is but one of the many factors that are behind an internationalization of a company whose goal ultimately is to create profit (Albaum, Duerr & Straskow, 2005).

### *3.2.1 Uppsala Stage Model*

One theory about internationalization is the Uppsala-model that was created by researchers at the University of Uppsala in Sweden (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). This Scandinavian model depicts different stages in the internationalization process, in which every stage increases the company's commitment to foreign markets as their experience grows (Johanson & Wiedersheim-Paul, 1975). Reid (1983) and Turnbull (1987) criticize the Uppsala Stage Model regarding it being too deterministic. Studies have also shown that the model is somewhat limited when used in the service industry that does not follow the process of elevated commitments (Sharma & Johansson, 1987). Also, there are companies that skip stages in the Uppsala Stage Model to speed up its internationalization process both in entering distant markets and the choice of entry mode. The reasons for this are a more homogeneous world that decreases the psychic distance as well as the development of technology in transportation that decreases the physical distance (Dunning, 1995).

### *3.2.2 Transaction Cost Analysis*

Another theory of internationalization is the Transaction Cost Analysis – model (TCA-model). The founder of the TCA-model was Coase (1937). He argued that a

company would expand until the cost of increasing the size of the company is higher than having the same operation as an exchange on the open market. In a perfect open market with zero transaction cost such exchanges would be common. However, there are often many frictions between two actors in a market (Sanford & Oliver, 1986). These frictions are explained as opportunistic behaviour between the buyer and seller (Williamson, 1981). To conclude the TCA model, in order to minimize costs a company must always reconsider its structural decisions. That is to internalize when there are cost reductions to be made. The work of Williamson has received criticism for simplifying and narrowing the human nature of opportunism (Ghoshal & Moran 1996).

### *3.2.3 Eclectic paradigm (OLI)*

The foundation of the Eclectic paradigm model, also known as OLI (Ownership, Location, and Internationalization), is that the global activities of a company is based on several economic theories (Dunning, 2000). The theory presents an overview of the factors affecting a company's assessment of going abroad or not. The OLI model has three key areas. Starting with Ownership, a company must assess what type of competitive advantages they possess relative to competitors in the market. The Location for a company should be assessed by the factor endowments (for instance labour, natural resources, infrastructure, transportation and income level) the countries possess. If there is none of these factor endowments in a country, the country should be exported to. The last of the three is Internationalization. For a company to be able to use its advantages it must evaluate all of its alternatives and choose the best option to exploit and profit from its advantages. The alternatives can be to either sell their advantages, sell their rights to use them or using them themselves in an expansion to new markets (Dunning, 2000). In short the theory depicts what type of entry mode the company should use. However, just because of its generality when it comes to theories the model lacks the power to explain and predict particular internationalization actions and individual company's behaviour.

### 3.2.4 The Transnational Solution

In Bartlett and Ghoshal's book (1998), the reader is introduced to a number of cases that were negatively affected by the trend of globalization during the 1980's. They could be summarized by three different models, Multinational, Global and International. All three models have different strategic capabilities. The multinational approach uses strong local presence to react quickly to national diversity. The Global approach exploits lower costs by using more centralized global scaled operations. The final of the three models, the International, utilizes the headquarters' knowledge and capabilities through diffusion and adaptation (Bartlett & Ghoshal, 1998). However, there were companies within these models that succeeded and thrived on the global market. They have evolved from using just one model, or strategic approach, to simultaneously utilize all of the mentioned models. This combination was the Transnational solution that tries to exploit the benefits from all the models. However, building, managing and maintaining the Transnational model was primarily an organizational challenge that many companies also failed to adopt. In many of the cases the lack of quick responses, economics of scale and knowledge were the ruin for companies (*ibid.*).

### 3.3 How do companies expand?

It is very important for the multinational enterprise (MNE) to make a strategic decision concerning which entry mode to use when planning the expansion. The choice of entry mode or entry strategy should be in line with the overall goals of the expansion. Also, the choice is important to determine the environment of the investment, the management of the operation, the commitment of resources, and future changes and development (Luo, 2002b). However, laws and regulations on foreign investment in host countries can sometimes limit the choices available for companies. Therefore, it is important to put these entry modes in the wider context of the environment into which the company is about to expand. Factors such as government policies, protection of property rights, host country risk, and cultural distance (country-specific factors), entry barriers, industrial uncertainty and complexity, and industry infrastructure (industry-specific factors), and resource possession, risk of leakage of technology, strategic goals, and previous international experience (firm-specific factors) must all be carefully considered

(Luo, 2002b). The vast amount of research conducted within this field also shows the importance of the choice of entry mode for companies (Gleason, Lee & Mathur, 2002). Following is a brief introduction to a selection of different entry modes. The reason for including entry modes in our theoretical discussion is that it shows to what extent a company has committed its resources. Accordingly, the authors of the Uppsala model argue that expansion is a process in which companies gradually increase their commitment of resources (Johanson & Vahlne, 1977). Thus, we can relate the companies' existing entry modes to the degree of commitment and the stage of their expansion.

The different entry modes include (but are not limited to) licensing, franchising, joint ventures, and wholly owned subsidiaries (greenfield and acquisition). Export is not included in this dissertation due to the fact that it does not require the company to make any large investments in the host country. Luo (2002b) classifies investment-related entry modes into two groups: transfer-related entry modes and FDI-related entry modes (Foreign Direct Investment-related entry modes). Transfer-related entry modes are those that involve transfer of ownership or exploitation of technology or assets in exchange for royalties or fees. Subcontracting, leasing, licensing, and franchising are examples of transfer-related entry modes. FDI-related entry modes are more sophisticated and involve more risk. This group includes joint ventures (equity and cooperative) and wholly owned subsidiaries (greenfield and acquisition). The contributions are more long-term in comparison to the transfer-related modes of entry (Luo, 2002b).

### *3.3.1 Transfer-related entry modes*

Subcontracting is usually explained as a process in which a foreign company pays a processing fee to a local company in exchange of processing or assembling products. The foreign company provides the local company with all the necessary materials and technology needed for the process; thus it keeps the property rights (Luo, 2002b). Leasing is an entry mode in which a foreign company allows a local company to rent its machines or other equipment for a fee. This allows for quick access to the target market for the foreign company and reduced costs for the local company (*ibid.*). Licensing involves the exchange of intangible property rights.

The foreign licensor grants the licensee the rights to use patents, trademarks, technology, managerial skills and so on for a limited amount of time. In exchange the licensor receives a royalty fee from the licensee. However, licensing reduces the foreign company's ability to control for the quality of the products which eventually could result in negative effects for the company (*ibid.*). Franchising is a similar mode of entry to licensing with the difference that the local company must follow detailed rules as to how it should perform. Also, it involves longer commitments for both companies and offers greater control for the foreign company. The foreign company normally receives royalty payment in terms of a percentage of the revenues generated by the local company (*ibid.*).

### 3.3.2 FDI-related entry modes

FDI-related entry modes (Foreign Direct Investment-related entry modes) are joint ventures and wholly-owned subsidiaries.

Luo (2002b) defines joint ventures as “cross-border partnerships between two or more firms from different countries with an attempt to pursue mutual interests through sharing their resources and capabilities” (Luo, 2002b, p. 215). He also distinguishes between two different kinds of joint ventures, cooperative and equity joint ventures. A cooperative joint venture is an agreement between two or more companies in which profits and other responsibilities are allocated through a contract. The profit does not necessarily mirror the size of each partner's investment percentage wise. On the contrary, an equity joint venture involves the establishment of a new entity. The new entity is mutually owned and managed by two or more companies in different countries. This is the most common method of joint venture and the most popular entry mode in countries such as China (Luo, 2002b; Floyd & Summan, 2008).

A wholly-owned subsidiary is, as the name suggests, the form of entry mode in which the foreign company owns the entire new entity. There are two ways of investing in a wholly owned subsidiary, greenfield investment and acquisition. When using greenfield investment the new entity is built-up from the start (including a new building, employ staff etc) whereas in an acquisition a local

business is bought. Even though this mode of entry requires more investment, it enables the company to keep control of the business (Luo, 2002b).

To conclude, the choice of entry mode is likely to be affected by the type of company, its resources and competences, the level of commitment and control it wants to keep, its transaction costs, and market specific characteristics. These factors are all a part of the investment climate. If the climate is perceived as uncertain enough the companies might chose non-FDI (transfer-related) entry modes to better facilitate their transactions. However, when protection of intellectual property rights and enforcement of contracts is insufficient, such an environment makes non-FDI entry modes difficult for companies (Gleason *et al.*, 2002). Thus, the choice of which market to enter is also important for the company and a part of the strategic expansion decisions.

### **3.4 Where do they expand?**

Another part of the international strategy is to choose which market to enter. This is a difficult choice for companies and several aspects of the environment must be carefully considered (such as political, economical, and social factors). The scholars of the Uppsala model (as described above) argued that companies begin to expand to markets that are close to their domestic market, countries with less psychic distance. The expansion then increases gradually by going to countries farther away (Johanson & Vahlne, 1977). Thus, the emphasis is on learning by doing (Forsgren, 2002). However, recent trends show that companies expand rapidly without entering countries with less psychic distance first. The emergence of the “Born Global” theory is derived from this phenomenon. One explanation for this new trend of companies expanding to markets farther away can be the increased easiness of getting access to market-specific knowledge. The individual learning curve of a company can differ a lot from other companies when entering a new market (Carlsson, Nordegren & Sjöholm, 2005). Thus, the obstacle of entering a market that is much more different from the home market is perceived as low compared to expansions by first-movers. Another explanation can be the opportunity to gain economic rewards in terms of greater returns, increased sales,

and cheaper production (Luo, 1999). These promising rewards are often related to the characteristics of emerging markets.

There are a few definitions of an emerging market available and the number of emerging markets differs depending on whose definition you use. Luo (2002b, p.5) characterizes an emerging market as:

...a country in which its national economy grows rapidly, its industry is structurally changing, its market is promising but volatile, its regulatory framework favors economic liberalization and the adoption of a free-market system and its government is reducing bureaucratic and administrative control over business activities.

Luo takes his own definition one step further by arguing that emerging markets are developing countries that undergo rapid growth and structural change and when emerging economies shift from former centrally-planned systems to a free-market system these are defined as transitional economies (Luo, 2002b). These countries have gradually opened up their economies and markets for foreign investment by introducing various reforms (economic, political, and social).

As discussed above in the OLI theory (Dunning, 2000), the environment of the location is important. The determinants of the location are most likely to influence the future operation and the expected returns of the company. These determinants are categorized into five different groups according to Luo (2002b): (1) cost/tax factors, (2) demand factors, (3) strategic factors, (4) regulatory/economic factors, and (5) sociopolitical factors. The first group includes factors such as transportation costs, wage rates, availability and cost of land, cost of raw materials and resources, and tax rates. Demand factors refer to the size of the market and the expected growth, presence of customers and competition. The strategic factors are important because they include infrastructure, presence of manufacturers and complementary industries, productiveness of the workers, and other types of logistics. Group five involves policies that facilitate the business for the company. Industrial policies, FDI policies, and laws and regulations are only a few examples. The last group, sociopolitical factors, includes political instability, business practices, corruption, and cultural barriers. All of these factors and others

that have not been mentioned must be assessed when choosing a new market and must be taken into consideration with the strategic objectives of the expansion (Luo, 2002b).

#### *3.4.1 Hofstede's Cultural Dimensions*

Even though countries have opened up their economies for foreign investors there are still certain remaining obstacles managers need to consider in the process of expanding to new markets. The cultural aspects have a great impact on the way people do business in different countries. One aspect of measuring cultural differences is Hofstede's Cultural Dimensions. Hofstede (1983) defined four dimensions that people from different cultures and societies view differently. These are individualism versus collectivism, power distance, uncertainty avoidance, and masculinity versus femininity. The first dimension, individualism, refers to the degree people in a society act as individuals or as members of a group. The people in an individual society are less dependent on others and are supposed to look after his or her self-interest or that of the immediate family. In contrast, the people in a collectivistic society are all interdependent on each other and are supposed to look after the interest of the group and share the same beliefs and opinions as those of the group's. Power distance is the degree of inequality between the physical and intellectual capacities of people and the concentration of power. When only a few people at the top make all the decisions they belong to a high power distance society. If, on the other hand, power is widely distributed among several people the society has a low power distance. Uncertainty avoidance has to do with formal rules, fixed patterns of life, and risk taking. In other words, the degree of how well people live with the uncertainty and the fact that the future is unknown. The people in a high uncertainty avoidance society take less risk and follow more formal rules and patterns than people in a low uncertainty avoidance society. A person in a low uncertainty avoidance society is also more responsive to future changes. Masculinity versus femininity concerns the division of roles between men and women in a society. This is the degree to which people in a society prefer values such as achievement, performance, success, and money (masculine characteristics) over values such as quality of life, relationships, service, and care for others (feminine characteristics). A masculine



society has distinct and clear roles for men and women whereas a more feminine society has less obvious distinctions between the roles of men and women (Hofstede, 1983).

There are some critical aspects needed to be considered with the use of Hofstede's Cultural Dimensions. Although Hofstede's study was extensive it was only done in one company, IBM. The influence of the corporate culture might have an effect on the result of the study. Another difficulty with cultural differences is that they change over time. This is an important factor that needs to be considered when evaluating Hofstede's research due to the fact that his work was done half a century ago.

### **3.5 Conclusions of Literature review**

#### *3.5.1 Geographic diversification*

According to the Uppsala Stage Model a company's experience of international trade increases over time (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). When the experience of the company increases the company's efficiency also increases which in the end should add to the firm performance (Carlson, 1966, as quoted in Forsgren, 2002). Also, there are other benefits of expansions; particularly if the company's domestic market is small. Examples of such benefits are economy of scale, access to larger markets and know-how. To fully exploit these benefits the company must often be active on several markets in different geographical regions (Bartlett & Ghoshal, 1989; Grant, 1987; Kogut, 1985; Porter, 1985 as quoted in Gomes & Ramaswamy, 1999). However, according to Gomes and Ramaswamy (1999) and Bartlett and Ghoshal (1998), the bigger the company gets the more difficult it will be to coordinate its operations. When the structure of a company is stretched over too many markets the relationships and interactions within the structure get more complex. This complexity might neutralize the initial benefits of expansion. In this dissertation it is proposed that the number of countries a company is active in is an increasing factor to the firm's performance. One can assume that when a company is present in several markets they have access to a larger customer base and factor

endowments (labor force, natural resources, capital, higher income customers and so forth). This could eventually lead to economies of scale which will increase the firm's performance overall (Porter, 1985 quoted in Gomes & Ramaswamy, 1999; Bartlett & Ghoshal, 1998). This leads us to the first hypothesis.

*Hypothesis 1:* The level of geographic diversification is positively related to performance.

### *3.5.2 Dependency on foreign markets*

When a company expands into new and foreign markets it might be an intimidating endeavor, yet many companies go through with it. The reasons for deciding to go abroad despite obstacles are many. The proposition in this dissertation is that the companies have a small domestic market. The lack of customers forces companies to either not invest in a product or service or to expand into other markets in order to create a big enough customer base. To continue to grow the company must find new international markets to enter. This should in the end increase the sales and generate more revenue. Hence, one can state that a company is dependent on its international markets and their sales to generate revenue (Gomes & Ramaswamy, 1999). Therefore, moving a part of your sales from the domestic market to the international arena often leaves the company in a disadvantage towards the local companies who has the know-how, the relationships and the experience of working there (Carlson, 1966, quoted in Forsgren, 2002; Bartlett & Ghoshal, 1998). One can assume that the initial costs of expansion outweigh the revenues generated from increased sales. However, with time these costs are lowered as a result of increased knowledge and a repetitive behavior of successful methods. As the company develops its international market knowledge and its international customer base, the possibility to increase the sales volume gets higher. The increase in the level of international sales will eventually result in higher levels of performance. Therefore, the following hypothesis is stated.

*Hypothesis 2:* The level of international sales is positively related to performance.

### *3.5.3 Internationalization of the board*

The result of prior research suggests that the effect of both cultural diversity and cultural distance on firm performance must be carefully considered (Li, Karakowsky & Lam, 2002). In their study Li *et al.* (2002) found that joint ventures with a balanced level of cultural diversity had significant higher performance. The study included a large number of joint ventures in the processing and fabricating industry and the results were the same in both industry types. The cultural dimensions measured by Hofstede (1983) are used to analyze differences between cultures. They are measured on individuals and can be used to explain how differently we perceive certain situations. Cultural diversity, on the other hand, is defined as the level of heterogeneity in cultural values among members in a group and can be used as a measurement to see how diversity of management teams affect firm performance (Li *et al.*, 2002). The link between cultural diversity and firm performance is information pooling, a process that refers to the pooling of information and knowledge (available among the members) in decision-making (*ibid.*). The capability of gathering important information, knowledge, and resources increases with a more cultural diversified management team due to each individual's various networks. Thus, a higher degree of information generated from a cultural diversified management team would affect the quality of strategic decisions being taken and in the end influence firm performance. The following hypothesis is stated.

*Hypothesis 3:* The level of international diversity of the board of directors is positively related to performance.

### *3.5.4 Internationalization of Human Resources*

In Hofstede's research on cultural distance, as mentioned above, the reader is introduced to cultural differences between countries within four areas. His research shows how people from different countries and cultures differ in the way they perceive things within the four areas of the model. The differences in the way people perceive things are proposed as factors that influence the firm performance in a company. A strategy formulated in one country might be interpreted differently in another country. Thus, adding more countries with further

differentiated views the more difficult will it be to interpret strategies, orders and goals correctly. In other words, the cultural distance of employees will create difficulties when implementing strategies and coordinating human resources. There is empirical evidence of cultural distance having a negative influence on the firm's performance (Davidson & McFetridge, 1985, as quoted in Karakowsky & Lam, 2002). Hence, in this dissertation the proportion of international employees is investigated as a factor that influences the firm's performance negatively. The following hypothesis is stated.

*Hypothesis 4:* The level of international HR is negatively related to performance.

### *3.5.5 Market commitment*

The choice of entry mode is an important decision in the strategic planning of the expansion. The choice involves a preference for the level of resource commitment and control the company wants to keep. Transfer-related entry modes require less resource commitment compared to FDI-related entry modes. However, the level of control is not as high for transfer-related entry modes as it is for FDI-related entry modes. In other words, if the company wants to maintain a lot of control and is ready to commit a lot of resources, FDI-related entry modes such as joint ventures or wholly-owned subsidiaries are most likely to be chosen (Bartlett & Ghoshal, 1998). Thus, choice of entry mode depends upon the firm-specific factors, the strategic goals of the expansion, the characteristics of the market, and the level of risk. The risk of the expansion is greater if the commitment is high. Therefore, the return on the investment should be high. The cultural distance is another important factor in the choice of entry mode (Luo, 1999). The cultural barriers can be limited or minimized if knowledge is applied from earlier expansions as explained in Johanson & Vahne (1977). It can also reduce costs that are associated with the initial stage of expansion (Bobillo *et al.*, 2008). However, if less knowledge is acquired from previous experience the increase in risk should most likely generate expectations of higher returns.

The commitment of resources and the level of control are both likely to affect the performance of the company directly or indirectly. Previous research show that

companies with higher commitment of resources often engage in FDI-related entry modes due to higher investments in proprietary assets (Gleason *et al.*, 2002). Their study also states that companies with a higher degree of international diversification generally expand through FDI-related entry modes (*ibid.*). The discussion above suggests that a company with high commitment of its resources is taking a higher risk and should expect a higher return. Therefore, the following hypothesis is stated.

*Hypothesis 5:* The level of market commitment is positively related to performance.

### *3.5.6 International involvement*

The company's choice of entry mode is also a part of determining the level of investment necessary. A high level of investment most often requires high level of assets involved in the business. In other words, setting up overseas manufacturing requires more investment in assets compared to licensing due to the fact that assets, both tangible and intangible, are used to fund the operations abroad. The level of investment also depends upon the environment in which the company is about to enter. If the costs of external transactions are higher than internal transactions the company will increase its internal activities in order to reduce costs (Williamson, 1981). This requires a higher level of investment. A company with higher international involvement will probably use more tangible and intangible resources and is expected to have higher performance (Hymer, 1976 cited in Capar & Kotabe, 2003). On the other hand, a company that is too diversified might have difficulties coordinating its operations resulting in less efficient use of the assets involved (Bartlett & Ghoshal, 1998). This would evidently affect performance negatively. However, this fact is not considered in the hypothesis stated below.

*Hypothesis 6:* The level of international involvement is positively related to performance.

### *3.5.7 International ownership*

Previous research by Bobillo *et al.* (2008) included ownership structure as a control variable that could affect firm performance. Their study investigated the proportion of internal owners. External owners are also important for a company. A company that is listed on the Swedish stock exchange is not limited to have only Swedish shareholders. Foreigners that have an interest in owning the company can buy the stocks. The result of owning a share is often that the shareholder possesses a voting right. With this voting right the shareholder is able to influence what type of strategies should be implemented and elect company board members. One can assume that foreign shareholders have a slightly higher interest in international expansion than the national shareholders. Therefore, in this dissertation the presumption is that the higher the number of foreign owners a company has the higher the level of international expansion would be. This would eventually lead to increased financial performance of the company. The following hypothesis is stated.

*Hypothesis 7:* The level of international ownership is positively related to firm performance.

### *3.5.8 Index*

The hypotheses above are based on different individual measures of expansion. The performance of a company is affected by several different factors of a wider perspective rather than one single factor. Alone, these factors represent only a limited proportion of the complete picture. The risk of having any unusual circumstance, such as extreme variations in currencies, distort the result is high (Sullivan, 1994). However, by using an index of several factors the validity of the results could increase. A number of prior researchers have used an index to measure the degree of internationalization. One of the most commonly known is the index used by Sullivan (1994) – the degree of internationalization scale. The index uses a multitude of variables in order to better and more accurately explain the differences in firm performance. Another index is the Transnationality index from UNCTAD (2008). Compared to Sullivan's index the Transnationality index uses a smaller number of variables. Therefore, the Transnationality index is easier

to investigate but the measurements of the problem are not as wide and descriptive. To use Sullivan's index requires data that in some countries can be difficult to collect; thus, making the Transnationality index the only option in this research. The limitation of gathering data from annual reports would restrict us to use the Transnationality index. However, we propose an extension of the Transnationality index with more variables to test as well as it is a simplification of Sullivan's index. Thus, we created our own index to further explain the relationship between the level of international expansion and firm performance. We named our own index the GL-Index (Gerlofstig - Lindstrand Index). The index consists of five of the independent hypotheses discussed individually above (see figure 3.1).

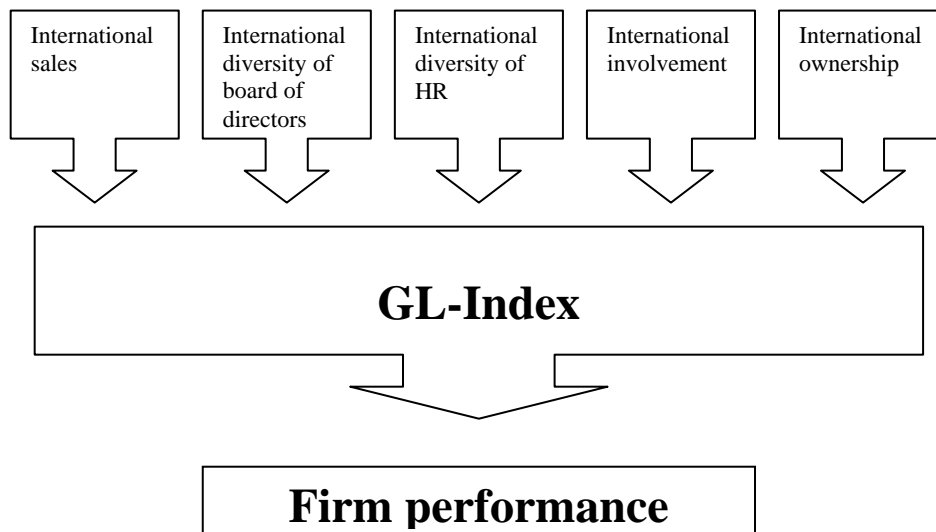


Figure 3.1 The model of GL-Index

By including international sales, international diversity of the board, level of international HR, international involvement, and international ownership in the index a wider perspective of the reality is given. The reason for not including geographic diversification and market commitment in the GL-Index is that these variables are not measured as ratios (for more details on the measurements see section 4.5 Operationalization). According to Sullivan (1994), the use of an index reduces the risk of having any unusual circumstances that could invalidate one factor invalidate the results of the entire measure. Due to the reduced risk of distortion and the considered variety of the relationship, the index is assumed to

show a positive correlation with firm performance. The discussion above supports the following hypothesis.

*Hypothesis 8:* The level of Gerlofstig – Lindstrand index is positively related to performance.

### **3.6 Summary of hypotheses**

Presented below is a list of the hypotheses.

*Hypothesis 1:* The level of geographic diversification is positively related to performance.

*Hypothesis 2:* The level of international sales is positively related to performance.

*Hypothesis 3:* The level of international diversity of the board of directors is positively related to performance.

*Hypothesis 4:* The level of international HR is negatively related to performance.

*Hypothesis 5:* The level of market commitment is positively related to performance.

*Hypothesis 6:* The level of international involvement is positively related to performance.

*Hypothesis 7:* The level of international ownership is positively related to firm performance.

*Hypothesis 8:* The level of Gerlofstig – Lindstrand index is positively related to performance.

The list of hypotheses (as seen above) is summarized in The Internationalization model (see figure 3.2). The relationships between international expansion and firm performance are also depicted with a positive or a negative sign. The positive or negative signs indicate how the measures of international expansion affect firm performance. The abbreviations ROA and ROE (Return on Assets and Return on Equity) are measures of firm performance. These relationships are derived from the literature review and summarized to create the Internationalization Model (figure 3.2).



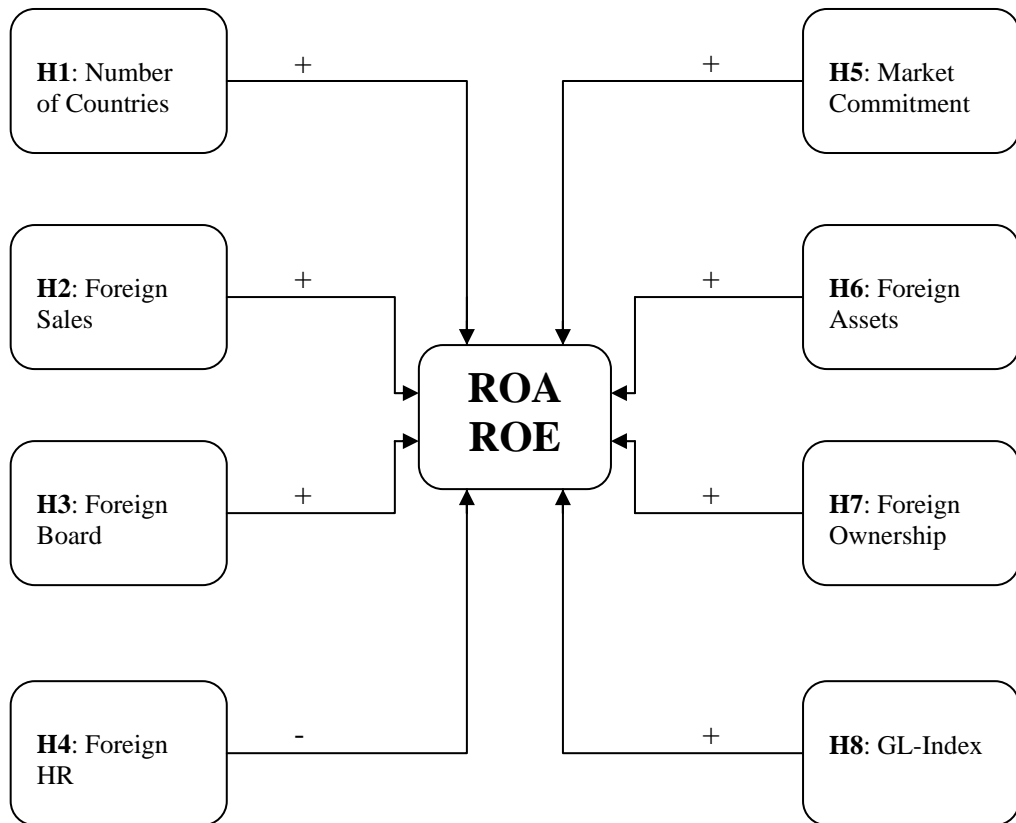


Figure 3.2: The Internationalization model

## 4. Empirical method

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*The empirical method is presented in this chapter. The research design and strategy are discussed followed by data collection, sample selection, operationalization, reliability, and validity. Finally, the matter of generalisability is defined and discussed.*

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### 4.1 Research design and strategy

There are three common ways to describe the research design used in most studies. These are exploratory, descriptive, and explanatory research design. A study with an exploratory research design is used to explore the specific nature of a problem. Flexibility and adaptability to change are two examples of advantages when using an exploratory research design (Saunders *et al.*, 2009). The purpose of the research when using a descriptive research design is to identify and map the reality of a situation (Eriksson & Wiedersheim-Paul, 2006). It is very closely related to both the exploratory (an extension of) and the explanatory (a piece of) research design (Saunders *et al.*, 2009). The third and final research design is the explanatory one. Studies that investigate a situation or a problem in order to explain the relationship between variables are explanatory (*ibid.*). The purpose is to analyze the cause and correlation between independent and dependent variables (Eriksson & Wiedersheim-Paul, 2006).

The purpose of the research in this dissertation is to explain the relationship between international expansion and firm performance. Therefore, the use of an explanatory research design is appropriate.

The choice of research strategy is also important. According to Saunders *et al.* (2009) there are seven different categories of research strategy and each of them can be used in any of the above mentioned research designs. The different categories are: (1) experiment, (2) survey, (3) case study, (4) action research, (5) grounded theory, (6) ethnography, and (7) archival research. A more thorough

discussion on each of the seven categories can be found in Saunders *et al.* (2009) or in any other book about writing a dissertation.

The strategy of the research in this dissertation is archival research. The main source of information used in the research is data released by companies in administrative reports.

#### **4.2 Time Horizon**

There are two dimensions of the time perspective when performing a research study. These are cross-sectional and longitudinal. The cross-sectional time horizon is used when you want to study a particular phenomenon at a given point in time. It is the most common method used when there is a time limit of your study. On the contrary, when studying a phenomenon over a long period of time, the longitudinal time frame is used. In longitudinal studies, the ability to study change and development is important. Thus, it is necessary to study the phenomenon over a time period.

