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Master's Thesis

**Corporate Social Responsibility and Financial Performance:
The Examples of Estonia, Latvia and Lithuania**

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ABSTRACT

Companies worldwide tend to spend significant resources to promote corporate social responsibility (CSR). Yet, previous researches have found no conclusive evidence that such activities lead to any financial benefits for the companies, especially in the less well-developed regions.

The aim of this thesis is to examine the relationship between CSR activities and firm financial performance in the Baltic States of Latvia, Lithuania and Estonia. Further, CSR activities are subdivided in five categories (workplace, market place, environment, community and other CSR) to determine which particular CSR categories affect firm financial performance the most. The content analysis methodology is applied to measure CSR and regressions are run to determine the relationship between CSR and firm financial performance, approximated by return on assets (ROA).

The results show that on the overall level, CSR activities do not have any effect on firm financial performance in the Baltics. However, certain CSR categories were found to impact ROA. Firstly, market place and environment related CSR activities seem to reduce firm financial performance, but other CSR activities, which are more abstract (e.g. adherence to CSR standards) increase ROA. We speculate that the notion of CSR has not yet become institutionalized in the Baltic societies, therefore, in general, people are not ready to pay more for products delivered by socially responsible companies.

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1. INTRODUCTION

1.1. CORPORATE SOCIAL RESPONSIBILITY DEFINED

Corporate social responsibility (CSR) as defined by the European Commission is “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (European Commission, 2011). CSR has become a hot topic all around the world. According to a survey by KPMG (2011), 95% of the 250 largest companies in the world report on their CSR activities. To fund these activities, billions of dollars are spent every year. In India alone, company spending on CSR activities is expected to reach USD 5 billion in 2013 (Frontier India, 2013), as government requires companies to spend at least 2% of average net profit on CSR activities of their own choice (The Indian Express, 2013). Do these substantial sums of money bring any benefit to the firms, or is this just a hole in shareholders’ pockets? And if there is any benefit, does it translate into tangible financial gains?

1.2. CSR AND CORPORATE FINANCIAL PERFORMANCE

Traditionally, the major concern for most companies is profits. However, increasing level of governmental regulations, media attention, pressure of non-governmental organizations and fast information spread require companies to look beyond pure profit maximization and “please” a variety of stakeholders in a sustainable and ethical manner. Examples of being a socially responsible company include saving natural resources, polluting less, investing in employee development or supporting other CSR related initiatives. Being involved in CSR activities is becoming a must for companies, especially if they are aiming for good public opinion and want to sustain a well-appreciated brand (Werther & Chandler, 2005). At the same time, engaging in CSR activities may have both, positive and negative effects on firms’ financial performance. On the one hand, a positive image may help to increase profits, as customers are willing to pay more for the firm’s products and services. Similarly, CSR activities may increase profits via efficiency improvements and a more sustainable use of resources. On the other hand, CSR activities require substantial financing, so costs may exceed the abovementioned benefits and profits may be eroded.

The two contradicting views of managers have provoked and extensive research in the field of CSR relation to corporate financial performance (CFP) of the companies (McWilliams & Siegel, 2001). So far the results of the CSR – CFP studies have been mixed – there is evidence about positive relationship between CSR performance and CFP of the company, while in other cases this relationship is negative or there is lack of significance to prove any direction.

The studies that find positive CSR – CFP relationship support theories arguing that CSR activities legitimize firms' actions, work as a marketing tool and have positive effects on firms' financial performance via (1) increased productivity (more motivated staff, less waste of resources), (2) increased margins as customers are willing to pay a premium and (3) reduced cost of capital as shareholders are willing to pay a premium for owning a socially responsible company.

Contrary, the studies that find negative CSR – CFP relationship support the theory of Milton Friedman that “The Social Responsibility of business is to increase its profits” (Friedman, 1970), which is rooted in Adam Smith's metaphor of “the invisible hand” (Smith, 2005) meaning that in a free market, an economic agent pursuing own self-interest also promotes the good of society. According to these theories, CSR is an expense reducing the company's profits and therefore, works against the social interest.

In addition, most of the CSR – CFP researches are rather abstract and of limited use to managers since they do not shed light on the particular CSR activities that contribute to the positive or negative CSR – CFP relationship. Knowing which CSR activities do pay-off would be valuable information for company managers.

The debate over the different CSR – CFP theories is further magnified by scientists who have no unifying opinion regarding research methodologies. Firstly, since CSR is not a tangible or directly measurable phenomenon, a debate exists on how it should best be measured. Secondly, there is no agreement among the scientists concerning the best research methods and regression model specifications, leaving room for further research.

1.3. PURPOSE AND RESEARCH QUESTION

Leaving aside the fact that previous research on the CSR – CFP relationship is still in a big debate and there is room for further investigation, most of the studies so far have been performed in the developed markets (the US, the UK, Canada, Australia, etc.), which are assumed to have more embedded CSR traditions and more predictable fundamentals. The aim of this paper is to examine the CSR – CFP relationship in the three Baltic States (Estonia, Latvia and Lithuania), which are on their way to incorporate CSR practices in the business environment. The research aims to answer the following question:

“Which CSR activities of publicly listed companies in the Baltic States have impact on firms’ financial performance?”

To our knowledge this kind of study has never been done in the region, so the results should contribute to the general theoretical understanding on the CSR – CFP relationship in the Baltics. Further, this research will contribute to the scientific debate, since the commonly used research methodologies will have to be adjusted to fit the circumstances of a developing region. As there is no readily available measure of CSR activities of the publicly listed companies in the Baltic States (e.g. a CSR index or ranking), one of the main contributions of this paper will be the development of the CSR performance evaluation methodology. Furthermore, we aim to increase the overall understanding regarding the individual CSR activities that affect firm financial performance. Additionally, with the help of descriptive statistics, the CSR performance results will be compared between the three countries, years and industries, thus providing an insight on CSR development trends in the Baltics.

The expected managerial implications of this paper include: (1) understanding whether contributing additional effort and funds to CSR related activities translate into better financial performance and (2) identifying which CSR activities are the most valuable to focus on for company managers in the Baltic States.

1.4. OUTLINE

The rest of the paper is organized as follows: *Section 2* reviews the relevant literature about the CSR – CFP relationship and summarizes previous research findings; *Section 3* presents the methodology employed; *Section 4* describes the data sample and the market background; *Section 5* gives a summary of descriptive statistics of the data; *Section 6* presents empirical regression results; *Section 7* summarizes the main findings, *Section 8* discusses the findings, compares them to previous researches and provides managerial implications and *Section 9* concludes the paper and gives ideas for further research.



Figure 1 Outline of the paper

2. LITERATURE REVIEW

The chapter aims to serve two purposes – (1) give an overview on general CSR development trends and associated theories and (2) provide the knowledge on previous research done in the field of CSR – CFP relationship, based on different types of methodology.

2.1. THEORY

This section provides a brief summary about the history and development of CSR awareness. Also, it presents the main theories that explain the reasons why companies should or should not be considerate about their CSR activities.

2.1.1. CSR AWARENESS AND STANDARDS

In early 80's a more intense debate about CSR and its disclosure started in the US. Until then, the opinion that private enterprises should care not just about profit maximization but the wellbeing of the society they are operating in, was not much escalated (Ramanathan, 1976). Around the same time the notion of a social contract was formed, which basically stated that any institution operates in society via social contract based on (1) obligation to deliver some socially valuable means to society in general and (2) distribution of economic, social or political benefits to the groups the institution benefits from (Shocker & Sethi, 1974). The increased public awareness of CSR dictated the need to enrich traditional corporate reporting with corporate social performance accounting. Different US accounting authorities started issuing reports and guidelines on corporate social accounting, however, the progress of adoption was slow (Ramanathan, 1976).

Even today there is no unified and worldwide used principle of CSR performance measurement. There are many organizations that are active in issuing different CSR standards, guidelines and compliance policies. ISO 26000 is one of the best-known CSR related initiatives. It provides guidelines on how companies should act in a socially responsible way that considers impact on the surrounding society and environment. ISO 26000 presents 8 main principles of social responsibility and serves more like a clarifying summary of what CSR is rather than an obtainable standard as opposed to other ISO services (ISO, 2013). Also, Global Reporting Initiative has

issued Sustainability Reporting Guidelines. Those guidelines consist of 6 main areas (economic, environmental, labor practice, human rights, society and product responsibility) and are aimed to provide a unified way on how companies should report their sustainability related activities (GRI, 2006). United Nations organization is another active participant in the CSR area. It has launched the UN Global Compact initiative, which is based on 10 principles in the areas of labor, human rights, environment and anti-corruption. By voluntarily complying with those principles companies are expected to contribute to CSR awareness and impact. Currently this initiative has over 10,000 corporate participants globally and could be named as the largest voluntary corporate CSR initiative worldwide (UN, 2013).

2.1.2. CSR THEORIES

There are various theories that are aimed to explain the reasoning behind corporate willingness to get engaged in CSR activities. The dominating ones are Friedman's trade-off theory, which is the opponent of CSR activities, stakeholder (good management) theory and slack resource theory - both of which explain the contradicting view of why companies act in a socially responsible manner.

Milton Friedman is one of the main critics of the CSR phenomenon. He claims that: "there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud" (Friedman, 1970). According to him, the executives of companies are agents and should act in the very best interest of their shareholders, i.e. earn as much profits as possible. Those executives could engage in socially responsible activities as individuals, while most socially responsible initiatives should come from governmental institutions. The ideas of Friedman are closely related to the trade-off theory, which claims that socially responsible companies devote much resources to CSR related activities and, as a result, that makes them disadvantaged compared to socially less active enterprises, which concentrate on profit seeking (Preston & O'Bannon, 1997).

R. Edward Freeman with his book "Strategic Management – A Stakeholder Approach (1984)" has stimulated the disagreement with Friedman's ideas. He claimed that the

corporate environment is changing rapidly and the social interdependence between different counterparties is increasing. As a result, in order to lead successful management process, executives should consider all the stakeholders involved in their business. Freeman, Velamuri & Moriarty (2006) argue that, if the company creates value for its stakeholders it is socially responsible and the term “company stakeholder responsibility” could be used instead. A closely related theory to Freeman’s ideas is the good management theory. It is often used by the proponents of positive CSR - CFP relationship. The idea of this theory is that good management practices, such as taking care of major stakeholders, should eventually have a positive effect on company financial performance (Waddock & Graves, 1997). The examples of such practices include motivational and training packages to employees, who later on “pay back” with increased productivity; or social support for the community, which starts respecting the company more and prefers its services over the less CSR aware competitors.

