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HUMAN CAPITAL REPORTING LINKAGE WITH FINANCIAL PERFORMANCE OF SELECTED COUNTRIES

Bachelor Thesis

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I declare I have written the bachelor’s thesis independently.
All works and major viewpoints of the other authors, data from other sources of literature and elsewhere used for writing this paper have been referenced.

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ABSTRACT

The title of the thesis is Human capital reporting linkage with financial performance of selected countries. Human capital creates immeasurable value for organizations. Human capital reporting is not mandatory, which makes it had to find its impact on corporate financial performance.

Corporate social reporting examines the relationship of the corporation and the external environment where it operates. During the years reporting rate has grown significantly and European countries achieved a rate of 74% in 2015.

The purpose of this Bachelor Thesis is to examine whether there is a linkage between human capital reporting and corporation financial performance during fiscal year 2015. Selected companies are listed on Copenhagen, Helsinki or Stockholm stock market in Nasdaq Nordic. In addition, author will compile the main characteristics of corporate social responsibility for each selected country to support the outcome of the research.

The empirical part of this Bachelor Thesis was conducted by comparing profitability ratios and human capital scoring. Author has used return on equity, return on assets and return on revenue ratios and studies each company's annual report for their human capital reporting.

In general, it was found that there was no linkage between human capital reporting and financial performance.

Results of this Bachelor Thesis can be used for research purposes, when examining the importance of human capital reporting and its relation to financial performance.

Keywords: Human capital, corporate social responsibility, financial performance

INTRODUCTION

Human capital is immeasurable and it is impossible to state in numerical values in entity's financial statements. In this paper, the author will examine how organizations report their human capital disclosures in annual reports. It also examines its possible connection with company's financial performance.

Governments give corporate social reporting recommendations to organizations but it is not an obligatory act in each country. It is entities choice whether they follow guidelines on a voluntary basis. Corporate social responsibility examines the relationship between a corporation and the environment where the company is operating. It gives an endorsement to the human capital reporting and the findings in this paper. Corporate social reports can be included for example in companies' annual reports for external users such as investors and society as general. These responsibilities deal with social issues, such as carbon and other emissions. These issues are often ignored because of the high costs on reporting. In this research, the author examines what are the recommendations governments and EU are giving to countries and how exact entities in Finland, Denmark and Sweden are following these guidelines. In order, to clarify why corporate social reporting is important and how selected countries are encouraging organizations to it.

The topic was chosen by the author based on the presence of high competition nowadays. Differentiation is important to make the company stand out and it is often one key factor in a successful entity. In most cases, this "something" might be the employee between the chair and the desk. Everyone has an ability to purchase equal assets but employees and their productivity are always different. The subject was introduced by the supervisor and the author was clearly inducted to this issue. The main aim of the research is to examine whether there is a linkage between human capital reporting and corporate financial performance.

Companies for this paper were chosen from three different countries; Finland, Denmark and Sweden. To make the results comparable, all countries and companies are close to each other geographically and in economic manners. Countries were chosen from Nasdaq Nordic, which is an international stock exchange. Every organization introduced in this paper has its headquarter in a Scandinavian country. These companies were selected with a small cap from

Helsinki, Stockholm, and Copenhagen stock market, which mean the organization is considered generally as a company with a market capitalization between $300 million and $2 billion.

This paper will begin with a discussion about what is corporate social responsibility, basic concepts, and a brief history. The author is describing the similarities and differences in selected countries and what is the responsibility of European Union as guide maker.

Different methods of human capital reporting that are explained in the second chapter. Aim is to explain reasons how these models work and why actual implication takes place. The author is introducing the Lev and Schwartz model that focus on valuing human capital based on the sizes of the employees' salaries. Is it valuable to invest in training and educating of the entity's employees but what is the correct way to measure the possible returns? The author considers it to be important to be able to distinguish the difference between human capital and nonhuman capital. There is also a clear distinction how to invest in it.

The third part of this paper is dealing with the calculations and compiled data are prepared and later analyzed. Financial performance is measured by three different profitability ratios. According to the outcome, author discusses whether the connection has been found or not and will make conclusions does corporate social responsibility support the findings.

1. CORPORATE SOCIAL RESPONSIBILITY: DEFINITION AND IMPORTANCE

Most of the European countries' governments give guidelines to organizations how to report their social and environmental activities. This report should be attached for example to entity's annual reports or publish as a separate description (Nielsen, Thomsen 2007, 25). In 1938, Barnard has defined corporate social reporting as follows: "CSR analyses economic, legal, moral, social and physical aspects of environment". The broadest definition for corporate social reporting is the relationship between global corporations, governments, and individual citizens. More precisely and locally, this model is examining the relationship between corporation and society in the region where a company is operating. There have been conducted plenty of studies that examine the relationship between a corporation and its stakeholders. (Crowther, Aras 2008, 10)

Each of these definitions causes issues and disagreements between stakeholders. The discussion is shared and everything regarding it is based on ethics. The main question concerns increased regulations. Is it ethically correct to influence companies by setting different restricting regulations? (Ibid, 10). Corporate social Responsibility is a diverse subject, which causes dozens of different definitions. In turn, these definitions create disagreements among society and makes it impossible to state an explanation that satisfies everyone.

1.1 History of corporate social responsibility reporting

The development of corporate social responsibility reporting has a long history. For a long time, it has been influencing organization's behaviour. This can be illustrated with an example of Ford Motor Company. Henry Ford's intention was to reinvest the company's accumulated profits on plant expansion because the purpose of his company was also to serve

society. The increase in the size of the factory would have increased a number of work places, which consequently would have improved the welfare of the society. Shareholders didn't approve Mr. Ford's plan and they agreed to grant Dodge brothers their request for maximum dividends. At that time, people did not understand how important and dependent society is from businesses. Profits were all that mattered (Moura-Leite, Padgett 2011, 529).

In the 1950s, Peter Drucker included public responsibility as one of the eight key areas of business objectives. He recognized the growing trend for a manager to accept responsibility for the public good. Mr. Drucker stated that managers should consider whether the company's operations are going to promote the public welfare, to advance the basic beliefs of a society or contribute its stability. During the 50's corporate social responsibility was considered as the idea of balancing competing claims to corporate resources and companies' managers were people protecting the welfare of society (Ibid, 530).

Literature expanded significantly in the next decade. It focused on determining corporate social responsibility and importance of it to business and society. It was stated that corporate social responsibility means a public posture toward society's economic and human resources. It is a willingness to recognize that organization's resources are used for broad social ends rather than narrowly restricted persons and organizations (Ibid, 530).

1970's was a decade when business managers applied traditional management functions to deal with corporate social responsibility issues. However, during 1980s business and social interest become closer and firms started to act more responsibly to their stakeholders. In addition, many researchers started to focus on developing alternative or complementary concepts for corporate social responsibility reporting. During these decades Archie B. Carrol constructed a framework, which aimed to understand various thoughts on this method. He developed a four-part definition that was embedded in a model of corporate social performance. He stated that social responsibility of business consists of economic, legal, ethical and discretionary expectations that society has of organizations at given point of time (Ibid, 531-532).

The last strategic implications happened in the decade of 1990. Still, up to this date, the concept of corporate social reporting has become almost universally recommended and promoted by governments. It has been told that "doing good to do well" is a basic characteristic of corporate social responsibility today. Most of the companies are claimed to become more

successful when they follow this principle but unfortunately, all companies don't have equal potential to imply it. This leads to a situation where the corporation will focus on problems that are less costly. Nevertheless, researchers still examine the critical issues that corporations ignore because of high costs (Ibid, 533-535). Each decade had a different viewpoint on corporate social responsibility. Nowadays, author considers the lack of equivalent resources the biggest differences in social responsibility reporting. However, dropping the corporate social responsibility report out doesn't necessarily mean company is unethical. In the other extremity, well-designed corporate social report is prepared only to boost corporate image, sales or profitability, not to increase the stakeholder value.

1.2 Why companies should act socially responsible

The objective of the corporations is to generate profits and maximize the company value. There are plenty of examples of corporations that are defaulting on a purpose to generate higher profits. Examples of this irresponsible behaviour could be such as cheating customers, putting consumers at risk and poisoning environment. On the other hand, there are corporations that are treating customers and employees eligibly. However, this might reduce profits. It raises an interesting question why it is important and what is the incentive for to corporations to be socially responsible? (Campbell 2007, 947)

Corporate behaviour varies across different countries and continents. The reason behind this is still a mystery. People who have a stake or interest towards the entity are called stakeholders of the corporation and they could be individuals or groups of people corporations interacts with. Examples of stakeholders are employees, consumers, suppliers and local communities within the region the corporation operates. The way the corporation treats their stakeholders depends on the institutions where they operate (Ibid, 947).

One might think that a socially responsible company is always achieving better results. Yet, this assumption is not correct. There have been various arguments regarding the relationship between a organization's social responsibility and its financial performance. The first point of view is that they face trade-off between these variables. In this angle, the firm think that being socially responsible is economically disadvantageous for them. Another view point is that explicit costs are minimal and firm can gain from being socially responsible. They

believe that the moral of employees and their productivity will increase from their initiative. (Mc Guire, Sungren, Schneeweis 1988, 854)

Economic condition is one factor why corporations act in socially responsible way. Companies that have weak financial performance are less willing to act in socially responsible way, whereas firms standing on a strong financial base. The reason for this is that less profitable companies have limited usable resource and capital for social responsible activities. The second factor, competition, states that corporations are less interested in acting socially responsible if markets are either too competitive or not competitive at all. When the market is extremely intense, profit margins are narrow enough to cut corners and save money wherever possible. This helps firms to believe that it helps them to survive and turn profitable. The other extreme, when competition is theoretically zero, firms hardly face any stimulus to operate in socially responsible ways. The reason why companies can afford this kind of mind-set is that customers don't have many or any other alternatives. Corporate reputation or customer loyalty is not relatively affecting sales, profitability or firm's survival (Campbell 2007, 953)

To conclude the questions why corporations act so and which conditions force corporations to behave in socially responsible way? Corporations are most likely to behave in a responsible way when they operate in normal competitive markets. Managers are more concerned to improve corporation reputation to continue the success of the business. If customers and suppliers take their business to their competitor and that has straight correlation with firm's profitability (Ibid, 953). Nevertheless, it might be assumed that the financial position of the organization has influence on their willingness to behave in a desired way.