This dissertation will use the cross-sectional time horizon. The two main reasons for this are (1) the purpose of this research is to study the effects or correlation between different variables at a given point in time and (2) the time is limited to only fifteen weeks.

#### **4.3 Data collection**

The choice of data collection method should be in line with the research question and objectives of the study. There are two types of data collection – primary (collecting new data) and secondary (already collected data) data collection. The different types of secondary data are divided into three groups: documentary, survey-based, and multiple source based data (Saunders *et al.*, 2009).

The explanatory research design of this dissertation allows us to use secondary data collection to reanalyze data that has already been compiled. Also, for research projects that requires national or international comparisons “secondary

data will probably provide the main source” (Saunders *et al.*, 2009, p.257). Most of the data will be collected from the consolidated financial statements in the annual reports. This is written material categorized as documentary secondary data (*ibid.*). Even though the data is already published and classified as secondary data, it is not collected to fulfill the purpose of this dissertation. The data will be collected from the annual reports of the years 2005 and 2008. In some cases companies have different financial year as their reporting period. In those cases the data will be collected from the annual reports of 2004-2005 and 2007-2008. Some data will be collected from a time-series based multiple source. The advantages of using secondary data are resource based. It allows us to collect a large number of data in a short period of time. Also, it does not require us to purchase any data due to the fact that it is all public. One of the disadvantages with secondary data collection is that the purpose of the compiled data does not match the purpose of the research project (*ibid.*). In this case, all necessary data might not be available as the data is published for various stakeholders and, therefore, vary in quantity and quality.

#### **4.4 Sample selection**

In almost all quantitative studies, the need to sample is inevitable (Bryman & Bell, 2007). The various sampling techniques available are “methods that enable you to reduce the amount of data you need to collect by considering only data from a sub-group rather than all possible cases” (Saunders *et al.*, 2009, p.210). All possible cases are called the population. The population does not have to consist of people as it normally does. In this dissertation, the population consists of Swedish companies. The vast amount of companies in Sweden requires us to select a sample. Saunders *et al.* (2009) categorize two groups of sampling techniques – probability or representative sampling and non-probability or judgmental sampling. For probability sampling it is very important to have a complete list of all the cases in the population (companies in our study). Such a list could probably be obtained from the Swedish Companies Registration Office in exchange for a fee. However, this would require a lot more time and money than what is given for this research.

To meet the objectives of the study in this dissertation a combination of purposive sampling and convenience sampling is used, both of which are non-probability sampling techniques. The sample consists of all Swedish companies listed on the Stockholm OMX stock exchange for the year. The list of all companies listed on the Large, Mid, and Small Cap in 2008 is compared with the companies listed in 2005. The reason for this procedure was to be able to exclude companies that were not listed on the stock exchange in 2005. The total number of listed companies in 2005 that compose our sample is 236<sup>1</sup>. Due to varying accounting requirements companies in industries such as banking, insurance, property management/real estate, shipping, and investment will all be excluded from our sample (Aktiespararnas Aktieskola 1997; Broberg, 2006). Also, national companies with no business abroad are excluded. This resulted in 158 companies as the total sample from which data was collected.

#### **4.5 Operationalization**

The following section is a discussion about the operationalization of the hypotheses. The hypotheses are explained and converted into practical measurements. It is of great importance to clearly state the measuring variables (both independent and dependent variables) for increased reliability and validity. The study consists of eight independent variables, two dependent variables and finally three control variables. The eight independent variables investigate the international expansion in a company. These will be listed below. The independent variables are quite common in the research of internationalization and its effect on firm performance. Hence, some independent variables in this dissertation are the same as in previous research. After the independent variables the dependent variables are listed. They will measure the outcome of the independent variables, which are used in previous research as well. Firm performance will be measured with the dependent variables. Lastly the control variables are listed. The control variables will look at size factors of a company as well as industry to see if they better explain the presumed diverse results. These control variables are very common in the research area of international business.

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<sup>1</sup> As of 2008 the companies listed on Large Cap were 56, Mid Cap 67, and Small Cap 113.

#### 4.5.1 Expansion

1. *Geographic diversification* is operationalized as the number of countries a company is actively present in (Gomes & Ramaswamy, 1999; Tallman & Li, 1996). The number of countries is mostly found in the optional information of the annual reports. However, if this data does not exist in the optional part the geographical segmentation of the employees will be used for estimating the number of countries a company is active in. These numbers can often be found in the notes of an annual report.

2. *International sales* is operationalized as the ratio of foreign sales to total sales (Bobillo *et al.*, 2008; Capar & Kotabe, 2003; Gleason *et al.*, 2002; Gomes & Ramaswamy, 1999). Sullivan (1994) presented a comprehensive list of previous research done with ratio of foreign sales as a measurement of internationalization. It shows that a majority of studies use the ratio of foreign sales as a measurement. This variable will show how dependent a company is on its foreign sales. The data is commonly found in the notes of the annual report. Most companies have a geographical segmented description of their sales.

3. *International diversity of the board of directors* is operationalized as the ratio of foreign nationalities of the directors of the board (Collin, Smith, Umans, Broberg, & Tagesson, 2008). Most companies choose to publish information about their board members in their annual report. Due to the fact that this is a part of the optional information, the quality of the data varies. In very few cases the nationality of the members can be found. Therefore, the members of the board are observed by two individuals independently. By observing the member's names and photographs (and other information published) a subjective observation of the ratio of foreign members of the board is conducted. To control for the reliability of the results two other individuals are asked to separately observe a small random sample of ten companies (Collin *et al.*, 2008). Their observations were crosschecked with the original results. The overall inter-rater reliability was 100 % for one of the tests and 93.6 % for the other test. There is always a risk with subjective observations as showed in one of the tests. However, the overall result of the inter-rater reliability tests indicates that the observations are reliable.

4. *Internationalization of HR* is operationalized as the ratio of foreign employees to total employees. This measure is a development of the control variable (total employees) used in previous research (Karakowsky & Lam, 2002; Luo, 1999). The ratio of foreign employees is not a measure of nationalities of the employees, but a ratio of the number of foreign employees. The number of employees and the geographical segmentation of the employees are often found in the notes of the company's annual report.

5. *Market commitment* is operationalized as a dummy variable where companies belonging to transfer-related entry modes are coded (0) and companies belonging to FDI-related entry modes are coded (1). The market commitment is derived from the optional part of the annual report. Hence, the data quality varies. To determine market commitment the data is subjectively observed by two individuals. The basis of the decision is foreign employees. If a company possesses foreign HR the presumption is that it is a result of FDI-related entry modes. Also, if the company reports acquisitions abroad and if the company possesses foreign assets these are seen as factors leaning towards FDI-related entry modes.

6. *International involvement* is operationalized as the ratio of foreign assets to total assets (Bobillo *et al.*, 2008; Gleason *et al.*, 2002; Gomes & Ramaswamy, 1999). The data is acquired from the notes in the annual report. The measure of foreign assets to total assets can be used as one method to see how dependent the company is on its overseas production (Gomes & Ramaswamy, 1999).

7. *International ownership* is operationalized as the ratio of foreign votes to total votes of the shares (Collin *et al.*, 2008). In listed Swedish companies the owner of a share in the company normally has the right to a vote. In other words, the variable measures the ratio of foreign owned votes. However, there are different shares in some companies that have different voting values. An A-share is normally worth more votes than a B-share. The data will be collected from Fristedt and Sundqvist, (2006). The use of this source is because the annual reports often lack the information about foreign owned shares and votes.

8. *The Gerlofstig-Lindstrand Index* is operationalized by adding five different ratios (similar to Sullivan's index of internationalization (1994)). All the ratios included in the index are discussed individually above. The measures included are the ratio of foreign sales, the ratio of foreign board, the ratio of foreign employees, the ratio of foreign assets, and the ratio of international ownership. The result is a number from zero to five that each company can get. This number is the degree of internationalization in our model. By adding the individual ratios the index should represent the complexity of the relationship.

#### *4.5.2 Firm performance*

The dependent variables are operationalized as Return on assets (ROA) and Return on Equity (ROE). ROA is calculated as the ratio between net income and total assets (Bobillo *et al.*, 2008; Gleason *et al.*, 2002; Gomes & Ramaswamy, 1999; Riahi-Belkaoui, 1998; Collin *et al.*, 2008). ROE is calculated as the ratio between net income and shareholder's equity (Gleason *et al.*, 2002). Net income is occasionally referred to as net profit or loss in annual reports.

#### *4.5.3 Control variables*

Three control variables are used in this research. The first control variable measures firm size and is operationalized as the total number of employees (Bobillo *et al.*, 2008; Capar & Kotabe, 2003; Luo, 1999; Tallman & Li, 1996). The second variable is also measuring firm size and is operationalized as turnover (Tallman & Li, 1996; Collin *et al.*, 2008). Turnover is defined as net sales. The third control variable is industry (Capar & Kotabe, 2003; Gomes & Ramaswamy, 1999; Collin *et al.*, 2008). This controls for any differences between industries. There are ten industries: (1) energy, (2) materials, (3) industrials, (4) consumer discretionary, (5) consumer staples, (6) healthcare, (7) financial, (8) IT, (9) telecom, (10) utilities (Nasdaq OMX, 2009).



#### **4.6 Reliability**

Reliability deals with an important part of the dissertation and is commonly used in quantitative studies. It allows the researcher as well as the reader of the dissertation to check the consistency of the study performed. In other words, would a researcher performing the same tests at a different time get the same results (Eriksson & Wiedersheim-Paul, 2006; Bryman & Bell, 2007; Saunders *et al.*, 2009)? There are four threats to the reliability of a study according to Saunders *et al.* (2009). The first is Subject or participant error that might give different results pending on what time or under what mindset the study is performed. Subject or participant bias, is the second threat to reliability. The study might be faulty if the subjects or participants give answers they think the researcher wants. The third threat, Observer error, can negatively affect the reliability with the observers of a study conducting it in different ways. Finally the fourth threat is Observer bias, which leads to conflicting result if the observers do not perceive the data coherently. There is also a different way to judge if a study is reliable or not. This is to check for three different factors (Bryman & Bell, 2007). The first factor is Stability, which checks if a test is constant over time and if it is possible to replicate. To achieve high stability the goal is that there would be little fluctuation in the result (*ibid.*). The second factor is Internal reliability. This factor checks if the dissertations' measurements examine the same thing. For instance, if the researcher uses multiple indicators to measure an outcome these indicators must have coherence and be related to each other (*ibid.*). The third and final factor is Inter-observer consistency. When there is more than one observer conducting the research, there is a risk for lack of subjective judgment. The way one observer categorizes a sample might not be the same way another observer categorizes it (*ibid.*).

This dissertation will be using annual reports from specific years to collect the data for a quantitative research. This is already published data and the accessibility of the data allows the test to be easily replicable which gives a stable and reliable dissertation. Also, previous published researches have used similar measurements and indicators to investigate the relationship between international diversification and firm performance. Thus, the research measurements show a

high reliability. To measure the internal reliability, the Cronbach Alpha coefficient is used and the results of this test will influence further tests and the analysis. The final factor inter-observer consistency is manageable through the clarity of the data used. In other words, the financial information in the annual reports is regulated by laws and should be consistent to a certain extent. These factors lead to a high reliability for the study.

#### **4.7 Validity**

The validity of a research is important to prove that the research variables measure the correct concept (Saunders *et al.*, 2009). Having a low validity gives the risk that the research lacks relevance to the area it is investigating (Bryman & Bell, 2007). There are four main types of validity that one can distinguish between according to Bryman and Bell (2007). Measurement validity is the first. In short it investigates if an indicator is really measuring and explaining the correct concept. The second is Internal validity. This validity refers to how well the conclusions drawn from the relationship between two or more variables hold. External validity, which is the third type, relates to how well the result of a study can be generalized over a larger sample than the specific one that was investigated. Last of the four validity types is Ecological validity. This type concerns the trustworthiness of social scientific findings and its applicability to the every day life of people (Bryman & Bell, 2007). In order to determine the validity of a study Bryman and Bell (2007) give five different factors to utilize. Face validity is what a researcher must achieve when developing a new measure. The measure must at least appear to measure the correct concept. Concurrent validity seeks to exploit existing criteria to investigate a phenomenon. Predictive validity, which is the third factor, contradicts Concurrent validity and uses future criterions to measure and investigate. The fourth factor, Construct validity, employs hypotheses that are derived from established theories in the relevant concept. The last factor is Convergent validity, which utilizes other measurements to strengthen itself (*ibid.*).

Since this dissertation is not investigating social scientific data to a larger extent the ecological validity does not need to be that high. However, measured validity, internal validity, and together with external validity are the types of validity that

need to be taken into account. In this dissertation the validity is created through the use of construct validity. The well established theories employed in the dissertation create the foundation for eight hypotheses. These hypotheses are operationalized to create measurements that are clearly defined and tested. The measurements are then applied to our sample that consists of listed companies on the Swedish stock exchange. As mentioned above, there are a lot of research on the problem and area of interest. Therefore, the validity of our dissertation would be considered quite high.

#### **4.8 Generalisability**

The aim of many researchers is to apply the results of their study on an entire population. This means that they want to be able to generalize their findings (Bryman & Bell, 2007). Generalization, which is also known as *external validity*, is important for the researcher. This dissertation has a deductive approach and one of the characteristics of this approach is to be able to generalize the results. It is important to collect a sufficient sample size and also to question if the sample can be generalized (Saunders *et al.*, 2009). If the researcher is not able to generalize the results, they can not say that their result is relevant to anything other than their specific sample. The contribution to the scientific world would then be limited or even insignificant.

In this dissertation the aim is to use a sample that is representative for Swedish companies with international diversification to be able to generalize the results. If another study is conducted on Swedish companies with international diversification the result should be similar to the results of this research. However, the use of non-probability sample techniques reduces the possibility to generalize the results on all Swedish companies.

## 5. Empirical Findings and Analysis

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*The fifth chapter includes a presentation of the empirical data collected for the research. At first the sample is discussed. Later, the results for each hypothesis and the GL-Index are presented and discussed. Finally, an Ad – hoc analysis is presented.*

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### 5.1 Empirical Findings

#### 5.1.2 Sample

The initial sample consisted of 236 listed Swedish companies. Out of these, 79 companies were excluded. The excluded companies are banks, insurance, property management/real estate, shipping, or investment companies. The reason for excluding these companies is that accounting requirements differ (Aktiesparernas Aktieskola, 1997; Broberg, 2006). Also, the focus of this dissertation is international expansion; therefore, companies that only conduct national business were excluded. This resulted in 158 companies representing our final sample. These companies are found on three lists on the Swedish Stock Exchange: Small Cap, Mid Cap, and Large Cap. Initial analysis of the data is conducted through Pearson correlation tests. The results are shown in table 5.1. There is significant correlation between some of the independent and dependent variables. According to Pallant (2007) a bivariate correlation of 0.7 or above indicates multicollinearity. Variables with such a high correlation should be separated in further tests. The results of the Pearson correlation test show that there is multicollinearity between the dependent variables and the control variables. Thus, these variables will be separated in further tests. Also, there is multicollinearity between the GL-Index and some of the independent variables. This is expected because the independent variables are included in the GL-Index. Again, this will not affect further tests because these variables will be tested separately.

Table 5.1: Descriptive Statistics and Pearson Correlation Coefficients

Variables	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12
1 No of Countries	13.90	16.771												
2 Foreign Sales	0.606	0.277	0.514**											
3 Foreign Board	0.098	0.166	0.047	0.307**										
4 Foreign HR	0.427	0.328	0.412**	0.502**	0.239**									
5 Market Commitment	0.86	0.347	0.047	0.254**	0.094	0.371**								
6 Foreign Assets	0.379	0.279	0.478**	0.640**	0.336**	0.808**	0.145							
7 International ownership	0.223	0.199	0.159	0.338**	0.478**	0.293**	0.000	0.395**						
8 GLIndex	1.275	0.867	0.346**	0.695**	0.468**	0.701**	0.323**	0.854**	0.533**					
9 ROA	0.019	0.197	0.304**	-0.093	-0.120	0.177*	0.300**	0.067	-0.094	0.117				
10 ROE	0.061	0.466	0.327**	-0.011	-0.073	0.188*	0.269**	0.084	-0.032	0.081	0.786**			
11 Turnover MSEK	11388.7	30716.8	0.309**	0.390**	0.199*	0.293**	0.141	0.269*	0.139	0.411**	0.083	0.090		
12 Size of HR	5277.5	12953.7	0.405**	0.412**	0.150	0.371**	0.147	0.316**	0.153	0.445**	0.095	0.107	0.939**	
13 Industry	3.85	2.215	-0.141	-0.172	0.165*	-0.175*	-0.210**	-0.029	0.008	-0.202*	-0.162*	-0.061	-0.131	-0.188*

n = 158

\*\*  $p < 0.01$

\*  $p < 0.05$

### 5.1.3 Type of data

In the research, two types of data are used. The first type, numerical data, is values that are “measured or counted numerically as quantities” (Saunders *et al.*, 2009, p.418). Data that cannot be measured numerically is referred to as categorical. Numerical data can be used in a wider range of statistical tests than categorical data (*ibid.*). See table 5.2 for a list of the types of data used for each variable in this research.

Table 5.2 Types of data

Variable	Operationalization	Type
Independent	Number of countries	Numerical
Independent	Foreign sales / total sales	Numerical
Independent	Foreign board members / Total board members	Numerical
Independent	Foreign HR / Total HR	Numerical
Independent	FDI-related entry modes or Transfer-related entry modes	Categorical
Independent	Foreign assets / Total Assets	Numerical
Independent	Foreign owned votes / Total owned votes	Numerical
Independent	Sum of Foreign sales / total sales, Foreign board members / Total board members, Foreign HR / Total HR, Foreign assets / Total Assets, Foreign owned votes / Total owned votes	Numerical
Dependent	Return on Assets	Numerical
Dependent	Return on Equity	Numerical
Control	Total HR	Numerical
Control	Turnover (net sales)	Numerical
Control	Industry	Categorical

### 5.1.4 Independent variables

The amount of data reported in the annual reports varied. Therefore, in order to distinguish the amount of data collected for the independent variables a descriptive statistic analysis was conducted. The number of cases (companies) included in the data vary from 69 to 158 companies (as shown below in table 5.3). The variables with the highest number of companies reported were Foreign Board and GL-index. The variable with the least amount of data collected was Foreign Assets. The companies missing certain values were excluded pair wise in order to

get a sample as large as possible. If the companies were excluded list wise from the study, the final sample would not be robust. Therefore, pair wise exclusion of missing values is used.

Table 5.3 *Descriptive Statistics (Independent variables)*

	<b>Number</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
<b>No of Countries</b>	137	1	130	13.90
<b>Foreign sales</b>	103	0.02	1.00	0.6061
<b>Foreign Board</b>	158	0.00	1	0.0980
<b>Foreign HR</b>	154	0.00	1.00	0.4265
<b>Foreign Assets</b>	69	0.00	0.94	0.3790
<b>International ownership</b>	142	0.00	0.95	0.2232
<b>GL-Index</b>	158	0.00	4.88	1.2749
<b>Valid N (listwise)</b>	57			

One independent variable – the level of market commitment - was measured with categorical data. 22 companies were observed to belong to the group with transfer-related entry modes and 136 companies belonged to the group FDI-related entry modes (see table 5.4 for more details). The missing value 78 refers to the excluded companies.

Table 5.4 *Frequency statistics (Market commitment)*

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Transfer-related</b>	22	9.3	13.9	13.9
<b>FDI-related</b>	136	57.6	86.1	100.0
<b>Total</b>	158	66.9	100.0	
<b>Missing</b>	78	33.1		
<b>Total</b>	236	100.0		

### 5.1.5 *Dependent variables*

The dependent variables ROA and ROE are both collected as numerical data. For both variables the total number of companies observed is 158 (see table 5.5). The mean of ROA is 0.0197 and the mean for ROE is 0.0609.

Table 5.5 *Descriptive statistics (Dependent variables)*

	<b>Number</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
<b>ROA</b>	158	-1.61	0.38	0.0197
<b>ROE</b>	158	-3.41	1.64	0.0609
<b>Valid N (listwise)</b>	158			

### 5.1.6 Control variables

Two of the three control variables (Turnover and Size of HR) are both measured with numerical data. The total number of companies observed for Turnover is 157. One company is missing due to data reported in a different currency. The total number of companies observed for Size of HR is 157. One company did not report the total number of employees. See table 5.6 for more details including the mean.

Table 5.6 *Descriptive statistics (Control variables)*

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
<b>Turnover MSEK</b>	157	0.88	240 559.00	11 388.7003
<b>Size of HR</b>	157	6	81184	5 277.47
<b>Valid N (list wise)</b>	157			

The control variable Industry is categorical data. There are ten different industries (Nasdaq OMX, 2009). However, only nine of them are shown in table 5.7. The industry Utilities is not included because of the lack of listed Swedish companies belonging to this industry. The industry sector with the highest number of companies is Industrials (23.3 %) followed by IT (16.1 %). The industry sectors with the least number of companies are Financial (0.4 %), Energy (0.8 %), Telecom (0.8 %), and Consumer Staples (1.7 %). The low number of Financial companies is most likely to be explained by the choice of excluding such companies. One reason for the low frequency in the other sectors could be the fact that there are few players in such industries. The missing value 78 refers to the excluded companies.



Table 5.7 *Frequency statistics (Control variable)*

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Energy</b>	2	0.8	1.3	1.3
<b>Materials</b>	10	4.2	6.3	7.6
<b>Industrials</b>	55	23.3	34.8	42.4
<b>Consumer Discretionary</b>	24	10.2	15.2	57.6
<b>Consumer Staples</b>	4	1.7	2.5	60.1
<b>Healthcare</b>	21	8.9	13.3	73.4
<b>Financial</b>	1	0.4	0.6	74.1
<b>IT</b>	39	16.5	24.7	98.7
<b>Telecom</b>	2	0.8	1.3	100.0
<b>Total</b>	158	66.9	100.0	
<b>Missing</b>	78	33.1		
<b>Total</b>	236	100.0		

### 5.1.7 Sensitivity analysis

There are two parts of the sensitivity analysis. The first step is to test the distribution of the variables. To test for normal distribution the Kolmogorov-Smirnov test is used. The sample is normally distributed if the significant value of Kolmogorov-Smirnov is equal to or exceeds 0.05. Histograms and boxplots are also used to depict the normality of the sample as well as to check for outliers. The test for normal distribution is only done on the continuous variables (Pallant, 2007). To test for normality on the variable for Market Commitment would not provide any useful values. The independent variables are tested for an informative purpose. The distribution of the independent variables does not provide any useful information to determine further tests. However, it is interesting to see the distribution of internationalization for listed Swedish companies.

The result of the Kolmogorov-Smirnov test for the independent variables is shown in table 5.8. All of the independent variables have no indication of normal distribution. Their significance values are below 0.05. The result of the Kolmogorov-Smirnov test is further confirmed when analyzing the histograms (see Appendix 1). The histograms for Foreign Sales, Foreign Assets, and GL-index are the only variables that are close to show an indication of normal distributed results. Also, their significance values for the Kolmogorov-Smirnov test show some indication of difference from the other variables. However, the

values are not near 0.05 that is necessary to show normal distribution. The uneven distribution for Number of Countries is assumed to exist because of differences in the size of companies. For the ratios (Foreign Sales, Foreign Board, Foreign HR, Foreign Assets, International ownership, and GL-index) the size of the company does matter but not to the same extent. A small company can have a high ratio of foreign sales.

Table 5.8 *Kolmogorov-Smirnov test (independent variables)*

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
<b>No of Countries</b>	0.221	137	0.000
<b>Foreign Sales</b>	0.124	103	0.001
<b>Foreign Board</b>	0.330	158	0.000
<b>Foreign HR</b>	0.109	154	0.000
<b>Foreign Assets</b>	0.135	69	0.003
<b>International ownership</b>	0.165	142	0.000
<b>GL-index</b>	0.098	158	0.001

The statistical techniques used to test the data are sensitive to outliers. An outlier is a case with a value well above or below the majority of the other cases (Pallant, 2007). The boxplots and the tables for extreme cases in Appendix 1 are used to check for any outliers. Case number 96 shows extreme values for all independent variables except for the variable Number of Countries. However, it is only for the variables Foreign Board and the GL-index that the value is well above the majority. We consider case number 96 to be a part of our target population; thus it should remain in our data. According to Tabachnick and Fidell (2007), “cases with extreme scores, which are, nonetheless, apparently connected to the rest of the cases, are more likely to be a legitimate part of the sample” (Tabachnick & Fidell, 2007, p.77).

The Kolmogorov-Smirnov test on the dependent variables shows significance values of 0.0 for both ROA and ROE (as shown in table 5.9). This suggests that both of the variables are not normally distributed. However, the histograms of ROA and ROE show some indication of normal distribution. The uneven distribution in both variables is assumed to be explained by the majority of companies having similar ROA (0-12.5 %) and ROE (0-33 %) as shown in Appendix 1, figure 15 and 17. This results in a small variation of the values. In the

histograms there are also cases found outside the majority of values. To get further information about these cases a boxplot is used.

Table 5.9 *Kolmogorov-Smirnov test (Dependent variables)*

	<b>Kolmogorov-Smirnov</b>		
	<b>Statistic</b>	<b>df</b>	<b>Sig.</b>
<b>ROA</b>	0.256	158	0.000
<b>ROE</b>	0.243	158	0.000

The boxplots for ROA and ROE show a more detailed view of the distribution including outliers (see Appendix 1, figure 16 and 18). Both boxplots show more negative than positive outliers. One case, case number 205, shows negative extreme values for ROA and ROE. The case is kept in the analysis for the same reasons the independent outlier was kept. It is part of the targeted population and should be a legitimate part of the sample (Tabachnick & Fidell, 2007).

The result of the Kolmogorov-Smirnov test for the control variables is shown in table 5.10. The significance values for both Turnover and Size of HR are below 0.05. This indicates that they are not normally distributed. The histograms for the control variables are of equal structure (see Appendix 1, figure 19 and 21). Most of the data are found on the left side of the charts. One reason for this could be that the majority of cases are found on the Small Cap list. These companies are of smaller size than the companies found on the Mid and Large Cap. Therefore, the cases on the Small Cap list reduce the level of distribution.

Table 5.10 *Kolmogorov-Smirnov test (Control variables)*

	<b>Kolmogorov-Smirnov</b>		
	<b>Statistic</b>	<b>df</b>	<b>Sig.</b>
<b>Turnover MSEK</b>	0.359	157	0.000
<b>Size of HR</b>	0.347	157	0.000

The fact that the majority of the cases are found on the Small Cap list is also shown in the boxplots of the control variables (Appendix 1, figure 20 and 22). Almost all the outliers are cases from the Mid and Large Cap lists.

The second part of the sensitivity analysis involves testing for any differences between the companies on the three lists (Small, Mid, and Large Cap) in the

sample. The intended purpose of including this test is to determine if further tests should be conducted on the lists separately or if they should be combined. The choice of the test depends upon the result of the normality tests. The one-way between groups variance test (one-way ANOVA) should be used if the result of the normality tests indicates normal distribution. If there is no indication of normal distribution, the non-parametric test of Kruskal-Wallis should be used. However, when the collected sample exceeds 30 in a variable, the variable is large enough to be robust (Pallant, 2007). Thus, the one-way ANOVA tests can be used even if the assumption of normality is violated. The results from the Kolmogorov-Smirnov tests in the first part of the sensitivity analysis indicate the use of the non-parametric Kruskal-Wallis test. However, the number of cases in the sample ( $69 < N > 158$ , see tables 5.3, 5.5, and 5.6 for more details) allows us to use the one-way ANOVA test. The tests are done on independent, dependent, and control variables. The significance level for the one-way ANOVA is 0.05.

For the independent variable Number of Countries there are significant differences between the groups (sig. value of 0.0 as seen in table 5.11). However, the one-way ANOVA test only indicates that there are differences between the lists but does not show which lists that differ. To see in more detail which list that differ from which list, Tukey's test is used. The result of this test show significant differences between all three lists (see Appendix 2, table 1).

Table 5.11 *One-way between groups variance test (No. of countries)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	12 182.111	2	6091.056	31.308	0.000
<b>Within Groups</b>	26 070.458	134	194.556		
<b>Total</b>	38 252.569	136			

For the independent variable Foreign Sales there are significant differences between the groups (sig. value of 0.0 as seen in table 5.12). Tukey's test (see Appendix 2 table 4) shows that there are significant differences between all three lists.

Table 5.12 *One-way between groups variance test (Foreign sales)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	2.442	2	1.221	22.753	0.000
<b>Within Groups</b>	5.367	100	0.054		
<b>Total</b>	7.810	102			

For the independent variable Foreign Board there are significant differences between the groups (sig. value of 0.013 as seen in table 5.13). The results of Tukey's test (see Appendix 2, table 6) show that there is a significant difference between Large Cap and Small Cap (sig. value of 0.033). There is no significant difference between Large Cap and Mid Cap (sig. value of 0.892). The significance value 0.055 indicates that there is no significant difference between Mid Cap and Small Cap.

Table 5.13 *One-way between groups variance test (Foreign board)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	0.238	2	0.119	4.494	0.013
<b>Within Groups</b>	4.103	155	0.026		
<b>Total</b>	4.341	157			

For the independent variable Foreign HR there are significant differences between the groups (sig. value of 0.0 as seen in table 5.14). Tukey's test (see Appendix 2, table 8) shows that there are significant differences between all three lists.

Table 5.14 *One-way between groups variance test (Foreign HR)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	4.341	2	2.171	26.990	0.000
<b>Within Groups</b>	12.144	151	0.080		
<b>Total</b>	16.486	153			

For the independent variable Market Commitment there are significant differences between the groups (sig. value of 0.044 as seen in table 5.15). The results of Tukey's test (see Appendix 2, table 10) show that there is significant difference between Large Cap and Small Cap (sig. value of 0.047). However, there are no significant differences between Large Cap and Mid Cap (sig. value of 0.077) as well as between Mid Cap and Small Cap (sig. value of 1.0).