Slack resource theory opposes the good management theory regarding the causation of the CSR – CFP relationship. It claims that the companies are willing to invest into non-mandatory CSR activities when they have available free cash flow (Bird, Casavecchia & Reggiani, 2006). It means that executives are not that proactive when it comes to CSR management and their intentions are not based on consideration about the stakeholders’ wellbeing. They are not motivated by potential financial benefits brought by extra effort in CSR, but rather look for “popular” ways of spending extra funds. The contradiction between the slack resource and good management theories raises the fundamental question of causation in the relationship of CSR performance and CFP. In case of positive relationship, there is a question, whether increase in CSR activities caused better financial results (free cash flow) or the business success unrelated to CSR activities brought resources that became available for CSR involvement (Bird et al., 2006).

Kurucz, Colbert & Wheeler (2008) identified four main types of business cases of why companies are motivated to initiate CSR practice. The first one is “Risk and Cost Reduction”, and it is reasoned by engaging in those CSR activities that are meant to eliminate the risk of conflicts with major stakeholders, while at the same time trying not to forget the main goal of the company – profit maximization. The second case is

called “Competitive Advantage”, which claims that companies constantly observe what kind of CSR activities are demanded by the market and they try to overcome competitors by offering the demanded qualities or actions. “Reputation and Legitimacy” business case is closely related to the before mentioned social contract and motivates companies to act in a way that is respected by the society. The final fourth business case “Synergistic Value Creation” is about the virtuous cycle, where companies that care about their stakeholders are awarded by the same stakeholders and are able to achieve better results, which enables them to invest into CSR more and the cycle continues. Kurucz et al. (2008) do not claim that those business cases are mutually exclusive. Contrary, they are interconnected, however, at the same time they offer different perspectives for managers that are considering their CSR strategy.

2.2. EMPIRICAL EVIDENCE

Much research has been done trying to conclude whether companies that are committed to CSR practices achieve better financial results. Margolis & Walsh (2002) have re-examined 127 studies on the CSR – CFP relationship carried out between years 1972 – 2002. Half of the studies found positive relationship between CSR and CFP, just 7 indicated negative relationship, while the rest achieved inconclusive results. Similar aggregation of previous research results was done by Orlitzky, Schmidt & Rynes (2003), who performed a meta-analysis of 52 studies. They reached the conclusion that in general there is a correlation between CSR performance and accounting based performance, though this association is moderate and highly dependent on the research approach.

There are two main streams of testing the CSR – CFP relationship. One way to evaluate financial performance related to CSR activities is the “short run” effect, which is based on the stock performance of the company. In those cases authors use event study methodology and check how market reacted to particular CSR related announcements or how close is the correlation between the event of being included in a particular CSR index and stock performance. Examples of this research approach include Wright & Ferris (1997), Posnikoff (1997), McWilliams & Siegel (2000) and Abbott & Monsen (1979). Another research design is based on long-term financial performance of the company, i.e. accounting measures like return on assets (ROA) or earnings before interest and tax (EBIT). This approach seems to be more popular than

the previous one and it was employed by Cochran & Wood (1984), Waddock & Graves (1997), Simpson & Kohers (2002), Aupperle, Carroll & Hatfield (1985), Mahoney & Roberts (2007) and others.

The following sections present results from both streams of the CSR – CFP relationship research. Additionally, each stream is split by the method of CSR measurement – content analysis (that represents the methodology of this research) and other types of measurement.

2.2.1. SHORT-TERM FINANCIAL PERFORMANCE AND CONTENT ANALYSIS

Short-term financial performance and CSR studies are more rare in general, while the only more cited study that used content analysis for CSR measurement is Abbott & Monsen (1979), which at the same time was one the first attempts to check the CSR performance relationship with investors' returns. The authors used the analysis of annual reports of Fortune 500 companies for the years 1973 and 1974, which was performed by the Ernst and Ernst company. The indication of CSR disclosure there was binary and indicated whether there was information on different fields of CSR. Most of the companies had information about environmental issues (up to 36% in 1974), while categories of workplace related information reached up to 18%, having similar occurrence as community. Later on those companies were divided into two categories of low and high social involvement and the corresponding average annual returns for investors were compared. The analysis showed no significant connection between the two measures, however high social involvement companies achieved marginally higher investors' returns.

2.2.2. SHORT-TERM FINANCIAL PERFORMANCE AND OTHER METHODOLOGY

Other types of methodology for CSR measurement in short-term financial performance studies include reputation rankings, socially responsible investing, indication of special CSR related behavior and Kinder, Lydenberg and Domini (KLD) measure (MSCI, 2013). All of those are discussed in the following paragraphs.

Brown (1998) based his research on reputation rankings of the Fortune database for US companies in the period of 1982 – 1991. After running regression analysis, the author concluded that there was a significant stock price premium for companies with high average reputation indices. Such result was interpreted as market willingness to pay extra for companies that are less likely to get into incidents or lawsuits, which come along with significant risk of losing investments.

Together with an increase in awareness of CSR practices, socially responsible investing has emerged. A number of studies have examined the performance of socially responsible mutual funds as compared to their peers or market averages. The results in this field have also been mixed. Reyes & Grieb (1998) examined fifteen socially responsible US mutual funds in the period of 1986 – 1995 and found that their returns were not significantly different from their peers. Mallin, Saadouni, & Briston (1995) did a similar research for UK funds that operated in 1986 – 1993. The authors made two samples of 29 funds, one sample corresponded to ethical funds, while the other one represented matching funds, which were not considered as ethical. Then the authors tested if the two samples had different returns compared to each other and the market in general. Results of the study have been mixed – in general terms the ethical funds underperformed the matching unethical ones and the market, while on a risk adjusted basis the ethical funds had better return than unethical funds, but were lagging behind the market average.

A couple of studies used US corporate disinvestments from South Africa in the 90's as a proxy for CSR involvement. At that time there were political and racial issues in the country, so US companies felt pressure to refrain from investments in South Africa. Posnikoff (1997) used the event study method to evaluate stock performance of 52 companies that announced disinvestments from Africa between 1987 and 1992. The results indicated that in the short-term period surrounding the announcement date, investors experienced significant increase in returns. The authors concluded that apart from probable economic reasoning, the effect was experienced due to good public opinion. Wright & Ferris (1997) did a similar research, however, they found contradicting results, i.e. on the announcement date the stock price of the corresponding company experienced significantly negative excess returns. The difference in results might have occurred because of slight differences in data samples

and statistical methods. Wright & Ferris (1997) claimed that their results were in line with the proponents of the principal-agent problem, where managers are expected to care more about economic reasoning than public opinion. Additionally, the authors theorized that the negative market reaction might have been caused by the fact that disinvestments affected negatively another stakeholder group – the local residents of South Africa.

Hilman & Keim (2001) decided to split CSR performance into two categories – stakeholder management and social issue participation. They hypothesized that CSR effort in the first category should increase shareholders' value, while the second one may be an unnecessary waste of resources or opportunities, thus resulting in losses for shareholders. The data set comprised 308 US companies in the years 1994 – 1996. The authors split KLD measure into stakeholder related aspects and the other variable included the remaining aspects, while the return was calculated as market value added (market value of equity less capital invested). The results indicated that both hypotheses were correct and stakeholder related KLD measures were related to higher market value added than the remaining measures.

2.2.3. LONG-TERM FINANCIAL PERFORMANCE AND CONTENT ANALYSIS

Studies that investigate the long-term CSR – CFP relationship, which is based on accounting measures, seem to be more popular among scholars. The major differences in those studies include the period of research, chosen accounting variables and statistical tools. Most of the studies have been performed with data from the developed countries, basically the US, while some of them tried to examine the relationship in emerging markets (e.g. Turkey or Malaysia). When it comes to the methodology of CSR measurement, there are more examples of content analysis as compared to the research stream of short-term financial performance analysis. Also it seems that content analysis is a preferable methodology in the studies that concentrate not on the US and UK markets, which could be explained by the lack of credible indexes or survey results in less well developed countries.

Hackston & Milne (1996) were the ones to have significant impact on polishing the content analysis methodology for CSR – CFP relationship analysis. The authors

investigated annual reports of 47 companies in New Zealand for the year 1992. They counted number of sentences related to six types of CSR areas (environment, human resources, products, energy, community and other) and tested correlation coefficients with profitability measures (ROE and ROA), company size (capitalization and total assets) and industries. The average of CSR related sentences in annual reports was 23 (1 being the minimum and 137 the maximum for the annual report). Human resources related sentences comprised 57% of all disclosure, leaving community with 19% and environment with 12% behind, while products had just 9% of attention. After doing the correlation analysis the authors came up to the conclusion that CSR disclosure is significantly associated with size and industry of the company, while there is no correlation with profitability.

Everaert, Bouten, Van Liedekerke, De Moor & Christiaens (2009) did a content analysis study for 117 listed Belgium companies by analyzing their annual reports for the year 2005. The authors used Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines as the basis for their CSR coding system and ended up with five CSR categories (labour conditions and decent work, human rights, society, product responsibility and environment). The other difference as compared to Hackston & Milne (1996) was that instead of sentences as the measurement of CSR disclosure, Everaert et al. (2009) used words. The average number of CSR related words was 1,179 (12 being the minimum and 5,855 the maximum per one annual report). Most of the words (40%) were spent on the labour conditions and decent work category, environment had 31% of words while society and product responsibility were lagging behind with 16% and 12%, respectively. Later on Everaert et al. (2009) tested the correlation coefficients between the amount of CSR disclosure and independent variables, such as size, industry and profitability of the company. The authors did find positive and significant relationship between CSR disclosure and profitability as well as the size of the company. Also, there was big variation of CSR disclosure among the industries, where utilities and banking industries appeared to be the most CSR concerned.

Aras, Aybars, & Kutlu (2010) took a look at the emerging market of Turkey, where they examined 40 publicly listed companies in the period of 2005 – 2007. The authors used the content analysis methodology (the same as Hackston & Milne (1996)) to

evaluate companies' CSR activities in different areas. The average number of CSR related sentences was 117, where majority of them was about products and consumers (35%) and employee related issues (33%), while community and environment had a secondary role with 18% and 9%, respectively. Return on equity (ROE), assets (ROA) and sales (net profit margin) ratios served as independent variables. The study tested the before mentioned causality relationship, whether CSR activities bring better financial results or vice versa – better financial situation enables managers to care about CSR. However, the authors did not find any significant relationship between CSR and CFP in none of the ways. The only significant relationship appeared to be between CSR and company size control variables.