1.3 Relationship between accounting and corporate social reporting

There are three different major areas for an accountant: financial accountant, management accountant, and auditor. When talking about financial accounting, the accountant is believed to focus on the accounting and reporting of assets, liabilities, and equity. The management accountant is interested in costs and benefits regarding these issues. Management accounting provides information regarding the costs of production. Managers of the organizations are using this data to increase the margins of production. The auditor is providing the verification of the social account produced. It is also auditor's responsibility to make sure

that company is not reporting too optimistic results. Accounting for corporate social responsibility is however much more complicated than that. The role of an accountant is widely varying. Some state that the object is to improve social justice and contribute social and environmental benefits for society (Tilt 2009, 12).

Many countries accounting standards are supported by a certain framework. The main objective of financial reports is defined as providing relevant and reliable information to assist stakeholders in making decisions and evaluations. Relevant information must be comparable with other companies and the time span is relatively small (Ibid, 19).

Accounting is focusing on different activities and processes inside the organization. According to T. Gabrusewicz corporate social responsibility accounting is defined as measuring information regarding the impact of entity’s operations on the society, which is finally published to externalities (Gabrusewicz, Beck 2010, 57). The term “social responsibility accounting” is not providing any new theoretical solution for measuring intangible benefits or expenses. It was created as an indicator for shareholders to increase their possible interest and usage towards accounting (Bak 2013, 10-11).

It has been stated that the concept of corporate social responsibility is a proper functioning of an enterprise and accounting. To achieve this, it is obligatory for enterprise and its employees to follow certain ethical guidance. It is important to verify all activities performed in the final statements. This should come from the persons who are responsible for accounting and auditor’s role is to question the truthfulness. Also, changes in the company’s assets, which are influenced by social-oriented activities or stakeholders’ needs are crucial important (Ibid, 11).

Today corporate social responsibility appears more or less in form of expenses, rather than revenues. This creates the problem of financial result determination. Social costs or social revenues and commitments are the most important issues in accounting. Identification and measurement can be challenging in some cases. Traditional accounting, for example, bookkeeping, is not referring to social issues. The reason for this problem is that the majority of outlays and effects result from implementation of corporate social responsibility. It influences to invisible assets in the accounting system (Ibid, 11).

The overall perspective of accounting in corporate social responsibility can be presented that such accounting doesn’t exist as a “separate notion in accounting space”. Accounting as a

source of information and control in the enterprise is capable of implementing corporate social responsibility by means of financial and managerial accounting instruments. In the other hand, accounting is founded to stimulate economic efficiency and ethical conduct according to E. Burzym (Ibid, 11-12). For that reason, the relationship between accounting and corporate social reporting seems vital for all countries all over the world.

1.4 KPMG survey of corporate social responsibility reporting

KPMG has conducted a survey on corporate social responsibility reporting based on N100 and G250 companies. According to the survey N100 companies has increased reporting each year. It was stated that 73% of the companies report on their social responsibilities. In turn, corporate social responsibility reporting level of G250 companies has been stable, around 90%, for past five years. It has been mentioned that the main driver for corporate social responsibility reporting is legislation. There is a growing trend of regulations requiring companies to publish non-financial information. G250 stands for globally 250 biggest companies and N100 is a collection of 100 biggest companies among 34 examined countries. Figure 1 express the change between 2011 and 2015 among 4500 N100 companies in corporate social responsibility reporting in different continents in percentages (KPMG 2015, 30-31).

Asia Pacific has become the leading region in corporate social responsibility reporting within years 2011-2015 as stated in Figure 1. It has also increased its reporting rate by 30%. This growth is a result of increasing reporting in India, Taiwan, and South Korea because corporate social responsibility reporting has become mandatory and voluntary reporting requirements has been increased in these countries. However, big differences between Eastern and Western corporate social responsibility reporting has decreased Europe’s ranking in KPMG’s report. Low reporting percentage in Eastern countries reduce the average European corporate social responsibility reporting. It is obvious that reporting rate has decreased among companies in Middle East and Africa. Reason behind this trend is not specified in KPMG Currents of Change report (Ibid 31).

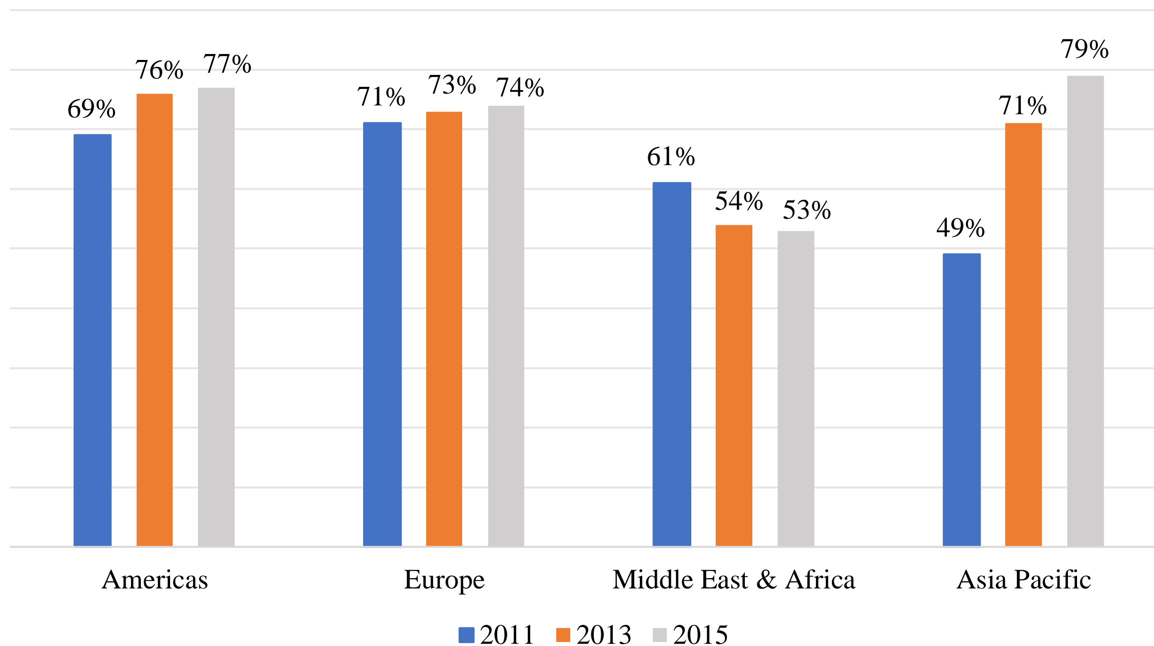

Figure 1. CSR rate development

Source: Combined by the author based on the information from KPMG Currents of Change report (Currents of Change, KPMG, 31).

Author assumes that reporting doesn't benefit them at any level and therefore incentive to invest in it is small. It has been expected that the introduced of European Directive on Non-Financial Reporting will change the reporting percentage in a better direction. According to Directive, companies are responsible for reporting on their environmental, social, human rights, employee and anti-corruption matters. Companies have two years to implement these regulations and analyst Jose Luis Blasco Vazquez expects European companies to report more than ever in 2017 (Ibid, 31).

KPMG has surveyed corporate social responsibility reporting based on the sectors. It states that industries that are traditionally polluting more, for example, mining and utilities have the highest reporting rate. In turn, the retail sector has furthest to go. It is examined that the impact of corporate social reporting is less significant but retailers lack control over factors upstream and downstream of their own operations (Ibid, 34). Figure 2. and 3. represents the progress of organizations corporate social responsibility reporting in N100 and G250 companies in the past 22 years.

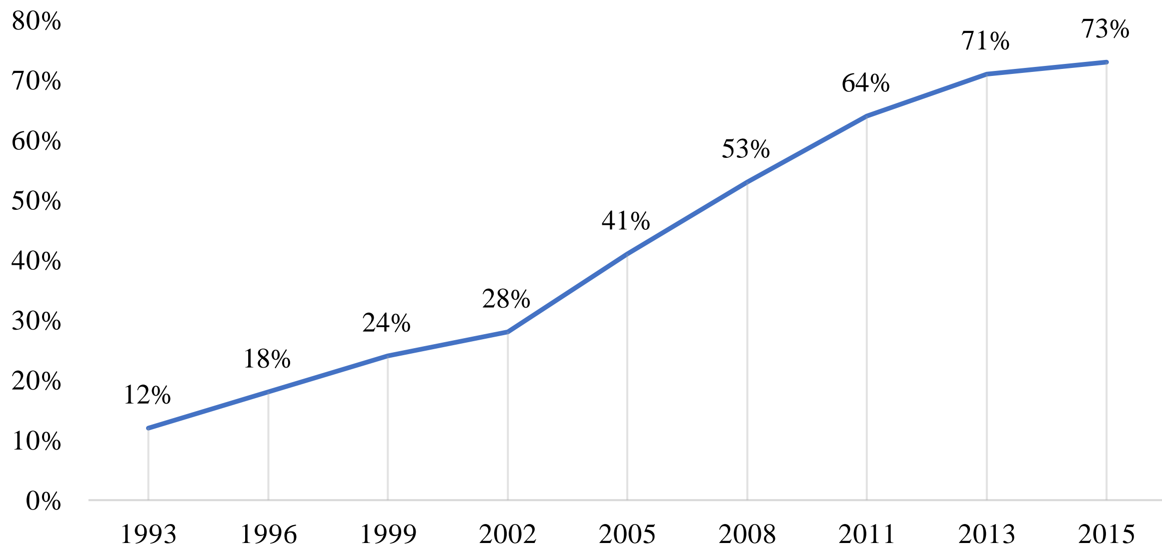

Figure 2. Combined CSR reporting in N100 Companies

Source: Prepared by author based on the information from KPMG Currents of Change report (Currents of Change, KPMG, 30).

As specified by the survey, there is an increase of including corporate social responsibility reports in annual reports. It relieves access to the non-financial information for investors. Among N100 companies the rate of inclusion in annual reports has almost tripled during 22 years. This is the result of increased regulation in many countries. KMPG claims that in eight countries with highest rates of corporate social responsibility all have legislations that require it report disclosure in financial reports. It can be observed from the Figure 2. that the increase among N100 companies is going to slow down in future. In 2015 KPMG included four new countries (Czech Republic, Ireland, Oman, and Peru) to its survey, which slowed the increasing trend (Ibid, 30-36).