Table 5.15 *One-way between groups variance test (Market commitment)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	0.748	2	0.374	3.186	0.044
<b>Within Groups</b>	18.189	155	0.117		
<b>Total</b>	18.937	157			

For the independent variable Foreign Assets there are significant differences between the groups (sig. value of 0.0 as seen in table 5.16). The results of Tukey's test (see Appendix 2, table 12) show that there are significant differences between Large Cap and Small Cap (sig. value of 0.0) and between Mid Cap and Small Cap (sig. value of 0.003). However, between Large Cap and Mid Cap there is no significant difference (sig. value of 0.476).

Table 5.16 *One-way between groups variance test (Foreign assets)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	1.371	2	0.685	11.464	0.000
<b>Within Groups</b>	3.946	66	0.060		
<b>Total</b>	5.317	68			

For the independent variable International ownership there are significant differences between the groups (sig. value of 0.01 as seen in table 5.17). The results of Tukey's test (see Appendix 2, table 14) show significant differences between Large Cap and Mid Cap (sig. value of 0.026) and between Mid Cap and Small Cap (sig. value of 0.046). However, there is no significant difference between Large Cap and Mid Cap (sig. value of 0.906).

Table 5.17 *One-way between groups variance test (International ownership)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	0.361	2	0.181	4.812	0.010
<b>Within Groups</b>	5.217	139	0.038		
<b>Total</b>	5.579	141			

For the model (included as an independent variable) there are significant differences between the groups (sig. value of 0.0 as seen in table 5.18). Tukey's test (see Appendix 2, table 16) shows that there are significant differences between Large Cap and Small Cap (sig. value of 0.0) and between Mid Cap and

Small Cap (sig. value of 0.0). However, there is no significant difference between Large Cap and Mid Cap (sig. value of 0.065).

Table 5.18 *One-way between groups variance test (GL-Index)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	30.415	2	15.208	26.916	0.000
<b>Within Groups</b>	87.575	155	0.565		
<b>Total</b>	117.991	157			

For the dependent variable ROA there are significant differences between the groups (sig. value of 0.005 as seen in table 5.19). The results of Tukey's test (see Appendix 2, table 18) show significant differences between Large Cap and Small Cap (sig. value of 0.016) and Mid Cap and Small Cap (sig. value 0.025). However, there is no significant difference between Large Cap and Mid Cap (sig. value of 0.899).

Table 5.19 *One-way between groups variance test (ROA)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	0.410	2	0.205	5.590	0.005
<b>Within Groups</b>	5.688	155	0.037		
<b>Total</b>	6.098	157			

For the dependent variable ROE there are significant differences between the groups (sig. value of 0.002 as seen in table 5.20). Tukey's test (see Appendix 2, table 20) shows that there is significant difference between Large Cap and Small Cap (sig. value of 0.002). However, there are no significant differences between Large Cap and Mid Cap (sig. value of 0.313) and between Mid Cap and Small Cap (sig. value of 0.086).

Table 5.20 *One-way between groups variance test (ROE)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	2.689	2	1.344	6.623	0.002
<b>Within Groups</b>	31.463	155	0.203		
<b>Total</b>	34.152	157			

For the control variable Turnover there are significant differences between the groups (sig. value of 0.0 as seen in table 5.21). The results of Tukey's test (see Appendix 2, table 22) show that there are significant differences between Large Cap and Mid Cap (sig. value of 0.0) as well as between Large Cap and Small Cap

(sig. value of 0.0). However, there is no significant difference between Mid Cap and Small Cap (sig. value of 0.644).

Table 5.21 *One-way between groups variance test (Turnover)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	5.715E10	2	2.857E10	48.872	0.000
<b>Within Groups</b>	9.004E10	154	5.847E8		
<b>Total</b>	1.472E11	156			

For the control variable, Size of HR, there are significant differences between the groups (sig. value of 0.0 as seen in table 5.22). The results of Tukey's test (see Appendix 2, table 24) show that there are significant differences between Large Cap and Mid Cap (sig. value of 0.0) and between Large Cap and Small Cap (sig. value of 0.0). However, there is no significant difference between Mid Cap and Small Cap (sig. value of 0.522).

Table 5.22 *One-way between groups variance test (Size of HR)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	1.061E10	2	5.307E9	52.521	0.000
<b>Within Groups</b>	1.556E10	154	1.011E8		
<b>Total</b>	2.618E10	156			

For the last control variable, Industry, there are significant differences between the groups (sig. value of 0.0 as seen in table 5.23). Tukey's test (see Appendix 2, table 26) shows that there is no significant difference between Large Cap and Mid Cap (sig. value of 0.597). However, there are significant differences between Large Cap and Small Cap (sig. value of 0.001) and between Mid Cap and Small Cap (sig. value of 0.010).

Table 5.23 *One-way between groups variance test (Industry)*

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	76.189	2	38.094	8.506	0.000
<b>Within Groups</b>	694.166	155	4.478		
<b>Total</b>	770.354	157			

To conclude, there are significant differences between the groups for all variables. This would suggest that further tests should be conducted on each list separately. However, when analyzing the results of Tukey's test most of the results indicate that there is no significant difference between Large Cap and Mid Cap. This



suggests that further tests should be conducted only after combining Large Cap and Mid Cap. Small Cap would be separated and tested individually. However, the results of Tukey's test for Foreign Board, Market Commitment, ROE, Turnover, and Size of HR show that there are no significant differences between Mid Cap and Small Cap. This would suggest that the lists Mid Cap and Small Cap should be combined. Overall, the results of Tukey's test indicate that the lists should be separated or combined differently for each variable. To be consistent all three lists are combined into one list. Also, if the lists were to be separated the number of cases on each list would be too few for certain variables. This would not result in a robust sample; thus limiting the possibility for future tests.

### *5.1.8 Hypotheses*

The following section presents the empirical findings for each hypothesis. The method for each part of the multiple regression tests is only described in the first hypothesis. Each hypothesis ends with a brief conclusion of the results. However, the analysis of the results is discussed in section 5.2.

#### *5.1.8.1 Hypothesis 1*

The first hypothesis is as follows:

*The level of geographic diversification is positively related to performance.*

The level of geographic diversification is operationalized as the number of countries a company is active in. The mean for this variable is 13.90 (Appendix 3) which is interpreted as a company on the Swedish stock exchange is on average active in almost 14 countries. The Pearson Correlation coefficients for both dependent variables ROA and ROE show values of 0.304 and 0.327 respectively (Appendix 3). This indicates that there is a positive relationship between geographic diversification and performance. To test if this relationship is significant a multiple regression analysis is conducted. The first step when analyzing the results of the multiple regression analysis is to look at the Tolerance and VIF values. Both values are indicators of multiple correlation between the independent variables in the model (Pallant, 2007). If the Tolerance value is below 0.10 it indicates a high multiple correlation with the other independent

variables in the model (*ibid.*). The value of VIF should be below 2.5 otherwise it indicates multiple correlation between the independent variables (Djurfeldt, Larsson, & Stjärnhagen, 2003). The Tolerance values and VIF values for the multiple regression test with Number of Countries and ROA indicate high multiple correlation between the control variables Turnover and Size of HR (see table 3 in Appendix 4 for details). A similar result is seen when the test is done with ROE as the dependent variable (Appendix 4, table 14). This is an expected outcome because both variables measure the size of the company. Due to the high risk of multicollinearity, a regression analysis is conducted without each of the control variables that showed high multicollinearity. The Tolerance and VIF values for these tests show less risk of multiple correlation (for details see Appendix 4, tables 6, 9, 17, and 20).

The second step of the analysis is to look at the statistical significance of the model. The R square value shows “how much of the variance in the dependent variable [...] is explained by the model” (Pallant, 2007, p. 158). In the ANOVA of the regression analysis, the significance value indicates if the model is statistically significant or not. In other words, a significance value of 0.05 or less indicates that the variance in the dependent variable is statistically explained by the independent variables in the model. In this dissertation, a significance value of 0.1 is also acceptable. An increase in the significance value reduces the statistical significance of the model.

There is a statistical significance for the models in hypothesis 1. The significance values of the models (including control variables) are 0.003 for the dependent variable ROA and 0.004 for the dependent variable ROE (Tables 5.24 and 5.25). The tests for both ROA and ROE but without the control variable Size of HR are also significant, significance value of 0.002 (tables 5.24 and 5.25). Similar results are found for the test without the control variable Turnover (tables 5.24 and 5.25). When the control variables are excluded the significance values are 0.0 and 0.0 for ROA and ROE respectively (tables 5.24 and 5.25) which would indicate that the control variables decrease the statistical significance of the model. The R square value is 0.113 for the model including all control variables with the dependent variable ROA and 0.11 for the model with the dependent variable ROE (tables

5.24 and 5.25). This suggests that 11.3 % of the variance of the dependent variable ROA is explained by the model. For the variance in ROE, the model explains 11 %. The tests excluding the control variable Size of HR show an R square value of 0.107 for both ROA and ROE (table 5.24 and 5.25). For the tests without the control variable Turnover the R square values are 0.109 and 0.108 for ROA and ROE respectively (see table 5.24 and 5.25). When all control variables are excluded the R square values for ROA and ROE are 0.092 and 0.107 respectively (see table 5.24 and 5.25).

Table 5.24 *No. of Countries and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.113	0.003*
Without Size of HR	0.107	0.002*
Without Turnover	0.109	0.002*
Without control variables	0.092	0.000*

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.25 *No. of Countries and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.110	0.004*
Without Size of HR	0.107	0.002*
Without Turnover	0.108	0.002*
Without control variables	0.107	0.000*

\* sig. at 0.05, \*\* sig. at 0.1

The final part of the analysis is to decide which of the variables that is contributing the most to the model. That is, which of the variables makes the strongest contribution to explaining the dependent variable when controlling for the variance explained by all other variables is controlled for (Pallant, 2007)? The variable with the highest value of the standardized Beta coefficient (negative sign ignored) makes the strongest contribution to explaining the dependent variable. The significance value for the same Beta coefficient indicates if this contribution is statistically significant or not (*ibid.*). For both the model with ROA as the dependent variable and the model with ROE as the dependent variable and the control variables included, the independent variable Number of Countries receives the highest Beta coefficient (0.323 and 0.348 respectively). Both contributions are statistically significant (see Appendix 4, tables 3 and 14). For the tests excluding the control variable Size of HR, for ROA and ROE, Number of Countries have the highest Beta value (see Appendix 4, tables 6 and 17). Similarly, the variable Number of Counties has the highest Beta value in the tests for both ROA and

ROE but without the control variable Turnover (Appendix 4, tables 9 and 20). This suggests that the independent variable Number of Countries is the strongest contributing variable to the model when explaining the variance in both ROA and ROE.

To conclude, the independent variable Number of Countries is shown to have statistical significance for the dependent variables ROA and ROE. The correlations between the independent variable and the dependent variables are positive. This suggests that if a company increases the number of countries they are active in, ROA and ROE will increase. In other words, the positive relationship between geographic diversification and performance is statistically significant. Thus, hypothesis 1 is accepted. However, the results should be interpreted with caution. The probability is high that performance influence geographic diversification (a reversed relationship). A company with high performance is more likely to go abroad.

#### 5.1.8.2 Hypothesis 2

The second hypothesis is as follows:

*The level of international sales is positively related to performance.*

The level of international sales is operationalized as the ratio of foreign sales. The mean for the ratio is 0.606 which is interpreted as the average company on the Swedish stock exchange has 60 % of its sales abroad. The correlation coefficient for ROA is -0.093 and for ROE -0.011 (Appendix 3). This indicates that the relationship between international sales and performance is negative. To test if these relationships are statistical significant a multiple regression analysis is used. The first step of the analysis is to look at the Tolerance and VIF values of the model. The Tolerance value should be higher then 0.1 to avoid the risk of multiple correlation. For VIF the value should be less then 2.5. For the control variables Turnover and Size of HR, the Tolerance and VIF values show a risk for multiple correlation, when included in the same model. The Tolerance values are close to 0.1 and the VIF values are close to 10 (Appendix 4, tables 25 and 36). However, the risk of multicollinearity is reduced when the control variables Turnover and

Size of HR are excluded separately from the models (see Appendix 4, tables 28, 31, 39, and 42 for more details).

The next step is to look at the statistical significance of the model. For the dependent variable ROA with all the control variables included the significance value is 0.218 (see table 5.26). This suggests that the model is not significant. The significance value for the dependent variable ROE (including all control variables) is 0.773 (table 5.27) which makes the model even less statistical significant. When excluding the control variables from the model the significance values for ROA and ROE are 0.352 and 0.913 respectively (see tables 5.26 and 5.27). This indicates that without the control variables the models with the independent variable Foreign Sales are less statistically significant. The significance values for ROA, when the control variables Size of HR and Turnover are excluded individually from the models, are close to the 0.1 significance level (see tables 5.26 and 5.27 for details). However, the models are not statistically significant. The R square values range from 0.009 to 0.056 for the dependent variable ROA (tables 5.26 and 5.27). For the dependent variable ROE the R square values range from 0.0 to 0.018 (tables 5.26 and 5.27). If the models have statistical significance they would explain between 0.9 % and 5.6 % and between 0 % to 1.8 % of the variance of the dependent variable ROA and ROE respectively. However, this is not the case.

Table 5.26 *Foreign Sales and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.056	0.218
Without Size of HR	0.055	0.132
Without Turnover	0.056	0.123
Without control variables	0.009	0.352

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.27 *Foreign Sales and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.018	0.773
Without Size of HR	0.014	0.712
Without Turnover	0.017	0.628
Without control variables	0.000	0.913

\* sig. at 0.05, \*\* sig. at 0.1

The third and final step when analyzing the model is to look at the standardized Beta to determine which variable makes the strongest contribution to the model.

For the dependent variable ROA the model recognizes the independent variable Foreign Sales as having the highest Beta value when the control variables are included. However, the significance value is above 0.104 which makes the contribution not significant (Appendix 4, table 25). Even if the significance level is reduced to 0.1 this model is not significant. When the control variable Size of HR is excluded from the model with ROA, the control variable Industry is contributing the most to explaining the model (Appendix 4, table 28). This contribution is significant. On the contrary, when excluding the control variable Turnover from the model, Foreign Sales is contributing the most to explaining the model (Appendix 4, table 31). The standardized Beta for the model with the dependent variable ROE (all control variables included) is highest for the control variable Size of HR (0.195). The statistical significance value is 0.515, which is not significant (Appendix 4, table 36). When the control variable Size of HR is excluded from the model with ROE, the control variable Turnover makes the strongest contribution to explaining the model. However, the contribution is not statistically significant (Appendix 4, table 39). The control variable Size of HR is contributing the most to explaining the model when the control variable Turnover is excluded from the model with ROE. The contribution is not statistically significant (Appendix 4, table 42).

To conclude, the models with the independent variable Foreign Sales are not statistically significant for both the dependent variables ROA and ROE. In contrast to the hypothesis, the correlation is negative. In other words, a higher ratio of foreign sales decreases the firm performance (ROA and ROE). The results of the analysis do not support the statement that the level of international sales is positively related to performance; thus, hypothesis 2 is rejected.

#### 5.1.8.3 Hypothesis 3

The third hypothesis is as follows:

*The level of international diversity of the board of directors is positively related to performance.*

International diversity of the board of directors is operationalized as the ratio of foreign board members. The mean of Foreign Board members is 0.098. This indicates that 10 % of the board members are foreigners in the average listed Swedish company (Appendix 3). The relationship between international diversity of the board of directors and performance is negative for both the model ROA and the model ROE. This is indicated by the correlation coefficients -0.12 for ROA and -0.073 for ROE (Appendix 3). The multiple regression analysis is used to test these relationships. The first step is to look at the values for Tolerance and VIF. These values indicate if there is any risk of multiple correlation between the variables. The Tolerance value should be above 0.1 to avoid multiple correlation. Table 47 (Appendix 4) shows that the tolerance values for Turnover and Size of HR are close to 0.1. The same result is shown in table 58 (Appendix 4). This indicates that the control variables Turnover and Size of HR have a high correlation. This result is supported by the VIF values for Turnover and Size of HR. If the VIF value is below 2.5 there is no risk of multiple correlation. The VIF values for Turnover and Size of HR are 8.812 and 8.832 respectively (Appendix 4, tables 47 and 58) for both models. The control variable Industry and the independent variable Foreign Board indicate no multiple correlation. Hence, the control variables Turnover and Size of HR was excluded from the model individually and tested again. These tests showed no risk for multiple correlation for the variables in the ROA and ROE models (see Appendix 4, tables 50, 53, 61, and 64).

The second step of the analysis is to look at the statistical significance of the models. The model with the dependent variable ROA, including the control variables, is not significant (sig. value of 0.154 in table 5.28). The same result is shown in table 5.29 for the model with all control variables for ROE (sig. value of 0.535). If the control variables are excluded from the model, the significance values are 0.133 for ROA and 0.362 for ROE (tables 5.28 and 5.29). The same can be seen when excluding the control variable Size of HR for ROE as well as the model that excludes the control variable Turnover for ROE (see table 5.28 and 5.29 for more details). However, at a significance level of 0.1 the result for the model with ROA that excludes the control variable Size of HR is significant at 0.083 (table 5.28). When Turnover is excluded from the model with ROA the

relationship also becomes statistically significant at 0.084 (table 5.29). The R square value for the model with ROA and all of the control variables included is 0.043 (see table 5.28). For the model with ROE and all of the control variables included the R square value is 0.02 (see table 5.29). When testing the models without the control variable Size of HR the R square values are not that varied (0.042). This is the same when testing the models without Turnover for ROA (see table 5.28 for details). However, when the model is tested without any of the control variables the R square value drops to 0.014 for the dependent variable ROA (table 5.29). For ROE the tested models have quite low R square values ranging from 0.005 to 0.02 (see table 5.29 for more details).

Table 5.28 *Foreign Board and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.043	0.154
Without Size of HR	0.042	0.083**
Without Turnover	0.042	0.084**
Without control variables	0.014	0.133

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.29 *Foreign Board and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.020	0.535
Without Size of HR	0.018	0.435
Without Turnover	0.020	0.373
Without control variables	0.005	0.362

\* sig. at 0.05, \*\* sig. at 0.1

The final step of the analysis is to determine which of the variables in the model makes the strongest contribution to explaining the dependent variable. The variables with the highest Beta value (any negative sign ignored) are Industry in the model with ROA with all control variables included and Size of HR in the model with ROE and all control variables included (Appendix 4, tables 47 and 58). The significance value for Industry is 0.124 and for Size of HR 0.518 (Appendix 4, tables 47 and 58). For the models that exclude Size of HR the control variable Industry has the highest Beta value for ROA and the control variable Turnover has the highest Beta value for ROE (Appendix 4, tables 50 and 61). When Turnover is excluded from the model the control variable Industry has the highest Beta value for ROA and for the model with ROE the control variable Turnover has the highest Beta value (Appendix 4, tables 53 and 64). However, all



of the Beta values for the variables are not statistically significant, even at a 0.1 significance level (Appendix 4, tables 50, 53, 61 and 64).

To conclude, the models for ROE with the independent variable Foreign Board are not statistically significant. However, the models with ROA that exclude the control variables Size of HR and Turnover separately have statistical significance at a 0.1 significance level. This is not the case for the model with ROA that includes all control variables and the model with ROA that excludes all of the control variables. The correlation is negative indicating that a higher level of international diversification of the board affects performance negatively. The low mean value (0.098) indicates that the number of foreign board members is not high for listed Swedish companies. The results presented above do not support the statement that international diversity of the board is positively related to performance. Thus, the hypothesis is rejected.

#### 5.1.8.4 Hypothesis 4

The fourth hypothesis is as follows:

*The level of international HR is negatively related to performance.*

The level of international HR is operationalized as the ratio of foreign HR. The mean of the measurement is 0.4265 which signifies that the average company on the Swedish stock exchange has more than 40 % of its employees abroad (see Appendix 3). The correlations for the models are positive for both ROA and ROE (0,177 and 0,188 respectively, see Appendix 3). The models are tested in a multiple regression analysis in order to test their significance. As the first step of the analysis the Tolerance and VIF values are investigated. For both the dependent variables ROA and ROE (with all control variables included) the models show a risk of multiple correlation between the control variables Turnover and Size of HR (see Appendix 4, tables 69 and 80). The independent variable Foreign HR and the control variable Industry show a low risk for multiple correlation. When the control variable Size of HR is excluded from the models with ROA and ROE, the risk of multiple correlation is reduced (see Appendix 4,

tables 72 and 83). Similar results are found when the control variable Turnover is excluded from the models with ROA and ROE (Appendix 4, tables 75 and 86).

The next step is to look at the statistical significance of the models. The significance value for the model with the dependent variable ROA and all the control variables included is 0.105 (table 5.30). This shows that the model is not significant for the variance in ROA even though it is close to the 0.1 significance level. For the dependent variable ROE with all control variables included the model has a significance value of 0.222 (table 5.31). This indicates that the model is not significant for either of the dependent models. The models with ROA are significant (at the 0.1 significance level) when each of the control variables Size of HR and Turnover are excluded separately from the models (table 5.30). For the model with ROE this is not the case when the control variables are individually excluded (table 5.31). Without the control variables the significance values are 0.028 for the dependent variable ROA and 0.02 for the dependent variable ROE (tables 5.30 and 5.31). Therefore, the models are significant at the 0.05 significance level when the control variables are excluded for both of the dependent variables. The R-square of the models with the control variables included is 0.05 for ROA and 0.037 for ROE (tables 5.30 and 5.31). This would indicate that 5 % of the variance in ROA is explained by the model and 3.7 % of the variance in ROE is explained by the model. The R square values do not change much when the control variables are excluded separately from the models (see table 5.30 and 5.31 for details). However, if the control variables are excluded the R square is 0.031 for ROA and 0.035 for ROE (tables 5.30 and 5.31).

Table 5.30 *Foreign HR and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.050	0.105
Without Size of HR	0.050	0.054**
Without Turnover	0.049	0.055**
Without control variables	0.031	0.028*

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.31 *Foreign HR and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.037	0.222
Without Size of HR	0.037	0.127
Without Turnover	0.037	0.126
Without control variables	0.035	0.020*

\* sig. at 0.05, \*\* sig. at 0.1

The final step is to analyze the standardized Beta to determine which variable makes the strongest contribution to the model. The independent variable Foreign HR has the strongest contribution to both the dependent variables ROA and ROE when all the control variables are included (see Appendix 4, tables 69 and 80). The contribution is statistically significant in the model with ROA (sig. value 0.084) as well as in the model with ROE (sig. value 0.058). It is the independent variable Foreign HR that is contributing the most to explaining both models with ROA when the control variables Size of HR and Turnover are excluded separately (see Appendix 4, tables 72 and 75). Both contributions are significant. A similar result is found for the models with ROE. Both contributions of Foreign HR are significant when the control variables Size of HR and Turnover are excluded individually (Appendix 4, tables 83 and 86).

In conclusion, the multiple regression is significant for the models with ROA as the dependent variable when the control variables Size of HR and Turnover are excluded separately. Also, the models for both ROA and ROE but without any of the control variables show statistical significance. The remaining models show no significance. This indicates that the relationship between the level of foreign HR and firm performance is to some extent significant. In the analysis it is interesting to look at the correlation of the model which points at a positive relationship for both of the dependent variables. In contrast to the hypothesis the positive relationship is unexpected. Therefore, the hypothesis is not supported and it is rejected.

#### 5.1.8.5 Hypothesis 5

The fifth hypothesis is as follows:

*The level of market commitment is positively related to performance.*

The level of Market Commitment is operationalized as a categorical value in which the company can use transfer related or FDI related entry modes. The mean for the market commitment variable is 0.86 (see Appendix 3). In other words, the average company on the Swedish stock exchange tends to utilize FDI-related entry modes. The correlation for ROA is 0.3 and for ROE the correlation is 0.269 (see Appendix 3). This signifies a positive relationship between the independent variable Market Commitment and the dependent variables (ROA and ROE). In other words, the more a company commits to a market the higher the performance they have. The next stage is to analyze the Tolerance and VIF in a multiple regression test. The Tolerance values for the control variables Turnover and Size of HR are close to the 0.1 level in both models (see Appendix 4, tables 91 and 102 for more details). This indicates a risk for multiple correlation and it is supported by the high VIF values for the same control variables (see Appendix 4, tables 91 and 102). The risk for multiple correlation is low in the remaining variables in the models for both dependent variables (see Appendix 4, tables 91 and 102). To lower the risk for multiple correlation the models for ROA and ROE were first tested without the control variable Size of HR and then without the control variable Turnover. The multiple correlation decreased for all of the models (see Appendix 4, tables 94, 97, 105 and 108).

In the second step of the analysis of the multiple regression the statistical significance is determined. The level of significance for the dependent variable ROA is 0.003, which is significant at a 0.05 significant level (see table 5.32). For ROE the statistical significance of the model is 0.014 (see table 5.33). This is also a significant value for the model. Hence, the models have a statistical significance for both the dependent variables when the control variables are included. The models are tested without the control variable Size of HR which gives significant values of 0.001 and 0.007 for ROA and ROE respectively (see table 5.32 and 5.33 for more details). This is statistically significant at a 0.05 significance level. When the models exclude the control variable Turnover the significance values are 0.001 and 0.006 for ROA and ROE respectively (see table 5.32 and 5.33 for more details). If all of the control variables are excluded the significance of the models increases for both the dependent variables (table 5.32 and 5.33 for more details). The second part of this step is to determine the R square value of the models. In

the first model for ROA the R square value is 0.102 (see table 5.32). In the first model for ROE the R square value is 0.078 (see table 5.33). In other words, 10.2 % of the variance in ROA is explained by the model. For ROE 7.8 % of the variance in ROE is explained by the model. For the other models for ROA the R square values vary from 0.09 to 0.102 (see table 5.32 for more details). The R square values for the same models with ROE vary even less from 0.072 to 0.077 (see table 5.33 for more details).

Table 5.32 *Market Commitment and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.102	0.003*
Without Size of HR	0.101	0.001*
Without Turnover	0.102	0.001*
Without control variables	0.090	0.000*

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.33 *Market Commitment and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.078	0.014*
Without Size of HR	0.075	0.007*
Without Turnover	0.077	0.006*
Without control variables	0.072	0.001*

\* sig. at 0.05, \*\* sig. at 0.1

In the final step the Beta value of the independent and control variables included in the models are determined. With this value the variable with the strongest contribution to the model is recognized. For both dependent variable models (ROA and ROE) the independent variable Market Commitment has the strongest Beta value when all the control variables are included (see Appendix 4, tables 91 and 102). This indicates that the independent variable contributed the most to explaining the dependent variables. The same pattern is seen in all of the models for ROA and ROE (see Appendix 4, tables 94, 97, 105, and 108). The significance value of Beta for Market Commitment is 0.001 in all of the models for both ROA and ROE (see Appendix 4, tables 91, 94, 97, 102, 105 and 108). Therefore, the contribution of the independent variable is significant.

To conclude, the models are statistically significant for the dependent variables ROA and ROE. The Market Commitment variable explains the variance of ROA and ROE by 10.2% and 7.8 % respectively when including all of the control variables. The correlation between Market Commitment and ROA and ROE is

positive. This indicates that when a listed Swedish company increases its market commitment from transfer-related entry modes to FDI-related entry modes, the performance should increase. These results collected from the analysis indicate support for the hypothesis. Therefore, the hypothesis is accepted.

#### 5.1.8.6 Hypothesis 6

The sixth hypothesis is as follows:

*The level of international involvement is positively related to performance.*

The level of international involvement is operationalized as the ratio of foreign assets. The mean of foreign assets is 0.379. This indicates that a listed Swedish company on average has 37.9 % of its assets abroad. The correlation coefficients (as seen in Appendix 3) are 0.067 for ROA and 0.084 for ROE. This indicates a positive relationship for both models. To further analyze the relationships a multiple regression is used. The first step in the analysis is to look at the values for Tolerance and VIF. These values are indicators of multicollinearity. The Tolerance values for Turnover and Size of HR (for both models with ROA and ROE and all control variables included) are almost at the level of multiple correlation (Appendix 4, tables 113 and 124). This is an indication of multicollinearity between these variables. If the VIF value is 2.5 or higher it indicates multicollinearity. The VIF values in the models for both ROA and ROE are close to 10 for Turnover and Size of HR. A result that is similar to the indication of multiple correlation in the Tolerance values. The control variable Industry and the independent variable Foreign Assets show no indication of multiple correlation. When the control variables Size of HR and Turnover are excluded separately from the models with ROA and ROE the risk for multicollinearity is reduced (see Appendix 4, tables 116, 119, 127 and 130 for details).

The second step of the analysis is to look at the statistical significance of the models. The significance value for the model with ROA (with all control variables included) is 0.709 (table 5.34). This model is not significant. The significance value for the model with ROE (with all control variables included) is 0.897 (table

5.35). This shows that the model is not significant. The tests without the control variables Size of HR and Turnover, excluded separately, show similar results for the models with both ROA and ROE. All the models are not statistical significant (tables 5.34 and 5.35). If all the control variables are excluded from the model the significance values are 0.584 for ROA and 0.492 for ROE (tables 5.34 and 5.35). The R square value is used to analyze how much of the variance in the dependent variable is explained by the model. The R square value for the model with ROA (all control variables included) is 0.032 (table 5.34). If the model is significant then 3.2 % of the variance in ROA is explained by the variables in the model. The R square value in the model with ROE (all control variables included) is 0.017 (table 5.35). Again, if the model is significant only 1.7 % of the variance in ROE is explained by the model. The R square values for the remaining models with both ROA and ROE as the dependent variables are similar. The R square value does not change much when any of the two control variables Size of HR and Turnover are excluded from the model. However, when all the control variables are excluded the R square values for both models with ROA and ROE decrease (tables 5.34 and 5.35).

Table 5.34 *Foreign Assets and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.032	0.709
Without Size of HR	0.032	0.542
Without Turnover	0.032	0.540
Without control variables	0.004	0.584

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.35 *Foreign Assets and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.017	0.897
Without Size of HR	0.014	0.814
Without Turnover	0.016	0.786
Without control variables	0.007	0.492

\* sig. at 0.05, \*\* sig. at 0.1

The final step of the analysis is to look at the Beta values and decide which variable that contributes the most to explaining the dependent variable. The variable with the largest Beta value (negative sign ignored) in the model with ROA and all control variables included is Industry (Appendix 4, table 113). However, this contribution is not significant (sig. value of 0.236). In the model with ROE and all control variables included, the variable Size of HR has the

largest Beta value (Appendix 4, table 124). This contribution is not significant. When the control variable Size of HR is excluded from the model with ROA, Industry is still the variable with the highest Beta value (Appendix 4, table 116). The contribution is not significant. When the control variable Size of HR is excluded from the model with ROE, both Foreign Assets and Turnover have the same Beta value (Appendix 4, table 127). The contribution is not significant. The control variable Industry is contributing the most to explaining the model with ROA when the control variable Turnover is excluded from the model (Appendix 4, table 119). The contribution is not significant. When excluding the control variable Turnover from the model with ROE, the other control variable Size of HR is contributing the most to explaining the model (Appendix 4, table 130). The contribution is not significant.