One more example from emerging markets is Saleh, Zulkifli & Muhamad (2008), who did a CSR – CFP relationship analysis of the 200 largest companies in the Malaysian stock exchange for the years of 2000 – 2005. Based on a CSR measure estimated from the annual reports with the help of content analysis and dependent variables of ROA, stock return and Tobin's Q (ratio of market value of company's equity to book value of the company's equity), the authors managed to confirm the existence of the CSR - CFP relationship. Though, the authors do not present the numerical evaluation of CSR disclosure and the corresponding split by category. They find that in the ROA and Tobin's Q models, CSR activities related to product development had positive relation to financial performance. In some of the model specifications, environmental and community related CSR activities had negative relationship with financial performance, indicating that rewards related to good management of stakeholders' interests were not enough to compensate for the incurred costs.

2.2.4. LONG-TERM FINANCIAL PERFORMANCE AND OTHER METHODOLOGY

There are a number of studies that tested CSR – CFP relationship with accounting measures and used other methodologies than content analysis to evaluate the amount of CSR activities. As mentioned before, those studies were mainly from the developed markets where different CSR indices and databases are available.

Cochran & Wood (1984) examined two periods of 1970-1974 and 1975-1979. They used Moskowitz list (Moskowitz, 1975) as the measure of CSR performance, while the financial performance was measured in three ways: (1) the ratio of operating profits to assets (ROA), (2) ratio of operating profits to sales (EBIT margin) and (3) excess market valuation (calculated as market value of equity plus book value of debt minus total assets and scaled by sales). The sample contained 39 companies in the first period and 36 companies in the second period. The authors concluded that the connection between CSR and CFP is marginally significant. They also found that the CSR performance is also highly correlated with the age of the assets – the older the assets, the lower the CSR ranking.

Waddock & Graves (1997) did a research for the period of 1989-1991 with a sample of 469 US companies. As a measure of CSR performance the authors used the KLD index, which rates Standard and Poor 500 companies on eight different CSR attributes. CFP was estimated by three variables: (1) return on equity (ROE), (2) return on assets (ROA) and (3) return on sales (net profit margin), while control variables accounted for size (total assets, total sales and number of employees), risk (debt/asset ratio) and industry. Descriptive statistics indicated, that companies operating in banking and financial services and wholesaling and retailing scored the highest in terms of CSR index. The main findings of the paper indicate that there is a significant positive relationship between CSR performance and CFP of the previous years, which means the proof of the slack resource theory, claiming that companies having better financial situation can afford better CSR practices. However, at the same time the authors found a positive relationship between CSR performance and CFP of the upcoming year, which is in line with the good management theory. As a result, they leave the question of causation unanswered and discuss the reasoning behind this virtuous circle.

Auperle et al. (1985) used the factor analysis method, where CSR performance was evaluated by survey results. The survey was based on the method developed by one of the authors, which was designed to assess the executives' opinions about CSR activities. The results were obtained from 241 CEOs, listed on Forbes 1981 Annual Directory. The authors used one year and five year average ROA as the indicator of financial performance. The findings of the study indicated that there is no statistically

significant relationship between company engagement into CSR and its financial performance.

Simpson & Kohers (2002) decided to solve one of the probable problems in previous researches – aggregation of different industries and performed analysis of a single US banking industry. Their sample consisted of 385 banks that operated in 1993 – 1994. For the CSR performance estimate the authors used Community of Reinvestment Act (CRA) rating (FFIEC, 2013), which was used as a dummy variable – either the bank needed improvement or its performance in CSR related area of society beneficial banking practices was outstanding. The authors also chose industry specific financial performance measures of return and loan losses on assets ratios. The list of control variables amounted to 14 items, most of which were related to banking performance indicators. Regression analysis of the study revealed that there is a significant positive relationship between the CSR measure and both dependent financial performance indicators of ROA and loan losses.

A more recent study on this topic was performed by Mahoney & Roberts (2007). They did not find significant relationship between companies' composite evaluation of CSR activities and their financial performance, however, the relationship was significant if just the measures for environmental and international CSR initiatives were considered. The data sample consisted of publicly listed Canadian companies in the period of 1996-1999. The authors measured CSR performance according to an index published on the Canadian Social Investment Database (similar to the KLD index used by other authors for American companies), which has separate sections for community, diversity, employee relations, environment, international, product safety, and other. The financial performance was estimated by ROE and ROA ratios, while control variables were the same as for Waddock & Graves (1997) – company size, debt level and industry.

Ahmed, Islam & Hasan (2012) examined the banking industry in Bangladesh. The authors distributed a CSR survey, containing questions in 5 areas (values and transparency, workplace, corporate governance practices, environment and community) and ended up with a sample size of 17 banks. Later on those banks were split into two groups of CSR and non-CSR banks, and their corresponding ROA, earnings per share and price to earnings indicators were compared. In general, CSR

banks had better financial performance, however, the difference was not significant, so no distinct conclusion was drawn.

2.2.5. CSR DISCLOSURE AND CONTENT ANALYSIS

This section gives additional examples on CSR disclosure studies that used content analysis of annual reports, though did not analyze the CSR – CFP relationship. Having more evidence from different countries would enable us to make more reliable comparison of our collected data.

Adams, Hill & Roberts (1998) did a comparative research on CSR disclosure in six European countries – France, Germany, the Netherlands, Sweden, Switzerland and the UK. The authors analyzed the number of pages the companies devote to CSR disclosure in their annual reports. The sample consisted of 25 companies per each country in year 1992 and the authors also compared the results across countries, industries and companies of different size. The split of CSR categories included environment, employee related and ethical issues. The full sample had the mean length of disclosure at the level of 3,13 pages, employee issues having 62%, environmental – 22% and ethical – 16% of all length. Industry of oil, chemical, metal and power had the largest mean of disclosure – 4,06 pages per annual report, while service, retail and food industry was at the very bottom of the list with 2,44 pages per annual report. When analyzing the effect of the company size the authors found linear positive relation – the larger the company, the more it discloses and the disclosure increases in all three CSR categories proportionally. Country of company origin analysis showed that the most developed markets of Germany and the UK had the highest CSR disclosure level – on average 5,90 and 3,45 pages, respectively. The Netherlands and Switzerland had the lowest averages, though, Sweden and France being not that far ahead.

The only content analysis on CSR disclosure from the Baltic States that came into the scope of the authors of this paper was Dagiliene (2010). The author examined annual reports of four milk-processing companies in Lithuania for the years 2007 and 2008. The split of CSR included categories for product, human resources, community and environment. The data set was not thorough enough to have meaningful averages, though some tendencies were observed. Product and human resources disclosure

comprised most of the CSR related space, leaving environmental issues in the shadow; none of the companies had any disclosure on community. The author concluded that CSR disclosure in Lithuanian companies was far away from being comprehensive and action oriented.

2.2.6. CONCLUSION

Overall, as mentioned before in the empirical evidence sections, there is no common agreement whether the CSR – CFP relationship is existent or not. The variety of methodologies used and countries examined expands the obscurity a lot, providing results of all kind – non-significant, significantly positive and negative. The results are more conclusive for the developed markets, while the emerging countries still have not attracted significant amount of attention in this area of research.

This paper follows the methodology developed by Hackston & Milne (1996), so it will contribute to the area of studies that use content analysis as the way to evaluate CSR activities. When applying this methodology in the emerging markets no clear proof of CSR – CFP relationship existence has been found in the past, - Aras et al. (2010) found no relationship at all, while Saleh et al. (2008) had different results for different CSR categories.

The next chapter describes the methodological framework that was used to carry out the CSR – CFP relationship research.

3. METHODOLOGY

This chapter introduces and explains the methodology used to answer the research question. Firstly, it introduces the measurement of company CSR activities and secondly, it specifies the regressions models.

3.1. CONTENT ANALYSIS

The research follows the content analysis methodology, which, according to Milne & Adler (1999), is the most widely used methodological approach for conducting CSR related research. Furthermore, for the purpose of this research it is the only feasible alternative, because it allows quantifying CSR disclosure in cases, where no other CSR measures exist (e.g. a reputation index), which is the case in the Baltic States.

Abbot & Monsen (1979, p. 504) define content analysis as “a technique of gathering data that consist of codifying qualitative information in anecdotal and literary form into categories in order to drive quantitative scales of varying levels of complexity”. The methodology allows transforming qualitative data into quantitative data that can later be analyzed using various quantitative methods.

According to Vourvachis (2007), other methodologies used in CSR research include case studies, interviews, surveys, experiments and theoretical investigations, which can be both, qualitative and quantitative. Since answering our research question asks for developing a quantitative CSR measure, according to Cochran & Wood (1984, p. 43) “there are two generally accepted methods of measuring CSR” – a reputation index and content analysis of corporate publications.

The reputation index or reputation scale method, according to Abbot & Monsen (1979, p. 503) aims to “obtain the response of a public to a social phenomenon”. For CSR this means using interviews and surveys to rate (e.g. using a Likert-type scale) companies with regard to their CSR involvement, therefore what is actually studied is the CSR image of the companies as the respondents see it. Nowadays, there are many reputation based CSR indices developed around the world, the most notable being Dow Jones Sustainability Index in the US and FTSE4Good in the UK. In the Baltics,

CSR indices are in their infancy. In Latvia, the Institute of Corporate Sustainability and Responsibility publishes Sustainability Index¹ since 2010 (Institute for Corporate Sustainability and Responsibility, 2013), however, companies can voluntarily choose to participate, therefore, the data set is limited and likely to be biased (e.g. those companies with high CSR involvement are likely to participate). In Estonia, the CSR Index² is developed in cooperation with the NGO CSR Forum since 2007 (NGO CSR Forum, 2013) and, similarly to Latvia, company participation is voluntary, so it has the same potential problems. In Lithuania, no CSR index has been developed so far; therefore, using the reputational scale method would be impossible in this study.