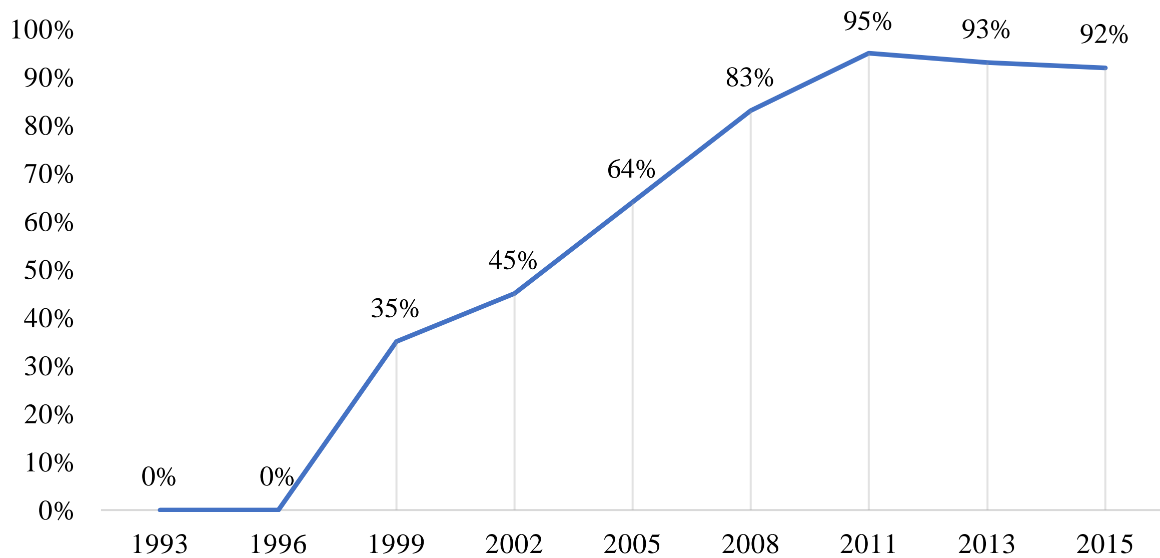

Figure 3. Combined CSR reporting in G250 companies

Source: Prepared by author based on the information from KPMG Currents of Change report (Currents of Change, KPMG, 30).

Figure 3. represents the expansion of reporting rate among 250 biggest companies in the world. Currently the rate is 92% and it has been varying during the last four year between 90 and 95%. This swinging is a consequence of changing G250 list. In other words, companies are not the same each year which don't give the most reliable outcome. KPMG expects that reporting rates remain the same in the future (Ibid, 30). As the legislation is presumed to demand more on corporate social reporting, it is authors opinion that reporting rates will climb up in both company compositions in the future.

1.5 CSR in selected countries

Corporate social responsibility is not regulated by law in selected countries. As soft law provisions, countries give recommendations or instructions for organizations. In this chapter, the author has combined the most important characteristics of corporate social responsibility in selected countries. Similarities and differences are converged after each country has been examined. Finland, Sweden, and Denmark countries are Nordic countries, which gives the

author a realistic base for comparison. It is assumed that the economic situation is currently at the same level in each country.

The author used the latest action plan for each country but some of the recommendations might have been from previous years. However, these kinds of documents are valid for many years.

1.5.1 Corporate social responsibility in Finland

Corporations are part of world's society and they cannot act against with the values in the society they are operating. In Finland, it is believed that maintaining the competition is increasing the amount of corporate social responsibility itself but the expectations towards organizations are also growing. The motive for Finnish companies is to achieve better reputation, more efficient workforce and solving social problems (Corporate sustainability reposting in Finland 2011, 1). The newest action plan was published in November 2012 and is valid till 2015. The main objective of this plan is to emphasize capacity building and legislation. The aim of the government is to promote transparent business conduct. Finland encourages organizations to implement corporate social reporting managements systems and publish non-financial information. The government also strives to introduce social and environmental responsibility to stakeholders (Williamson, Stampe-Knippel, Weber 2014, 70-71).

According to the article of sustainability in Finland 2015, environmental issues were the most common themes in corporate responsibility. Nevertheless, companies are investing most in being environmentally friendly. Due to the survey, sustainability is very important to all companies. However, only 57% of the companies are regarding sustainability as a relevant cornerstone for their business. It has been discovered that price and other short-term profitability objectives are having a bigger impact on competitiveness. Finnish companies are considering the brand building as a most important reason to invest in sustainability. This is the incentive for extending the corporate reporting. Finnish companies are considering sustainability as a basis for profitability (Roiha, Routti 2015, 2-10).

Chapter Three, Section 1a in the Accounting Act of Finland requires that companies include their non-financial issues in the annual report. These could be such as information about personnel, environmental factors or other potential matters that have an impact on

organization's operations. In the accounting law, it is stated that balance sheet and annual report must give the right picture of the operations and financial possession that organization is having. Information must be relevant as discussed before. This means that companies are expected to publish precise statements on their operations (Accounting Act, 1336/1997). Finnish accounting act also requires to report these cash-free issues and author considers Finnish stakeholders to respect environmental factors, which is why companies invest time and effort to prepare and disclosure the information.

1.5.2 Corporate social responsibility in Sweden

Sweden considers corporate social reporting essential for enterprises operating in or from the country. The country is acting according to the principles set out in the OECD Guidelines. These recommendations are developing sustainable businesses. Media has an important role in this sector when they are expected to monitor how organizations are following these instructions. In case if companies cut corners, media can raise public awareness about what has happened. This gives pressure to the firms to stay in their molds (Sustainable business…2013, 6).

Sweden published Environment code in 1998 and it introduced the requirement to reveal environment consequence information in annual environment report. This guideline was mainly constructed for companies in the construction sector and those who are emitting toxic wastes to the environment. Sweden has approached the corporate social reporting from the similar angle than Finland. Country value environment and as a result, reporting about activities that have an impact on it must be reported to the general publics. The aim for the Environmental code is to assure healthy and sound environment for the present and future generations. It states that nature is worth to be protected and our right to change and utilize it has responsibilities (Act of the code of the Environment, Sweden 3-9).

As every country, Swedish state is owning plenty of companies. Some of them are completely or partially administered by the government and some are even listed on the stock exchange. These companies are providing many workplaces and they represent significant value for the society. Therefore, the country has a high responsibility to be an active and

professional owner of their companies. Sweden has set an objective for companies to maximize their value and ensure that the social interests are fulfilled (Government Offices of Sweden).

Swedish government published a national action on corporate social reporting in January 2014. It gave tools such as action plans, practical tools, partnering and financial support to implement social reporting (Williamson, Stampe-Knippel, Weber 2014, 94-95). Sweden states its corporate social responsibility in a similar way that Finland. They value environment and want to assure it for future generations.

1.5.3 Corporate social reporting in Denmark

Denmark published an action plan for years 2012-2015 for corporate social responsibility in February 2012. Their objective is to make progress in training, knowledge sharing, partnerships and legislation. This plan was created by Danish Council for corporate social responsibility. Denmark has clearly identified and promoted good corporate social responsibility practices. The aim is to support companies to start publishing their reports, raise awareness and promote mutual learning on social reporting practices (Williamson, Stampe-Knippel, Weber 2014, 66-68).

The Danish government has an intensive that they succeed to put the financial crisis behind and together build a base for new responsible growth and employment. The financial crisis has increased the focus on social responsibility in Denmark. The country is facing challenges in form of climate change, scarcity of natural resources and human rights, which are caused by companies, investors, consumers, including general publics. Most of the companies are taking for granted that there is responsibility for humans and environment when running a business. It has also been stated that these legislations and expectations are clearly defined and therefore, easy to follow. Ability to adapt with international principles and corporate social responsibility guidelines has direct linkage to the capability to compete in the market. However, there are plenty of organizations that like to act in a correct way but because of lack of necessary tools and knowledge restrict them to do it in practice (Responsible growth, Danish action plan 4-6).

Danish companies are demonstrating their social responsibility well in global perspective. The number of organizations that adopt recommendations from UN Global

Compact increase steadily each year. The country has faced positive phenomena on participating corporate social reporting. Not only the high proportion of Danish companies report their social responsibilities but also the share of these Danish companies in global level is growing (Ibid, 4-6).

Danish parliament adopted "Act amending the Danish Financial Statement Act (Accounting for CSR in large businesses)" in December 2008. The objective of this law is to inspire businesses to practice corporate social responsibility and report about it. This regulation gives instructions to the large businesses in Denmark to account for their work on corporate social responsibility. In these reports, organizations must report on their social responsibility policies, standards, guidelines or principles. Companies are expected to describe how they are translating these standards into practice and what they have achieved through corporate social responsibility during their financial year (Danish Business Authority).

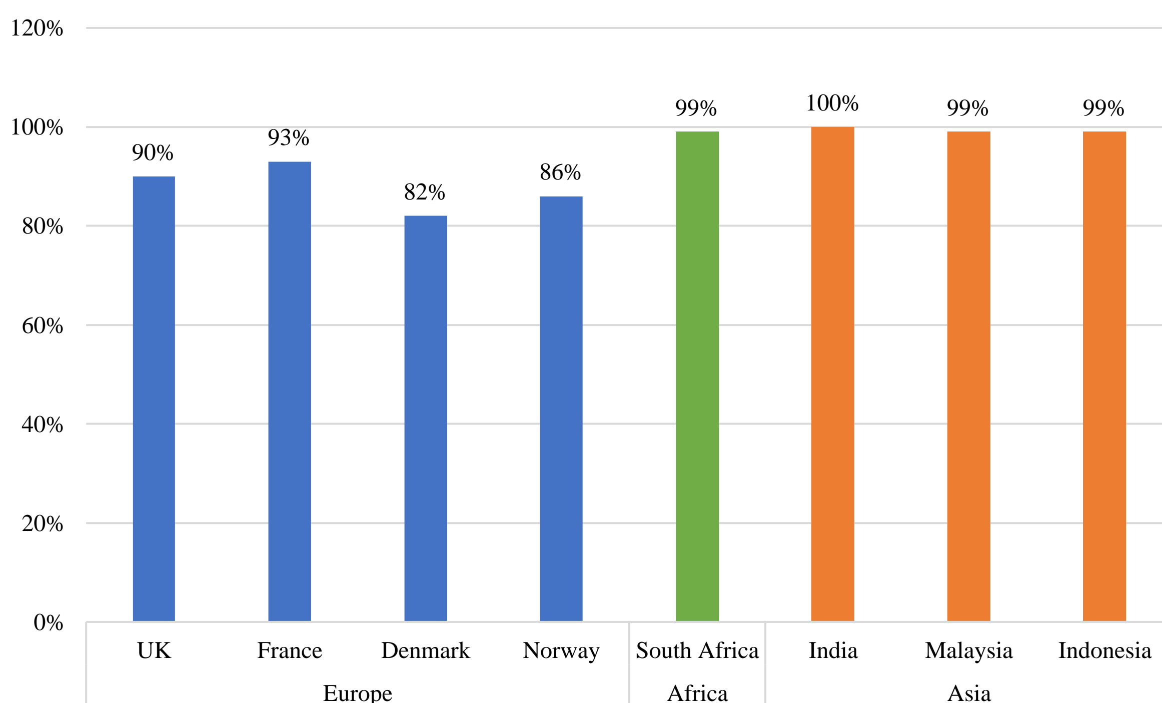

Figure 4. Countries with highest rate of CR disclosures

Source: Prepared by author based on the information from KPMG Currents of Change report (Currents of Change, KPMG, 37).