To conclude, the models with ROA and ROE as the dependent variables and Foreign Assets as the independent variable are not statistically significant. The correlation coefficients for both models indicate positive relationships. This indicates that when the level of foreign assets increases, firm performance increases as well. The results of the tests can only be assumed to be correct as the fact remains that the models were not statistically significant. Therefore, support is given to the statement that the relationship between the level of international involvement and performance is positive. However, the results are not statistically significant and the hypothesis is rejected.

#### 5.1.8.7 Hypothesis 7

The seventh hypothesis is as follows:

*The level of international ownership is positively related to firm performance.*

The level of International ownership is operationalized as the ratio of foreign owned votes. The mean of this variable is 0.2232 (see Appendix 3). This shows that in an average company listed on the Swedish stock exchange the ratio of foreign owned votes is 22.32%. The correlation between International Ownership and ROA is -0.094 (see Appendix 3) and the correlation between International Ownership and ROE is -0.032 (see Appendix 3). This indicates a slight negative



relationship for both the relationships. Then the multiple regression analysis is performed and the first step is to analyze the Tolerance and VIF values. These determine if there is any risk of multiple correlation. The Tolerance values for both dependent variables (ROA and ROE) show a risk of multiple correlation for the control variables Turnover and Size of HR (see Appendix 4, tables 135 and 146). This is confirmed by the high VIF values for both models (Appendix 4, tables 135 and 146). The variable Foreign Ownership together with Industry has a low risk for multiple correlation in both models that include the control variables (ROA and ROE, as seen Appendix 4, tables 135 and 146). To lower the risk for multiple correlation the models were also tested without the control variables Size of HR and Turnover individually. This lowered the risk for multiple correlation significantly (see Appendix 4, tables 138, 141, 149 and 152 for more details).

The second step of the analysis is to determine the significance values of the models. The model for ROA has a significance value of 0.211 which is not significant (see table 5.36). The model for ROE has a significance value of 0.69 which is also not significant (see table 5.37). For the models excluding the control variable Size of HR for both ROA and ROE the significance increases. However, the increase is not enough to make the models statistically significant (see table 5.36 and 5.37 for more details). Similar results are seen for the models that exclude the control variable Turnover for both ROA and ROE (see table 5.36 and table 5.37) When excluding the control variables the significance of the models decrease for both ROA and ROE (see table 5.36 and 5.37). The R square values for the models ROA and ROE are 0.042 and 0.016 respectively (see table 5.36 and 5.37). This indicates a degree of explanation of 4.2 % of the variance in ROA and 1.6 % of the variance in ROE if the models had been significant. When the control variable Size of HR is excluded the R square values are 0.041 and 0.012 for ROA and ROE respectively (table 5.36 and 5.37). For the models excluding Turnover the R square values are 0.042 and 0.015 for ROA and ROE respectively (table 5.36 and 5.37). When all of the control variables are excluded the models for ROA and ROE decrease the R square values to 0.009 and 0.001 respectively (table 5.36 and 5.37).

Table 5.36 *International ownership and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.042	0.211
Without Size of HR	0.041	0.125
Without Turnover	0.042	0.118
Without control variables	0.009	0.265

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.37 *International ownership and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.016	0.690
Without Size of HR	0.012	0.631
Without Turnover	0.015	0.541
Without control variables	0.001	0.702

\* sig. at 0.05, \*\* sig. at 0.1

In the last step the Beta value is analyzed. In the ROA model that includes the control variables the Beta value is highest for the control variable Industry. With a significance value of 0.095 it contributes the most in explaining the dependent variable (see Appendix 4, table 135). For the ROE model the Size of HR has the highest Beta value which indicates that it contributes the most in explaining the dependent variable (see Appendix 4, table 146). However, the significance value of 0.470 makes the contribution not significant (Appendix 4, table 146). For the model with ROA that excludes the control variable Size of HR the Beta value is highest for the control variable Industry when the negative sign is ignored (see Appendix 4, table 138). The significance value for this variable is 0.075 which is significant at a 0.1 significance level (Appendix 4, table 138). For the dependent variable ROE, when the control variable Size of HR is excluded, the control variable Turnover has the highest Beta value (Appendix 4, table 149). Turnover has a significance value of 0.302 which makes the contribution to the model insignificant. When the control variable Turnover is excluded for the models measuring ROA the Beta value is highest for the control variable Industry (Appendix 4, table 141). This variable has a significant contribution at a 0.1 significance level (Appendix 4, table 141). For ROE, when the control variable Turnover is excluded, the highest Beta value is for the variable Size of HR (Appendix 4, table 152). However, the variable has no statistical significant contribution to the model (see Appendix 4, table 152 for more details).

In conclusion, the correlation of the relationship between International ownership and ROA, as well as, the relationship between International ownership and ROE

is slightly negative. This does not support our hypothesis that has a presumed positive relationship. Also, the models are not significant which does not support our hypothesis. Therefore, the hypothesis is rejected.

#### 5.1.8.8 Hypothesis 8

The eighth hypothesis is as follows:

*The level of Gerlofstig – Lindstrand index is positively related to performance.*

The first step when testing the GL-Index is to determine if the independent variables measure the same concept. For this the Cronbach Alpha test is used. The result of this test should be above 0.7 to indicate that the variables measure the same thing (Pallant, 2007). The Cronbach Alpha value for the variables in the GL-Index is 0.836. This suggests that the variables included in the model measure the same concept. Thus, they can be added together to be tested as an index.

The GL-Index is operationalized as the sum of the ratio of foreign sales, the ratio of foreign board, the ratio of foreign employees, the ratio of foreign assets, and the ratio of international ownership. Thus, a company can receive a number from zero to five. The mean for the index is 1.275. This indicates a very low level of internationalization for the average listed Swedish company. The correlation coefficient for ROA is 0.117 and for ROE 0.081 (Appendix 3). This indicates a positive relationship between the level of internationalization and performance. To further test the relationships, multiple regression analysis is conducted. The first step of the analysis is to look at the values for Tolerance and VIF. The values are indicators of multicollinearity (if there is any multiple correlation between the variables in the model). The Tolerance value should be higher than 0.1. The Tolerance values for the variables Turnover and Size of HR are close to 0.1 in the model with ROA (Appendix 4, table 157). This indicates that there is a strong possibility of multiple correlation between these variables. The same result is found for the Tolerance values in the model with ROE (Appendix 4, table 168). The VIF value should be smaller than 2.5. The VIF values for both models are identical (Appendix 4, tables 157 and 168). The values for the variables Turnover and Size of HR are close to 10 (8.621 and 9.029 respectively) which indicates a

strong possibility of multicollinearity. The Tolerance and VIF values for the variables Industry and GL-Index show no sign of multiple correlation. However, when either of the control variables Size of HR or Turnover is excluded from the models with ROA and ROE, the Tolerance and VIF values show no sign of multicollinearity (Appendix 4, tables 160, 163, 171 and 174).

The next step in the analysis is to look at the statistical significance of the models. The significance value for the model with ROA (all control variables included) is 0.250 (table 5.38). This is not a statistically significant result. The significance value for the model with ROE when all control variables are included is 0.683 (table 5.39). This value does not indicate any statistical significance in the model. The results are similar for the remaining models. All tests when the control variable Size of HR is excluded from the models with ROA and ROE are not significant (tables 5.38 and 5.39). When the control variable Turnover is excluded from the model with both ROA and ROE, the models are not statistically significant (tables 5.38 and 5.39). The results are similar when all of the control variables are excluded from the models. The significance value for the model with ROA is 0.145 and 0.313 for the model with ROE (tables 5.38 and 5.39). The results show no statistical significance. The R square values for the models with ROA range from 0.014 to 0.035 (table 5.38). This value shows how much of the variance is explained by the model. At the most, only 3.5 % of the variance is explained by the variables in the models with ROA. The R square values for the models with ROE range from 0.007 to 0.015 (table 5.39). These low values suggest that, at the most, only 1.5 % of the variance in ROE is explained by the model.

Table 5.38 *GL – Index and ROA*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.035	0.250
Without Size of HR	0.034	0.146
Without Turnover	0.035	0.145
Without control variables	0.014	0.145

\* sig. at 0.05, \*\* sig. at 0.1

Table 5.39 *GL – Index and ROE*

<b>Model</b>	<b>R Square</b>	<b>Sig. Value</b>
With all control variables	0.015	0.683
Without Size of HR	0.012	0.600
Without Turnover	0.014	0.534
Without control variables	0.007	0.313

\* sig. at 0.05, \*\* sig. at 0.1

The final step in the analysis is to determine which variable makes the strongest contribution to explaining the dependent variable. The variable with the largest Beta value (any negative sign ignored) in the model with ROA and all control variables included is Industry (Appendix 4, table 157). This indicates that the variable Industry contributes the most to explaining the model. The contribution is significant on a 0.1 significance level as the significance value for Industry is 0.091 (Appendix 4, table 157). The largest Beta value in the model with ROE (all control variables included) is found for the variable Size of HR (Appendix 4, table 168). However, this contribution is not significant (sig. value of 0.519). For the remaining models with ROA as the dependent variable, Industry is the variable that contributes the most to explaining the model (Appendix 4, tables 160 and 163). These contributions are significant. When the control variable Size of HR is excluded from the model with ROE, Turnover is the variable that contributes the most to explaining the model (Appendix 4, table 171). The contribution is not statistically significant. When the control variable Turnover is excluded from the model with ROE, Size of HR is the variable that contributes the most to explaining the model (Appendix 4, table 174). This contribution is not statistically significant.

To conclude the results for the GL-Index, the models for both ROA and ROE are not statistically significant. The correlation coefficients for both models are positive. This indicates a positive relationship between the GL-Index and performance. In other words, when the degree of internationalization increases, firm performance (when measured as ROA and ROE) increases as well. Due to the fact that both models are not statistically significant, the results can only show a tendency to support the statement that there is a positive relationship between the level of GL-Index and firm performance. Thus, the hypothesis is rejected.

### 5.1.9 Summary of hypotheses

A summary of the outcome of the hypotheses are presented in the table below (table 5.40). Two of the hypotheses were accepted. The remaining six hypotheses were rejected.

Table 5.40 *Summary of hypotheses*

<b>Hypothesis</b>	<b>Outcome</b>
1	<i>Accepted</i>
2	<i>Rejected</i>
3	<i>Rejected</i>
4	<i>Rejected</i>
5	<i>Accepted</i>
6	<i>Rejected</i>
7	<i>Rejected</i>
8	<i>Rejected</i>

## 5.2 Analysis

In this section the empirical findings are discussed and analyzed for each hypothesis separately. The empirical findings are linked with the literature review and conclusions are drawn.

### 5.2.1 Analysis of Hypothesis 1

The independent variable Number of Countries is shown to have statistical significance for the dependent variables ROA and ROE. Therefore, the positive relationship between geographic diversification and performance is statistically significant. According to the Uppsala Stage Model a company's experience of international trade increases over time (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). This in turn affects firm performance (Carlson, 1966, as quoted in Forsgren, 2002). Another result of the increased experience is a company's willingness to further expand in order to achieve economies of scale. The mean value of the number of countries is close to 14. This supports the statement that when a company is present in several markets it has access to a larger customer base and factor endowments (OLI-model, Dunning, 2000). However, the high mean can indicate that a company is contractually obligated to the foreign markets. In a financial crisis, such a commitment can reduce the flexibility to withdraw from markets. The results could indicate that the Swedish

companies that are active in a relatively high number of countries rather internalize than outsource their activities. Such a conclusion would support the TCA-model by Williamson (1981). The access to more customers and factor endowments could eventually lead to economies of scale which will increase the firm's performance overall (Porter, 1985 quoted in Gomes & Ramaswamy, 1999; Bartlett & Ghoshal, 1998; Dunning, 2000). However, there is a high risk that the relationship is reversed. The fact that high performance could influence a company's decision to expand must be considered. Even though a reversed relationship is possible, the support for the accepted hypothesis indicates that the results can be generalized.

### *5.2.2 Analysis of Hypothesis 2*

When a company is faced with a small domestic market it must find new international markets to be able to grow. According to Gomes and Ramaswamy (1999) a company is dependent on its international markets and sales to generate revenue. The costs associated with international expansion are assumed to be reduced as a result of experience. As the sales volume increases, the performance is assumed to increase as well. On the contrary, the negative correlation between the variables in hypothesis two indicates that a higher ratio of foreign sales decreases a company's firm performance (ROA and ROE). The result of this analysis does not support the statement in the hypothesis that the level of international sales is positively related to performance. Also, the relationship is not statistically significant. The negative relationship between the level of international sales and firm performance could be the result of the financial crisis in 2008. The global economic downturn had a huge effect on both consumers (reduced demand) and companies (reduced sales). As the average listed Swedish company has 60 % of its sales abroad, a global financial crisis would affect the company more than a company with less international exposure. Due to the fact that the relationship between foreign sales and performance is not statistically significant, the generalization of the results is not possible.

### 5.2.3 Analysis of Hypothesis 3

The models for ROE with the independent variable Foreign Board are not statistically significant. However, two of the models with ROA are statistically significant. This means that the level of international diversity of the board of directors have some significant impact on firm performance. The correlations between international diversification of the board members and firm performance are negative. The relationships are opposite of the positive relationship stated in the hypothesis. This gives support to the rejection of the hypothesis. This suggests that international differences in the board of directors of Swedish companies create a barrier that reduces the performance of the company (Hofstede, 1983). However, the result from prior research indicates that the effect of cultural diversity on firm performance must be carefully considered (Li *et al.*, 2002). The level of international diversity of the board of directors had a relatively low mean (0.098) for listed Swedish companies. This could be a value that is too low to create a positive relationship between international diversity of board members and firm performance. Thus, the benefits of information pooling and the increase of the quality in decision making are not shown in the results of the research. The independent variable might have had a more significant impact on the relationship if the level of diversity was balanced, a result shown in previous studies (*ibid.*). It is difficult to generalize the results of a hypothesis that is partly statistically significant. Hence, the rejection of the hypothesis implies that there is no significant relationship between the level of international board of directors and firm performance for listed Swedish companies.

### 5.2.4 Analysis of Hypothesis 4

The differences in the way people perceive things are proposed as factors that influence the firm performance in a company. A strategy formulated in one country might be interpreted differently in another country. With further international expansion, the cultural distance of employees will create more difficulties when implementing strategies and coordinating human resources. There is empirical evidence of cultural distance having a negative influence on the firm's performance (Davidson & McFetridge, 1985, as quoted in Karakowsky & Lam, 2002). The results presented above show some statistical significance for the



relationship between the level of foreign HR and firm performance. In contrast to the expected negative relationship, the result of the analysis shows a positive relationship. One explanation is the increased globalization of markets and its effect on the associated costs of cultural differences. If the cost of having foreign HR is low the effect on firm performance is positive. This could indicate that the dimensions of Hofstede's model (1983) are not applicable to the modern culture of Swedish companies. Cultural differences change over time and Hofstede's study was done in the early 1980's. As the relationship between foreign HR and performance is only partly statistically significant, the result of the research cannot be generalized. Thus, the hypothesis is rejected.

#### *5.2.5 Analysis of Hypothesis 5*

The hypothesis was accepted since the models have statistical significance and a positive correlation between the level of market commitment and firm performance. This indicates that a company that increases its market commitment would increase its performance. This suggests that the average company on the Swedish stock exchange have the market knowledge and international experience to successfully use a higher level of market commitment (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977; Bobillo *et al.*, 2008). Also, the cultural barriers between countries and the associated costs are reduced with increased international knowledge (Luo, 1999; Johanson & Vahlne, 1977). The knowledge could be a result from earlier expansions since the average number of countries that a company is active in is fourteen. Hence, taking a higher risk with higher investment costs gives a higher return for Swedish listed companies. This would indicate that in the TCA-model the Swedish company has a tendency to expand internally (Williamson, 1981). However, this is only generalized on listed Swedish companies and could be used as an indicator for other Swedish companies. Even if the performance of companies were affected by the financial crisis in 2008, those companies with FDI-related market commitment could to some extent better handle the downturn compared to those companies with transfer-related market commitment. FDI-related entry modes allow the companies to keep control of their resources. This might suggest that FDI-related entry modes only are preferable in a crisis when the company can keep a high

level of control. At the same time, long-term contracts can constrain companies to remain in the countries. Thus, transfer-related entry modes could be just as appropriate and generate equal performance results as FDI-related entry modes. The positive correlation between the level of market commitment and firm performance and the statistical significance of the models support the hypothesis; thus, it is accepted. The support for the hypothesis indicates that the results can be generalized.

#### *5.2.6 Analysis of Hypothesis 6*

A high level of investment most often requires high level of assets involved in the business. If the costs of external transactions are higher than the costs of internal transactions the company will increase the internal activities in order to reduce costs (Williamson, 1981). This requires a higher level of investment. The results of the empirical findings show support for the statement that the relationship between the level of foreign assets and performance is positive. With an average of 37.9 % of foreign assets, a listed Swedish company was most likely affected by the financial crisis in 2008. As the data for ROA and ROE are collected from 2008, the effects of the economic downturn should reflect the results of the research. Also, a company that is too diversified might have difficulties coordinating its operations resulting in less efficient use of the assets involved. A combination between a financial crisis and too diversified operations could explain the low mean of firm performance of 2008 (1.97 % for ROA and 6.1 % for ROE). The support for the hypothesis can only be assumed to be correct. The fact remains that both models were not statistically significant; thus, the results cannot be generalized.

#### *5.2.7 Analysis of Hypothesis 7*

The result of the research on hypothesis seven is that the relationship between the level of foreign owned votes and firm performance is not statistically significant. Also, the slight negative correlations between the variables in the models are contradicting the hypothesis. With a relatively low level of Foreign Owned votes (approximately 20 %) the voting power possessed by the foreign owners is quite

low. Particularly since the votes are distributed among several foreign shareholders. This limits their influence on the company's strategic decisions. Another important factor is the possibility that performance indirectly affects the level of international ownership. As stated earlier, geographic diversification could be a result of high performance. The geographic diversification increases the exposure of the company to foreign stakeholders. These stakeholders could eventually become shareholders. This hypothesis is not generalized due to the lack of statistical significance of the results. Therefore, the hypothesis was rejected.

#### *5.2.8 Analysis of Hypothesis 8*

The use of an index gives a wider perspective of the reality. The GL-Index consists of the independent variables that measure international sales, international diversity of the board, level of international HR, international involvement, and international ownership. According to Sullivan (1994), the use of an index reduces the risk of having any unusual circumstances, which could invalidate one factor, invalidate the results of the entire measure. Due to the reduced risk of distortion and the considered variety of the relationship, the index is assumed to show a positive correlation with firm performance. The empirical findings for the GL-Index indicate support for the assumption of a positive relationship. In other words, when the degree of internationalization increases, firm performance increases as well. Due to the fact that both models are not statistically significant, the results can only show a tendency to support the statement that there is a positive relationship between the level of GL-Index and firm performance. Again, the effects of the financial crisis might have had an overall impact on the dependent variables ROA and ROE. This could have reduced the significance for the relationship between the index and performance. Also, the fact that some data for the variables included in the index were missing might have had an effect on the results of the statistical significance. Finally, considering that there is no significance of the independent variables when these are tested individually, the significance value of the GL-Index is expected. The discussion above supports the rejection of the hypothesis and the results cannot be generalized.

### 5.3 Ad-hoc analysis

When the Pearson correlation coefficients are examined an interesting pattern of significant relationships between Foreign Board and the other independent variables are recognized. Four out of six relationships are significant (see Appendix 3). All of the independent variables are positively related to Foreign Board. From a corporate governance perspective, this phenomenon could be further tested. In table 5.41 the results of a multiple regression analysis are presented. Included in the test is the control variables Turnover and Industry. Similar to the main study, the tests are conducted when the control variable Size of HR is excluded. The reason for excluding this control variable is the high risk of multicollinearity with the other control variable Turnover. This risk is reduced when one of the control variables is excluded. The main study indicated no differences in the results when the multicorrelated control variables were excluded separately. This, with the combination of lack of time, is the reason why the ad-hoc analysis only is conducted when the control variable Size of HR is excluded from the model. As seen in table 5.41 all of the relationships are significant (at the significance level of 0.05). If the significance level is increased to 0.01 all relationships except Number of Countries are significant. The R square values range from 0.077 to 0.279. This means that the level of explanation of the variance in the dependent variable varies between 7.7 % (Number of Countries) and 27.9 % (International ownership).

Table 5.41 *Regression: Dependent variable Foreign Board*

<b>Independent variable</b>	<b>Sig. value</b>	<b>R square</b>
Number of Countries	0.014	0.077
Foreign Sales	0.001	0.153
Foreign HR	0.000	0.125
Market Commitment	0.003	0.088
Foreign Assets	0.009	0.162
International ownership	0.000	0.279

To check for multiple correlation between the variables in the regression model the Tolerance and VIF values are analyzed. The Tolerance values range from 0.833 to 0.990. This is above the critical value of 0.1 (Pallant, 2007). The VIF

values range from 1.011 to 1.200. According to Djurfeldt *et al.* (2003) the VIF value should be below 2.5.

To conclude, the relationships between the dependent variable Foreign Board and the independent variables are all statistical significant. This indicates that a higher ratio of international expansion results in a higher ratio of foreign board members. However, all of the relationships can be reversed. That is, the ratio of foreign board members could increase the international expansion of the company.

#### **5.4 Summary of analysis**

The results of the analysis indicate that international expansion affects firm performance both positively and negatively. The results show that it is only two of the relationships that are statistically significant. These show a positive relationship between international expansion and firm performance. To be active in several countries or to have a high market commitment is positively related with firm performance. This is interesting to relate to the different stages of a financial cycle. It is assumed (and as the study shows) that companies are sensitive to the movements in a financial cycle. Thus, in a downturn when companies experience negative effects the results indicate that it is positive to be highly committed both in terms of number of countries and market commitment. The negative relationship between the level of international sales and firm performance is another indicator of how sensitive a company is on the movements in the financial cycle. However, this relationship is not statistically significant; thus, it cannot be generalized.

## 6. Conclusion

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*In chapter six our conclusions are presented. The chapter starts with a summary of the dissertation. Then the conclusions of our study are presented. This is followed by critical review, practical implications and finally suggestions for future research are presented.*

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### 6.1 Summary of the dissertation

Today, in the global market the number of companies going abroad is increasing. The aim is to access new markets, gain improved factor endowments, and ultimately increase the profit of the company (UNCTAD, 2008). Therefore, it is important to investigate if the result of an expansion really is increased profit.

Previous research has shown that by diversifying internationally to new markets companies increase their performance. However, this research is not conclusive. Researchers argue that international diversification has both a positive and a negative effect on firm performance (Chari, Devarai & David, 2007; Bobillo, Iturriaga & Gaité, 2008). Therefore, it would be interesting to perform a study on Swedish companies since almost all previous research is done on American companies (and a few European). Swedish companies have a long history of international trade and they have been quite successful (Embassy of Sweden, 2008). Sweden was one of the countries that conducted most FDI-related investments in 2007 (UNCTAD, 2008). Hence, the risk and uncertainty associated with international expansion is not reducing the willingness of the Swedish companies to go abroad. However, with a relatively small domestic market Swedish companies have few other options than to go abroad if they want to grow. Therefore, it is important to investigate the relationship of international expansion and firm performance in Swedish companies.

Within the internationalization literature there are well established theories that were used to present an overview of the research field. The main theories resulting from the literature review, that constitute the foundation of this study, are the Uppsala model (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977), the Transaction Cost Analysis – model (Coarse, 1937), Entry Modes (Luo, 2002b), and Cultural Dimensions (Hofstede, 1983). With these theories eight hypotheses were created and tested in order to study the relationship between international expansion and firm performance. The sample for the study consisted of Swedish companies listed on the Swedish stock exchange, from the years 2005 and 2008. The data was collected from their annual reports to be statistically tested. The results of these tests were then analyzed and discussed.

## **6.2 Conclusion**

The process of international diversification is important for companies. To be able to understand the effect international diversification has on firm performance a vast amount of research has been conducted. The lack of research done on Swedish companies generated the idea to study the relationship between international expansion (diversification) and firm performance and to apply it in a different setting. Thus, the purpose of this dissertation was to explain the effects international expansion has on Swedish companies and how it influences firm performance. The research question was stated as follows:

*How does international expansion affect firm performance?*

The choice of relevant theories gave the opportunity to limit the study and focus on a specific set of aspects that resulted in eight hypotheses. The eight and last hypothesis concerned an index created as a combination of five of the other hypotheses. The following hypotheses were developed:

*Hypothesis 1:* The level of geographic diversification is positively related to performance.

*Hypothesis 2:* The level of international sales is positively related to performance.

*Hypothesis 3:* The level of international diversity of the board of directors is positively related to performance.

*Hypothesis 4:* The level of international HR is negatively related to performance.

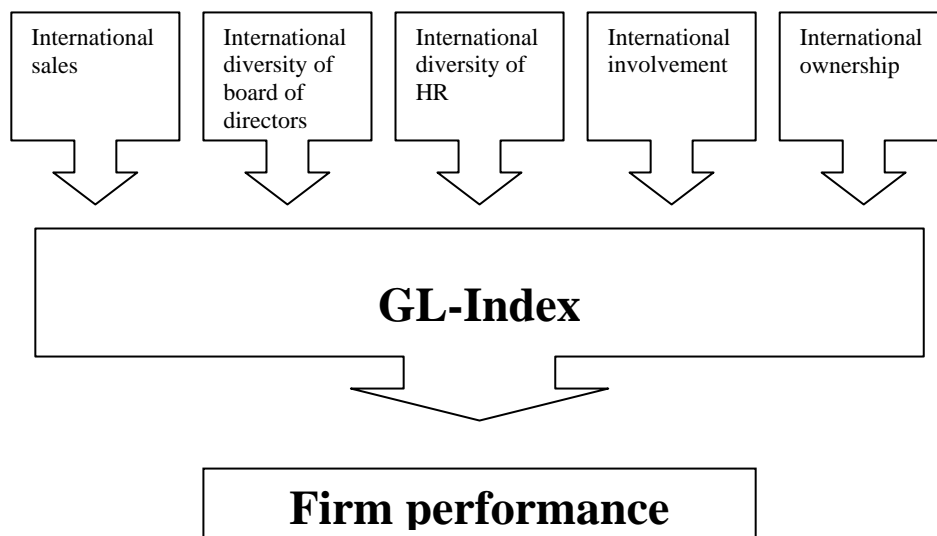
*Hypothesis 5:* The level of market commitment is positively related to performance.

*Hypothesis 6:* The level of international involvement is positively related to performance.

*Hypothesis 7:* The level of international ownership is positively related to firm performance.

*Hypothesis 8:* The level of Gerlofstig – Lindstrand index is positively related to performance.

The index was a result of combining international sales, international diversity of the board of directors, international HR, international involvement, and international ownership. The reason for combining five of the aspects was to reflect a wider perspective of the relationship between international expansion and firm performance. The following model (figure 6.1) depicts this relationship:



*Figure 6.1* The model of GL-Index

A summary of the accepted or rejected hypotheses can be seen in figure 6.2. Two of the hypotheses were supported by the statistical significance and accepted. These were hypothesis 1 (Geographic Diversification) and hypothesis 5 (Market Commitment). In contrast to the stated relationship in hypothesis 2, the result of the analysis showed a negative relationship between the level of foreign sales and performance. A similar result was found for hypothesis 3, 4 and hypothesis 7. In



hypothesis 3, a positive relationship between the level of international diversity of the board and performance was assumed. The results of the analysis indicated a negative relationship. The analysis of hypothesis 4 indicated a positive relationship between the level of international HR and performance. This was opposite of that stated in the hypothesis. The presumed positive relationship between the level of international ownership and performance in hypothesis 7 contrasted to the found negative relationship. In hypothesis 6, the positive relationship between the level of foreign assets and performance was supported. The results were not statistically significant and the hypothesis was not accepted. The result of the analysis for hypothesis 8 tends to support the stated positive relationship between the level of the GL-Index and performance. However, the results were not statistically significant; thus, the hypothesis was rejected.

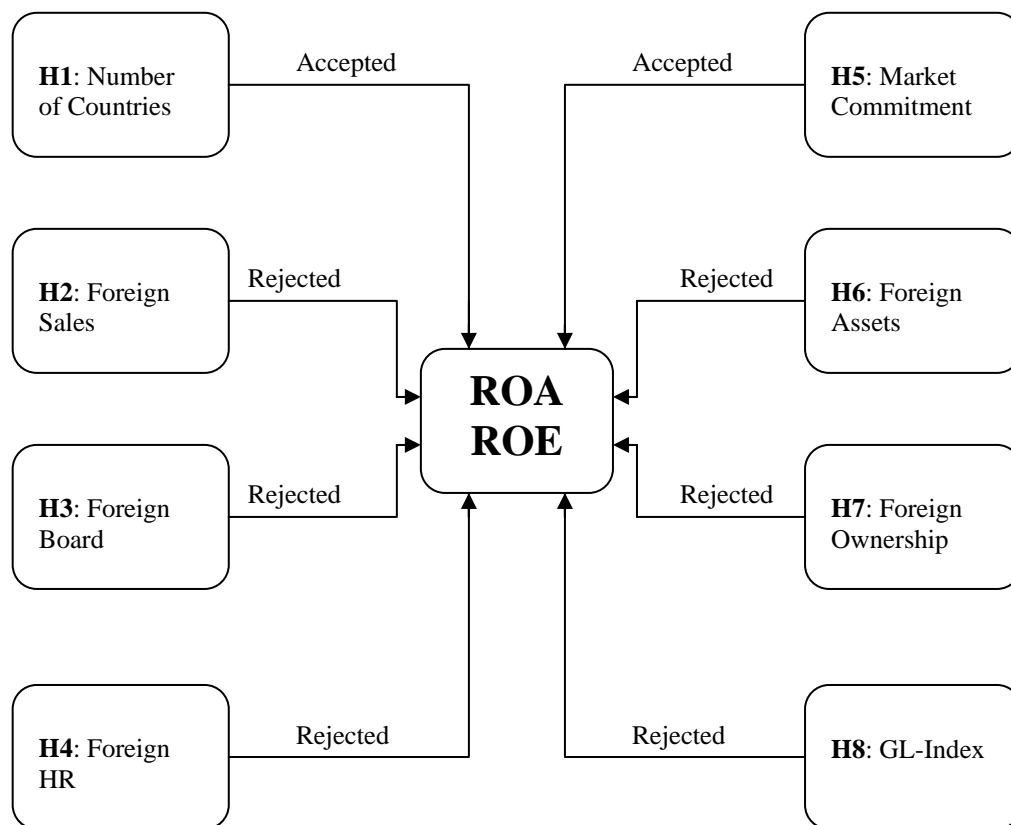


Figure 6.2: The Internationalization model

The results of the research showed that for hypothesis 3 and hypothesis 4 the relationships were reversed from those stated in the hypotheses. The relationship between the level of international diversification of the board of directors and firm performance was negative, in contrast to the stated positive relationship. The

relationship between the level of international HR and firm performance was positive, also in contrast to the stated negative relationship. The result for the models with ROA indicated some statistical significance for both hypothesis 3 and hypothesis 4. However, all models tested with ROE were not statistically significant.