Content analysis of corporate publications involves examining company annual reports, media disclosures, webpages, executive speeches etc. to categorize and quantify CSR related disclosures. According to Glaser (1965), Alfred Lindesmith first developed the methodology in 1931. Nowadays it is often used in media analyses, political studies, consumer research, nursing studies and many other fields, including CSR. According to Cochran and Wood (1984), the first CSR - CFP relationship research that used content analysis was carried out by Bowman and Haire in 1975.

Cochran & Wood (1984, p. 44) note that the main advantage of content analysis in CSR is its relative objectivity, because “once the particular variables have been chosen (a subjective process), the procedure is reasonably objective”. This is particularly important when, as in this case, more than one researcher works on the coding process. According to Wimmer & Dominick (1991), inter-coder reliability of at least 75% agreement above chance is considered an acceptable level for content analysis studies.

The main assumption behind content analysis is that CSR disclosures correspond to actual CSR activities undertaken by companies. Cochran & Wood (1984, p. 44) note that “content analysis is only an indication of what firms say they are doing, and this

¹ The methodology is based on Dow Jones Sustainability Index and is assessing workplace (25%), market relationships (20%), environment (25%), strategy (15%) and society (15%)

² The methodology is based on assessing strategy (20%), operations management (40%), principles of integration (20%), reporting and communication (20%)

may be very different from what they actually are doing”. The problem of discrepancies between what companies say and what they actually do has been documented by, for example, Kangun, Carlson & Grove (1991), who found that of the examined environmental ads of US companies, 58% had at least one deceptive or misleading claim. Nevertheless, the approximation of CSR activities by CSR related disclosure has been widely used in academic research in cases, where no reputation indices are available. In addition, several researches, for example, Bowman & Haire (1975), Abbott & Monsen (1979), Al-Tuwaijri, Christenson & Hughes (2004) and Clarkson, Li, Richardson & Vasvari (2008), reveal positive relationship between social disclosure (measured using content analysis) and social performance (measured using reputation indices), indicating that the assumption that CSR activities of companies correspond to their CSR disclosure might be valid.

3.2. MEASURING CSR

According to Vourvachis (2007, p. 8), content analysis studies can be divided into “index” studies and “volumetric” studies. Index studies are binary in a way that they only check if a specific item of information is present or absent. On the other hand, volumetric studies “check the overall volume of disclosure, most frequently by counting words, sentences or proportions of an A4 page”.

This research is based on volumetric content analysis, since Vourvachis (2007) suggests that the usefulness of index studies in CSR might be arguable. The problem arises because, for example, a company making 100 environmental disclosures in index studies is treated the same as a company making just 1 such disclosure. Vourvachis (2007, p. 9) further notes, that “in volumetric approaches, on the other hand, it is assumed that the extent of disclosure can be taken as some indication of the importance of an issue to the reporting entity”. Milne & Adler (1999) also state that most of the researches nowadays use volumetric approaches, therefore using similar methodology makes our research comparable to others.

3.3. UNITS OF ANALYSIS

Volumetric content analysis requires decisions on what to analyze (e.g. annual reports, webpages), and how to analyze (e.g. how to determine the presence and amount of CSR disclosure). According to Krippendorff (2004), they are defined as sampling units and recording or coding units.

3.3.1. SAMPLING UNITS

The research of Vourvachis (2007) indicates that corporate annual reports are the most commonly used sampling unit in CSR research, because it is the most widely used source of information about company's activities. Recently, however, researchers have started using other sources of CSR activity disclosures, for example, the Internet, brochures, advertisements and other ad hoc documents. Nevertheless, Vourvachis (2007, p. 12) states that it is not possible for any researcher to capture all the available data about company's activities and "it, therefore, seems justifiable for studies to employ Annual and stand alone reports as the sampling unit as these should contain the bulk of the disclosed CSR information". In order to capture the essence of CSR disclosure, this research uses both, annual reports and, if available, yearbooks of the companies.

3.3.2. CODING UNITS

In volumetric studies, coding units are used to determine the presence and amount of disclosure. According to Vourvachis (2007), the most commonly used coding units in CSR researches are words, sentences, proportion of pages and page size data. Milne & Addler (1999, p. 243) note that "sentences are far more reliable than any other unit of analysis" and that "most social and environmental content analyses in fact use sentences as their basis for coding decisions". In addition, the research of Ingram & Frazier (1980) finds that sentences are less prone to inter-coder variation, which is an important benefit for this research with two coders. Therefore, in order to employ the best practices and make the results comparable to most previous researches, we also use sentences as the coding units.

The general limitations of using sentences as the coding units include failure to account for repetitions and exclusion of information contained in tables, graphs or

other forms that are not sentences. Hackston & Milne (1996) propose to approximate one table line as equal to one sentence. Another solution, according to Vourvachis (2007) is to employ the proportion of page methodology, where a grid is placed on each A4 page and the volume of CSR related information is approximated by counting the number of grid cells that cover this information. We do not use this approach because it is affected by font sizes and is generally regarded as more subjective and causes larger inter-coder variation.

We have adjusted the standard sentence counting methodology to address the issue of excluded tables and graphs by coding them as corresponding to one sentence. Further, similarly to Hackston & Milne (1996), we are using the sentences in conjunction with the page size approach. This approach adjusts for differences in page layouts and report length by looking at the CSR sentences not in absolute terms, but relative to the length of annual report from which they were extracted.

3.3.3. CODING CATEGORIES

Coding categories refer to the classification of CSR activities into subcategories, such as environmental CSR activities, community related CSR activities etc. The coding categories of CSR disclosures largely depend on the adopted CSR definition. Holsti (1969) notes that “categories should reflect the purposes of the research, be exhaustive, mutually exclusive, independent and be derived from a single classification principle”. This research uses the CSR definition of the European Commission, where the biggest emphasis is on voluntary social and environmental actions. According to Vourvachis (2007), “in literature four major ‘themes’ for CSR are employed: marketplace (consumers, creditors), workplace (employees), community and environment, but there will always be a need for a development of an ‘other’ category”. These categories are usually based on a mixture of the Global Reporting Initiative, prominent CSR indices, ISO 26000 guidelines or created by researchers inductively. Since previous researches, for example, Everaert et al. (2009), show, that direct adoption a single category scheme, such as the Global Reporting Initiative, leads to subjectivity and requires adjustments, this research follows the categorization that most other researchers have used and recognized as optimal (e.g. market place, workplace, environment, community and other). These categories are also similar with the taxonomy initially developed by Ernst and Ernst

(1978) and later refined by Ng (1985)³; that has been adjusted and reused by many researchers, for example Hackston & Milne (1996).

Below detailed descriptions of all five CSR categories used in this research are provided:

Market place – this coding category includes CSR activities related to products, customer experiences and public relationship with other external market participants (e.g. suppliers, financiers, competitors). For example, disclosure related to new product development and product improvements beyond of what is needed to remain competitive in the market place are coded in this coding category. Similarly, disclosures about product quality and safety are also included in this category. With regard to customers, disclosures such as customer satisfaction survey results or changes in customer service offering are coded. With regard to other external market participants, an example would be information that the company discloses related to its relationship with suppliers or the government.

Workplace – this coding category includes disclosures related to the company's employees, such as employee statistics - gender, age, average salary, education level etc. Further, it includes any information with regard to the company's HR policy, personnel development, training, career planning and employee evaluation. Additionally, disclosures about employee health, safety and wellbeing, such as health benefits, available recreational activities and premises for resting, are also coded in this category. Further examples of workplace related disclosures coded in this category include employee satisfaction survey results, bonus and pension schemes, voluntary employee insurance, corporate events, worker unions, work accident statistics, strikes and many other.

Environment – this coding category includes CSR activities related to environment, for example, “green” initiatives, waste management, recycling, pollution control, CO2 emission, environment protection, sustainable production processes, preservation of

³ Categories include environment, energy, employee health and safety, employee other, products, community involvement, and other.

natural resources, environmental impact studies, investments in process efficiency and others.

Community – this coding category includes disclosures related to the company's relationship with the community. For example, information related to charity, donations, sponsorship activities, employment of or scholarships to students, funding science and research projects, investments in community infrastructure and the wellbeing of citizens would be coded in this category.

Other CSR – this coding category consists of CSR related disclosures that are neither market place, nor workplace, nor environment nor community related. Examples of disclosures that are included in this category include adherence to CSR standards, such as the ISO 26000, introduction of codes of ethic and social conduct, stakeholder approach in communication, socially responsible strategy, vision and corporate values and other non-classified CSR activities.

3.4. CODING PROCESS

The coding process was done manually by highlighting the CSR related sentences (in PDF format) using five different colors, each responding to one of the abovementioned coding categories. In order to make the coding process as objective as possible, first, detailed subcategories were developed for each of the broad categories. For the full list of all categories and subcategories, please refer to Appendix I. The subcategories were developed based on the checklist created by Hackston & Milne (1996), who, in turn, based the checklist on the earlier works of Ernst and Ernst (1978) and Ng (1985). It was slightly adjusted by regrouping similar categories (e.g. merging the two employee related categories into one) and adding some subcategories (e.g. CO2 emission control for the environment category) to better reflect current CSR topic areas. Contrary to Hackston & Milne (1996), we do not distinguish between the type of the CSR disclosure (good, bad or neutral) and evidence (monetary, non-monetary or declaration) because this information is not necessary to answer the research question of the paper.

In addition, similarly to Hackston & Milne (1996), to facilitate a constant interpretation of the checklist and make the inter-coder variation as small as possible, we developed decision rules. Similarly to most other researches, we have focused on

voluntary CSR disclosures. Therefore, certain mandatory sections, for example the Corporate Governance Report and the Auditor's Report have been excluded from the analysis. For the full set of the decision rules, please refer to Appendix II.

Prior to coding, three rounds of pre-coding were performed to test the interpretation of the categories and the decision rules. The pre-coding rounds indicated around 80% agreement between the two coders; therefore, it is in the normally accepted range of 75% or better agreement above chance.

3.5. QUANTIFYING CSR

Companies' CSR activities were quantified by taking the coded CSR sentences in each category relative to the total number of pages in the annual report, from which they were extracted. If both, annual report and yearbook were available, the total number of coded sentences and pages is the sum of the two documents. As discussed previously, this approach takes into account the differences in report length. It is an improvement over the absolute number of CSR sentences, since it better shows the importance of CSR for each company. For example, a company may have 50 CSR related sentences in a 10 page annual report, but another company may have the same 50 CSR related sentences in a 100 page annual report. Employing our methodology, the first company would get a CSR score of 5 (50 divided by 10), while the score for the second company would be 0.5 (50 divided by 100), showing that CSR is of lesser importance to the second company.