All selected countries had differences and similarities with each other. Denmark was the only country, which encouraged organizations for corporate social responsibility reporting with instructions that were easy to understand. The main problem countries had was the challenge to understand what governments aimed for. In addition, the incentives to encourage companies have been left aside, which are the most important for companies. The author assumes that high rate of corporate social reporting is a consequence of the proper actions of government. Finland and Sweden were more similar among the selected countries. Their direction was also optimistic but the incentives to publish corporate social responsibility were rather non-existent. Companies consider the reporting as additional expenditure and it doesn't generate enough gain to be worth of investing. Figure 4. presents the countries with the highest rate of corporate social reporting in annual reports. According to KPMG report, the highest reporting rate has been in Asia in the year 2015. It is worth to pay attention that companies located in America are not having high reporting rates. In Denmark 1100 largest companies are required to publish corporate social reports in year-end reports, which is the reason of the high reporting rate. Country recommends organizations to focus on climate and human right matters on their reports. France has the highest rate of 93% in Europe. The Grenelle II Act requires all listed and big companies to report social responsibilities in annual reports. It can be observed that climate change is a global issue and therefore it is priority for many countries to regulate it. As it is stated in Figure 4. Corporate social responsibility reporting is mandatory for Asian organizations and that makes their reporting rate almost 100% in 2015 (Currents of Change, KPMG, 37). Corporate social responsibility reporting has increased during the years in most continents. The regulations are not yet as strict in Europe as in Asia. Author didn't find it surprising that Denmark had such high reporting rate in 2015 because of the forward looking and encouraging action plan.

In general, it can be concluded that corporate social reporting is becoming more important for all countries all over the world. The growing trend of corporate social responsibility reporting has also forced countries to include various disclosures in their annual reports. Author considers human capital as a vital part of corporate social responsibility and will examine it in detail in chapter 2.

2. HUMAN CAPITAL CONCEPT

Capital is defined as a source of income. The worth of its present value is the value of future income minus specific rate to the owner of the source. Human capital is not different from that even it is embodied in a person at specific time. Combination of individual's raw workforce and natural acquired skills are called the human capital. The difference between these two types of capital is that human capital is non-transferable. In turn nonhuman capital, can be traded in the global market. (Lev, Schwartz 1971, 104)

Reporting human capital values enables financial statement users with precious information. For example, changes in a company's labour force. It is important to note that skills of an employee and knowledge are valuable for the organization if, and only if, the company ends with profit. Some firms are disclosing and reporting this information in corporate annual reports. This is not a very common action and therefore it is hard to find beneficial information about it. It is said that human capital is generally the least released among intellectual capitals (Samudhram, Shanmugam 2010, 108). The gross value of services an employee performs must exceed the value of fixed expenses because the entity needs to provide certain facilities to obtain the service. It is indicated that there is no linkage between human capital values and the value of the people to a company (Morse 1973, 590). Human capital creates challenges to determine whether investing is beneficial to the company. In authors opinion, it depends largely on corporate culture and demands with educated employees.

2.1 Valuation of human capital

There are many models to define the value of human capital. Some of them are based on input measures for example salary paid and training expenses. Value can be measured also by output measures like productivity and efficiency. Each of the models has limitations and

none of them is proved to be more valid compared to another (Prasad, Sheela, Kumar 2011, 46). Human capital is extremely valuable for organizations. It is especially a good contributor for creating revenues. Investment in physical asset is nowadays considered equally important to human capital investment. Human capital is considered at the most valuable assets in many organizations. Therefore, it should be recorded in the firm's financial reports. There is support for the theory that organizations are unwilling to inform human capital-based information in their reports because competitors may follow them and diminish their competitive advantage (Samudhram, Shanmugam 2010, 114-116). Lev and Schwartz model has been the most widely used, which is generally an input measure. Therefore, the model uses the salary, which is paid but also expected growth in salary and training expenses to give reliable value for organization's human capital (Prasad, Sheela, Kumar 2011, 46). The first workforce is divided into two groups. To get the best result, the variance between maximum and minimum input values should be as close each other as possible. After the salary classification, an employee is sorted into four levels based on their position held in the company. Since, the average salary of each level worker is found, the expected growth rate in the salary is calculated. At the same time the cost of capital is specified. When the retirement age of employees is defined, the company should calculate net present value of future income for each level. When all data is available, the organization is able to calculate its human capital (Ibid, 46-48). In reality, this model is much more complicated and author was not able to find which model the companies were using if they reported their human capital as numerical values.

2.2 Investing and returns from human capital

Return on any kind of investment can be identified in terms of investor. An investor will select a promising target, which makes him better off. Typically, investment generate returns in the form of assets. These could be for example income or service streams (Lindsay 1971, 1196).

To make an investment, investors require high quality and reliable information to be able to choose the most convenient company to invest. This information denotes also for human capital. To get access to the information the investors must use enormous amount of time and effort to reach for the right data (Samudhram, Shanmugam 2010, 108).

Managers and directors are internal users of the organization's financial information. They are enabled to find required data quickly for making investments, which could create problems. Internal users can rustle up wealth at the expense of shareholders because they can cover up problems in the business. It is likely that these struggles come public when the firm eventually collapse (Ibid, 108-109).

Training investments' returns are considered in the form of a price change. This means that an investor may purchase investment option of selling his ownership of one item at higher price. To have a correct measure for return in training investments, a difference between net earnings of trained and untrained employees must be found (Lindsay 1971, 1196).

Employee training is called as a general training. It aims to increase productivity of the workers to all potential employers. Nowadays, markets are highly competitive and consequently employees earn equal wage to their marginal productivity. Organizations will serve this kind of training in case they don't have a big financial loss from the cost. For example, if the training costs are not followed by a change in the salaries and present value of resulting incremental productivity exceeds expenses. Then there will occur a growth in human resources (Morse 1973, 593).

When an organization decides to train their employees, they must take into count that it may result in increase of salaries. In this case, if costs of training are equal to resulting present value of incremental productivity, then the value of the employee interests in these resources increase. This also causes a situation when employees become too educated. There is a probability that productivity does not increase after training. When a company faces this situation, its total resources and nonemployee interests will decline (Ibid, 592).

Educating workers which increase their productivity to a single employer is called specific training. Risk of educating workers is that company will lose them after training is finished. These risks are mostly popular among the industrial workers. Caused expenditures and benefits of this training are often shared by both parties (Ibid, 593). Author believes that educating employees is not always beneficial. According to the W. J. Morse, more educated employee has bigger bargaining power, which might result in higher salary. Consequently, companies might want to just hire employees that are more skilled. In that case, organization will save all training expenses and use them for higher salaries.

2.3 Implications of human capital reporting

Disclosure of the of human capital gives relevant information about business. It concerns organizational changes in the firm so far. The ratio of human capital and nonhuman capital indicates the level of the employee intensiveness inside an organization (Lev, Schwartz 1971, 107). Human capital accounting is related with determining the value of human resources. It is categorized as a sub classification of general human resource accounting. In other words, it presents the amount of the human capital resources employed in a company relative to the workers of that organization (Ibid, 109). Human resource accounting could be viewed as an experimentation to quantify human beings. Regardless of its long history, it is a new phenomenon in practice. It has been occurred in many ways ever since the Middle Ages (Samudhram, Shanmugam 2010, 117).

There are a few problems in reporting realistic human capital values. Firstly, the challenge to measure the value of organization's work force. On the other hand, it is difficult to estimate and amortize firm's investment in human resources. There are few angles to approach this issue for example, it can be stated that human capital can't be purchased or owned by a company. Hence, it should not be considered as an asset. At individual worker's extent, it is true but when looking at company's labour force as a whole, this statement could be decoded differently (Lev, Schwartz 1971, 109).

Still and all, human capital values may be reported as an integral part of financial statement. It should be presented in the asset side of the balance sheet and present the value of the organizations salaries and wages payable in the liability side. Regardless of the fact, that human capital can be reported in the balance sheet it has no reflection to entity's income statement (Ibid, 110).

To identify benefits and impact of human capital reporting, three factors are taken into consideration: workforce-related factors, organization's internal and external factors. If the organization can make progress in all previously presented factors, the equity owners can expect growth in the value of the company. Human capital reporting is a good way to influence positively on these three elements. The company's financial performance can be influenced in a positive way with human capital reporting according the cause-and-effect relations (Gamerschlag, Moeller, 211). In the chapter 2.3.1 influencing factors of human capital are

discussed. From author's perspective, accurate value of human capital is difficult to achieve. It is hard to measure the actual benefits that employees bring to the company.

The author found an interesting research conducted by Absar (2014) on how Far East companies report their human capital. Far East had the highest rate of corporate social responsibility reporting as presented in the chapter one. In the research, Malaysian, Indian, and Bangladeshi companies were studied. The results indicated that the highest reported item on corporate social reporting was "training and development" and the least ones "separate HR statement" and "educational index of employees" (Absar 2014).