One of the explanations to why only hypothesis 1 and hypothesis 5 were accepted can be the choice of years that data was collected from. In 2008, the global economy was struck by a financial crisis. This had a major negative effect on companies. The data on firm performance was collected from the annual reports of 2008. It is important to consider that the negative effects of the financial crisis are reflected in the collected data. If a company had negative results in 2008, both dependent variables Return on Assets (ROA) and Return on Equity (ROE) are affected. This fact is reflected if the mean for each dependent variable is considered. The mean for ROA was 0.0197. The average listed Swedish company had in the year 2008 1.97 % return on assets. The mean for ROE was 0.0609. A listed Swedish company had in the year 2008 on average 6.09 % return on equity. Thus, the outcome of the analysis is affected by the low performance of the company.

To conclude, the effects of the financial crisis seemed to negatively affect listed Swedish companies. This is reflected in the results presented above. However, the results reflect an interesting observation of the effects of a financial crisis. It is important to study companies in all the stages of a financial cycle. Also, it is important to consider the fact that the relationship between international expansion and firm performance can be reversed. A high firm performance can lead to an increase in international expansion. The research conducted in this dissertation aimed at explaining the effects of international expansion in Swedish companies. The results of the analysis show that two hypotheses were supported and accepted. Another two had support for the relationships but not statistically significant. Therefore, they were rejected. The remaining four hypotheses were all rejected. Thus, the number of countries and the choice of market commitment affect performance positively. The other measures of international expansion

show no statistically significance in affecting firm performance. With that said, the research question is answered.

### **6.3 Critical review**

The purpose of the dissertation was to show the effects of international expansion on firm performance in Swedish companies. The results from the research indicated that there is some relationship between international expansion and firm performance. However, not all of the relationships were statistically significant. Therefore, the results cannot be generalized.

A critical reflection is that the limit of only gathering data from listed Swedish companies reduces the ability to generalize our findings. The listed companies are a targeted population and do not represent the entire population of Swedish companies that have international activities. Also, to combine the lists (Small Cap, Mid Cap, and Large Cap), a result of creating a robust sample, could have affected the results of the study. There were differences in many of the variables which would suggest that the lists should have been separated and tested individually.

The time horizon used in this dissertation included the year 2008. This year, the global economy was struck by a financial crisis which most likely had an impact on the performance of the companies. This in turn, had an impact on the results of this study.

### **6.4 Practical implications**

The aim of this study was to fill the academic gap in the research field of international diversification and performance for Swedish companies. Previous researches have focused on companies from North American and some European countries. Therefore, the study has some academic value.

For practical purposes, the results of the study and the conclusions drawn can be of some value for Swedish managers. The conclusions can be used as guidelines when planning for an expansion abroad. A balanced exposure to several countries is advisable in terms of better firm performance. Also, the choice of FDI-related entry modes is preferable to Transfer-related entry modes when a company should

implement an international expansion. This allows the company to retain control over its resources and, in the end, it affects firm performance positively.

Managers responsible for international expansion should also consider the possible positive effects on firm performance of increasing foreign assets. Even though the effects of increased foreign assets are not significant it is indicated that firm performance increases when a company increases its foreign assets.

Finally, managers of Swedish companies should consider the support for the positive effect international expansion has on firm performance when the different factors are combined. The combination of the factors of international expansion gives a wider perspective of the relationship. This should indicate to managers that a higher level of international expansion will increase firm performance.

## **6.5 Future research**

While conducting the study, a few ideas for future research emerged. It would be interesting to see if there are any differences in the results if a different time horizon is used for the study. A few options are proposed. At first, the time horizon used in this dissertation included a financial crisis. If the effects of the financial crisis are excluded from the models, the results are assumed to be different. Secondly, it would be interesting to compare the effects of several financial crises. Are there similar results in different crises? Thirdly, the study of the effects of a financial crisis could be developed to include more factors. It would be interesting to see in more detail how companies act in a financial crisis. What actions are taken to reduce the negative impacts?

Another interesting idea for future research is to extend the models with a variable that measures international experience of a company. This can be measured as the number of years a company has had international activities. However, this data requires in depth historical information about the companies. Such information was limited for this study.

To develop the research conducted in this dissertation, it would be interesting to study how companies can reduce their dependency on the financial cycle. The optimal solution should be to maintain a balanced level of development and growth in all stages of a financial cycle. What strategies should a company implement to achieve such an optimal level?

Finally, it would be interesting to conduct a study from a Corporate Governance perspective. The ad-hoc analysis provides guidelines for a study that measures the effect the internationalization of the board of directors has on the internationalization process of companies.

## References

- Albaum, G., Duerr, E. & Strandskov, J. (2005) *International Marketing and Export Management*, 5<sup>th</sup> ed. England, Harlow: Pearson Education Limited.
- Aktiespararnas Aktieskola (1998) *Läsa och tolka årsredovisningar*, 2:a upplagan, Sverige, Eskilstuna: Trycksaksbyrå.
- Bartlett, C. A. & Ghoshal, S. (1998) *Managing Across Borders: The Transnational Solution*, 2<sup>nd</sup> ed. England, London: Random House Business Books.
- Bobillo, A. M., Iturriaga, F. L. & Gaite, F. T. (2008) International diversification and firm performance: An international analysis. *The Business Review, Cambridge*, Vol. 9 (2), pp. 84-91.
- Broberg, P. (2006) *Vad förklarar variationer i frivilliga information?* Högskolan Kristianstad: Institutionen för ekonomi.
- Bryman, A. (2008) *Social Research Methods*, 3<sup>rd</sup> ed. New York: Oxford University Press Inc.
- Bryman, A. & Bell, E. (2007) *Business Research Methods*, 2<sup>nd</sup> ed. New York: Oxford University Press Inc.
- Buckley, P. J. (2007) The Strategy of Multinational enterprises in the light of the rise of China. *Scandinavian Journal of Management*, Vol. 23, pp. 107-126.
- Buckley, P. J., Clegg, J. & Tan, H. (2006) Cultural awareness in knowledge transfer to China – The role of Guanxi and mianzi. *Journal of world business*, Vol. 41, pp. 275-288.
- Carlsson, J., Nordegren, A. & Sjöholm, F. (2005) International experience and the performance of Scandinavian firms in China. *International Business Review*, 14, pp. 21-40.
- Capar, N. & Kotabe, M. (2003) The relationship between international diversification and performance in Service Firms. *Journal of International Business Studies*, vol. 34, No. 4, pp. 345-355.
- Chari, M. D. R., Devaraj, S. & David, P. (2007) International diversification and firm performance: Role of information technology investments. *Journal of World Business*, Vol. 42, pp. 184-197.
- Coase, R. H. (1937) The Nature of the Firm, in Williamson, O. E. & Masten, S. E., *The Economics of Transaction Costs*, UK: Edward Elgar Publishing Ltd.
- Collin, S-O., Smith, E., Umans, T., Broberg, P., and Tagesson, T. (2008) *Internationalisation of Corporate Governance Mechanisms and Its Performance Effects*. Presented at the Annual Meeting of the Academy of Management, Anaheim, CA, USA.
- Creswell, J. W. (2007) *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. Thousand Oaks: Sage Publication, Inc.
- Darby, R. (1995) Developing the euro-manager; Managing in a multicultural environment. *European Business Review*, 95, Vol. 1, pp. 13-15.
- Demir, R. & Söderman, S. (2007) Skills and complexity in management of IJVs: Exploring Swedish managers' experiences in China. *International Business Review*, 16, pp. 229-250.
- Djurfeldt, G., Larsson, R., & Stjärnhagen, O. (2003) *Statistisk verktyglåda*, Lund: Studentlitteratur.

- Dollar, D. & Kraay, A. (2001) *Trade, Growth and Poverty*. [online]. Development Research Group, The World Bank Publication. Available at: [http://www.google.com/books?hl=sv&lr=&id=rccRMMA\\_shcC&oi=fnd&pg=PA25&dq=Trade,+Growth+and+Poverty&ots=RZ5mnDLatP&sig=lx5jKdwrKu7n9\\_IyIrdCGyQ64Hg#v=onepage&q=&f=false](http://www.google.com/books?hl=sv&lr=&id=rccRMMA_shcC&oi=fnd&pg=PA25&dq=Trade,+Growth+and+Poverty&ots=RZ5mnDLatP&sig=lx5jKdwrKu7n9_IyIrdCGyQ64Hg#v=onepage&q=&f=false) [cited 27 September 2009].
- Dunning, J. H. (1995) Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism. *Journal of International Business Studies*, Vol. 26, pp. 461-491.
- Dunning, J. H. (2000) The Eclectic Paradigm as an Envelope for Economic and Business Theories of MNE Activity. *International Business Review*, Vol. 9, pp. 163-190.
- Embassy of Sweden (2008) Swedish Business in China: Trends and Challenges. [online]. Swedish Embassy, Peking. Available at: [http://www.swedenabroad.com/Page\\_\\_\\_\\_\\_20800.aspx](http://www.swedenabroad.com/Page_____20800.aspx) [cited 10 September 2009].
- Eriksson, L. T. & Wiedersheim-Paul, F. (2006) *Att utreda, forska och rapportera*, 8<sup>th</sup> ed. Malmö: Liber.
- Floyd, D. & Summan, S. (2008) Understanding the main motives for foreign direct investment, an East-West country contrast: is the host country legislation an important factor? *Corporate Governance*, Vol. 8 (5), pp. 661-668.
- Forsgren, M. (2002) The concept of learning in the Uppsala internationalization process model: a critical review. *International Business Review*, 11, pp. 257-277.
- Frankel, J. A. & Romer, D. (1999) Does Trade Cause Growth. *American Economic Review*, Vol. 89, no. 3, pp. 379-399.
- Fristedt, D. & Sundqvist, S. (2006) *Ägarna och Makten i Sveriges Börsföretag*, Halmstad: Bulls Graphics AB.
- Ghoshal, S. & Moran, P. (1996) Bad for Practice: A Critique of transaction Cost Theory. *Academy of Management Review*, Vol. 21 (1), pp. 13-47.
- Gleason, K. C., Lee, C. I. & Mathur, I. (2002) Dimensions of international expansions by US firms to China: Wealth effects, mode selection, and firm-specific factors. *International Review of Economics and Finance*, Vol. 11, pp. 139-154.
- Hofstede, G. (1983) The cultural relativity of organizational practices and theories. *Journal of international business studies*, Fall 1983, pp. 75-89.
- Johanson, J. & Wiedersheim-Paul, F. (1975) The Internationalization of the Firm: Four Swedish Cases. *Journal of Management Studies*, pp. 205-322.
- Johanson, J. & Vahlne, J. E. (1977) The Internationalization Process of the Firm: a Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, Vol. 8 (1), pp. 23-32.
- Landes, D. S. (1999) *The Wealth and Poverty of Nations*, New York: W.W. Norton & Company, Inc.
- Li, J., Karakowsky, L. & Lam, K. (2002) East meets East and East meets West: The Case of Sino-Japanese and Sino-West Joint Ventures in China. *Journal of Management Studies*, Vol. 39 (6), pp. 841-863.
- Luo, Y. (1999) International strategy and subsidiary performance in China. *Thunderbird International Business Review*, Vol. 41 (2), pp. 153-178.
- Luo, Y. (2002a) Product diversification in international joint ventures: Performance implications in an emerging market. *Strategic Management Journal*, Vol. 23 (1), pp. 1-20.

- Luo, Y. (2002b) *Multinational enterprises in emerging markets*, Copenhagen: Copenhagen Business School Press.
- Nasdaq OMX (2009) Sector indexes. [online] Nasdaq OMX. Available at: <http://www.nasdaqomxnordic.com> [cited 18 November 09].
- Neuman, W. L. (1994) *Social Research Methods – Qualitative and quantitative approaches*, 2nd ed. Needham Heights: Allyn and Bacon.
- Pallant, J. (2007) *SPSS Survival Manual*, 3<sup>rd</sup> ed. England: McGraw Hill Education
- Reid, S. D. (1983) Firm Internationalization, transaction costs and strategic choice. *International Marketing Review*, Vol. 1 (2), p. 44.
- Riahi-Belkaoui, A. (1998) The effects of the degree of internationalization on firm performance. *International Business Review*, Vol. 7, pp. 315-321.
- Sachs, J. D. & Warner, A. (1995) Economic Reform and the process of Global Integration. *Brooking papers on Economic Activity*, pp. 1-96.
- Sanford, G. J. & Oliver, H. D. (1986) The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, in Williamson, O. E. & Masten, S. E., *The Economics of Transaction Costs*, UK: Edward Elgar Publishing Ltd.
- Sanyal, R. N. & Guvenli, T. (2000) Relations between multinational firms and host governments: the experience of American-owned firms in China. *International Business Review*, Vol. 9, pp. 119-134.
- Saunders, M., Lewis, P. & Thornhill, A. (2009) *Research methods for business students*, 5<sup>th</sup> ed. England, Essex: Pearson Education Limited.
- Sharma, D. D. & Johanson J. (1987) Technical Consultancy in Internationalization. *International Marketing Review*, Winter, pp. 20-29.
- Sullivan, D (1994) Measuring the degree of internationalization of a firm. *Journal of international business studies*, 25, pp. 325-342.
- Tabachnick, B. G., & Fidell, L. S. (2007) *Using multivariate statistics*, 5<sup>th</sup> ed. USA: Pearson Education, Inc.
- Tallman, S. & Li, J. (1996) Effects of international diversity and product diversity on the performance of multinational firms. *The Academy of Management Journal*, Vol. 39, No. 1, pp. 179-196.
- Turnbull, P. N. (1987) Interaction and International Marketing: An Investment Process. *International Marketing Review*, Vol 4 (4), pp. 7-19.
- UNCTAD - United Nations Conference on Trade and Development (2008) *World Investment Report: Transnational Corporation and the Infrastructure challenge*, New York: United Nations Publication.
- Warciarg, R. & Welch, K. H. (2008) Trade Liberalization and Growth: New Evidence. *The World Bank Economic Review*, Vol. 22 (2), pp. 187-231.
- Williamson, O. E. (1981) The Modern Corporation: Origins, Evolution, Attributes. *Journal of Economic Literature*, Vol. XIV, pp. 1537-1568.



# Appendix 1 – Sensitivity analysis Part I

## 1.1 Independent variables

### 1.1.1 No of countries

Table 1 Kolmogorov-Smirnov test (No. of Countries)

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
No of Countries	0.221	137	0.000

Table 2 Extreme values (No. Of Countries)

		Case Number	Value
No of Countries	Highest	1	38
		2	6
		3	62
		4	89
		5	39
	Lowest	1	218
		2	139
		3	69
		4	235
		5	229

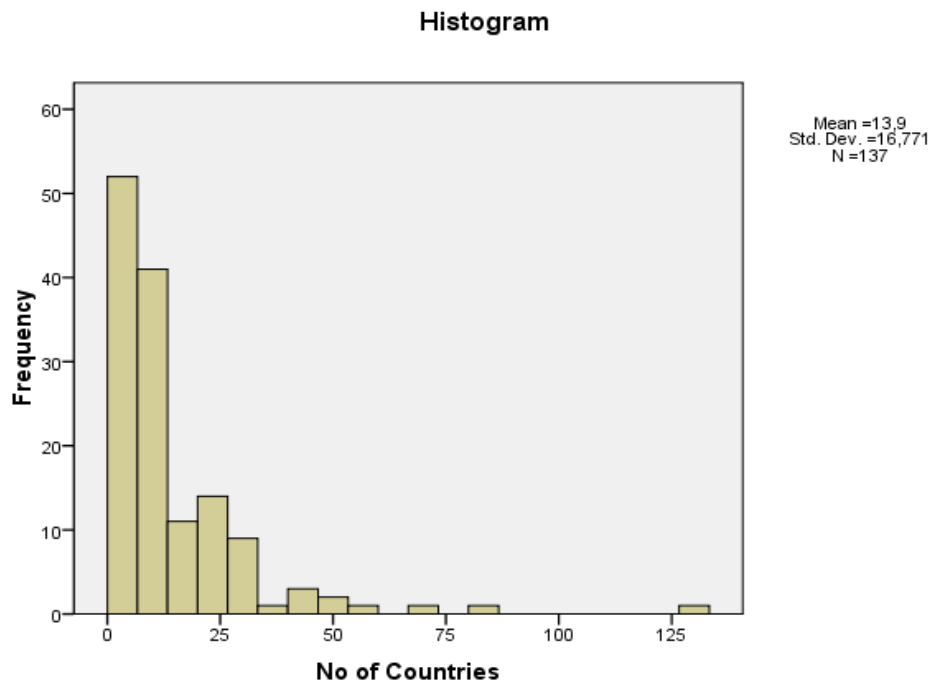


Figure 1 Histogram (No. of countries)

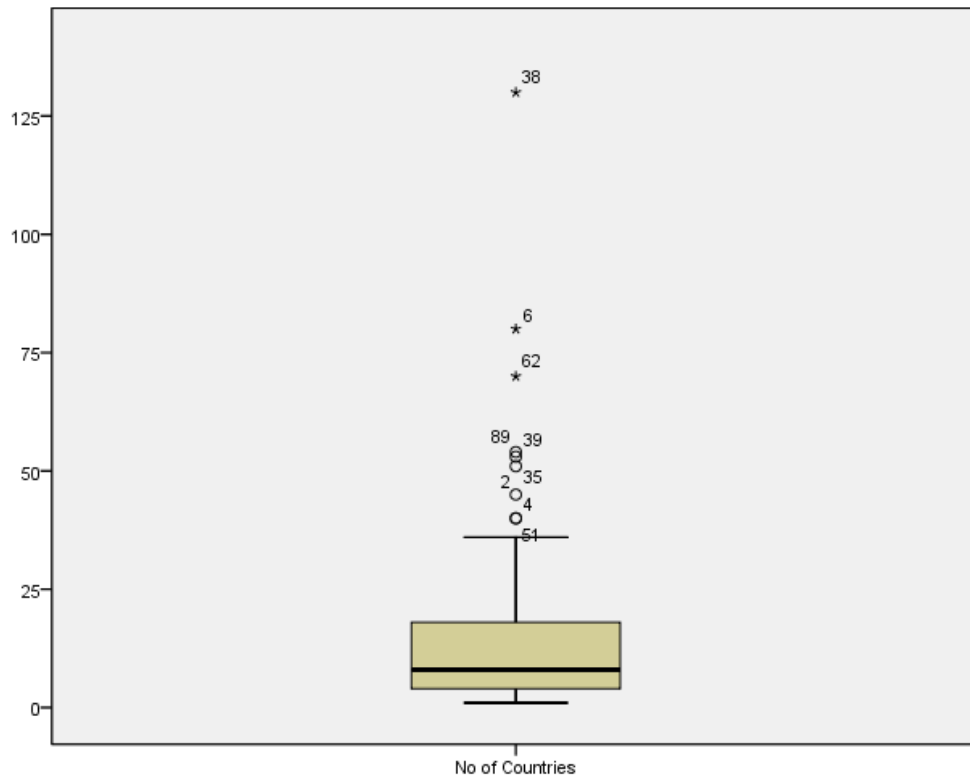


Figure 2 Boxplot (No. of countries)

### 1.1.2 Foreign sales

Table 3 Kolmogorov-Smirnov test (Foreign sales)

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Foreign sales	0.124	103	0.001

Table 4 Extreme values (Foreign sales)

		Case Number		Value
Foreign sales	Highest	1	29	1.00
		2	96	1.00
		3	6	0.98
		4	11	0.96
		5	13	0.96
Foreign sales	Lowest	1	147	0.02
		2	125	0.02
		3	174	0.04
		4	151	0.11
		5	171	0.14

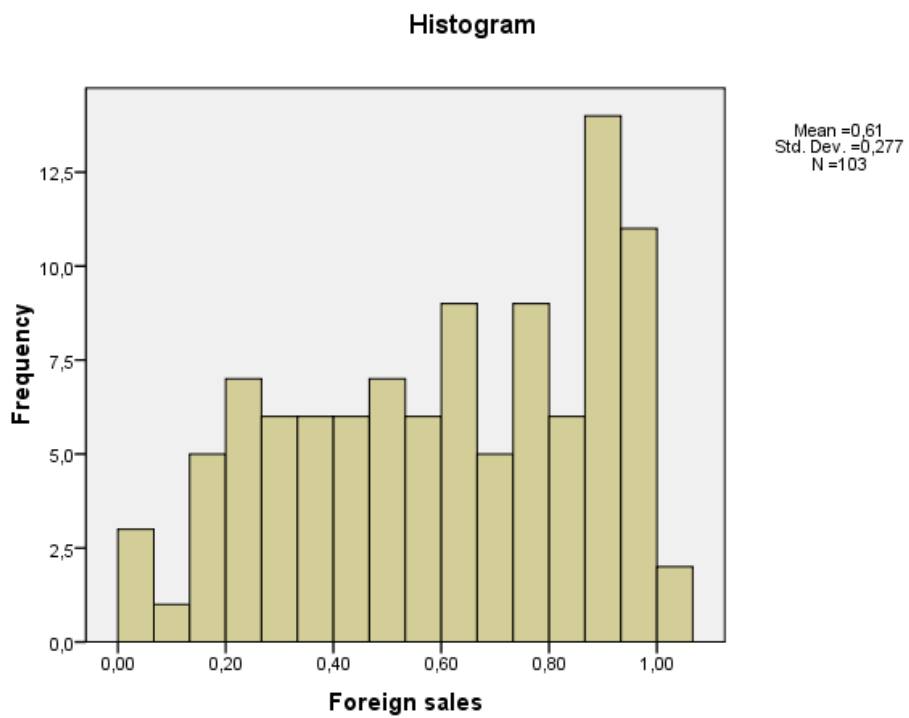


Figure 3 Histogram(Foreign sales)



Figure 4 Boxplot (Foreign sales)

### 1.1.3 Foreign Board

Table 5 Kolmogorov-Smirnov test (Foreign Board)

Kolmogorov-Smirnova			
	Statistic	df	Sig.
<b>Foreign Board</b>	0.330	158	0.000

Table 6 Extreme values (Foreign sales)

		Case Number	Value
<b>Foreign Board</b>	<b>Highest</b>	1	96
		2	48
		3	57
		4	106
		5	109
<b>Lowest</b>	1	236	
	2	235	
	3	230	
	4	229	
	5	226	

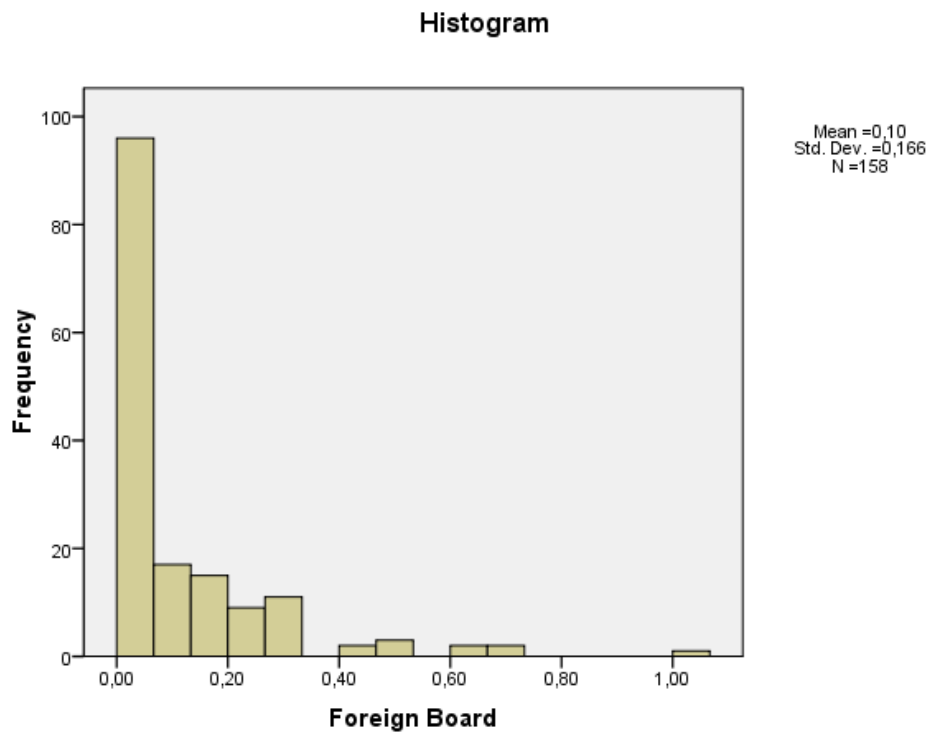


Figure 5 Histogram (Foreign board)

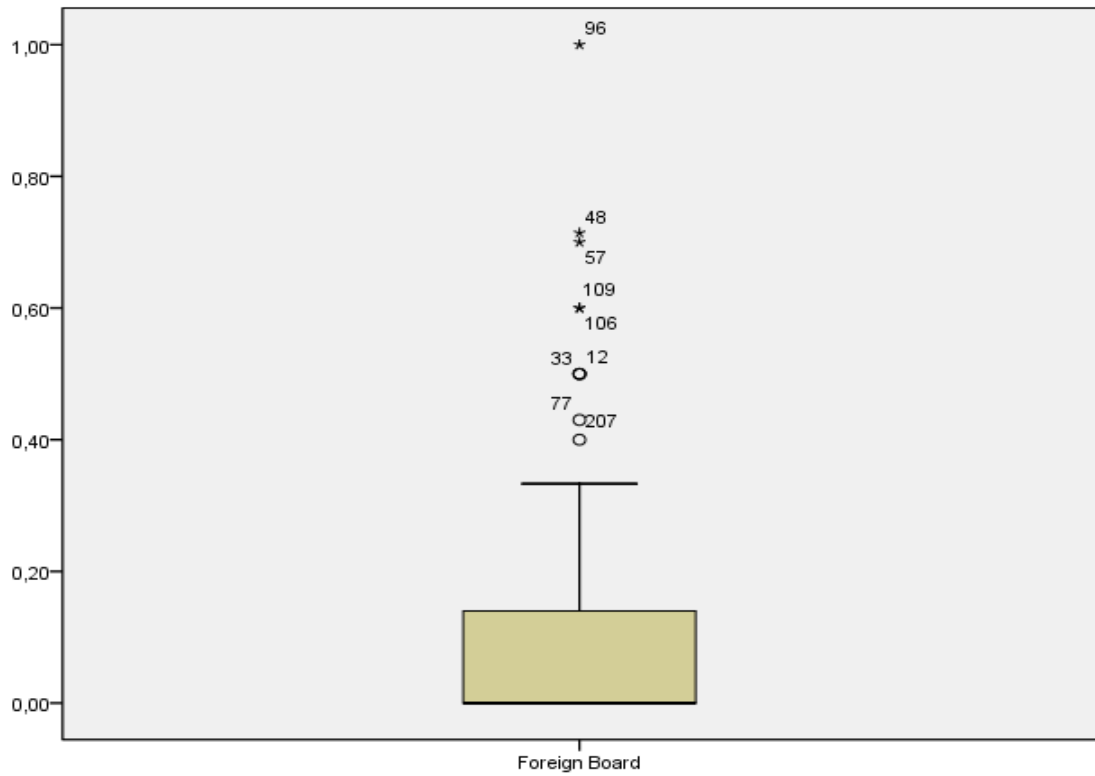


Figure 6 Boxplot (Foreign board)

### 1.1.4 Foreign HR

Table 7 Kolmogorov-Smirnov test (Foreign HR)

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
<b>Foreign HR</b>	0.109	154	0.000

Table 8 Extreme values (Foreign HR)

		Case Number	Value	
<b>Foreign HR</b>	<b>Highest</b>	1	71	1.00
		2	85	1.00
		3	86	1.00
		4	96	1.00
		5	183	1.00
<b>Foreign HR</b>	<b>Lowest</b>	1	233	0.00
		2	230	0.00
		3	221	0.00
		4	218	0.00
		5	216	0.00

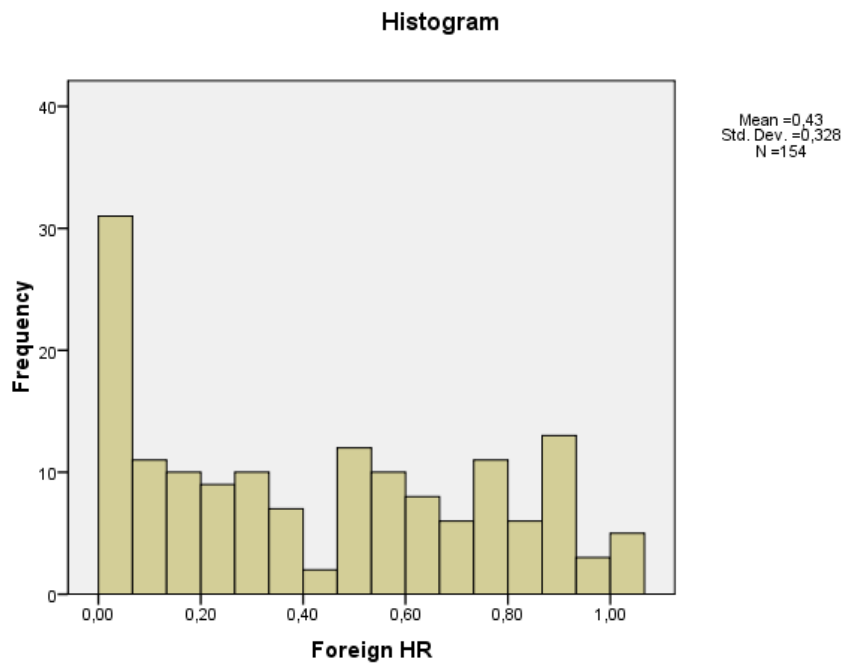


Figure 7 Histogram (Foreign HR)