3.6. REGRESSION SPECIFICATION

A commonly used regression specification to explain the relationship between CSR and CSP looks like, for example, that of Waddock & Graves (1997):

$$CFP_{it} = \alpha + \beta_{it} CSR + \beta_{it} SIZE + \beta_{it} RISK + \beta_{it} INDUSTRY + \varepsilon_{it}$$

where CFP denotes corporate financial performance of company i in year t , CSR denotes the company's CSR activities in year t , SIZE refers to the company's size in year t , INDUSTRY is a dummy variable for the industry in which the company operates and ε is the error term. The beta (β) coefficients show the magnitude and direction of the relationship between CFP and each of the independent variables.

3.6.1. DEPENDENT VARIABLE

In previous researches, the most popular dependent variable used to measure companies' financial performance has been ROA (for example, Cochran & Wood (1984), Hackston & Milnes (1996), Simpson & Kohers (2002)). Another widely used accounting measure has been ROE, followed by many other measures, such as earnings per share, price to earnings (e.g. Ahmed et al. (2012)), EBIT margin (e.g. Cochran & Wood (1984)), net profit margin (e.g. Waddock & Graves (1997)), sales growth, net asset growth (e.g. Kapoor & Sandhu (2010)) and other. In this research we employ ROA, calculated as EBIT to total assets, as the dependent variable to make our research results comparable to others. We do not use ROE, which is calculated as net profit to total assets, since our data set includes companies from three different countries. Differences in accounting practices among the Baltic States are likely to have a larger effect to net profit than to EBIT, therefore, there is a risk that ROE figures would not be consistent.

3.6.2. INDEPENDENT VARIABLES

CSR – as discussed before, companies' CSR activities have been found to have positive, negative or no relation to financial performance by different authors. We approximate companies' CSR activities by the number of coded CSR related sentences relative to the total length of the annual reports. As a result, each company is assigned a CSR score for years 2009, 2010 and 2011, where a larger score implies more extensive CSR disclosure. The total CSR score is further subdivided into the five individual CSR categories, namely, community, workplace, environment, market place and other CSR, based on the number of CSR sentences in each category, which is our improvement to the existing methodology that looks only at the overall CSR – CFP relationship.

In addition to the CSR variables, similarly to most previous researches, we add several control variables.

SIZE – according to Waddock & Graves (1997, p. 6), “smaller firms may not exhibit as many overt socially responsible behaviors as do larger firms”, because as firms grow, they attract more external attention and thus, need to respond more to different external stakeholder demands. According to Hackston & Milnes (1996), in previous

researches company size has been approximated by such measures as total assets, revenue, number of employees or an index rank. Further, other authors have used asset age (e.g. Cochran & Wood (1984)), lagged total assets (e.g. Fauzi, Mahoney & Rahman (2007)), market capitalization (e.g. Hackston & Milnes (1996)) and other. Taking into account the economic environment in the Baltic States in years 2009 to 2011, where many companies continued to experience depressed sales and laid off employees, we have chosen total assets as the most reliable indicator of company size. Furthermore, this makes our research results comparable to the majority of other studies.

RISK – according to Waddock & Graves (1997, p. 6-7), “management’s risk tolerance influences its attitude toward activities that have the potential to (1) elicit savings, (2) incur future or present costs or (3) build or destroy markets”. With regard to CSR, these activities could be, for example, investing in waste recycling or pollution reducing solutions. In previous researches, management’s risk tolerance has often been approximated by leverage (e.g. McWilliams & Siegel (2000), Tsoutsoura (2004), Mahoney & Roberts (2007)), meaning that the more debt management has taken on relative to equity or total assets, the more risk tolerant it is. Other researches (e.g. Kapoor & Sandhu (2010)) have used company’s beta (the company’s stock price’s correlated volatility in relation to the volatility of the overall stock market) as a proxy for risk. In theory, risk should be positively related to return, but the relationship is inverse when the cost of taking on new levels of debt exceeds the return generated by assets. In our research, we approximate risk by debt to equity.

INDUSTRY – ROA varies by industry and thus, many previous researches (e.g. Cochran & Wood (1984), Waddock & Graves (1997), Hackston & Milnes (1996)) have used industry dummies to control for these differences in ROA. McWilliams & Siegel (2001) suggest that the regression is misspecified unless companies’ research and development activities are taken into account, because higher R&D spending translates into higher financial performance. However, Waddock & Graves (1997) and many other authors argue that the differences in R&D spending are captured by industry dummies. We determine industries based on the industry classification provided by the Nasdaq OMX Baltic (Nasdaq OMX, 2013), which results in nine

industries – consumer services, financials, consumer goods, industrials, basic materials, health care, utilities, technology and telecommunications.

COUNTRY – since our research covers three different countries, we add country dummies to the regression to account for country specific differences.

3.7. REGRESSION SCENARIOS

In the following sections three regression scenarios are presented – the base case, which follows the widely used methodology and two additional ones, which improve the reliability of the regressions.

3.7.1. BASE CASE SCENARIO

Based on the abovementioned regression specifications, we run two panel data random effects generalized least squares (GLS) “base case scenario” regressions – A1 and B1:

$$(A1) ROA_{it} = \alpha + \beta_{it} TotalCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it},$$

$$(B1) ROA_{it} = \alpha + \beta_{it} COMM + \beta_{it} WORK + \beta_{it} ENV + \beta_{it} MARKT + \beta_{it} OtherCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it},$$

where *ROA* is company's *i* return on assets in year *t*, α is the intercept, *TotalCSR* is the company's aggregate CSR score in all CSR categories in year *t*, *DE* is the company's debt to equity ratio in year *t*, *SIZE* is the company's total assets in year *t*, *INDUSTRY* and *COUNTRY* are dummy variables representing the industry of the company and the country, where it is listed on the public stock exchange, *COMM*, *WORK*, *ENV*, *MARKT* and *OtherCSR* are the separate CSR scores for community, workplace, environment, market place and other CSR, respectively, and *u* and ε are the within and between entry error terms for the random effects GLS panel data regression.

3.7.2. EBIT SCENARIO

In order to improve the explanatory power of regressions A1 and B1, we add *EBIT* as an independent variable and run regressions A2 and B2:

$$(A2) ROA_{it} = \alpha + \beta_{it} TotalCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} EBIT + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it}$$

$$(B2) ROA_{it} = \alpha + \beta_{it} COMM + \beta_{it} WORK + \beta_{it} ENV + \beta_{it} MARKT + \beta_{it} OtherCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} EBIT + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it}$$

where *ROA* is company's *i* return on assets in year *t*, α is the intercept, *TotalCSR* is the company's aggregate CSR score in all CSR categories in year *t*, *DE* is the company's debt to equity ratio in year *t*, *SIZE* is the company's total assets in year *t*, *EBIT* is the company's earnings before interest and taxes in thousand EUR in year *t*, *INDUSTRY* and *COUNTRY* are dummy variables representing the industry of the company and the country, where it is listed on the public stock exchange, *COMM*, *WORK*, *ENV*, *MARKT* and *OtherCSR* are the separate CSR scores for community, workplace, environment, market place and other CSR, respectively, and *u* and ε are the within and between entry error terms for the random effects GLS panel data regression.

Theoretically, EBIT should have explanatory power for ROA, which in itself is an efficiency measure, therefore, adding EBIT could improve the explanatory power of the regression and help to determine more precisely the contribution of CSR to ROA. Since our interest does not lie in finding all components that explain ROA, but determining the contribution of CSR to company financial performance, no attempt is made to further subdivide EBIT in the factors that potentially explain it (e.g. GDP growth, cost inflation, wage growth etc.).

3.7.3. LAGGED ROA SCENARIO

As discussed before, previous researches have indicated that the causation relationship is not clear, meaning that CFP and CSR may have a reverse or loop causality, which leads to endogeneity. In order to test the robustness of regressions

A1, A2, B1 and B2, we run regressions A3 and B3 by adding one year lagged ROA as an independent variable:

$$(A3) ROA_{it} = \alpha + \beta_{it} TotalCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} EBIT + \beta_{it} LagROA + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it},$$

$$(B3) ROA_{it} = \alpha + \beta_{it} COMM + \beta_{it} WORK + \beta_{it} ENV + \beta_{it} MARKET + \beta_{it} OtherCSR + \beta_{it} DE + \beta_{it} SIZE + \beta_{it} EBIT + \beta_{it} LagROA + \beta_{it} INDUSTRY + \beta_{it} COUNTRY + u_{it} + \varepsilon_{it},$$

where ROA is company's *i* return on assets in year *t*, α is the intercept, TotalCSR is the company's aggregate CSR score in all CSR categories in year *t*, DE is the company's debt to equity ratio in year *t*, SIZE is the company's total assets in year *t*, EBIT is the company's earnings before interest and taxes in thousand EUR in year *t*, LagROA is the company's one year lagged return on assets in year *t*, INDUSTRY and COUNTRY are dummy variables representing the industry of the company and the country, where it is listed on the public stock exchange, COMM, WORK, ENV, MARKET and OtherCSR are the separate CSR scores for community, workplace, environment, market place and other CSR, respectively, and *u* and ε are the within and between entry error terms for the random effects GLS panel data regression.

The next chapter provides information about the data set to which the abovementioned methodology is applied. Additionally, it provides background information about the markets that are in the scope of this paper.

4. DATA OVERVIEW

As mentioned before, the research is based on the three Baltic States – Estonia, Latvia and Lithuania in the period of three years from 2009 to 2011. This section gives a short background on key developments of those countries as well as presents the source and the sample of all the data items collected.

4.1. MARKET BACKGROUND

All three Baltic States have much in common – history, economic development and CSR awareness level. Thus, the aggregation of those countries into one region for the research purposes is a justifiable decision.

All countries got their independence from Soviet Union in 1991 and started adoption to the market economy. Shortly after that separate stock exchanges were launched, while in 2004 those markets were united under the name of Nasdaq OMX, meaning the converged requirements and information presentation.

In middle 2000s all countries had GDP growth rates that ranked among the highest in Europe. However, in 2009 the financial crisis hit severely and GDP dropped by as much as 18% in Latvia, 14.7% in Lithuania and 14.1% in Estonia to (World Bank, 2013). Year 2010 was marked with patient recovery, while in 2011 all countries experienced GDP growth in the range from 5.5% in Latvia to 8.3% in Estonia (World Bank, 2013).