It was also interesting to notice that overall the level of human capital reporting is in low level in selected Far East countries. The lack of legal framework and knowledge, poor performance and fear of a bad reputation are stated to be the reasons behind this poor disclosure of human capital reporting (Absar, 44). This proves that the lack of human capital information is not only problem in Scandinavian but also in other countries around the world.

2.3.1 Factors impacting human capital reporting

Workforce-related factors are divided into capability, commitment and motivation. When an organization is improving these sectors, it causes a direct benefit for human capital reporting (Gamerschlag, Moeller 2011, 147).

Capabilities include individual workers' competence and qualifications. By training and educating employees the company can influence and advance their ability to perform challenging tasks. The results have been noted as increase in the company's knowledge base. Motivation refers to the employee's willing to perform and achieve organization's goals. This is an important asset for the company. A firm can increase workers' motivation for example by making clearer decisions and generating incentive plans. Workforce commitment is emotional allegiance with the employer (Ibid, 149). It is obvious, that all the mentioned factors are interconnected because they have a clear impact on each other all the time (Gamerschlag, Moeller, 211).

Internal factors of the organization consist of organizational performance, ability to be innovative and have good own good soft skills. The internal processes are often referred to be the core competencies of the company. (Gamerschlag, Moeller, 211)

Encouraging the innovation is the company's ability to create new ideas for the future and generate cash flows and competitive advantages. It is dependent on workforce's motivation and capability. To make progress in this sector, changes should be made in workforce segment. Organizational culture indicates all values and norms inside the company (Gamerschlag, Moeller 2011, 149). Finding similar competence is the most challenging task for competitors. Good corporate culture enables the positive influence to workers' motivation and other actions. The performance that happen inside the company directly influence in the company's external factors (Gamerschlag, Moeller, 211).

Attractiveness and reputation are the external elements of an organization. Similarly, these are impacted by the same components as internal factors and workforce. The indirect approach comes from workforce-related factors. Direct influence is caused from company's internal elements. Improvements in external variables are considered to be indirect benefits of human capital reporting (Gamerschlag, Moeller, 214).

A company can be viewed as an instrument to satisfy different stockholder segments. In other words, a stakeholder will evaluate the firm so that it satisfies their investment needs. Financial performance is influenced straight by its reputation and attractiveness. It is a result of human capital reporting which is derived from new customers and cooperation partners or customers and investors. The degree of need satisfaction describes the organization's capability to satisfy external stakeholder needs. Human capital reporting affects the company's value through the benefits it obtains from improved satisfaction of external users (Ibid, 214).

To sum up, the main challenge is to reach the right information and find a relevant way to convert it to measurable units. That enables companies to compare their human capital reporting with other measures. Providing financial information is necessary and companies report detailed information about their investments and physical assets. They are eager to provide human capital information only if it is improving the standing and beneficial for them (Gamerschlag, Moeller, 214).

In general, it was stated that corporate social responsibility regulation has increased during the past 22 years. Denmark's government has the most proper actions, which reflected to the highest reporting rate among the selected countries in 2015. It was stated that competition was the biggest determinant of corporate social responsibility reporting existence. In perfectly competitive or monopoly markets, organizations don't face gains that satisfies them. Even

human capital reporting is an important information for external investors the lack of resources force companies to drop human capital reports out from their annual reports. The Lev and Schwartz model gives a reliable measure for it based on salary and training expenses. However, employee training isn't necessarily always beneficial.

3. RESEARCH ON HCR CONNECTION TO CFP

In the third chapter author compiled the results of human capital reporting relation to company's financial performance. The method how the results were compiled and calculated were based on the data from companies' annual reports. All researched companies were selected from Nasdaq Nordic. The aim of the following calculations and analyses is to examine whether there is a recognizable connection between human capital reporting and financial performance of an organization. In addition, author has studied the corporate social reporting recommendations in the selected countries to support findings. Appendix 4. presents the connection of human capital reporting and return on assets between Finnish companies. It is possible to find the figures that are required to calculate the key ratios: net income, revenue, total assets and total equity from the appendices.

3.1 Research design and methodology

Linkage between human capital reporting and organization's financial performance is the research question for this thesis. The author is also willing to examine if it is possible to find any other continuous patterns and the variances between selected Scandinavian countries. Measuring this linkage could be done in numerous ways and author will confine the research by investigating the relationship with three financial key ratios: return on assets, return on equity and return on revenue. Fiscal year 2015 was used in this research because all organizations have not published their financial statements for year 2016.

Information from employee motivating incentives programs was searched from organization's annual reports, which were either in English or in Finnish. In some cases, this caused challenges when annual reports were not provided in the stated language. This delimited some Swedish and Danish companies from this research. When analyzing the results, the author

has researched country's corporate social responsibilities to endorse findings from entities annual reports.

In the beginning of the research, there were 229 small cap companies listed in Nasdaq Nordic. After all, 93 organizations were selected because of previously mentioned language barriers or lack of financial information. Nasdaq Inc. is the world's largest exchange company. It operates across six continents where it has over 3,500 listed companies. Nasdaq Inc. provides trading, public company service and exchange technology. There are seven locations which are Helsinki, Copenhagen, Stockholm, Iceland, Riga, Tallinn and Vilnius (Nasdaq Nordic 2016). When the annual reports were available, information about human capital reporting was transferred to a separate excel worksheet. Companies were listed on a vertical axis and ten different ways of investing in human capital on the horizontal line. The maximum and minimum score for human capital reporting in this research was ten and zero respectively. Each company was examined and all human capital related investment was marked with one point, which was given if some of the following statements were mentioned:

- Safety policy or working environment;
- Health policy;
- Pension insurance;
- Long-term employee benefit;
- Share-based payment;
- Providing physical exercising or cultural possibilities;
- Financial rewards;
- Training for employees;
- Providing apartment for employees;
- Clear delegation or goals.

Human capital reporting included both, financial and non-financial rewards. Finally, the total score to the human capital reporting was represented in the column on the right. It indicates how many ways the organization was reporting on their human capital investments.

The objective of this paper is to answer to the research question and if the author finds a linkage, what can be stated and how it will influence on company's performance. In case, if the author doesn't find any connection, this paper aims to explain why there is no relationship

and analyse if it is possible that someday there could be a clear alliance with these two immeasurable values. It is also worth of finding reasons why the connection does or doesn't exists.

The author calculated return on assets, return on equity and return on revenue for each organization. Return on equity is a profitability ratio and it shows how profitable an organization is compared to its total equity. The author calculated it by dividing net income by total equity (Startseva, Gurvits 2015, 51). Return on assets is measuring a company's ability to use its assets and generating income. There are many methods to calculate these ratios. The author has calculated return on assets by dividing the net income on total assets (Harrison, Horngren, and Oliver 2012, 598). The relation between net income and stockholders' equity is considered as a return on equity ratio. It is an indicator on how much a stockholder earns based on equity invested. This ratio is the first indicator investors look and it is calculated by dividing net income with stockholders' equity. The last financial ratio is return on revenue, which indicates how successfully company can use its assets to earn income. Return on revenue was calculated as net income divided by revenue (Ibid, 599). With these key ratios, it is enabled to examine the relation of human capital and financial performance. In authors opinion, these are the benchmark profitability ratios that give the best image of company's financial performance.

The author's hypothesis for this research is that there is no connection between company's financial performance and human capital reporting.

3.2 Linkage between human capital reporting and ROA

Appendix 4, Table 1 and 2 present the return on assets ratio in all 93 selected organizations in Finland, Sweden and Denmark. Companies are arranged by decreasing ROA values and these standings have been calculated by the author. The financial information for calculations are taken from the companies' annual reports for year 2015 and they are presented in the appendices. These tables also contain total score for human capital reporting in a separate column.

Based on results of the calculations shown in Appendix 4 it can be stated that the profitability ratios don't provide proof that there is connection with human capital reporting and company's financial performance in Finland. Ten best companies with highest return on

assets scored total one or two points of human capital reporting. Entities that have human capital reporting score of three or more are located in the upper middle of the list. For example, Consti Yhtiöt Oyj has 4 points and is ranked as 20th and Trainers' House Oyj holds 25th place with 3 different human capital methods.

Okmetic Oyj had the best outcome in the human capital reporting column. The company was placed in the 12th position in the table. The author interprets that there is not any connection between human capital reporting and return on assets. Finnish corporate social reporting gives also support to the results.

It was surprising that there were many organizations with negative return on assets ratio. In this research paper the author focused only for year 2015 but nevertheless it would have been interesting to calculate these accounts for previous years. Thereby it could be studied more deeply how a company has controlled human capital reporting and whether it has affected to the performance of the entity. This paper provides answers only in the first level. The financial strain has been bothering Finland previous years and economy has not recovered during 2015, which has impact on companies' the performance. In author's opinion, that it makes operating at profit more difficult and usually results to negative financial ratios. Because of the recession companies must cut their training and incentive programs, which also give them lower human capital reporting score.

To make a conclusion based on Appendix 4, the author didn't find any connection between high score in human capital reporting and return on assets. Regardless, it was a common phenomenon that entities with low score in the human capital reporting were positioned in the end of the list. This statement is valid when examining the data by return on assets ratio. This was also possible to interpret from corporate social responsibility section. When looking to the guidelines, Finnish government gives complicated suggestion for the entrepreneurs. They don't give any incentives to start reporting it and author summarizes this the biggest challenge. As a society, Finnish people want to benefit somehow from the effort they put into something. Table 1. represents the relationship between ROA and human capital reporting in Sweden.

Table 1. Comparison of ROA with human capital score. (Sweden)

Company name	Return on assets	HCR
CellaVision	25 %	3
Endomines	16 %	0
BTS Group B	14 %	3
Duroc B	8 %	0
Black Earth Farminf SDB	8 %	5
Consilium B	7 %	1
Björn Borg	7 %	4
DGC One	5 %	0
Boule Diagnostics	5 %	0
Concordia Maritime B	5 %	3
Feelgood Svenska	3 %	0
Electra Grubben	2 %	0
Beijer Electronics	2 %	4
Arctic Paper	1 %	1
Bong	0 %	3
Karolinska Development B	0 %	1
Episurf B	-3 %	2
Bactiguard	-4 %	6
Arise	-6 %	4
BE Group	-9 %	2
Enea	-25 %	0
Eolus Vind B	-37 %	0
Active Biotech	-43 %	2
Anoto Group	-64 %	2
BioInvent	-166 %	2

Source: Data compiled and calculated by the author based on table provided Appendix 2.