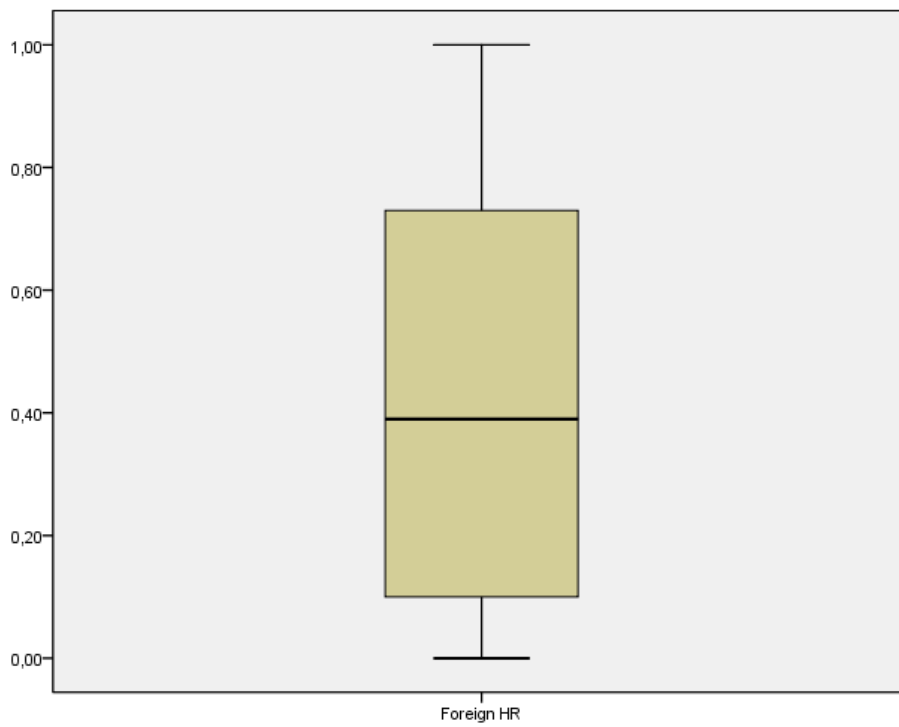


Figure 8 Boxplot (Foreign HR)

### 1.1.5 Foreign Assets

Table 9 Kolmogorov-Smirnov test (Foreign Assets)

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
Foreign Assets	0.135	69	0.003

Table 10 Extreme values (Foreign Assets)

		Case Number	Value
Foreign Assets	Highest	1	11
		2	115
		3	96
		4	6
		5	18
	Lowest	1	233
		2	199
		3	130
		4	172
		5	211

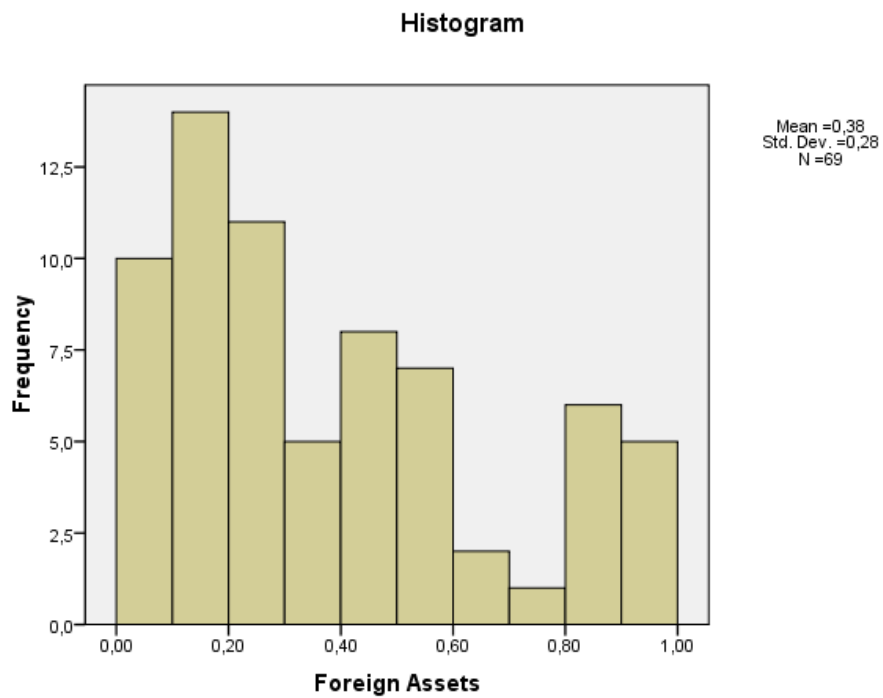


Figure 9 Histogram (Foreign assets)



Figure 10 Boxplot (Foreign assets)

### 1.1.6 International ownership

Table 11 *Kolmogorov-Smirnov test (International ownership)*

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
<b>International ownership</b>	0.165	142	0.000

Table 12 *Extreme values (International ownership)*

		Case Number		Value
<b>International ownership</b>	<b>Highest</b>	1	96	0.95
		2	164	0.88
		3	47	0.81
		4	79	0.81
		5	108	0.68
	<b>Lowest</b>	1	236	0.00
		2	224	0.01
		3	206	0.01
		4	168	0.01
		5	135	0.01



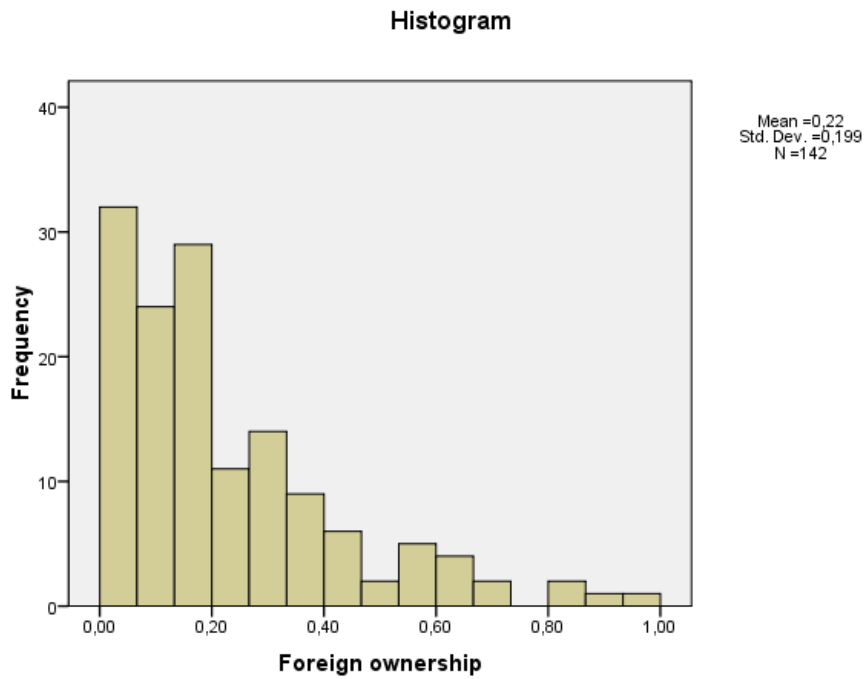


Figure 11 Histogram (International ownership)



Figure 12 Boxplot (International ownership)

### 1.1.7 GL-Index

Table 13 *Kolmogorov-Smirnov test (GL-Index)*

Kolmogorov-Smirnova			
	Statistic	df	Sig.
<b>GLIndex</b>	0.098	158	0.001

Table 14 *Extreme values (GL-Index)*

		Case Number	Value
<b>GLIndex</b>	<b>Highest</b>	1	96
		2	106
		3	6
		4	11
		5	115
<b>Lowest</b>	1	230	
	2	206	
	3	70	
	4	213	
	5	153	

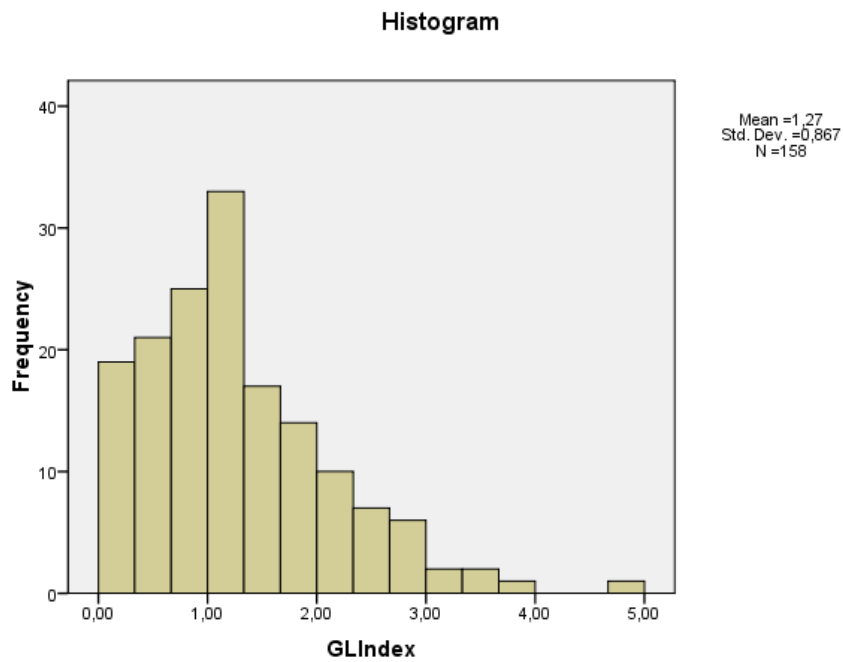


Figure 13 Histogram (GL-Index)

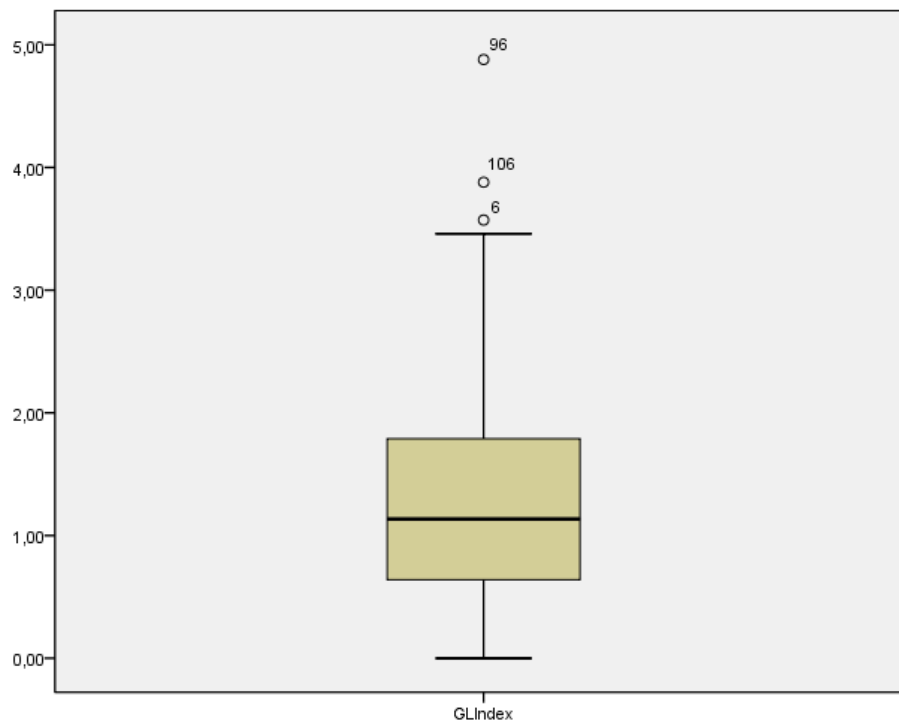


Figure 14 Boxplot (GL-Index)

## 1.2 Dependent Variables

### 1.2.1 ROA

Table 15 Kolmogorov-Smirnov test (ROA)

Kolmogorov-Smirnova			
	Statistic	df	Sig.
<b>ROA</b>	0.256	158	0.000

Table 16 Extreme values (ROA)

		Case Number	Value	
<b>ROA</b>	<b>Highest</b>	1	38	0.38
		2	16	0.30
		3	62	0.29
		4	233	0.25
		5	226	0.24
<b>ROA</b>	<b>Lowest</b>	1	205	-1.61
		2	154	-0.61
		3	132	-0.50
		4	153	-0.49
		5	131	-0.48

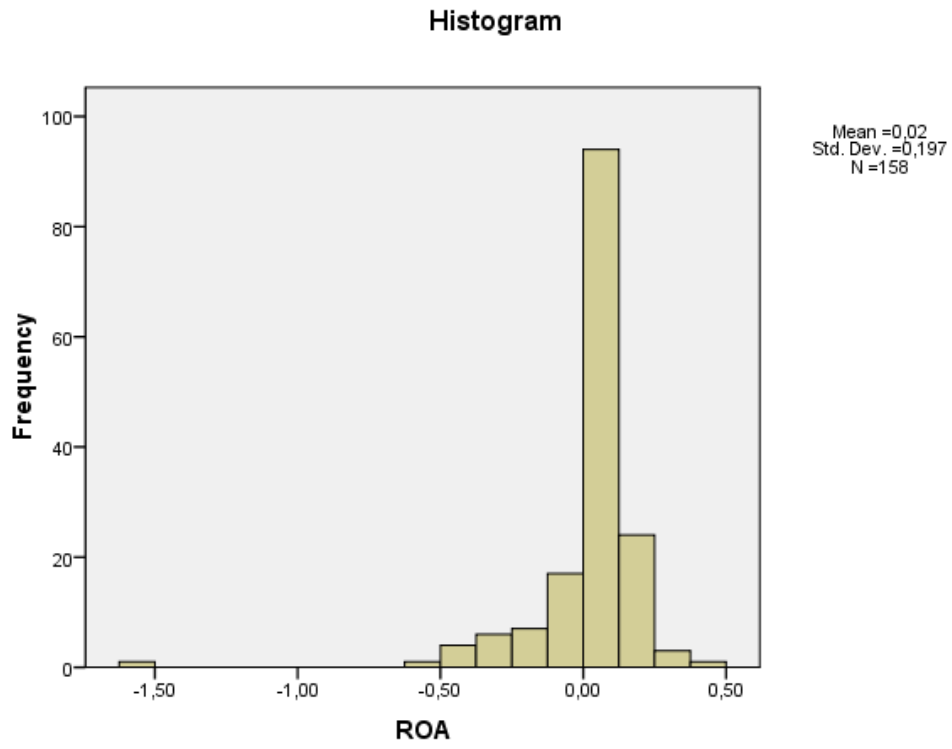


Figure 15 Histogram (ROA)

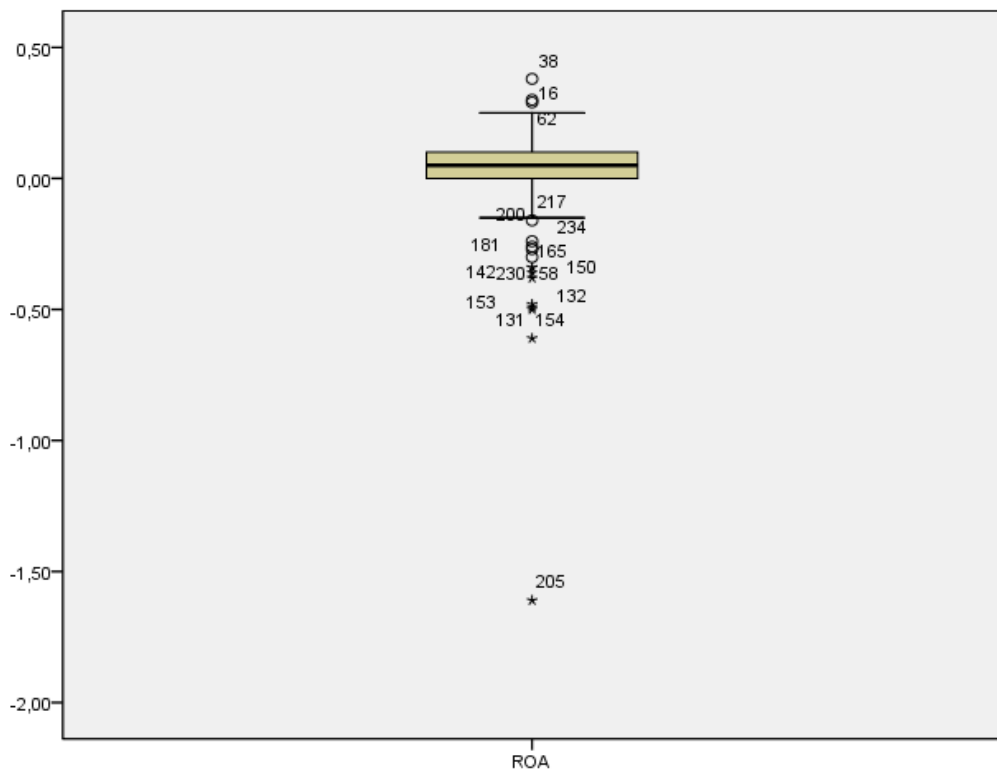


Figure 16 Boxplot (ROA)

### 1.2.2 ROE

Table 17 Kolmogorov-Smirnov test (ROE)

Kolmogorov-Smirnova			
	Statistic	df	Sig.
ROE	0.243	158	0.000

Table 18 Extreme values (ROE)

		Case Number	Value
<b>ROE Highest</b>	1	47	1.64
	2	154	1.28
	3	38	1.06
	4	35	0.96
	5	62	0.57
<b>ROE Lowest</b>	1	205	-3.41
	2	142	-1.94
	3	58	-1.11
	4	150	-1.05
	5	218	-0.98

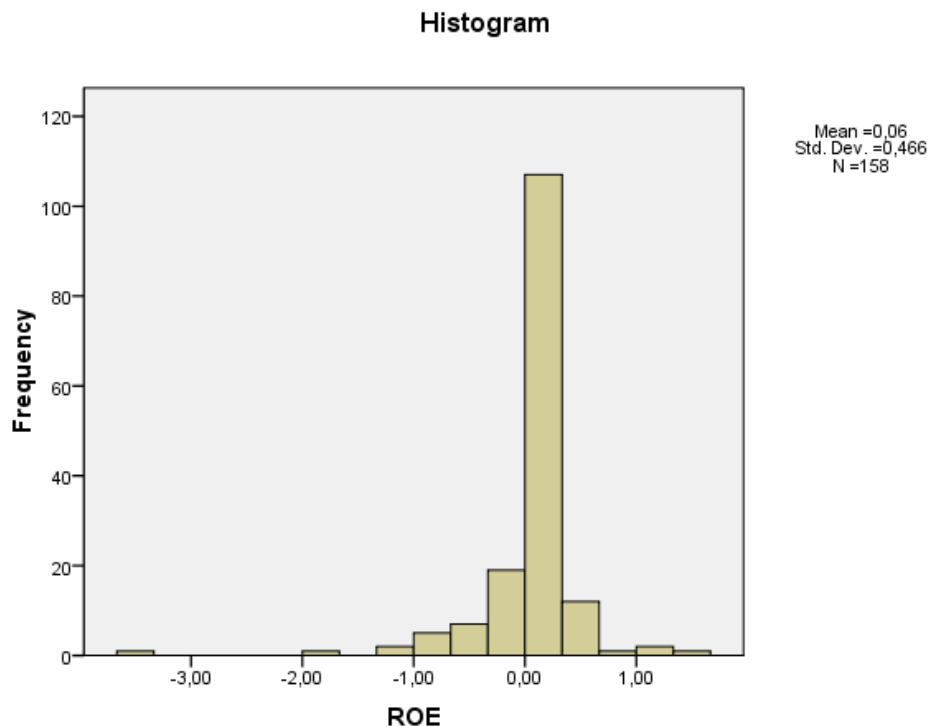


Figure 17 Histogram (ROE)

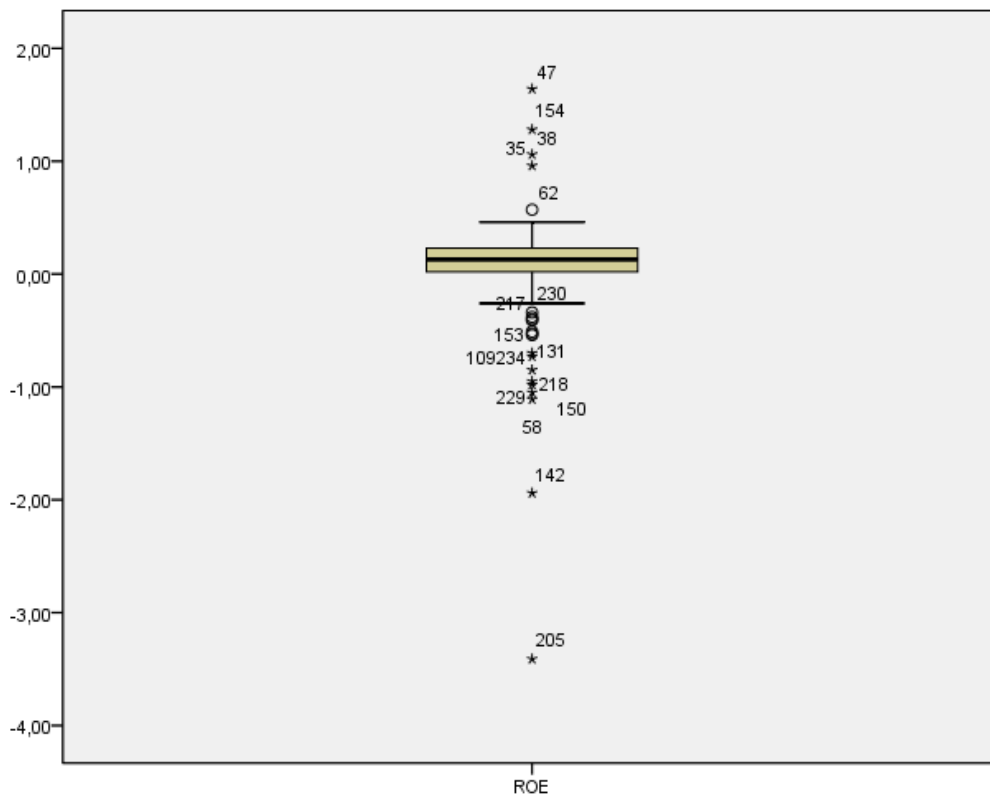


Figure 18 Boxplot (ROE)

### 1.3 Control variables

#### 1.3.1 Turnover

Table 19 Kolmogorov-Smirnov test (Turnover)

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
<b>Turnover MSEK</b>	0.359	157	0.000

Table 20 Extreme values (Turnover)

	Case Number	Value (MSEK)	
<b>Turnover MSEK Highest</b>	1	52	240559.00
	2	13	151821.00
	3	11	129469.00
	4	43	124667.00
	5	39	96385.00
<b>Lowest</b>	1	153	0.88
	2	234	1.00
	3	220	1.00
	4	218	1.00
	5	204	1.00

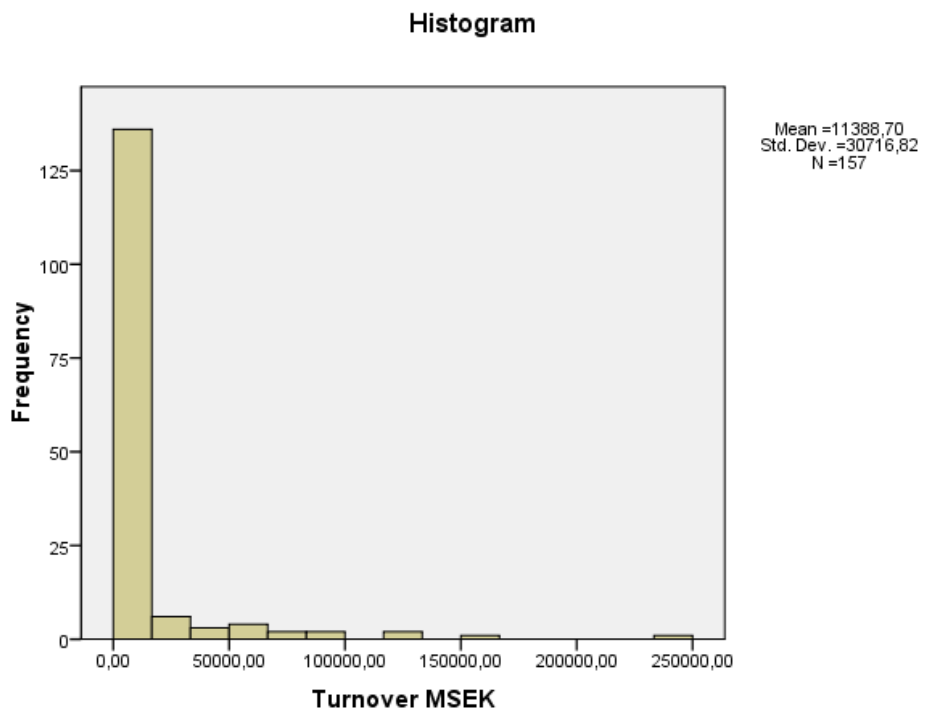


Figure 19 Histogram (Turnover)

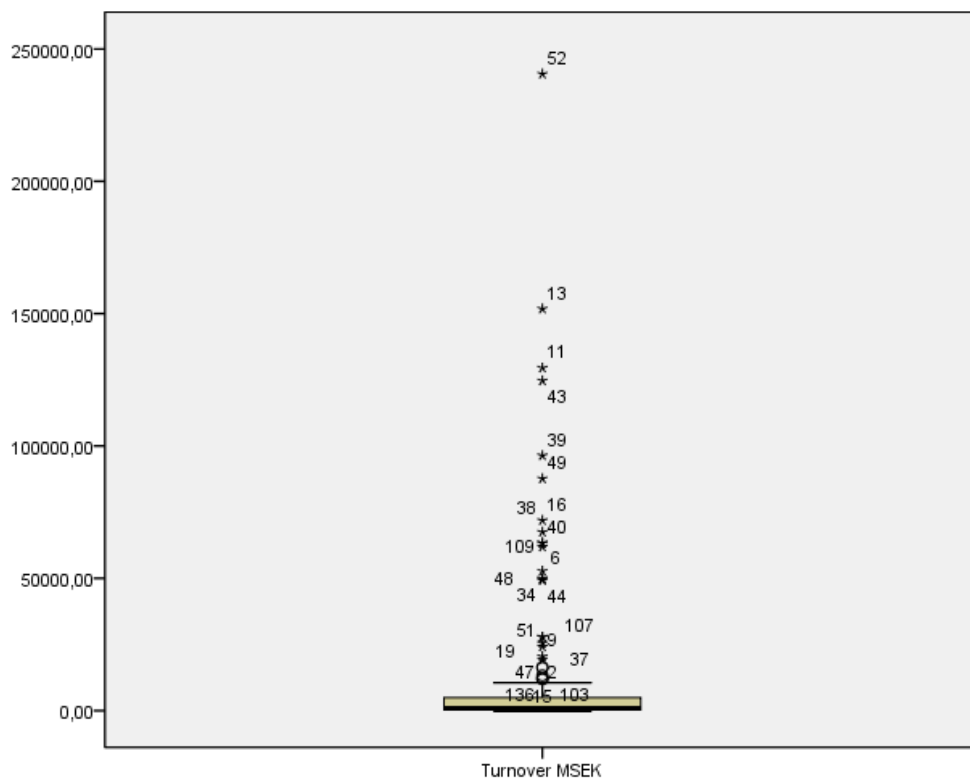


Figure 20 Boxplot (Turnover)

### 1.3.2 Size of HR

Table 21 Kolmogorov-Smirnov test (Size HR)

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
<b>Size of HR</b>	0.347	157	0.000

Table 22 Extreme values (Size HR)

		Case Number	Value	
<b>Size of HR</b>	<b>Highest</b>	1	52	81184
		2	11	69522
		3	13	56055
		4	43	53806
		5	39	50916
	<b>Lowest</b>	1	153	6
		2	139	7
		3	165	11
		4	194	14
		5	209	18

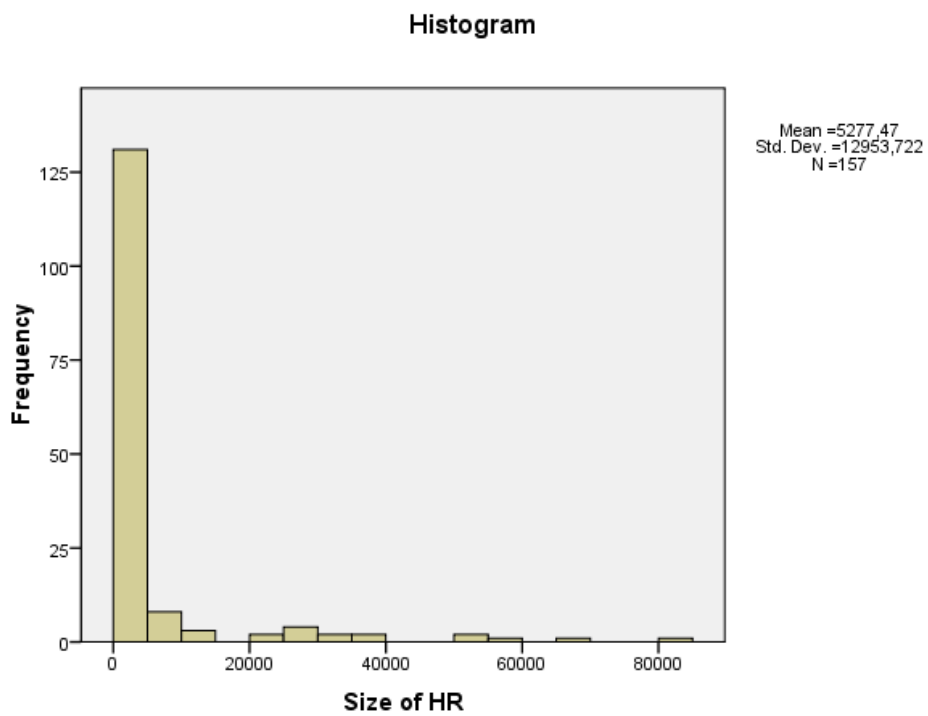


Figure 21 Histogram (Size HR)



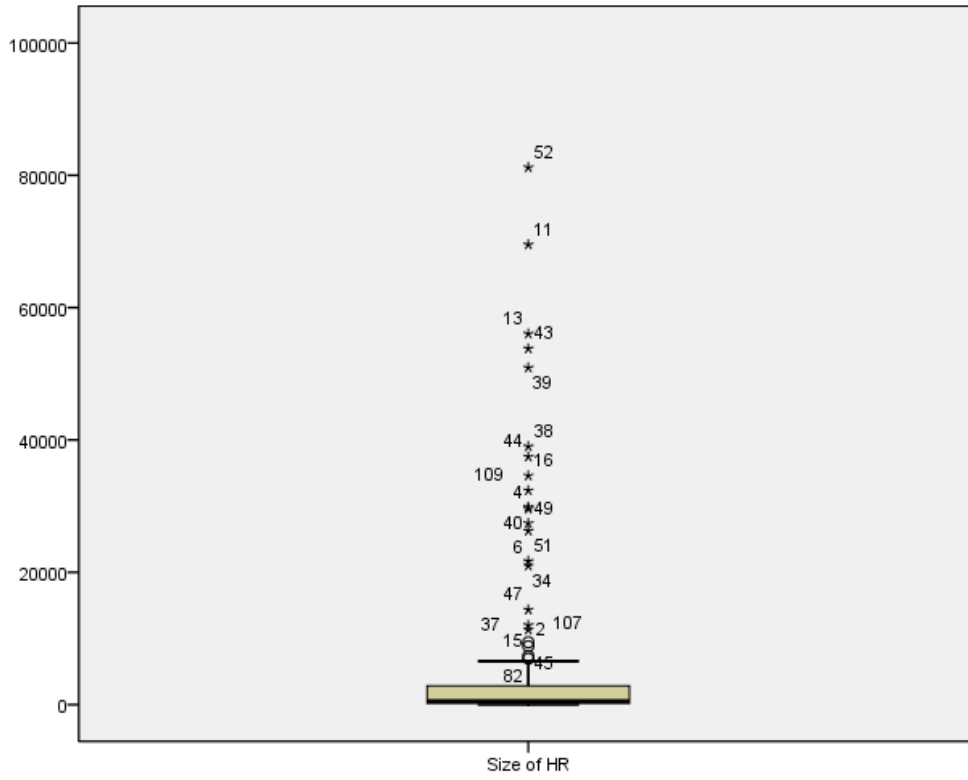


Figure 22 Boxplot (Size HR)

## Appendix 2 – Sensitivity analysis Part II

### 2.1 Independent variables

#### 2.1.1 No. of countries

Table 1 One-way between groups variance test (No. of countries)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	12 182.111	2	6091.056	31.308	0.000
<b>Within Groups</b>	26 070.458	134	194.556		
<b>Total</b>	38 252.569	136			

Table 2 One-way between groups variance test Tukey HSD (No. of countries)

(I) List	(J) List	Mean			95% Confidence Interval	
		Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	16.243 <sup>*</sup>	3.334	0.000	8.34	24.15
	<b>Small Cap</b>	24.356 <sup>*</sup>	3.079	0.000	17.06	31.65
<b>Mid Cap</b>	<b>Large Cap</b>	-16.243 <sup>*</sup>	3.334	0.000	-24.15	-8.34
	<b>Small Cap</b>	8.114 <sup>*</sup>	2.761	0.011	1.57	14.66
<b>Small Cap</b>	<b>Large Cap</b>	-24.356 <sup>*</sup>	3.079	0.000	-31.65	-17.06
	<b>Mid Cap</b>	-8.114 <sup>*</sup>	2.761	0.011	-14.66	-1.57

\*. The mean difference is significant at a 0.05 level.