The only credible study on CSR awareness level in the Baltic States was done in 2005 by the World Bank (World Bank, 2005). 243 executives were surveyed on their views on CSR. The general findings were that executives in the Baltics do understand what is meant by the term “CSR”. The key factor that refrains from engaging in higher number of CSR initiatives is economic costs, while the role of business was seen as economic rather than social. Also the respondents were missing more active CSR promotion and support from the governmental bodies.

4.2. DATA SET

The data set was extracted from the annual reports and yearbooks of publically listed companies on the Main List of the Nasdaq OMX Baltic Stock Exchange. The Main List is the most liquid with the strictest company reporting and governance requirements. In January 2013 it consisted of 36 companies, of which 18 were from Lithuania, 13 from Estonia and 5 from Latvia. In total it resulted in potential data set of 108 observations, however, 2 companies were taken out from the overall sample, leaving us with 34 companies and corresponding 102 observations during the three years period. Both companies are from Lithuania, one of them was listed in 2011, meaning just one year of observation, while the other one was formed after a merger of two other listed companies in 2011. Both cases resulted in incomparable data with other sample companies that had no structural interruptions during the whole period from 2009 to 2011.

The PDF versions of the companies' consolidated annual reports and yearbooks were downloaded from the Nasdaq OMX Baltic Stock Exchange. Since publication of yearbooks is not mandatory, only 4 out of the 108 observations had a yearbook that differed from the annual report. In the Baltics, a yearbook is very similar to an annual report, but with less emphasis on financials and more on the softer aspects, including CSR. In cases where the yearbook was identical with the annual report in terms of content, only the yearbook was used. In cases, where the two documents differed, both, the annual report and the yearbook were coded, and the numbers of coded sentences were summed.

According to the guidelines described in the methodology section, CSR sentences were counted in each CSR category and then summed up to the overall CSR related sentences per report. Yearly accounting figures of revenue, total assets, EBIT, net profit, debt and equity were extracted from the financial statements presented in the same annual reports. Out of them the independent variable ROA was constructed, while the other data served as control variables or as additional information in the categorical analysis. Additionally, each company of the sample was assigned into one of the countries, where its stocks are listed and one of the nine industry groups, providing us with dummy variables for the analyses.

5. DESCRIPTIVE STATISTICS: CSR IN THE BALTICS

The purpose of this section is to give an overview on CSR statistics in the Baltics and identify the main trends in different categorical splits. Our panel data allows comparing CSR disclosure and financial results in three major categories – countries, years and industries.

5.1. OVERALL SUMMARY

The whole sample of 102 observations indicated that the total average of CSR related sentences during 2009 – 2011 was 72, ranging from a minimum of 9 to a maximum of 315 sentences per one report. Workplace and market place related sentences comprised the largest share of all CSR disclosure, namely 37% and 32% of the total average, while community and environment categories were lagging behind with very similar result of 12% of the total average CSR disclosure, respectively.

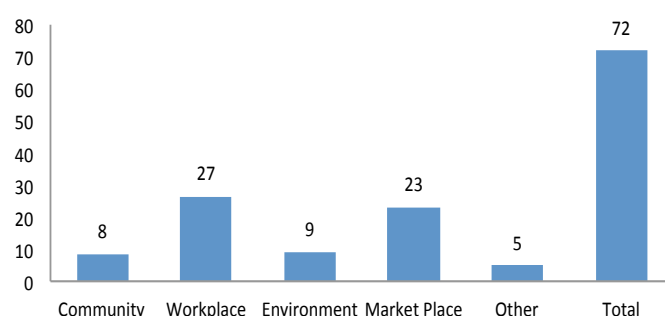
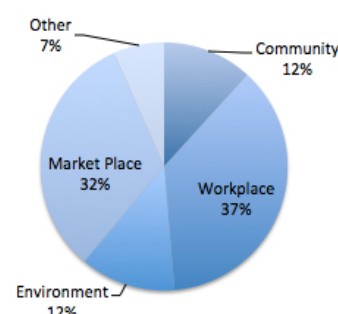


Figure 2 Average number of CSR related sentences

Figure 3 Split of CSR categories

When it comes to the operational figures of the sample, the variation seems to be of a large scale. The average revenue amounted to 140 million EUR, ranging from 12.5 million to 1.15 billion EUR. A similar trend is observed for total assets, which ranged from 8.5 million EUR to 1.9 billion EUR per company. The average profitability indicators of ROE and ROA were 3% and 5%, respectively, indicating the difficult economic conditions of the period.

	Revenue, tEUR	Operational figures		Assets, tEUR	D/E ratio	ROE	ROA
		EBIT, tEUR	Net Profit, tEUR				
All observations (102 observations)							
Minimum	12,538	-89,792	-110,916	8,488	0.0	-93%	-22%
Maximum	1,152,994	118,202	91,062	1,947,238	10.6	52%	41%
Average	140,507	7,552	2,810	265,338	1.3	3%	5%

Table 1 Financial data

The sample seems to be diversified, which gives a good ground for CSR – CFP relationship testing.

5.2. COUNTRY COMPARISON

Having a CSR disclosure split in terms of all three Baltic States allows us to see that Estonia stands out as the leader in terms of sentences per report. The average Estonian report had 91 CSR related sentences, while for Latvian companies this figure was 63 and for Lithuanian ones 59 sentences per report. However, it is important to mention that such a forge ahead of Estonian companies was influenced by two outliers - Tallinna Vesi (maximum of 315 sentences) and Harju Elekter (maximum of 206 sentences). Without those two companies Estonia would have had an average of 64 CSR related sentences per report, which is closely in line with Latvia and Lithuania.

When analyzing the split among the different CSR categories we can see that workplace and market place averages were the highest, comprising from 23% to 45% of the overall CSR disclosure. In Estonia, the split between those two categories was almost equal – 34% for workplace and 36% for market place. Latvia had the highest proportion of market place related sentences (45%), while in Lithuania this figure was just 23%. The situation was reverse with workplace – Lithuania had the highest figure of 42%, leaving Latvia at the end of the list with 31%. Environmental disclosure was the category where Lithuania stood out of its peers with 19% of disclosure, compared to 8% in Estonia and 10% in Latvia.

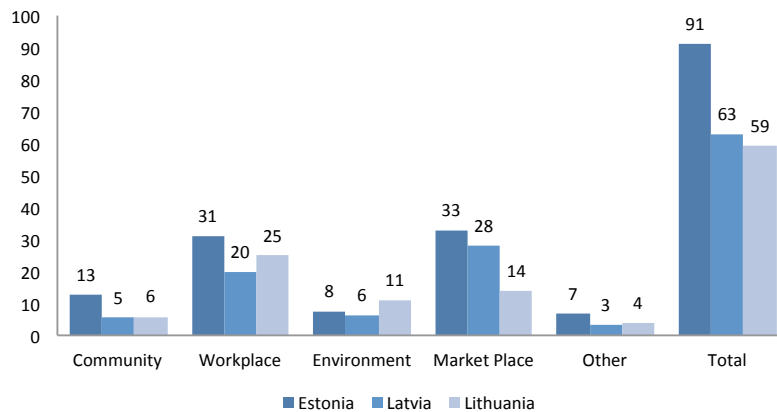


Figure 4 Average number of CSR related sentences - country comparison



Figure 5 Split of CSR categories - country comparison

In terms of revenue, Estonian companies were the largest, having an average turnover of 168 million EUR. However, the results are again influenced by an outlier – Tallink Grupp, which reached revenue of as much as 1.1 billion EUR in 2011. Lithuanian companies were on average the second largest with average revenue of 137 million EUR while Latvia with 77 million EUR ranked last. When it comes to the company size in terms of total assets, the situation is opposite – Latvian companies had the largest asset base with 334 million EUR on average and Estonian average of 240 million EUR was the smallest.

Lithuanian companies had the highest profitability almost in all categories – net profit, ROE and ROA, while Estonia had the highest EBIT. Latvian companies had the worst financial performance, resulting in negative averages of EBIT and net profit. When it comes to risk assessment, Lithuanian companies had the highest

leverage ratio, reaching a D/E ratio of 2.1 on average. Latvian companies were the least leveraged with a 0.4 D/E ratio.

	Operational figures						
	Revenue, tEUR	EBIT, tEUR	Net Profit, tEUR	Assets, tEUR	D/E ratio	ROE	ROA
Estonia (39 observations)							
Minimum	13,152	-21,533	-32,930	8,488	0.0	-86%	-22%
Maximum	1,152,994	118,202	37,476	1,947,238	1.9	49%	41%
Average	168,575	10,457	2,060	240,592	0.8	-5%	3%
Latvia (15 observations)							
Minimum	12,538	-89,792	-110,916	10,889	0.0	-46%	-17%
Maximum	168,242	14,538	10,121	986,437	1.3	25%	21%
Average	77,098	-8,880	-19,930	334,846	0.4	0%	3%
Lithuania (48 observations)							
Minimum	17,717	-25,137	-24,807	9,348	0.0	-93%	-14%
Maximum	534,601	103,183	91,062	1,451,200	10.6	52%	37%
Average	137,517	10,327	10,525	263,722	2.1	10%	7%

Table 2 Financial data - country comparison

5.3. YEARLY COMPARISON

The main trend that is revealed by the yearly comparison of CSR disclosure is a gradual increase in the average number of sentences per report. In 2009 the average amounted to 67 sentences, in 2010 it increased to 70, while in 2011 the jump was 14% and resulted in 79 sentences per report.

Also, we can see that there were no significant changes in CSR disclosure categories – workplace and market place remained as the most disclosed topics with proportions amounting to above 30% each.