It can be observed that human capital reporting doesn’t have linkage to financial performance in Sweden. There are plenty of companies that are not reporting their human capital at all and still achieving one of the highest returns for their assets. Nevertheless, organizations operate on different industries, which might influence authors results. For example, organization with very low value of assets can reach higher return on asset ratio compared to a company that requires huge amount of equipment to operate. Technology companies are a good example of industry that doesn’t need much of assets but can achieve

rather high return on assets. BioInvent is operating at pharmacy industry and made the biggest negative return on its assets. Company has made negative bottom line for five years now because of high investments on research and development. It is also worth of noticing that their total assets have been decreasing each year. The biggest change has appeared in liquid funds.

Author also found that there are less organizations whose ROA is negative compared to Finnish companies. This means that the economy has recovered better in Sweden than Finland. It is also worth to mention that this financial ratio is not extremely high for any company. Five companies with highest ROA have the ratio between 8-25%. To sum up the results author had for Sweden, there is no straight connection between return on assets and human capital reporting, which author was searching. As expected in the hypothesis, Finland and Sweden are quite similar countries.

The last country examined by the author is Denmark. After calculating before mentioned key ratios, author arrived into an interesting outcome. As table 4 presents, companies are a lot more active to report their human capital compared to Finland or Sweden. There is only one company among 25 examined organizations, which is not involved in reporting human capital. Reasons to this outcome is possible to find from Danish corporate social responsibility action plan. Denmark has stated that all the companies are pulling the same rope and hence, the economy has recovered from the financial recession quicker than other countries in this research. Table 2. presents the comparison of return on assets and human capital score in Denmark.

Table 2. Comparison of ROA with human capital score. (Denmark)

Company name	Return on assets	HCR
RTX	13,9 %	4
Monb. & Thor. B	12,1 %	4
Gabriel Holding	11,8 %	0
Nordic Shipholding	9,9 %	2
Columbus	9,4 %	3
Egetæpper B	7,5 %	2
Roblob B	6,7 %	3
F.E. Bording B	6,0 %	1
SP Group	5,7 %	3
Expendit B	3,6 %	1
H+H International	3,2 %	4
Rias B	3,0 %	3
Harboer Bryggeri B	2,7 %	3
Arkil Holding B	2,2 %	3
Migatronic B	2,1 %	4
Grønlandsbanken	1,2 %	3
Djurlands Bank	0,9 %	1
Greentech Energy Systems	0,3 %	3
Santa Fe Group	-1,4 %	1
First Farms	-4,2 %	3
Neuro Search	-6,8 %	1
Ceman	-16,4 %	3
Bio Porto	-21,2 %	3
DLH	-35,9 %	2
Scandinavian Brake System	-37,1 %	0

Source: Data compiled and calculated by the author based on table provided in Appendix 3.

Most of the Danish selected companies reached positive net income in their fiscal year 2015. There are only six organizations with negative return in assets ratio, which could be in some cases explained by heavy investments. Scandinavian Brake System quit and sold its daughter company's operations. This caused high costs for the company and net income decreased dramatically. In previous years, company has made profit. DLH is trading timber products around the world and it suffered huge losses on fluctuating exchange rates. Company has made loss in four consecutive years, but this year they managed reduce negative net income

to half. Author arrived into a conclusion, that there is no connection between human capital reporting and return on assets in Denmark.

3.3 Linkage between human capital reporting and ROE

Appendix 5 presents the return on equity and human capital reporting score for Finland in year 2015. Based on the representation of Appendix 5. it can be stated that there is no connection between human capital reporting and return on equity. It can be observed that organizations are passive reporters, which is shown in low human capital reporting level. Lack of reporting is also one evidence that it is challenging to draw linkage between financial performance and human capital. The return of equity ratio fluctuated among Finnish companies. However, most of the selected listed companies managed to create value for shareholder's investments. In author's opinion, there is no linkage between financial performance and human capital reporting. it is obvious that Appendix 5. states high score in human capital reporting doesn't guarantee high return on equity or improve it.

All selected companies from Sweden are listed in the Table 3. with calculated return on equity and human capital reporting score. All results are sorted in decreasing order, so company with the highest return on equity is on the top.

Eight companies had zero as human capital reporting score, which indicates extremely low interest of reporting or companies don't use similar criteria for human capital as the author did. Ten best performed companies based on return on equity ratio has human capital score between zero and five. This gives support that neither in Sweden, human capital reporting doesn't influence the organization's profitability based on return on equity.

Table 3. Comparison of ROE with human capital score. (Sweden)

Companies	Return on equity	HRC
Anoto Group	42,7 %	2
CellaVision	30,6 %	3
Consilium B	29,4 %	1
BTS Group B	22,7 %	3
Endomines	22,1 %	0
Duroc B	15,8 %	0
Björn Borg	14,3 %	4
Black Earth Farminf SDB	13,2 %	5
DGC One	13,2 %	0
Concordia Maritime B	11,2 %	3
Boule Diagnostics	8,1 %	0
Feelgood Svenska	5,7 %	0
Electra Grubben	4,9 %	0
Beijer Electronics	4,5 %	4
Arctic Paper	3,9 %	1
Bong	0,0 %	3
Karolinska Development B	-0,4 %	1
Bactiguard	-5,3 %	6
Arise	-14,3 %	4
BE Group	-21,5 %	2
Eolus Vind B	-40,0 %	0
Enea	-97,2 %	0
Active Biotech	-107,2 %	2
Episurf B	-292,6 %	2
BioInvent	-307,5 %	2

Source: Data compiled and calculated by the author based on table provided in Appendix 2.

Table 4. presents the 25 selected Danish companies and their calculated return on equity in fiscal year 2015 in decreasing order. It also shows the human capital reporting score based on the author’s criteria. Results show that there is no linkage between return on equity and human capital reporting.

Table 4. Comparison of ROE with human capital score. (Denmark)

Company name	Return on Equity	HCR
Scandinavian Brake System	87,3 %	0
Nordic Shipholding	30,9 %	2
RTX	17,6 %	4
Gabriel Holding	17,0 %	0
Columbus	16,9 %	3
SP Group	15,6 %	3
H+H International	15,4 %	4
F.E. Bording B	13,4 %	1
Monb. & Thor. B	12,2 %	4
Egetæpper B	12,1 %	2
Grønlandsbanken	8,0 %	3
Roblob B	7,9 %	3
Expendit B	7,6 %	1
Djurlands Bank	6,7 %	1
Arkil Holding B	4,8 %	3
Harboer Bryggeri B	4,7 %	3
Rias B	3,9 %	3
Migatronic B	3,7 %	4
Greentech Energy Systems	0,7 %	3
Santa Fe Group	-3,5 %	1
First Farms	-7,2 %	3
Neuro Search	-7,3 %	1
Bio Porto	-23,3 %	3
Ceman	-34,5 %	3
DLH	-81,0 %	2

Source: Data compiled and calculated by the author based on table provided in Appendix 3.

Results in Appendix 5., Table 3, and Table 4. clearly indicate that there is no connection between human capital reporting and company's financial performance based on return on equity ratio. Author believes that if it is proved that human capital reporting increase the profitability, then human capital scores in this research would have been much higher. It depends a lot from the corporate culture, how accurately management wants to disclosure these reports

3.4 Linkage between human capital reporting and ROR

Appendix 6. presents the return on revenue ratios of 44 selected Finnish companies in decreasing order. Human capital reporting score has been determined based on the same criteria author has used in the previous tables. All data is referring to fiscal year 2015.

Results indicate that score of one point is the most common among companies with ratio close to zero or negative. The top organizations mostly received score between two and three. Consti Yhtiöt Oyj had return on revenue 1,3% but still achieved four points in the research. This indicates that there is no clear connection between human capital reporting and return on revenue profitability ratio among Finnish companies.

Companies selected from Stockholm's stock exchange are listed in Table 5. Author has calculated the year 2015 return on revenue for each company and sorted them in decreasing order. In the right column, each company's human capital score is presented.

There was a trend of dropping human capital out of annual reports. This is based on the observation that author found eight companies with zero score. Author believes that it is enough of a proof that it is impossible to find linkage between return on revenue and human capital reporting. For example, Enea, is holding fourth place in Table 5., and most of the other companies with zero score are placed in the upper part of the table. Approximately, one third of the companies are facing negative return on revenue.

Table 5. Comparison of ROE with human capital score. (Sweden)

Company name	Return on revenue	HCR
Concordia Maritime B	25,9 %	3
Cella Vision	23,4 %	3
Enea	18,3 %	0
Black Earth Farming SDB	17,6 %	5
Björn Borg	7,3 %	4
Consilium B	7,1 %	1
Edgeware	5,3 %	0
FormPipe Software	5,2 %	0
Boule Diagnostics	4,6 %	0
DORO	3,5 %	0
Elos Medtech B	3,2 %	0
Beijer Electronics	1,7 %	4
BTS Group B	1,0 %	3
Arctic Paper	0,9 %	1
Bong	-2,7 %	3
BE Group	-4,1 %	2
Bactiguard	-19,1 %	6
Arise	-32,0 %	4
Anoto Group	-32,4 %	2
Karolinska Development B	-35,9 %	1
Etrion	-37,1 %	2
Eniro	-46,1 %	0
BioInvent	-569,4 %	2
Active Biotech	-1189,1 %	2
Episurf B	-4326,2 %	0

Source: Data compiled and calculated by the author based on table provided in Appendix 2.

Table 6. presents the Danish companies, their return on revenue ratios and human capital score respectively. The biggest difficulty of comparing the impact of human capital reporting is that companies are not operating in the same industry. In the other hand, this gives a wider perspective for authors research.

Danish companies' profitability ratios were fluctuating less compared to other selected countries. More active reporting rate also created a possible relation that human capital reporting might improve the stability of the company. In authors opinion, it could be said that

company looks like its owners. If they use time and effort to report human capital, it means things are done properly inside the organization, which in turn can result in stable business.