#### 2.1.2 Foreign sales

Table 3 One-way between groups variance test (Foreign sales)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	2.442	2	1.221	22.753	0.000
<b>Within Groups</b>	5.367	100	0.054		
<b>Total</b>	7.810	102			

Table 4 One-way between groups variance test Tukey HSD (Foreign sales)

(I) List	(J) List	Mean			95% Confidence Interval	
		Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.19169 <sup>*</sup>	0.06299	0.008	0.0418	0.3416
	<b>Small Cap</b>	0.38354 <sup>*</sup>	0.05792	0.000	0.2457	0.5213
<b>Mid Cap</b>	<b>Large Cap</b>	-0.19169 <sup>*</sup>	0.06299	0.008	-0.3416	-0.0418
	<b>Small Cap</b>	0.19185 <sup>*</sup>	0.05338	0.001	0.0648	0.3188
<b>Small Cap</b>	<b>Large Cap</b>	-0.38354 <sup>*</sup>	0.05792	0.000	-0.5213	-0.2457
	<b>Mid Cap</b>	-0.19185 <sup>*</sup>	0.05338	0.001	-0.3188	-0.0648

\*. The mean difference is significant at a 0.05 level.

### 2.1.3 Foreign board

Table 5 One-way between groups variance test (Foreign board)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	0.238	2	0.119	4.494	0.013
<b>Within Groups</b>	4.103	155	0.026		
<b>Total</b>	4.341	157			

Table 6 One-way between groups variance test Tukey HSD (Foreign board)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.01720	0.03781	0.892	-0.0723	0.1067
	<b>Small Cap</b>	0.08702 *	0.03436	0.033	0.0057	0.1683
<b>Mid Cap</b>	<b>Large Cap</b>	-0.01720	0.03781	0.892	-0.1067	0.0723
	<b>Small Cap</b>	0.06982	0.03004	0.055	-0.0013	0.1409
<b>Small Cap</b>	<b>Large Cap</b>	-0.08702 *	0.03436	0.033	-0.1683	-0.0057
	<b>Mid Cap</b>	-0.06982	0.03004	0.055	-0.1409	0.0013

\*. The mean difference is significant at a 0.05 level.

### 2.1.4 Foreign HR

Table 7 One-way between groups variance test (Foreign HR)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	4.341	2	2.171	26.990	0.000
<b>Within Groups</b>	12.144	151	0.080		
<b>Total</b>	16.486	153			

Table 8 One-way between groups variance test Tukey HSD (Foreign HR)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.17557 *	0.06875	0.031	0.0128	0.3383
	<b>Small Cap</b>	0.42593 *	0.06302	0.000	0.2768	0.5751
<b>Mid Cap</b>	<b>Large Cap</b>	-0.17557 *	0.06875	0.031	-0.3383	-0.0128
	<b>Small Cap</b>	0.25035 *	0.05236	0.000	0.1264	0.3743
<b>Small Cap</b>	<b>Large Cap</b>	-0.42593 *	0.06302	0.000	-0.5751	-0.2768
	<b>Mid Cap</b>	-0.25035 *	0.05236	0.000	-0.3743	-0.1264

\*. The mean difference is significant at a 0.05 level.

### 2.1.5 Market commitment

Table 9 One-way between groups variance test (Market commitment)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	0.748	2	0.374	3.186	0.044
<b>Within Groups</b>	18.189	155	0.117		
<b>Total</b>	18.937	157			

Table 10 One-way between groups variance test Tukey HSD (Market commitment)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.174	0.080	0.077	-0.01	0.36
	<b>Small Cap</b>	0.173 <sup>*</sup>	0.072	0.047	0.00	0.34
<b>Mid Cap</b>	<b>Large Cap</b>	-0.174	0.080	0.077	-0.36	0.01
	<b>Small Cap</b>	-0.001	0.063	1.000	-0.15	0.15
<b>Small Cap</b>	<b>Large Cap</b>	-0.173 <sup>*</sup>	0.072	0.047	-0.34	0.00
	<b>Mid Cap</b>	0.001	0.063	1.000	-0.15	0.15

\*. The mean difference is significant at a 0.05 level.

### 2.1.6 Foreign assets

Table 11 One-way between groups variance test (Foreign assets)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	1.371	2	0.685	11.464	0.000
<b>Within Groups</b>	3.946	66	0.060		
<b>Total</b>	5.317	68			

Table 12 One-way between groups variance test Tukey HSD (Foreign assets)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.09857	0.08437	0.476	-0.1037	0.3009
	<b>Small Cap</b>	0.33256 <sup>*</sup>	0.07765	0.000	0.1464	0.5187
<b>Mid Cap</b>	<b>Large Cap</b>	-0.09857	0.08437	0.476	-0.3009	0.1037
	<b>Small Cap</b>	0.23399 <sup>*</sup>	0.06787	0.003	0.0713	0.3967
<b>Small Cap</b>	<b>Large Cap</b>	-0.33256 <sup>*</sup>	0.07765	0.000	-0.5187	-0.1464
	<b>Mid Cap</b>	-0.23399 <sup>*</sup>	0.06787	0.003	-0.3967	-0.0713

\*. The mean difference is significant at a 0.05 level.

### 2.1.7 International ownership

Table 13 One-way between groups variance test (International ownership)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	0.361	2	0.181	4.812	0.010
<b>Within Groups</b>	5.217	139	0.038		
<b>Total</b>	5.579	141			

Table 14 One-way between groups variance test Tukey HSD (International ownership)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.01996	0.04725	0.906	-0.0920	0.1319
	<b>Small Cap</b>	0.11155*	0.04253	0.026	0.0108	0.2123
<b>Mid Cap</b>	<b>Large Cap</b>	-0.01996	0.04725	0.906	-0.1319	0.0920
	<b>Small Cap</b>	0.09159*	0.03811	0.046	0.0013	0.1819
<b>Small Cap</b>	<b>Large Cap</b>	-0.11155*	0.04253	0.026	-0.2123	-0.0108
	<b>Mid Cap</b>	-0.09159*	0.03811	0.046	-0.1819	-0.0013

\*. The mean difference is significant at a 0.05 level.

### 2.1.8 GL-Index

Table 15 One-way between groups variance test (GL-Index)

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	30.415	2	15.208	26.916	0.000
<b>Within Groups</b>	87.575	155	0.565		
<b>Total</b>	117.991	157			

Table 16 One-way between groups variance test Tukey HSD (GL-Index)

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.39415	0.17467	0.065	-0.0192	0.8075
	<b>Small Cap</b>	1.07070*	0.15875	0.000	0.6950	1.4464
<b>Mid Cap</b>	<b>Large Cap</b>	-0.39415	0.17467	0.065	-0.8075	0.0192
	<b>Small Cap</b>	0.67656*	0.13877	0.000	0.3482	1.0050
<b>Small Cap</b>	<b>Large Cap</b>	-1.07070*	0.15875	0.000	-1.4464	-0.6950
	<b>Mid Cap</b>	-0.67656*	0.13877	0.000	-1.0050	-0.3482

\*. The mean difference is significant at a 0.05 level.

## 2.2 Dependent variables

### 2.2.1 ROA

Table 17 *One-way between groups variance test (ROA)*

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	0.410	2	0.205	5.590	0.005
<b>Within Groups</b>	5.688	155	0.037		
<b>Total</b>	6.098	157			

Table 18 *One-way between groups variance test Tukey HSD (ROA)*

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.01953	0.04451	0.899	-0.0858	0.1249
	<b>Small Cap</b>	0.11273*	0.04046	0.016	0.0170	0.2085
<b>Mid Cap</b>	<b>Large Cap</b>	-0.01953	0.04451	0.899	-0.1249	0.0858
	<b>Small Cap</b>	0.09320*	0.03537	0.025	0.0095	0.1769
<b>Small Cap</b>	<b>Large Cap</b>	-0.11273*	0.04046	0.016	-0.2085	-0.0170
	<b>Mid Cap</b>	-0.09320*	0.03537	0.025	-0.1769	-0.0095

\*. The mean difference is significant at a 0.05 level.

### 2.2.2 ROE

Table 19 *One-way between groups variance test (ROE)*

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	2.689	2	1.344	6.623	0.002
<b>Within Groups</b>	31.463	155	0.203		
<b>Total</b>	34.152	157			

Table 20 *One-way between groups variance test Tukey HSD (ROE)*

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	0.15288	0.10469	0.313	-0.0949	0.4006
	<b>Small Cap</b>	0.33039*	0.09515	0.002	0.1052	0.5556
<b>Mid Cap</b>	<b>Large Cap</b>	-0.15288	0.10469	0.313	-0.4006	0.0949
	<b>Small Cap</b>	0.17751	0.08318	0.086	-0.0193	0.3744
<b>Small Cap</b>	<b>Large Cap</b>	-0.33039*	0.09515	0.002	-0.5556	-0.1052
	<b>Mid Cap</b>	-0.17751	0.08318	0.086	-0.3744	0.0193

\*. The mean difference is significant at a 0.05 level.

## 2.3 Control variables

### 2.3.1 Turnover

Table 21 *One-way between groups variance test (Turnover)*

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	5.715E10	2	2.857E10	48.872	0.000
<b>Within Groups</b>	9.004E10	154	5.847E8		
<b>Total</b>	1.472E11	156			

Table 22 *One-way between groups variance test Tukey HSD (Turnover)*

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	45778.54496*	5674.47602	0.000	32349.3646	59207.7253
	<b>Small Cap</b>	49776.55458*	5167.93288	0.000	37546.1561	62006.9530
<b>Mid Cap</b>	<b>Large Cap</b>	-4.57785E4	5674.47602	0.000	-59207.7253	-32349.3646
	<b>Small Cap</b>	3998.00962	4464.15173	0.644	-6566.8246	14562.8439
<b>Small Cap</b>	<b>Large Cap</b>	-4.97766E4	5167.93288	0.000	-62006.9530	-37546.1561
	<b>Mid Cap</b>	-3998.00962	4464.15173	0.644	-14562.8439	6566.8246

\*. The mean difference is significant at a 0.05 level.

### 2.3.2 Size of HR

Table 23 *One-way between groups variance test (Size of HR)*

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	1.061E10	2	5.307E9	52.521	0.000
<b>Within Groups</b>	1.556E10	154	1.011E8		
<b>Total</b>	2.618E10	156			

Table 24 *One-way between groups variance test Tukey HSD (Size of HR)*

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	19505.192*	2359.057	0.000	13922.26	25088.12
	<b>Small Cap</b>	21528.379*	2148.471	0.000	16443.82	26612.94
<b>Mid Cap</b>	<b>Large Cap</b>	-19505.192*	2359.057	0.000	-25088.12	-13922.26
	<b>Small Cap</b>	2023.186	1855.887	0.522	-2368.94	6415.32
<b>Small Cap</b>	<b>Large Cap</b>	-21528.379*	2148.471	0.000	-26612.94	-16443.82
	<b>Mid Cap</b>	-2023.186	1855.887	0.522	-6415.32	2368.94

\*. The mean difference is significant at a 0.05 level.

### 2.3.3 Industry

Table 25 *One-way between groups variance test (Industry)*

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	76.189	2	38.094	8.506	0.000
<b>Within Groups</b>	694.166	155	4.478		
<b>Total</b>	770.354	157			

Table 26 *One-way between groups variance test Tukey HSD (Industry)*

(I) List	(J) List	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Large Cap</b>	<b>Mid Cap</b>	-0.477	0.492	0.597	-1.64	0.69
	<b>Small Cap</b>	-1.635 <sup>*</sup>	0.447	0.001	-2.69	-0.58
<b>Mid Cap</b>	<b>Large Cap</b>	0.477	0.492	0.597	-0.69	1.64
	<b>Small Cap</b>	-1.158 <sup>*</sup>	0.391	0.010	-2.08	-0.23
<b>Small Cap</b>	<b>Large Cap</b>	1.635 <sup>*</sup>	0.447	0.001	0.58	2.69
	<b>Mid Cap</b>	1.158 <sup>*</sup>	0.391	0.010	0.23	2.08

\*. The mean difference is significant at a 0.05 level.



## Appendix 3 – Descriptive Statistics and Pearson Correlation Coefficients

**Table 1** Descriptive Statistics and Pearson Correlation Coefficients

Variables	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12
1 No of Countries	13.90	16.771												
2 Foreign Sales	0.606	0.277	0.514**											
3 Foreign Board	0.098	0.166	0.047	0.307**										
4 Foreign HR	0.427	0.328	0.412**	0.502**	0.239**									
5 Market Commitment	0.86	0.347	0.047	0.254**	0.094	0.371**								
6 Foreign Assets	0.379	0.279	0.478**	0.640**	0.336**	0.808**	0.145							
7 International ownership	0.223	0.199	0.159	0.338**	0.478**	0.293**	0.000	0.395**						
8 GLIndex	1.275	0.867	0.346**	0.695**	0.468**	0.701**	0.323**	0.854**	0.533**					
9 ROA	0.019	0.197	0.304**	-0.093	-0.120	0.177*	0.300**	0.067	-0.094	0.117				
10 ROE	0.061	0.466	0.327**	-0.011	-0.073	0.188*	0.269**	0.084	-0.032	0.081	0.786**			
11 Turnover MSEK	11388.7	30716.8	0.309**	0.390**	0.199*	0.293**	0.141	0.269*	0.139	0.411**	0.083	0.090		
12 Size of HR	5277.5	12953.7	0.405**	0.412**	0.150	0.371**	0.147	0.316**	0.153	0.445**	0.095	0.107	0.939**	
13 Industry	3.85	2.215	-0.141	-0.172	0.165*	-0.175*	-0.210**	-0.029	0.008	-0.202*	-0.162*	-0.061	-0.131	-0.188*

n = 158

\*\*  $p < 0.01$

\*  $p < 0.05$

# Appendix 4 – Regression analysis

## 4.1 Model: Number of Countries, Dependent: ROA

### 4.1.1 Number of Countries model with control variables

Table 1 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.336a	0.113	0.086	0.18844

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries, Size of HR

Table 2 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.592	4	0.148	4.169	0.003a
	<b>Residual</b>	4.652	131	0.036		
	<b>Total</b>	5.244	135			

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries, Size of HR

Table 3 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	<b>No of Countries</b>	0.004	0.001	0.323	3.488	0.001	0.792	1.263
	<b>Turnover MSEK</b>	1.229E-6	0.000	0.192	0.774	0.441	0.110	9.055
	<b>Size of HR</b>	-3.664E-6	0.000	-0.241	-0.929	0.354	0.101	9.921
	<b>Industry</b>	-0.012	0.008	-0.136	-1.612	0.109	0.945	1.058

a. Dependent Variable: ROA

### 4.1.2 Number of Countries model excluding Size of HR

Table 4 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.327a	0.107	0.087	0.18834

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries

Table 5 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.562	3	0.187	5.277	0.002a
	<b>Residual</b>	4.682	132	0.035		
	<b>Total</b>	5.244	135			

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries

Table 6 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 No of Countries	0.003	0.001	0.294	3.375	0.001	0.894	1.119
Turnover MSEK	-1.535E-7	0.000	-0.024	-0.275	0.783	0.897	1.115
Industry	-0.011	0.007	-0.123	-1.479	0.142	0.972	1.029

a. Dependent Variable: ROA

#### 4.1.3 Number of Countries model excluding Turnover

Table 7 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.330a	0.109	0.089	0.18815

a. Predictors: (Constant), Industry, No of Countries, Size of HR

Table 8 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.571	3	0.190	5.376	0.002a
	Residual	4.673	132	0.035		
	Total	5.244	135			

a. Predictors: (Constant), Industry, No of Countries, Size of HR

Table 9 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 No of Countries	0.004	0.001	0.307	3.407	0.001	0.832	1.203
Size of HR	-8.081E-7	0.000	-0.053	-0.585	0.560	0.818	1.222
Industry	-0.011	0.007	-0.128	-1.530	0.128	0.959	1.042

a. Dependent Variable: ROA

#### 4.1.4 Number of Countries model without control variables

Table 10 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.304a	0.092	0.085	0.18848

a. Predictors: (Constant), No of Countries

Table 11 *Multiple regression, Anova dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.487	1	0.487	13.705	0.000a
	<b>Residual</b>	4.796	135	0.036		
	<b>Total</b>	5.283	136			

a. Predictors: (Constant), No of Countries

## 4.2 Model: Number of Countries, Dependent: ROE

### 4.2.1 Number of Countries model with control variables

Table 12 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.331a	0.110	0.083	0.44674

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries, Size of HR

Table 13 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	3.222	4	0.805	4.036	0.004a
	<b>Residual</b>	26.145	131	0.200		
	<b>Total</b>	29.366	135			

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries, Size of HR

Table 14 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>No of Countries</b>	0.010	0.003	0.348	3.756	0.000	0.792	1.263
	<b>Turnover MSEK</b>	1.929E-6	0.000	0.127	0.512	0.609	0.110	9.055
	<b>Size of HR</b>	-5.688E-6	0.000	-0.158	-0.608	0.544	0.101	9.921
	<b>Industry</b>	-0.005	0.018	-0.025	-0.291	0.772	0.945	1.058

a. Dependent Variable: ROE

### 4.2.2 Number of Countries model excluding Size of HR

Table 15 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.327a	0.107	0.087	0.44567

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries

Table 16 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	3.148	3	1.049	5.283	0.002a
	<b>Residual</b>	26.218	132	0.199		
	<b>Total</b>	29.366	135			

a. Predictors: (Constant), Industry, Turnover MSEK, No of Countries

Table 17 *Multiple regression, Coefficient*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>No of Countries</b>	0.009	0.002	0.329	3.782	0.000	0.894	1.119
	<b>Turnover MSEK</b>	-2.170E-7	0.000	-0.014	-0.165	0.870	0.897	1.115
	<b>Industry</b>	-0.003	0.018	-0.016	-0.193	0.847	0.972	1.029

a. Dependent Variable: ROE

#### 4.2.3 Number of Countries model excluding Turnover

Table 18 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.329a	0.108	0.088	0.44549

a. Predictors: (Constant), Industry, No of Countries, Size of HR

Table 19 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	3.169	3	1.056	5.323	0.002a
	<b>Residual</b>	26.197	132	0.198		
	<b>Total</b>	29.366	135			

a. Predictors: (Constant), Industry, No of Countries, Size of HR

Table 20 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>No of Countries</b>	0.009	0.003	0.338	3.745	0.000	0.832	1.203
	<b>Size of HR</b>	-1.205E-6	0.000	-0.033	-0.368	0.713	0.818	1.222
	<b>Industry</b>	-0.004	0.018	-0.019	-0.230	0.818	0.959	1.042

a. Dependent Variable: ROE

#### 4.2.4 Number of Countries model without control variables

Table 21 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.327a	0.107	0.100	0.44242

a. Predictors: (Constant), No of Countries

Table 22 Multiple regression, ANOVA dependent ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	3.159	1	3.159	16.141	0.000a
	<b>Residual</b>	26.424	135	0.196		
	<b>Total</b>	29.584	136			

a. Predictors: (Constant), No of Countries

### 4.3 Model: Foreign sales, Dependent: ROA

#### 4.3.1 Foreign sales model with control variables

Table 23 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.238a	0.056	0.018	0.19531

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales, Size of HR

Table 24 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.224	4	0.056	1.467	0.218a
	<b>Residual</b>	3.738	98	0.038		
	<b>Total</b>	3.962	102			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales, Size of HR

Table 25 Multiple regression, Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign sales</b>	-0.127	0.077	-0.178	-1.642	0.104	0.821	1.218
	<b>Turnover MSEK</b>	9.128E-8	0.000	0.014	0.049	0.961	0.116	8.626
	<b>Size of HR</b>	1.883E-6	0.000	0.124	0.422	0.674	0.112	8.917
	<b>Industry</b>	-0.015	0.009	-0.167	-1.647	0.103	0.936	1.069

a. Dependent Variable: ROA

### 4.3.2 Foreign sales model excluding Size of HR

Table 26 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.234a	0.055	0.026	0.19449

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales

Table 27 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.217	3	0.072	1.912	0.132a
	<b>Residual</b>	3.745	99	0.038		
	<b>Total</b>	3.962	102			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales

Table 28 Multiple regression, Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	<b>Foreign sales</b>	-0.123	0.076	-0.172	-1.609	0.111	0.833	1.200
	<b>Turnover MSEK</b>	8.167E-7	0.000	0.127	1.197	0.234	0.844	1.185
	<b>Industry</b>	-0.016	0.009	-0.175	-1.757	0.082	0.966	1.036

a. Dependent Variable: ROA

### 4.3.3 Foreign sales model excluding Turnover

Table 29 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.238a	0.056	0.028	0.19432

a. Predictors: (Constant), Industry, Foreign sales, Size of HR

Table 30 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0,224	3	0,075	1,975	0,123a
	<b>Residual</b>	3,738	99	0,038		
	<b>Total</b>	3,962	102			

a. Predictors: (Constant), Industry, Foreign sales, Size of HR

Table 31 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1 Foreign sales</b>	-0.127	0.077	-0.178	-1.650	0.102	0.821	1.217
<b>Size of HR</b>	2.088E-6	0.000	0.137	1.270	0.207	0.816	1.225
<b>Industry</b>	-0.015	0.009	-0.166	-1.665	0.099	0.954	1.048

a. Dependent Variable: ROA

#### 4.3.4 Foreign sales model without control variables

Table 32 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.093a	0.009	-0.001	0.19721

a. Predictors: (Constant), Foreign sales

Table 33 *Multiple regression, ANOVA dependent ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
<b>1</b>	<b>Regression</b>	0.034	1	0.034	0.875	0.352a
	<b>Residual</b>	3.928	101	0.039		
	<b>Total</b>	3.962	102			

a. Predictors: (Constant), Foreign sales

## 4.4 Model: Foreign sales, Dependent: ROE

### 4.4.1 Foreign sales model with control variables

Table 34 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.134a	0.018	-0.022	0.47153

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales, Size of HR

Table 35 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
<b>1</b>	<b>Regression</b>	0.399	4	0.100	0.448	0.773a
	<b>Residual</b>	21.789	98	0.222		
	<b>Total</b>	22.188	102			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales, Size of HR



Table 36 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 Foreign sales	-0.120	0.186	-0.071	-0.642	0.522	0.821	1.218
Turnover MSEK	-1.098E-6	0.000	-0.072	-0.246	0.806	0.116	8.626
Size of HR	7.037E-6	0.000	0.195	0.654	0.515	0.112	8.917
Industry	-0.010	0.022	-0.046	-0.440	0.661	0.936	1.069

a. Dependent Variable: ROE

#### 4.4.2 Foreign sales model excluding Size of HR

Table 37 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.117a	0.014	-0.016	0.47016

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales

Table 38 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.304	3	0.101	0.458	0.712a
	Residual	21.884	99	0.221		
	Total	22.188	102			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign sales

Table 39 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 Foreign sales	-0.105	0.184	-0.062	-0.568	0.571	0.833	1.200
Turnover MSEK	1.613E-6	0.000	0.106	0.978	0.331	0.844	1.185
Industry	-0.012	0.021	-0.057	-0.566	0.573	0.966	1.036

a. Dependent Variable: ROE

#### 4.4.3 Foreign sales model excluding Turnover

Table 40 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.132a	0.017	-0.012	0.46929

a. Predictors: (Constant), Industry, Foreign sales, Size of HR

Table 41 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.385	3	0.128	0.583	0.628a
	<b>Residual</b>	21.803	99	0.220		
	<b>Total</b>	22.188	102			

a. Predictors: (Constant), Industry, Foreign sales, Size of HR

Table 42 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	<b>Foreign sales</b>	-0.121	0.185	-0.072	-0.652	0.516	0.821	1.217
	<b>Size of HR</b>	4.579E-6	0.000	0.127	1.153	0.252	0.816	1.225
	<b>Industry</b>	-0.010	0.021	-0.049	-0.481	0.632	0.954	1.048

a. Dependent Variable:ROE

#### 4.4.4 Foreign sales model without control variables

Table 43 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.011a	0.000	-0.010	0.46867

a. Predictors: (Constant), Foreign sales

Table 44 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.003	1	0.003	0.012	0.913a
	<b>Residual</b>	22.185	101	0.220		
	<b>Total</b>	22.188	102			

a. Predictors: (Constant), Foreign sales

## 4.5 Model: Foreign Board, Dependent: ROA

### 4.5.1 Foreign board model with control variables

Table 45 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.207a	0.043	0.017	0.19536

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board, Size of HR

Table 46 *Multiple regression, ANOVA depend ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.259	4	0.065	1.694	0.154a
	<b>Residual</b>	5.801	152	0.038		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board, Size of HR

Table 47 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign Board</b>	-0.136	0.098	-0.115	-1.389	0.167	0.918	1.089
	<b>Turnover MSEK</b>	3.244E-7	0.000	0.051	0.215	0.830	0.113	8.812
	<b>Size of HR</b>	6.242E-7	0.000	0.041	0.174	0.862	0.113	8.832
	<b>Industry</b>	-0.011	0.007	-0.128	-1.549	0.124	0.916	1.092

a. Dependent Variable: ROA

#### 4.5.2 Foreign Board excluding Size of HR

Table 48 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.206a	0.042	0.024	0.19474

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board

Table 49 *Multiple regression, ANOVA dependent ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.258	3	0.086	2.264	0.083a
	<b>Residual</b>	5.802	153	0.038		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board

Table 50 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign Board</b>	-0.138	0.098	-0.116	-1.410	0.161	0.923	1.083
	<b>Turnover MSEK</b>	5.708E-7	0.000	0.089	1.086	0.279	0.933	1.072
	<b>Industry</b>	-0.012	0.007	-0.131	-1.609	0.110	0.945	1.058

a. Dependent Variable: ROA

#### 4.5.3 Foreign Board excluding Turnover

Table 51 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.206a	0.042	0.024	0.19475

a. Predictors: (Constant), Industry, Foreign Board, Size of HR

Table 52 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.257	3	0.086	2.258	0.084a
	<b>Residual</b>	5.803	153	0.038		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Foreign Board, Size of HR

Table 53 Multiple regression, Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign Board</b>	-0.133	0.097	-0.112	-1.377	0.171	0.939	1.065
	<b>Size of HR</b>	1.346E-6	0.000	0.088	1.079	0.282	0.931	1.074
	<b>Industry</b>	-0.011	0.007	-0.127	-1.539	0.126	0.926	1.080

a. Dependent Variable: ROA

#### 4.5.4 Foreign Board without control variables

Table 54 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.120a	0.014	0.008	0.19629

a. Predictors: (Constant), Foreign Board

Table 55 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.088	1	0.088	2.280	0.133a
	<b>Residual</b>	6.011	156	0.039		
	<b>Total</b>	6.098	157			

a. Predictors: (Constant), Foreign Board

## 4.6 Model: Foreign Board, Dependent: ROE

### 4.6.1 Foreign Board with control variables

Table 56 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.143a	0.020	-0.005	0.46767