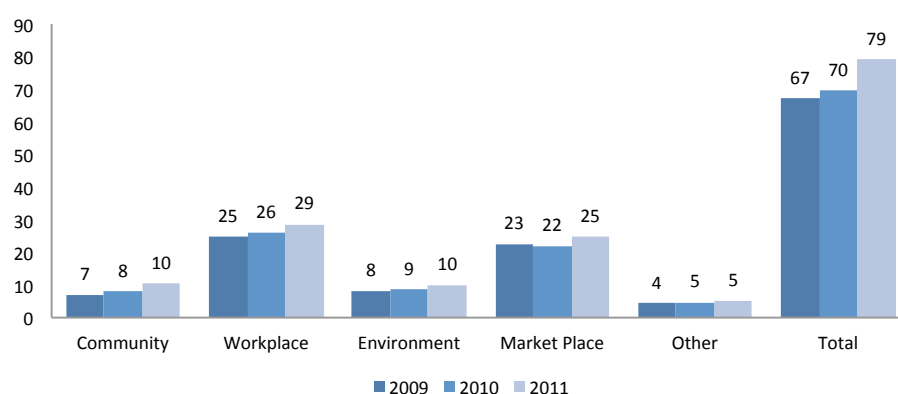


Figure 6 Average number of CSR related sentences - yearly comparison

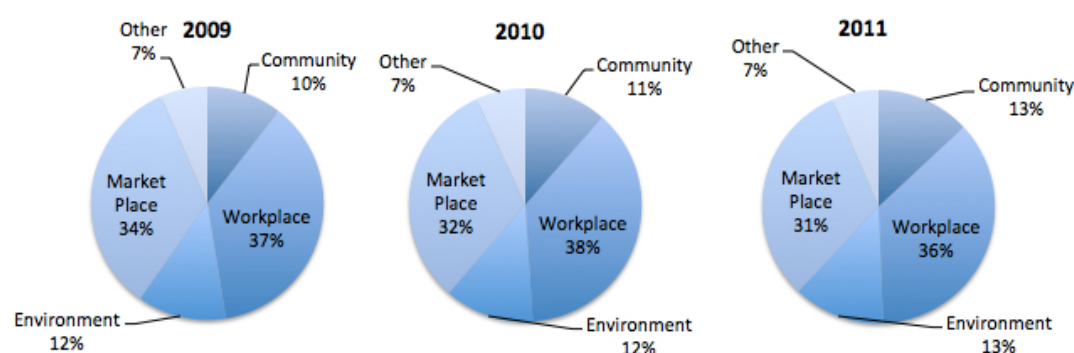


Figure 7 Split of CSR categories - yearly comparison

Analysis of operational result dynamics in 2009 – 2011 indicates the gradually improving economic wellbeing of the companies. There was an increase in all size and profitability related indicators – revenue, EBIT, net profit, assets, ROE and ROA. The only variable that had been shrinking was D/E ratio, indicating deleveraging and the associated reduction in risk.

	Operational figures				D/E ratio	ROE	ROA
	Revenue, tEUR	EBIT, tEUR	Net Profit, tEUR	Assets, tEUR			
2009 (34 observations)							
Minimum	12,538	-74,269	-62,801	8,488	0.0	-93%	-22%
Maximum	791,863	63,738	48,967	1,947,238	10.5	35%	25%
Average	126,344	1,599	-3,234	263,257	1.6	-9%	1%
2010 (34 observations)							
Minimum	13,929	-89,792	-110,916	9,115	0.0	-51%	-17%
Maximum	791,530	86,917	47,189	1,871,315	10.6	38%	29%
Average	136,583	6,728	720	265,783	1.4	6%	6%
Growth compared to previous year	8%	321%	N/A	1%	-15%	N/A	476%
2011 (34 observations)							
Minimum	15,504	-23,666	-34,283	9,348	0.0	-61%	-13%
Maximum	1,152,994	118,202	91,062	1,799,542	8.3	52%	41%
Average	158,593	14,330	10,944	266,973	1.1	11%	9%
Growth compared to previous year	16%	113%	1420%	0%	-22%	82%	46%

Table 3 Financial data - yearly comparison

5.4. INDUSTRY COMPARISON

Further we look at CSR statistics in different industries. As discussed before, the sample of 34 companies was subdivided into industries based on the NASDAQ OMX industry split. As a result, for the categorical analysis we use nine industries – consumer services, financial services, consumer goods, industrials, basic materials, healthcare, utilities, technology and telecommunications.

Utilities could be ranked as the most CSR considerate industry, since its average of CSR related sentences amounted to 206 – more than double of what the next industry

with most CSR disclosure has. However, the average of utilities companies is strongly influenced by the before mentioned outlier Tallinna Vesi, thus this leadership cannot be conclusive. The healthcare industry had the second largest average – 89 CSR related sentences per report, while the technology industry ranked third with 86 sentences. On the opposing side, was the basic materials industry, which had an average of 40 CSR related sentences per report and financial service companies with 49 sentences.

When comparing CSR category composition, all industries except the financial services industry had workplace and market place as the main areas of CSR disclosure. In the case of the financial services industry, workplace was the most expressed comprising 50% of total disclosure, while community and environment also got high shares with 18% and 17%, respectively.

In terms of industry leaders per each CSR category, companies of the utilities industry paid the most attention to community issues (20% of total disclosure), financial services companies concentrated on workplace disclosure (50% of total disclosure), basic materials industry posed most emphasis on environment (18% of total disclosure) and healthcare companies provided the most information on market place related CSR activities (41% of total disclosure).

Consumer services (15 observations)	Number of sentences					Total
	Community	Workplace	Environment	Market Place	Other	
Minimum	0	5	0	6	0	19
Maximum	37	58	29	45	15	142
Average	6	22	4	25	5	62
Percentage of Total average	10%	36%	6%	40%	8%	
Financial services (12 observations)						
Minimum	0	10	0	0	0	28
Maximum	22	39	27	12	7	85
Average	9	25	8	5	3	49
Percentage of Total average	18%	50%	17%	9%	6%	
Consumer goods (30 observations)						
Minimum	0	6	0	1	0	9
Maximum	20	37	35	49	14	127
Average	4	21	10	20	3	57
Percentage of Total average	7%	36%	17%	35%	5%	
Industrials (21 observations)						
Minimum	0	7	1	0	0	12
Maximum	24	67	31	89	18	206
Average	10	27	8	19	6	70
Percentage of Total average	15%	38%	12%	27%	8%	
Basic Materials (3 observations)						
Minimum	0	11	13	1	0	34
Maximum	0	23	22	9	1	46
Average	0	19	16	5	0	40
Percentage of Total average	0%	21%	18%	6%	0%	
Healthcare (9 observations)						
Minimum	0	4	0	3	1	45
Maximum	16	49	24	81	14	140
Average	5	31	10	36	7	89
Percentage of Total average	5%	35%	11%	41%	8%	
Utilities (6 observations)						
Minimum	20	25	18	46	2	123
Maximum	61	82	26	125	25	315
Average	42	51	23	79	14	207
Percentage of Total average	20%	24%	11%	38%	7%	
Technology (3 observations)						
Minimum	11	26	7	28	1	75
Maximum	12	44	8	34	4	99
Average	11	34	7	31	3	86
Percentage of Total average	13%	40%	8%	36%	3%	
Telecoms (3 observations)						
Minimum	0	51	3	4	4	66
Maximum	3	54	3	19	6	80
Average	2	52	3	10	5	72
Percentage of Total average	2%	60%	3%	12%	5%	

Table 4 Number of CSR related sentences - industry comparison

5.5. DISCUSSION

Overall, the range of CSR related sentences from 9 to 315 per one report indicates that there is a significant variation in CSR disclosure among the listed companies in the Baltic States. That could be interpreted as a signal of immature market tradition to be involved in CSR actions and disclose the information about them. Some of the companies have already established credible CSR culture, while others are still lagging behind and neglecting the worldwide trend. It is in line with our expectations

that the three Baltic States are emerging markets, meaning an unstructured CSR of behavior pattern and an area for further research. At the same time having big variation in CSR disclosure and financial performance signals that the data set is diversified and it could provide credible and good basis for the CSR – CFP relationship analysis.

The highest attention to workplace and market place (37% and 32% of total disclosure, respectively) indicates the natural evolution of the CSR culture. Employees and customers are the most influential stakeholders for most companies, so management devotes the most effort to keep them satisfied. The other two CSR areas of community and environment (12% and 13% of total disclosure, respectively) have been left behind so far, however, we expect those areas to get a higher share of importance together with the CSR culture development. Apparently, at the moment the corporate world still does not see much return related to showing more initiatives in community wellbeing and environmental friendliness.

Analysis of the country based statistics gives the impression that there may be negative or no relationship between CSR and CFP – Estonia had the highest CSR disclosure numbers, however, its financial performance during the research period was the lowest among the three countries. As mentioned before, the leadership of Estonia in CSR disclosure was strongly influenced by the two outlier companies with significantly higher averages of CSR related sentences, therefore, the overall sample can still exhibit significant positive CSR – CFP relationship, which should be revealed by the regression analysis.

The yearly analysis shows that CSR disclosure has been expanding gradually each year, while financial performance has also been improving overall, meaning that positive CSR - CFP relationship could be present. However, there is also the question of causation – during 2009 – 2011 the Baltic States were experiencing recovery after the financial crisis, so their results were improving gradually, potentially enabling them to pay more attention to CSR activities.

The split of results into different industries provided an insight into which companies care most about CSR. The high-tech related healthcare and technology industries appeared to be the most involved into CSR activities, which signals the connection

between the more sophisticated industry of the company and its maturity in the CSR area. Healthcare industry seems to devote much attention to market place, where the main CSR related factors are R&D and results leading to more effective variations of medicaments. So, annual reports is the place where those companies can disclose their results that have real impact on customers' wellbeing. In the technology industry the situation is similar, though in our sample this industry had marginally more disclosure on workplace related CSR activities than on market place.

The worst CSR performing industry of base materials is not a surprising finding, since the environment of this industry is oriented to business-to-business relationship and there is less connection to end customers, resulting in fewer stakeholders to consider. Though, it should be mentioned that in this study the base materials industry had just one representative company, so the result may be biased. The financial services being the second worst CSR performing industry is controversial. On the one hand, companies that provide financial services (in this case, two banks and two investing companies) are expected to be modern and caring about CSR impact. On the other hand, however, it could be argued, that companies of this type have less negative impact on the environment that they "have to neutralize" by CSR initiatives. Also, their products are not of the type that may be unsafe or do direct harm to customers, thus there is less need for CSR actions and disclosure.

6. EMPIRICAL RESULTS: CSR - CFP RELATIONSHIP IN THE BALTICS

This chapter provides regression results of the CSR – CFP relationship in the Baltics. Results are split into two sections – (1) overall CSR – CFP relationship and (2) individual CSR category – CFP relationship. At the end of the chapter potential statistical limitations are discussed.