Table 6. Comparison of ROE with human capital score. (Denmark)

Company name	Return on revenue	HCR
Neuro Search	N/A	1
Nordic Shipholding	29,1 %	2
Grønlandsbanken	25,6 %	3
Djurlands Bank	18,7 %	1
RTX	13,8 %	4
Greentech Energy Systems	9,4 %	3
Gabriel Holding	8,8 %	0
Roblob B	8,7 %	3
Egetæpper B	6,0 %	2
Columbus	5,8 %	3
SP Group	4,6 %	3
F.E. Bording B	4,2 %	1
Harboer Bryggeri B	2,5 %	3
H+H International	2,4 %	4
Rias B	2,4 %	3
Expendit B	1,9 %	1
Migatronic B	1,5 %	4
Monb. & Thor. B	1,2 %	4
Arkil Holding B	1,1 %	3
Santa Fe Group	-0,9 %	1
First Farms	-19,7 %	3
Scandinavian Brake System	-21,9 %	0
Ceman	-31,3 %	3
Bio Porto	-50,9 %	3
DLH	-73,0 %	2

Source: Data compiled and calculated by the author based on table provided in Appendix 3.

Results indicated that there is no connection between human capital reporting and return on revenue ratio among the selected companies from Nasdaq Nordic. However, author found it interesting that Denmark reported most actively and achieved the ratios with smallest variance. Author considers it to be captivating to examine the possible connection when comparing few consecutive years.

3.5 Results and discussion

The findings of the results indicate that there is no linkage between organizations financial performance measured by the key ratios and human capital reporting in short-term. This is illustrated by performance of 93 companies listed in the Nasdaq Nordic from Helsinki's, Copenhagen's and Stockholm's stock market. For further research, author believes that it would be interesting to see how key ratios and human capital scores have changed during the years. That gives each company a trend and it would be easier to determine, whether the linkage exists.

Author found that organization with low human capital score had possibility to perform better compared to companies with high human capital reporting score. It is still worth to mention that many companies are not establishing exact and detailed human capital reporting practices for their annual reports. This has impacted to the reliability of the research outcome. Reasons why companies are not reporting on human capital could be explained that companies don't find a practical way to implement it and don't consider it necessary.

In the authors opinion limitations for the research were language barrier and human capital reporting positions chosen by the author. It might be that companies have reported some other human capital category, which is not included to this research or in the other report.

Figure 5. presents the most frequently reported issues of human capital reporting in each country. The most popular reporting category in each country was pension funds, which is mandatory regulation each company. Total of 93 companies, 67 reported for pension fund. The least reported category in this research was apartment possibility and cultural benefits. Saga Furs Oyj was the only company that provided an apartment for employees living far from the headquarters or factories. Compared to research by Absar 2014, author didn't find any similarities between selected countries and Far East countries.

Human capital reporting has a low rate in selected Nordic countries. This can be concluded on organizations' annual reports. Almost none of the companies are eager to report about their investments to human capital because companies don't face remarkable benefit from it. Danish companies were the most active parties of reporting among selected countries.

That enables to compare the real relation between human capital and financial performance. Secondly, the author searched for human capital reporting from each organization's annual report for year 2015. During this process, plenty of the companies were

withdrawn because some of the reports were not available in Finnish or English or haven't been released yet.

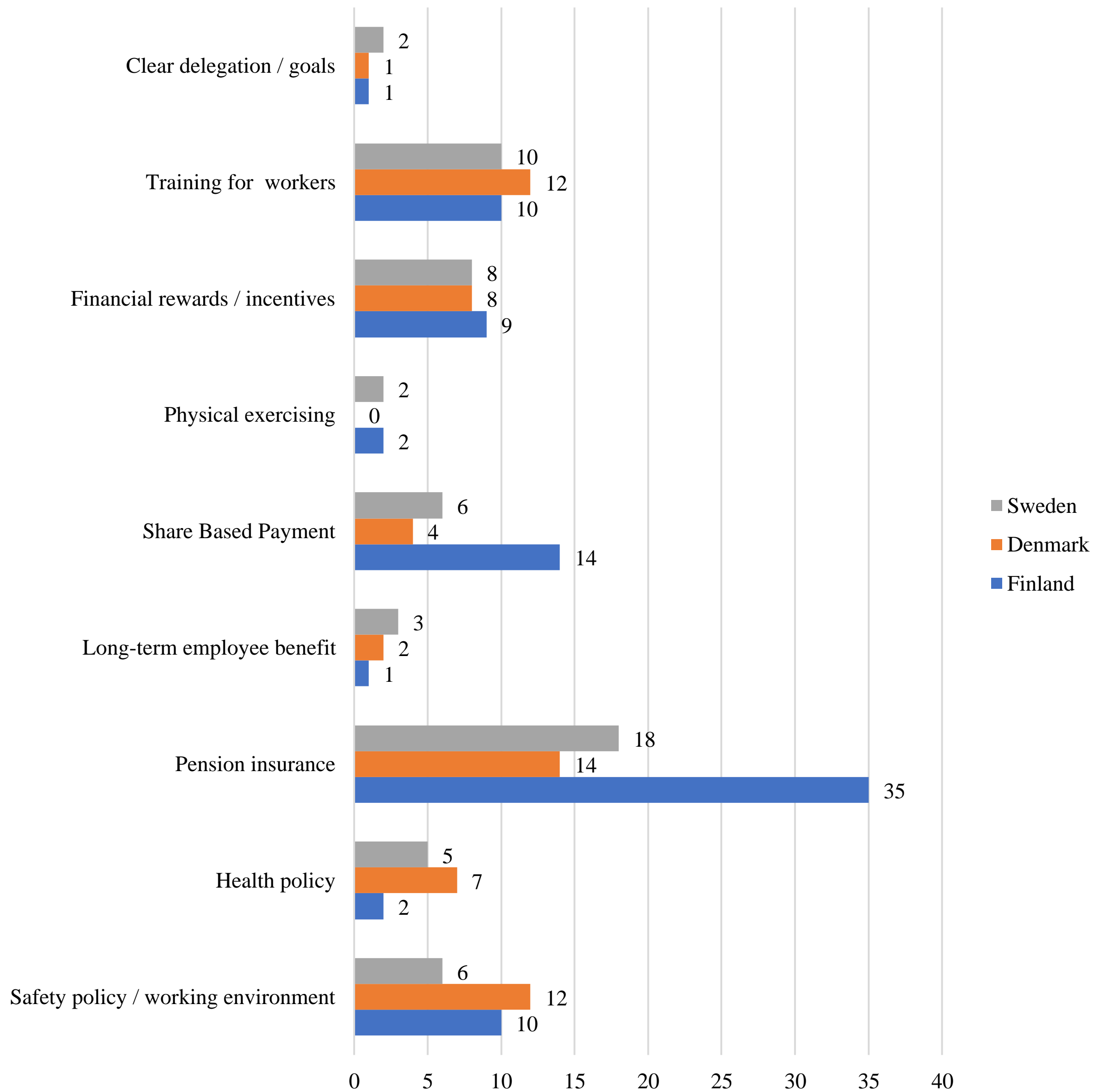

Figure 5. The main issues of human capital reporting in selected countries

Source: Combined by the author, based on companies' annual reports 2015.

In authors opinion, companies still haven't realized the benefits of corporate social responsibility reporting in general and human capital reporting in particular. It seems that most of the selected companies still consider non-financial reporting as not very important as well as time and effort consuming.

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APPENDICES

Appendix 1. Finnish companies' financial data

Financial data from selected Finnish companies. (thousand euro)

Company name	Net income	Revenue	Total assets	Total equity
Afarak Group	8 539	187 711	266 994	171 207
Affecto Oyj	5 894	116 026	120 333	62 319
Apetit	-4 600	380 800	197 900	121 000
Ascomp Group Oyj	-1 018	17 452	13 796	9 465
Biohit Oyj B	-2 917	6 051	11 728	1 031
Capman Oyj	6 054	31 767	138 265	78 755
Componenta Oyj	-1 459	286 901	2 880	951
Comptel Oyj	1 729	93 137	60 402	9 834
Consti Yhtiöt Oyj	3 260	256 151	90 692	24 538
Digia Oyj	522 755	10 788	84 295	40 887
Dovre Group	-382	115 947	5 204	27 329
Efore Oyj	-3 412	89 857	55 632	19 038
Elecster Oyj	3 136	46 108	47 208	21 383
Etteplan Oyj	6 189	141 143	92 513	34 618
Evli Pankki	12 349	64 249	632 247	70 234
Exel Composites Oyj	2 844	80 196	53 968	30 716
Glaston Oyj	-13 821	123 371	100 290	36 798
Honkarakenne Oyj	-906	39 110	24 932	7 990
Ilkka-Yhtymä 2	3 607	41 172	127 181	66 035
Incap Oyj	2 012	30 566	18 124	5 647
Innofactor Oyj	1 548	44 452	43 983	24 534
Kesla Oyj	-1 788	40 131	31 177	10 614
Kotipizza Group Oyj	3 794	52 226	52 422	4 188
Marimekko Oyj	803	95 652	46 061	27 129
Martela Oyj	2 483	132 820	55 986	22 662
Norvestia Oyj	12 034	15 455	160 948	156 018
Nurminen Logistics Oyj	-4 375	43 016	51 033	8 675
Okmetic Oyj	48 323	845 401	901 268	576 081
Orava Residential REIT	7 421	17 519	199 315	94 346
Panostaja Oyj	13 499	148 218	188 143	70 076
QPR Software Oyj	338	9 436	8 033	2 914
Raute Oyj	6 684	127 278	61 760	29 700

Appendix 1. continued

Company name	Net income	Revenue	Total assets	Total equity
Saga Furs Oyj	7 400	58 507	227 783	94 967
Scanfil Oyj	8,37	377	298 611	101 414
Sievi Capital Oyj	7 932	4 412	75 862	70 846
Solteq Oyj	102	54 215	64 251	15 407
Soprano Oyj	-383	20 273	14 337	3 369
Sotkamo Silver Oyj	-1 275	68,1	16 415	13 652
SSH Communications Security Oyj	-3 910	18 867	21 755	11 445
Takoma Oyj	-680	13 181	10 695	-122
Teleste Oyj	11 011	247 758	164 458	77 545
Tulikivi Oyj	-3 881	31 951	39 396	14 409
Uutechnic Group Oyj	954	8 859	22 179	9 504
Wulff-Yhtiöt Oyj	-205	6 882	28 514	12 579

Source: Companies annual reports, compiled by the author.