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board, Size of HR

Table 57 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.690	4	0.172	0.788	0.535a
	<b>Residual</b>	33.245	152	0.219		
	<b>Total</b>	33.934	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board, Size of HR

Table 58 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign Board</b>	-0.236	0.235	-0.084	-1.003	0.317	0.918	1.089
	<b>Turnover MSEK</b>	-6.349E-7	0.000	-0.042	-0.175	0.861	0.113	8.812
	<b>Size of HR</b>	5.561E-6	0.000	0.154	0.647	0.518	0.113	8.832
	<b>Industry</b>	-0.005	0.018	-0.023	-0.277	0.782	0.916	1.092

a. Dependent Variable: ROE

### 4.6.2 Foreign Board excluding Size of HR

Table 59 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.133a	0.018	-0.002	0.46678

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board

Table 60 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.598	3	0.199	0.915	0.435a
	<b>Residual</b>	33.337	153	0.218		
	<b>Total</b>	33.934	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign Board

Table 61 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1 Foreign Board</b>	-0.247	0.234	-0.088	-1.056	0.293	0.923	1.083
<b>Turnover MSEK</b>	1.561E-6	0.000	0.103	1.239	0.217	0.933	1.072
<b>Industry</b>	-0.007	0.017	-0.033	-0.397	0.692	0.945	1.058

a. Dependent Variable: ROE

#### 4.6.3 Foreign Board excluding Turnover

Table 62 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.142a	0.020	0.001	0.46619

a. Predictors: (Constant), Industry, Foreign Board, Size of HR

Table 63 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
<b>1</b>	<b>Regression</b>	0.683	3	0.228	1.047	0.373a
	<b>Residual</b>	33.252	153	0.217		
	<b>Total</b>	33.934	156			

a. Predictors: (Constant), Industry, Foreign Board, Size of HR

Table 64 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1 Foreign Board</b>	-0.242	0.232	-0.086	-1.044	0.298	0.939	1.065
<b>Size of HR</b>	4.149E-6	0.000	0.115	1.389	0.167	0.931	1.074
<b>Industry</b>	-0.005	0.018	-0.025	-0.298	0.766	0.926	1.080

a. Dependent Variable: ROE

#### 4.6.4 Foreign Board without control variables

Table 65 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.073a	0.005	-0.001	0.46664

a. Predictors: (Constant), Foreign Board

Table 66 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.182	1	0.182	0.836	0.362a
	<b>Residual</b>	33.970	156	0.218		
	<b>Total</b>	34.152	157			

a. Predictors: (Constant), Foreign Board

## 4.7 Model: Foreign HR, Dependent: ROA

### 4.7.1 Foreign HR model with control variables

Table 67 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.223a	0.050	0.024	0.19468

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR, Size of HR

Table 68 *Multiple regression, ANOVA dependent ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.296	4	0.074	1.952	0.105a
	<b>Residual</b>	5.647	149	0.038		
	<b>Total</b>	5.943	153			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR, Size of HR

Table 69 *Multiple regression, Coefficient*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign HR</b>	0.092	0.053	0.152	1.738	0.084	0.829	1.207
	<b>Turnover MSEK</b>	4.446E-7	0.000	0.069	0.292	0.771	0.113	8.853
	<b>Size of HR</b>	-7.883E-7	0.000	-0.052	-0.211	0.834	0.105	9.494
	<b>Industry</b>	-0.012	0.007	-0.136	-1.648	0.102	0.938	1.066

a. Dependent Variable: ROA

#### 4.7.2 Foreign HR model excluding Size of HR

Table 70 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.222a	0.050	0.030	0.19406

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR

Table 71 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.294	3	0.098	2.604	0.054a
	<b>Residual</b>	5.649	150	0.038		
	<b>Total</b>	5.943	153			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR

Table 72 Multiple regression, Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics		
	B	Std. Error	Beta	t		Tolerance	VIF	
1	<b>Foreign HR</b>	0.088	0.051	0.147	1.752	0.082	0.896	1.117
	<b>Turnover MSEK</b>	1.442E-7	0.000	0.022	0.269	0.788	0.908	1.102
	<b>Industry</b>	-0.012	0.007	-0.133	-1.640	0.103	0.963	1.039

a. Dependent Variable: ROA

#### 4.7.3 Foreign HR model excluding Turnover

Table 73 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.222a	0.049	0.030	0.19408

a. Predictors: (Constant), Industry, Foreign HR, Size of HR

Table 74 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.293	3	0.098	2.590	0.055a
	<b>Residual</b>	5.650	150	0.038		
	<b>Total</b>	5.943	153			

a. Predictors: (Constant), Industry, Foreign HR, Size of HR



Table 75 Multiple regression, Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 Foreign HR	0.089	0.052	0.148	1.718	0.088	0.851	1.175
Size of HR	2.333E-7	0.000	0.015	0.177	0.860	0.847	1.181
Industry	-0.012	0.007	-0.133	-1.630	0.105	0.952	1.051

a. Dependent Variable: ROA

#### 4.7.4 Foreign HR model without control variables

Table 76 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.177a	0.031	0.025	0.19461

a. Predictors: (Constant), Foreign HR

Table 77 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.187	1	0.187	4.927	0.028a
	Residual	5.756	152	0.038		
	Total	5.943	153			

a. Predictors: (Constant), Foreign HR

## 4.8 Model: Foreign HR, Dependent: ROE

### 4.8.1 Foreign HR model with control variables

Table 78 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.193a	0.037	0.011	0.46371

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR, Size of HR

Table 79 Multiple regression, ANOVA dependent ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.243	4	0.311	1.445	0.222a
	Residual	32.039	149	0.215		
	Total	33.282	153			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR, Size of HR

Table 80 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1 Foreign HR</b>	0.239	0.125	0.168	1.907	0.058	0.829	1.207
<b>Turnover MSEK</b>	-4.678E-8	0.000	-0.003	-0.013	0.990	0.113	8.853
<b>Size of HR</b>	1.544E-6	0.000	0.043	0.173	0.863	0.105	9.494
<b>Industry</b>	-0.005	0.017	-0.024	-0.285	0.776	0.938	1.066

a. Dependent Variable: ROE

#### 4.8.2 Foreign HR model excluding Size of HR

Table 81 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.193a	0.037	0.018	0.46221

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR

Table 82 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
<b>1</b>	<b>Regression</b>	1.236	3	0.412	1.929	0.127a
	<b>Residual</b>	32.046	150	0.214		
	<b>Total</b>	33.282	153			

a. Predictors: (Constant), Industry, Turnover MSEK, Foreign HR

Table 83 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1 Foreign HR</b>	0.245	0.120	0.173	2.039	0.043	0.896	1.117
<b>Turnover MSEK</b>	5.414E-7	0.000	0.036	0.424	0.672	0.908	1.102
<b>Industry</b>	-0.005	0.017	-0.026	-0.317	0.751	0.963	1.039

a. Dependent Variable: ROE

#### 4.8.3 Foreign HR excluding Turnover

Table 84 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	0.193a	0.037	0.018	0.46216

a. Predictors: (Constant), Industry, Foreign HR, Size of HR

Table 85 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	1.243	3	0.414	1.939	0.126a
	<b>Residual</b>	32.039	150	0.214		
	<b>Total</b>	33.282	153			

a. Predictors: (Constant), Industry, Foreign HR, Size of HR

Table 86 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	<b>Foreign HR</b>	0.240	0.123	0.169	1.942	0.054	0.851	1.175
	<b>Size of HR</b>	1.436E-6	0.000	0.040	0.458	0.648	0.847	1.181
	<b>Industry</b>	-0.005	0.017	-0.024	-0.290	0.773	0.952	1.051

a. Dependent Variable: ROE

#### 4.8.4 Foreign HR without control variables

Table 87 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.188a	0.035	0.029	0.45963

a. Predictors: (Constant), Foreign HR

Table 88 *Multiple regression, ANOVA dependent ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	1.171	1	1.171	5.543	0.020a
	<b>Residual</b>	32.111	152	0.211		
	<b>Total</b>	33.282	153			

b. Dependent Variable: ROE

## 4.9 Model: Market Commitment, Dependent: ROA

### 4.9.1 Market Commitment model with control variables

Table 89 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.319a	0.102	0.078	0.18925

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment, Size of HR

Table 90 *Multiple regression, ANOVA dependent ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.616	4	0.154	4.297	0.003a
	<b>Residual</b>	5.444	152	0.036		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment, Size of HR

Table 91 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	<b>Commitment</b>	0.156	0.045	0.275	3.467	0.001	0.943	1.061
	<b>Turnover MSEK</b>	-1.534E-7	0.000	-0.024	-0.106	0.916	0.116	8.631
	<b>Size of HR</b>	9.033E-7	0.000	0.059	0.261	0.795	0.114	8.785
	<b>Industry</b>	-0.009	0.007	-0.096	-1.194	0.234	0.912	1.096

a. Dependent Variable: ROA

#### 4.9.2 Market Commitment model excluding Size of HR

Table 92 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.318a	0.101	0.084	0.18867

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment

Table 93 *Multiple regression, ANOVA dependent ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.613	3	0.204	5.742	0.001a
	<b>Residual</b>	5.446	153	0.036		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment

Table 94 *Multiple regression, Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	<b>Commitment</b>	0.156	0.045	0.275	3.480	0.001	0.943	1.060
	<b>Turnover MSEK</b>	2.009E-7	0.000	0.031	0.402	0.688	0.969	1.031
	<b>Industry</b>	-0.009	0.007	-0.100	-1.269	0.206	0.945	1.058

a. Dependent Variable: ROA

#### 4.9.3 Market Commitment model excluding Turnover

Table 95 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.319a	0.102	0.084	0.18864

a. Predictors: (Constant), Industry, Size of HR, Commitment

Table 96 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.615	3	0.205	5.763	0.001 <sup>a</sup>
	<b>Residual</b>	5.444	153	0.036		
	<b>Total</b>	6.060	156			

a. Predictors: (Constant), Industry, Size of HR, Commitment

Table 97 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	<b>Commitment</b>	0.156	0.045	0.274	3.477	0.001	0.944	1.059
	<b>Size of HR</b>	5.590E-7	0.000	0.037	0.468	0.641	0.952	1.050
	<b>Industry</b>	-0.009	0.007	-0.097	-1.225	0.223	0.931	1.075

a. Dependent Variable: ROA

#### 4.9.4 Market Commitment model without control variables

Table 98 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.300a	0.090	0.084	0.18861

a. Predictors: (Constant), Commitment

Table 99 Multiple regression, ANOVA dependent ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	0.549	1	0.549	15.434	0.000a
	<b>Residual</b>	5.549	156	0.036		
	<b>Total</b>	6.098	157			

a. Predictors: (Constant), Commitment

## 4.10 Model: Market Commitment, Dependent: ROE

### 4.10.1 Market Commitment model with control variables

Table 100 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.280a	0.078	0.054	0.45363

a. Predictors: (Constant), Size of HR, Commitment, Turnover MSEK

Table 101 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.655	4	0.664	3.226	0.014a
	Residual	31.279	152	0.206		
	Total	33.934	156			

a. Predictors: (Constant), Size of HR, Commitment, Turnover MSEK

b. Dependent Variable: ROE

Table 102 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-0.265	0.130		-2.040	0.043		
	Commitment	0.351	0.108	0.261	3.259	0.001	0.943	1.061
	Turnover MSEK	-1.549E-6	0.000	-0.102	-0.446	0.656	0.116	8.631
	Size of HR	5.998E-6	0.000	0.167	0.722	0.472	0.114	8.785
	Industry	0.003	0.017	0.012	0.149	0.882	0.912	1.096

a. Dependent Variable: ROE

### 4.10.2 Market Commitment model excluding Size of HR

Table 103 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.274a	0.075	0.057	0.45292

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment

Table 104 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.548	3	0.849	4.141	0.007a
	Residual	31.386	153	0.205		
	Total	33.934	156			

a. Predictors: (Constant), Industry, Turnover MSEK, Commitment

b. Dependent Variable: ROE

Table 105 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-0.252	0.128		-1.961	0.052		
	Commitment	0.352	0.108	0.262	3.270	0.001	0.943	1.060
	Turnover MSEK	8.032E-7	0.000	0.053	0.670	0.504	0.969	1.031
	Industry	0.000	0.017	0.001	0.014	0.989	0.945	1.058

a. Dependent Variable: ROE

#### 4.10.3 Market Commitment model excluding Turnover

Table 106 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.278a	0.077	0.059	0.45244

a. Predictors: (Constant), Industry, Size of HR, Commitment

Table 107 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.614	3	0.871	4.257	0.006a
	Residual	31.320	153	0.205		
	Total	33.934	156			

a. Predictors: (Constant), Industry, Size of HR, Commitment

b. Dependent Variable: ROE

Table 108 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-0.259	0.129		-2.009	0.046		
	Commitment	0.349	0.107	0.260	3.255	0.001	0.944	1.059
	Size of HR	2.520E-6	0.000	0.070	0.879	0.381	0.952	1.050
	Industry	0.001	0.017	0.007	0.088	0.930	0.931	1.075

a. Dependent Variable: ROE

#### 4.10.4 Market Commitment model without control variables

Table 109 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.269a	0.072	0.066	0.45065

a. Predictors: (Constant), Commitment

Table 110 *Multiple regression, Anova dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.471	1	2.471	12.169	0.001a
	Residual	31.681	156	0.203		
	Total	34.152	157			

a. Predictors: (Constant), Commitment

b. Dependent Variable: ROE

#### 4.11 Model: Foreign Assets, Dependent: ROA

##### 4.11.1 Foreign Assets model with control variables

Table 111 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.180a	0.032	-0.028	0.19983

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK, Size of HR

Table 112 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.086	4	0.021	0.537	0.709a
	Residual	2.556	64	0.040		
	Total	2.641	68			

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK, Size of HR

b. Dependent Variable: ROA

Table 113 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.055	0.060		0.916	0.363		
	Foreign Assets	0.033	0.092	0.047	0.358	0.722	0.892	1.121
	Turnover MSEK	8.977E-8	0.000	0.014	0.039	0.969	0.115	8.691
	Size of HR	5.950E-7	0.000	0.039	0.105	0.917	0.109	9.134
	Industry	-0.013	0.011	-0.151	-1.195	0.236	0.945	1.058

a. Dependent Variable: ROA



#### 4.11.2 Foreign Assets model excluding Size of HR

Table 114 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.180a	0.032	-0.012	0.19830

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK

Table 115 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.085	3	0.028	0.723	0.542a
	Residual	2.556	65	0.039		
	Total	2.641	68			

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK

b. Dependent Variable: ROA

Table 116 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.056	0.059		0.942	0.350		
	Foreign Assets	0.035	0.089	0.049	0.389	0.699	0.928	1.078
	Turnover MSEK	3.186E-7	0.000	0.050	0.389	0.699	0.913	1.096
	Industry	-0.014	0.011	-0.154	-1.250	0.216	0.983	1.017

a. Dependent Variable: ROA

#### 4.11.3 Foreign Assets model excluding Turnover

Table 117 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.180a	0.032	-0.012	0.19829

a. Predictors: (Constant), Industry, Foreign Assets, Size of HR

Table 118 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.086	3	0.029	0.727	0.540a
	Residual	2.556	65	0.039		
	Total	2.641	68			

a. Predictors: (Constant), Industry, Foreign Assets, Size of HR

b. Dependent Variable: ROA

Table 119 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.055	0.059		0.923	0.359		
	Foreign Assets	0.032	0.091	0.046	0.358	0.721	0.899	1.112
	Size of HR	7.990E-7	0.000	0.053	0.401	0.690	0.868	1.152
	Industry	-0.013	0.011	-0.151	-1.211	0.230	0.964	1.038

a. Dependent Variable: ROA

#### 4.11.4 Foreign Assets model without control variables

Table 120 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.067a	0.004	-0.010	0.19811

a. Predictors: (Constant), Foreign Assets

Table 121 *Multiple regression, Anova dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.012	1	0.012	0.303	0.584a
	Residual	2.629	67	0.039		
	Total	2.641	68			

a. Predictors: (Constant), Foreign Assets

b. Dependent Variable: ROA

## 4.12 Model: Foreign Assets, Dependent: ROE

### 4.12.1 Foreign Assets model with control variables

Table 122 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.129a	0.017	-0.045	0.47675

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK, Size of HR

Table 123 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.245	4	0.061	0.270	0.897a
	Residual	14.547	64	0.227		
	Total	14.792	68			

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK, Size of HR

b. Dependent Variable: ROE

Table 124 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.043	0.143		0.302	0.764		
	Foreign Assets	0.092	0.219	0.055	0.422	0.675	0.892	1.121
	Turnover MSEK	-9.597E-7	0.000	-0.063	-0.173	0.863	0.115	8.691
	Size of HR	5.082E-6	0.000	0.141	0.377	0.708	0.109	9.134
	Industry	-0.009	0.027	-0.041	-0.320	0.750	0.945	1.058

a. Dependent Variable: ROE

#### 4.12.2 Foreign Assets model excluding Size of HR

Table 125 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.120a	0.014	-0.031	0.47360

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK

Table 126 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.213	3	0.071	0.316	0.814a
	Residual	14.579	65	0.224		
	Total	14.792	68			

a. Predictors: (Constant), Industry, Foreign Assets, Turnover MSEK

b. Dependent Variable: ROE

Table 127 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.049	0.141		0.349	0.728		
	Foreign Assets	0.108	0.213	0.065	0.509	0.613	0.928	1.078
	Turnover MSEK	9.945E-7	0.000	0.065	0.508	0.613	0.913	1.096
	Industry	-0.011	0.026	-0.050	-0.405	0.687	0.983	1.017

a. Dependent Variable: ROE

#### 4.12.3 Foreign Assets model excluding Turnover

Table 128 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.127a	0.016	-0.029	0.47318

a. Predictors: (Constant), Industry, Foreign Assets, Size of HR

Table 129 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.238	3	0.079	0.355	0.786a
	Residual	14.554	65	0.224		
	Total	14.792	68			

a. Predictors: (Constant), Industry, Foreign Assets, Size of HR

b. Dependent Variable: ROE

Table 130 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.045	0.142		0.317	0.752		
	Foreign Assets	0.096	0.216	0.057	0.442	0.660	0.899	1.112
	Size of HR	2.901E-6	0.000	0.081	0.610	0.544	0.868	1.152
	Industry	-0.009	0.026	-0.044	-0.350	0.727	0.964	1.038

a. Dependent Variable: ROE

#### 4.12.4 Foreign Assets model without control variables

Table 131 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.084a	0.007	-0.008	0.46820

a. Predictors: (Constant), Foreign Assets

Table 132 *Multiple regression, Anova dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.105	1	0.105	0.477	0.492a
	Residual	14.687	67	0.219		
	Total	14.792	68			

a. Predictors: (Constant), Foreign Assets

b. Dependent Variable: ROE

### 4.13 Model: International ownership, Dependent: ROA

#### 4.13.1 International ownership model with control variables

Table 133 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.204a	0.042	0.014	0.19575

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK, Size of HR

Table 134 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.227	4	0.057	1.483	0.211a
	Residual	5.250	137	0.038		
	Total	5.477	141			

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK, Size of HR

b. Dependent Variable: ROA

Table 135 *Multilpe regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.086	0.039		2.195	0.030		
	International ownership	-0.105	0.084	-0.106	-1.252	0.213	0.975	1.026
	Turnover MSEK	-2.451E-8	0.000	-0.004	-0.016	0.988	0.116	8.624
	Size of HR	1.339E-6	0.000	0.088	0.354	0.724	0.113	8.832
	Industry	-0.013	0.008	-0.145	-1.683	0.095	0.945	1.058

a. Dependent Variable: ROA

#### 4.13.2 *International ownership model excluding Size of HR*

Table 136 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.202a	0.041	0.020	0.19513

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK

Table 137 *Multiple regression, ANOVA dependent variable ROA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.223	3	0.074	1.948	0.125a
	Residual	5.254	138	0.038		
	Total	5.477	141			

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK

b. Dependent Variable: ROA

Table 138 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.089	0.038		2.312	0.022		
	International ownership	-0.103	0.083	-0.104	-1.233	0.220	0.980	1.020
	Turnover MSEK	4.987E-7	0.000	0.078	0.915	0.362	0.963	1.038

Industry	-0.013	0.007	-0.151	-1.792	0.075	0.982	1.018
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a. Dependent Variable: ROA

#### 4.13.3 International ownership model excluding Turnover

Table 139 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.204a	0.042	0.021	0.19504

a. Predictors: (Constant), Industry, International ownership, Size of HR

Table 140 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.227	3	0.076	1.992	0.118a
	Residual	5.250	138	0.038		
	Total	5.477	141			

a. Predictors: (Constant), Industry, International ownership, Size of HR

b. Dependent Variable: ROA

Table 141 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.086	0.039		2.219	0.028		
	International ownership	-0.105	0.084	-0.106	-1.257	0.211	0.975	1.026
	Size of HR	1.284E-6	0.000	0.084	0.982	0.328	0.941	1.063
	Industry	-0.013	0.008	-0.145	-1.708	0.090	0.963	1.038

a. Dependent Variable: ROA

#### 4.13.4 International ownership model without control variables

Table 142 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.094a	0.009	0.002	0.19691

a. Predictors: (Constant), International ownership

Table 143 Multiple regression, Anova dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.049	1	0.049	1.255	0.265a
	Residual	5.428	140	0.039		
	Total	5.477	141			

a. Predictors: (Constant), International ownership

b. Dependent Variable: ROA

#### 4.14 Model: International ownership, Dependent: ROE

##### 4.14.1 International ownership model with control variables

Table 144 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.127a	0.016	-0.013	0.46932

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK, Size of HR

Table 145 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.496	4	0.124	0.563	0.690a
	Residual	30.175	137	0.220		
	Total	30.672	141			

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK, Size of HR

b. Dependent Variable: ROE

Table 146 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.095	0.094		1.014	0.313		
	International ownership	-0.115	0.201	-0.049	-0.571	0.569	0.975	1.026
	Turnover MSEK	-1.213E-6	0.000	-0.080	-0.321	0.749	0.116	8.624
	Size of HR	6.575E-6	0.000	0.183	0.725	0.470	0.113	8.832
	Industry	-0.008	0.018	-0.036	-0.417	0.677	0.945	1.058

a. Dependent Variable: ROE

##### 4.14.2 International ownership model excluding Size of HR

Table 147 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.111a	0.012	-0.009	0.46851

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK

Table 148 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
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<b>1</b>	Regression	0.380	3	0.127	0.577	0.631a
	Residual	30.291	138	0.220		
	Total	30.672	141			

a. Predictors: (Constant), Industry, International ownership, Turnover MSEK

b. Dependent Variable: ROE

Table 149 *Multiple regression, Coefficients*

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Collinearity Statistics</b>		
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>	<b>Tolerance</b>	<b>VIF</b>
<b>1</b>	(Constant)	0.108	0.092		1.175	0.242		
	International ownership	-0.104	0.200	-0.044	-0.520	0.604	0.980	1.020
	Turnover MSEK	1.357E-6	0.000	0.089	1.037	0.302	0.963	1.038
	Industry	-0.010	0.018	-0.049	-0.570	0.570	0.982	1.018

a. Dependent Variable: ROE

#### 4.14.3 International ownership model excluding Turnover

Table 150 *Multiple regression*

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
<b>1</b>	0.124a	0.015	-0.006	0.46779

a. Predictors: (Constant), Industry, International ownership, Size of HR

Table 151 *Multiple regression, ANOVA dependent variable ROE*

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>	Regression	0.473	3	0.158	0.721	0.541a
	Residual	30.198	138	0.219		
	Total	30.672	141			

a. Predictors: (Constant), Industry, International ownership, Size of HR

b. Dependent Variable: ROE

Table 152 *Multiple regression, Coefficients*

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Collinearity Statistics</b>		
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>	<b>Tolerance</b>	<b>VIF</b>
<b>1</b>	(Constant)	0.099	0.093		1.060	0.291		
	International ownership	-0.114	0.201	-0.048	-0.567	0.572	0.975	1.026
	Size of HR	3.846E-6	0.000	0.107	1.226	0.222	0.941	1.063
	Industry	-0.008	0.018	-0.040	-0.467	0.641	0.963	1.038

a. Dependent Variable: ROE



#### 4.14.4 International ownership model without control variables

Table 153 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.032a	0.001	-0.006	0.46782

a. Predictors: (Constant), International ownership

Table 154 Multiple regression, Anova dependent variable ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.032	1	0.032	0.147	0.702a
	Residual	30.639	140	0.219		
	Total	30.672	141			

a. Predictors: (Constant), International ownership

b. Dependent Variable: ROE

### 4.15 Model: GL-Index, Dependent: ROA

#### 4.15.1 GL-Index model with control variables

Table 155 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.186a	0.035	0.009	0.19618

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex, Size of HR

Table 156 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.210	4	0.052	1.361	0.250a
	Residual	5.850	152	0.038		
	Total	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex, Size of HR

b. Dependent Variable: ROA

Table 157 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.044	0.043		1.022	0.308		
	GLIndex	0.016	0.020	0.072	0.798	0.426	0.787	1.270
	Turnover MSEK	2.328E-8	0.000	0.004	0.016	0.988	0.116	8.621
	Size of HR	5.116E-7	0.000	0.034	0.140	0.889	0.111	9.029
	Industry	-0.012	0.007	-0.140	-1.700	0.091	0.930	1.075

a. Dependent Variable: ROA

#### 4.15.2 GL-Index model excluding Size of HR

Table 158 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.186a	0.034	0.016	0.19555

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex

Table 159 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.209	3	0.070	1.820	0.146a
	Residual	5.851	153	0.038		
	Total	6.060	156			

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex

b. Dependent Variable: ROA

Table 160 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.045	0.043		1.041	0.299		
	GLIndex	0.017	0.020	0.074	0.835	0.405	0.809	1.236
	Turnover MSEK	2.188E-7	0.000	0.034	0.391	0.696	0.829	1.206
	Industry	-0.013	0.007	-0.142	-1.753	0.082	0.956	1.045

a. Dependent Variable: ROA

#### 4.15.3 GL-Index model excluding Turnover

Table 161 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.186a	0.035	0.016	0.19554

a. Predictors: (Constant), Industry, Size of HR, GLIndex

Table 162 Multiple regression, ANOVA dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.210	3	0.070	1.827	0.145a
	Residual	5.850	153	0.038		
	Total	6.060	156			

a. Predictors: (Constant), Industry, Size of HR, GLIndex

b. Dependent Variable: ROA

Table 163 Multiple regression, Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.044	0.043		1.029	0.305		
	GLIndex	0.016	0.020	0.072	0.801	0.425	0.787	1.270
	Size of HR	5.640E-7	0.000	0.037	0.415	0.679	0.792	1.263
	Industry	-0.012	0.007	-0.140	-1.719	0.088	0.947	1.056

a. Dependent Variable: ROA

#### 4.15.4 GL-Index model without control variables

Table 164 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.117a	0.014	0.007	0.19637

a. Predictors: (Constant), GLIndex

Table 165 Multiple regression, Anova dependent variable ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.083	1	0.083	2.146	0.145a
	Residual	6.016	156	0.039		
	Total	6.098	157			

a. Predictors: (Constant), GLIndex

b. Dependent Variable: ROA

### 4.16 Model: GL-Index, Dependent: ROE

#### 4.16.1 GL-Index model with control variables

Table 166 Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.122a	0.015	-0.011	0.46898

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex, Size of HR

Table 167 Multiple regression, ANOVA dependent variable ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.503	4	0.126	0.572	0.683a
	Residual	33.431	152	0.220		
	Total	33.934	156			

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex, Size of HR

b. Dependent Variable: ROE

Table 168 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.048	0.103		0.462	0.645		
	GLIndex	0.019	0.049	0.036	0.391	0.696	0.787	1.270
	Turnover MSEK	-1.160E-6	0.000	-0.076	-0.323	0.747	0.116	8.621
	Size of HR	5.633E-6	0.000	0.156	0.647	0.519	0.111	9.029
	Industry	-0.007	0.018	-0.034	-0.408	0.684	0.930	1.075

a. Dependent Variable: ROE

4.16.2 *GL-Index model excluding Size of HR*Table 169 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.110a	0.012	-0.007	0.46809

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex

Table 170 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.411	3	0.137	0.625	0.600a
	Residual	33.523	153	0.219		
	Total	33.934	156			

a. Predictors: (Constant), Industry, Turnover MSEK, GLIndex

b. Dependent Variable: ROE

Table 171 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.054	0.103		0.522	0.603		
	GLIndex	0.024	0.048	0.045	0.506	0.614	0.809	1.236
	Turnover MSEK	9.926E-7	0.000	0.065	0.741	0.460	0.829	1.206
	Industry	-0.009	0.017	-0.043	-0.524	0.601	0.956	1.045

a. Dependent Variable: ROE

#### 4.16.3 GL-Index model excluding Turnover

Table 172 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.119a	0.014	-0.005	0.46761

a. Predictors: (Constant), Industry, Size of HR, GLIndex

Table 173 *Multiple regression, ANOVA dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.480	3	0.160	0.732	0.534a
	Residual	33.454	153	0.219		
	Total	33.934	156			

a. Predictors: (Constant), Industry, Size of HR, GLIndex

b. Dependent Variable: ROE

Table 174 *Multiple regression, Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.051	0.102		0.499	0.619		
	GLIndex	0.019	0.049	0.036	0.395	0.694	0.787	1.270
	Size of HR	3.022E-6	0.000	0.084	0.930	0.354	0.792	1.263
	Industry	-0.008	0.017	-0.038	-0.457	0.648	0.947	1.056

a. Dependent Variable: ROE

#### 4.16.4 GL-Index model without control variables

Table 175 *Multiple regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.081a	0.007	0.000	0.46637

a. Predictors: (Constant), GLIndex

Table 176 *Multiple regression, Anova dependent variable ROE*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.222	1	0.222	1.023	0.313a
	Residual	33.929	156	0.217		
	Total	34.152	157			

a. Predictors: (Constant), GLIndex

b. Dependent Variable: ROE