Appendix 2. Swedish companies' financial data

Financial data from selected Swedish companies. (thousand euro)

Company name	Net income	Revenue	Total Assets	Total equity
Active Biotech	-193 531	16 275	449 440	180 603
Anoto Group	-8 666	26 747	13 579	-20 276
Arctic Paper	6 663	727 432	454 757	169 754
Arise	-156 000	487 000	2 767 000	1 090 000
Bactiguard	-26 501	138 463	699 774	498 193
BE Group	-169 000	4 155 000	1 961 000	785 000
Beijer Electronics	23 817	1 374 575	1 453 004	526 940
BioInvent	-90 681	15 925	54 547	29 492
Björn Borg	41 643	574 328	578 425	290 675
Black Earth Farming SDB	14 314	81 102	181 156	108 080
Bong	-64,037	2 345,09	1 929 384	317 086
Boule Diagnostics	15 352	331 407	315 483	188 514
BTS Group B	109 500	10 439 000	811 000	483 300
Cella Vision	56 074	239 390	220 428	183 518
Concordia Maritime B	209 600	810 000	4 354 500	1 868 700
Consilium B	110 800	1 565 500	1 481 000	376 300
DORO	63 800	1 828 900	1 198 900	482 000
Edgeware	10 796	203 556	135 977	68 277
Elos Medtech B	16 089	503 661	881 594	330 595
Enea	87 959	481 480	538 535	398 898
Eniro	-1 125 000	2 438 000	4 416 000	1 158 000
Episurf B	-43 974,60	1 016,46	118 200	109 934
Etrion	-18 737	50 448	613 320	6 404
FormPipe Software	18 179	349 292	617 789	318 486
Karolinska Development B	-1055	2 942	599 807	234 487

Source: Companies annual reports, compiled by the author.

Appendix 3. Danish companies' financial data

Financial data from selected Danish companies. (thousand euro)

Company name	Revenue	Net income	Total assets	Total equity
Arkil Holding B	3 346,76	37,54	1 720,96	779,33
Bio Porto	20 383	-10 372	48 993	44 48,5
Ceman	287 302	-90 065	549 410	260 694
Columbus	1 123 443	65 339	697 781	386 179
Djurlands Bank	314,85	58,77	6 690	874,75
DLH	85000	-85 200	173 200	76 800
Egetæpper B	954 106	57 396	763 672	475 801
Expendit B	425 881	7 982	223 657	104 427
F.E. Bording B	610 803	25 636	429 860	190 639
First Farms	111 841	-21 997	525 946	306 173
Gabriel Holding	390 433	34 313	289 664	201 595
Greentech Energy Systems	14 321	1 344	414 409	191 831
Grønlandsbanken	284 174	72 726	5 846 450	914 282
H+H International	1 621 000	39 300	1 245 800	255 000
Harboer Bryggeri B	1 376 466	34 639	1 298 797	736 921
Migatronic B	294 751	4 404	213 490	119 000
Monb. & Thor. B	6 500 000	81 100	669 000	663 100
Neuro Search	-	-5 314	78 594	72 400
Nordic Shipholding	46 777	13 610	136 900	44 100
Rias B	266 200	6 300	208 600	162 500
Roblob B	229 600	20 000	300 600	251 800
RTX	359 600	49 500	355 400	280 600
Santa Fe Group	373 600	-3 400	241 300	97 000
Scandinavian Brake System	783 500	-171 900	463 200	-196 800
SP Group	1 319 768	61 112	1 077 888	391 098

Source: Companies annual reports, compiled by the author.

Appendix 4. Finnish companies’ ROA with human capital score

Comparison of ROA with human capital score in decreasing order. (Finland)

Company name	Return on assets	HCR
Incap Oyj	11,1%	1
Raute Oyj	10,8%	1
Sievi Capital Oyj	10,8%	2
Norvestia Oyj	7,5%	1
Panostaja Oyj	7,2%	2
Kotipizza Group Oyj	7,2%	1
Teleste Oyj	6,7%	2
Etteplan Oyj	6,7%	2
Elecster Oyj	6,6%	2
Digia Oyj	6,2%	1
Okmetic Oyj	5,4%	5
Exel Composites Oyj	5,3%	3
Affecto Oyj	4,9%	1
Martela Oyj	4,4%	3
Capman Oyj	4,4%	2
Uutechnic Group Oyj	4,3%	2
QPR Software Oyj	4,2%	1
Orava Asuntorahasto Oyj	3,7%	6
Consto Yhtiöt Oyj	3,6%	4
Innofactor Oyj	3,5%	4
Saga Furs Oyj	3,2%	3
Afarak Group Oyj	3,2%	2
Comptel Oyj	2,9%	2
Ilkka-Yhtymä Oyj	2,8%	2
Evli Pankki Oyj	2,0%	1
Marimekko Oyj	1,7%	2
Solteq Oyj	0,2%	1
Scanfil Oyj	0,0%	3
Wulff-Yhtiöt Oyj	-0,7%	2

Appendix 4. continued

Company name	Return on assets	HCR
Apetit	-2,3%	1
Soprano Oyj	-2,7%	3
Honkarakenne Oyj	-3,6%	1
Kesla Oyj	-5,7%	1
Efore Oyj	-6,1%	3
Takoma Oyj	-6,4%	1
Dovre Group	-7,3%	1
Ascomp Group Oyj	-7,4%	2
Sotkamo Silver Oyj	-7,8%	0
Nurminen Logistics Oyj	-8,6%	2
Tulikivi Oyj	-9,9%	3
Glaston Oyj	-13,8%	1
SSH Communication security Oyj	-18,0%	1
Biohit Oyj	-24,9%	1
Componenta Oyj	-50,7%	3

Source: Compiled and calculated by the author based on the data provided in Appendix 1.

Appendix 5. Finnish companies‘ ROE with human capital score

Comparison of ROE with human capital score in decreasing order. (Finland)

Company name	Return on equity	HCR
Incap Oyj	35,6 %	1
Raute Oyj A	22,5 %	1
Panostaja Oyj	19,3 %	2
Etteplan Oyj	17,9 %	2
Evli Pankki	17,6 %	1
Comptel Oyj	17,6 %	2
eQ Oyj	15,0 %	1
Elecster Oyj A	14,7 %	2
Teleste Oyj	14,2 %	2
Consti Yhtiöt Oyj	13,3 %	4
Kotipizza Group	13,0 %	1
Digia Oyj	12,8 %	1
QPR Software Oyj	11,6 %	1
Sievi Capital	11,2 %	2
Martela A	11,0 %	3
Uutechnic Group	10,0 %	2
Affecto Oyj	9,5 %	1
Exel Composites Oyj	9,3 %	3
Okmetic Oyj	8,4 %	5
Orava Asuntorahasto Oyj	7,9 %	0
Saga Furs C	7,8 %	3
Norvestia Oyj	7,7 %	1
CapMan Oyj B	7,7 %	2
Innofactor Plc	6,3 %	2
Ilkka-Yhtymä 2	5,5 %	2
Trainers´ House Oyj	5,2 %	3
Afarak Group	5,0 %	2
Marimekko Oyj	3,0 %	2
Solteq Oyj	0,7 %	1
Scanfil Oyj	0,0 %	3
Dovre Group	-1,4 %	1
Wulff-Yhtiöt Oyj	-1,6 %	2
Apetit	-3,8 %	1
Componenta Oyj	-8,0 %	3

Appendix 5. continued

Company name	Return on equity	HCR
Aspocomp Group Oyj	-10,8 %	2
Honkarakenne B	-11,3 %	1
Soprano Oyj	-11,4 %	3
Kesla A	-16,8 %	1
Efore Oyj	-17,9 %	3
Tulikivi Oyj A	-26,9 %	3
Biohit Oyj B	-28,3 %	1
Takoma Oyj	-33,1 %	1
SSH Communications security	-34,2 %	1
Glaston Oyj Abp	-37,6 %	1
Nurminen Logistics Oyj	-50,4 %	2

Source: Compiled and calculated by the author based on the data provided in Appendix 1.

Appendix 6. Finnish companies’ ROR with human capital score

Company name	Return on revenue	HCR
Sievi Capital	203,3 %	2
Dovre Group	154,3 %	1
Norvestia Oyj	77,9 %	1
Etteplan Oyj	57,5 %	2
eQ Oyj	36,5 %	1
Evli Pankki	16,3 %	1
Trainers´ House Oyj	16,0 %	3
Saga Furs C	12,6 %	3
Uutechnic Group	11,1 %	2
Panostaja Oyj	9,1 %	2
Ilkka-Yhtymä 2	8,8 %	2
Elecster Oyj A	6,8 %	2
Incap Oyj	6,6 %	1
Raute Oyj A	6,4 %	1
Okmetic Oyj	5,7 %	5
Affecto Oyj	5,1 %	1
Digia Oyj	4,8 %	1
Teleste Oyj	4,4 %	2
Exel Composites Oyj	4,2 %	3
QPR Software Oyj	3,6 %	1
Innofactor Plc	3,5 %	2
Scanfil Oyj	2,8 %	3
CapMan Oyj B	2,3 %	2
Martela A	2,0 %	3
Comptel Oyj	1,9 %	2
Consti Yhtiöt Oyj	1,3 %	4
Efore Oyj	1,1 %	3
Marimekko Oyj	0,8 %	2
Solteq Oyj	0,2 %	1
Apetit	-1,2 %	1
Soprano Oyj	-1,8 %	3
Honkarakenne B	-2,3 %	1
Wulff-Yhtiöt Oyj	-3,0 %	2
Kesla A	-4,5 %	1
Nurminen Logistics Oyj	-4,9 %	2

Appendix 6. continued

Company name	Return on revenue	HCR
Takoma Oyj	-5,2 %	1
Tulikivi Oyj A	-11,8 %	3
Aspocomp Group Oyj	-14,4 %	2
Componenta Oyj	-16,7 %	3
Kotipizza Group	-27,1 %	1
SSH Communications security	-54,6 %	1
Biohit Oyj B	-87,2 %	1
Afarak Group	-121,9 %	2
Glaston Oyj Abp	-690,1 %	1

Source: Compiled and calculated by the author based on the data provided in Appendix 1.