6.1. FIXED EFFECTS VERSUS RANDOM EFFECTS GLS

In order to determine, if fixed or random effects regression model is better suited, we perform the Hausman test for the “base case scenario” regressions A1 and B1. The Hausman test helps to evaluate if the statistical model corresponds to the data. The null hypothesis of the test states that the individual error terms are uncorrelated with the other variables in the regression. In case they are correlated, the null hypothesis is rejected. This means that the random effects model produces biased estimators, so the fixed effects model should be used instead. The results of the Hausman test are presented in Tables 5 and 6.

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixedA1	(B) randomA1		
TotalCSR	.0331772	.0332968	-.0001196	.0269543
SIZE	2.43e-07	3.38e-08	2.09e-07	2.41e-07
DE	-.0209694	-.0136853	-.007284	.0073289

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\text{chi2}(2) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

$$= 0.99$$

Prob>chi2 = 0.6099

Table 5 Hausman test results for regression A1

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixedB1	(B) randomB1		
COMM	.1541517	.1790493	-.0248976	.0918935
WORK	.1419553	.101397	.0405583	.1179419
ENV	-.2080497	-.1658247	-.042225	.0947958
MARKT	-.1684827	-.1185911	-.0498916	.0540032
OtherCSR	.083052	.5508568	.3321952	.3492362
SIZE	2.09e-07	3.74e-08	1.71e-07	2.34e-07
DE	-.024228	-.016587	-.007641	.006949

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
 = 2.43
 Prob>chi2 = 0.8765

Table 6 Hausman test results for regression B1

As the results indicate, the chi2 statistic is insignificant for both, A and B regressions, so it is safe to use the random effects model. Therefore, we run all the regressions as random effects GLS.

6.2. OVERALL CSR – CFP RELATIONSHIP

Regression results for regression A1 are presented in Table 7.

Random-effects GLS regression		Number of obs	=	102
Group variable: ID		Number of groups	=	34
R-sq: within	= 0.0736	Obs per group: min	=	3
between	= 0.4852	avg	=	3.0
overall	= 0.3494	max	=	3
corr(u_i, X) = 0 (assumed)		Wald chi2(13)	=	24.42
		Prob > chi2	=	0.0275

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
TotalCSR	.0332968	.0234469	1.42	0.156	-.0126582	.0792519
SIZE	3.38e-08	4.24e-08	0.80	0.425	-4.92e-08	1.17e-07
DE	-.0136853	.006702	-2.04	0.041	-.026821	-.0005497
Estonia	.0282462	.0650068	0.43	0.664	-.0991648	.1556573
Lithuania	.093868	.0602661	1.56	0.119	-.0242513	.2119874
ConsumerServices	-.0676296	.0944653	-0.72	0.474	-.2527782	.1175191
Financials	-.0965398	.0985143	-0.98	0.327	-.2896243	.0965447
ConsumerGoods	-.0102107	.0886121	-0.12	0.908	-.1838872	.1634659
Industrials	-.1037863	.0911712	-1.14	0.255	-.2824785	.074906
BasicMaterials	-.0652133	.1163698	-0.56	0.575	-.2932939	.1628674
HealthCare	.0453385	.1043792	0.43	0.664	-.159241	.249918
Utilities	-.0754378	.1063526	-0.71	0.478	-.2838851	.1330094
Technology	-.0393562	.1334963	-0.29	0.768	-.3010041	.2222916
_cons	.0283822	.1055735	0.27	0.788	-.1785382	.2353025
sigma_u	.07030109					
sigma_e	.07374893					
rho	.47607875	(fraction of variance due to u_i)				

Table 7 Random effects GLS regression results for regression A1

The regression results show that, overall, CSR activities of the firms in the Baltics are positively related to financial performance (in the column “Coef.” the coefficient of the variable TotalCSR is a positive 0.0332968), however, the results are insignificant (for the variable to be significant, the column “P>|z|” should have the test value lower than 0.10 (for at least 10% level of significance)). Therefore, we find no support that engaging in CSR activities would help improving ROA.

Further, the regression results indicate that leverage is a significant explanatory factor for explaining ROA at the 5% level of significance. According to the results of regression A1, more leveraged companies have lower financial performance. An increase in leverage across time and companies by one unit causes ROA to decrease on average by 1.4 basis points, so the effect is rather small. A possible explanation of

this might be that more profitable companies generate sufficient cash to finance their investment and working capital needs from internal funds, therefore their external borrowing needs are lower, resulting in lower debt to equity ratios.

The significant Wald chi2 statistic at the 5% level of significance indicates that at least one of the regression coefficients is not equal to zero and, therefore, explains the dependent variable. However, the coefficient of determination (R-sq) shows that for regression A1 all the independent variables together explain only 35% of the overall variation in ROA. This means that adding other independent variables might improve the regression specification, so we run regression A2 that has EBIT as an additional independent variable.

Regression results for regression A2 are presented in Table 8.

Random-effects GLS regression		Number of obs	=	102
Group variable: ID		Number of groups	=	34
R-sq: within	= 0.5139	Obs per group: min	=	3
between	= 0.5290	avg	=	3.0
overall	= 0.5196	max	=	3
corr(u_i, X) = 0 (assumed)		Wald chi2(14)	=	91.65
		Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
TotalCSR	.025613	.019706	1.30	0.194	-.01301	.064236
SIZE	-9.15e-08	4.38e-08	-2.09	0.037	-1.77e-07	-5.62e-09
DE	-.0046705	.00575	-0.81	0.417	-.0159403	.0065993
EBIT	3.42e-06	4.36e-07	7.85	0.000	2.57e-06	4.28e-06
Estonia	-.1318296	.0660177	-2.00	0.046	-.2612218	-.0024374
Lithuania	-.067398	.0622127	-1.08	0.279	-.1893326	.0545366
ConsumerServices	.0512955	.0930766	0.55	0.582	-.1311312	.2337222
Financials	.0898853	.0970331	0.93	0.354	-.1002961	.2800667
ConsumerGoods	.1025458	.0870359	1.18	0.239	-.0680415	.2731331
Industrials	.0488369	.0907316	0.54	0.590	-.1289937	.2266675
BasicMaterials	.0569717	.1142572	0.50	0.618	-.1669682	.2809116
HealthCare	.0185506	.1015114	0.18	0.855	-.1804081	.2175092
Utilities	.0169326	.1031222	0.16	0.870	-.1851832	.2190484
Technology	-.0580856	.1296985	-0.45	0.654	-.3122899	.1961187
_cons	.0570109	.1024637	0.56	0.578	-.1438142	.257836
sigma_u	.07294831					
sigma_e	.05300198					
rho	.65449205	(fraction of variance due to u_i)				

Table 8 Random effects GLS regression results for regression A2

Similarly to regression A1, regression A2 results indicate that, overall, CSR activities of the firms in the Baltics are positively related to financial performance, however, the

results are insignificant. Therefore, we find no support that engaging in CSR activities would help improving ROA.

Further, adding EBIT as an independent variable shows that it has a positive relationship to ROA at the 1% level of significance. This means that companies generating higher earnings before interest and taxes in absolute terms tend to have higher ROA, so they are using their assets more efficiently. According to the regression results, a 1000 EUR increase in EBIT leads on average to a tiny increase in ROA amounting to 0.0003 basis points.

Additionally, regression A2 results indicate that company size is a significant factor explaining ROA. The results show that larger companies have lower ROA at the 5% level of significance, but the effect is extremely small. An increase in total assets by 1000 EUR causes on average only a 0.000009 basis point decrease in ROA. The direction of relationship between company size and ROA can possibly be explained by the fact, that larger companies may have more bureaucratic inefficiencies and they may be less able to adapt to external changes and pressures. For example, in an economic downturn, larger companies may be less flexible and successful at reducing costs or assets, therefore resulting in lower ROA. However, as noted before, the magnitude of this effect is extremely small.

Similarly to regression A1, the Wald chi2 statistic of regression A2 shows that, at the 1% level of significance, at least one of the regression coefficients is not equal to zero and, therefore, affects the dependent variable. Compared to regression A1, the R-sq statistic has improved with independent variables explaining 52% of the variation in ROA. Therefore, adding EBIT has increased the explanatory power of the regression.

To sum up, regressions A1 and A2 show no indication that overall company CSR activities would affect financial performance in the Baltic States.

When adding previous period ROA as an independent variable to regression A2, there are no changes in the coefficient directions for any of the variables, but the TotalCSR variable becomes even less significant (from a p value of 0.194 in regression A2 to a p value of 0.564 in regression A3). Previous period ROA is significantly positively related to current period ROA, meaning that current financial performance depends on the company's financial performance in the past. The overall R-sq statistic of the

regression improves to 59%. The lagged value of ROA is supposed to reduce endogeneity, but since CSR did not show any significant relationship to company financial performance in neither regression A1, nor A2, the regression A3 does not change the overall findings.

6.3. CSR – CFP RELATIONSHIP OF INDIVIDUAL CSR CATEGORIES

As discussed before, regressions B1 to B3 mimic regressions A1 to A3, except that the TotalCSR variable is subdivided into the five CSR categories, namely, community, workplace, environment, market place and other CSR. Regression results for regression B1 are presented in Table 9.

Random-effects GLS regression		Number of obs	=	102
Group variable: ID		Number of groups	=	34
R-sq: within	= 0.1969	Obs per group: min	=	3
between	= 0.4659	avg	=	3.0
overall	= 0.3728	max	=	3
corr(u_i, X) = 0 (assumed)		Wald chi2(17)	=	30.74
		Prob > chi2	=	0.0215

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
COMM	.1790493	.1392034	1.29	0.198	-.0937843	.4518829
WORK	.101397	.1219312	0.83	0.406	-.1375837	.3403777
ENV	-.1658247	.1437033	-1.15	0.249	-.4474779	.1158285
MARKT	-.1185911	.0693571	-1.71	0.087	-.2545285	.0173463
OtherCSR	.5508568	.3212781	1.71	0.086	-.0788367	1.18055
SIZE	3.74e-08	4.92e-08	0.76	0.447	-5.91e-08	1.34e-07
DE	-.016587	.0069532	-2.39	0.017	-.0302149	-.002959
Estonia	-.0288129	.0758441	-0.38	0.704	-.1774645	.1198388
Lithuania	.0451574	.0709295	0.64	0.524	-.0938617	.1841766
ConsumerServices	-.0242674	.1106454	-0.22	0.826	-.2411283	.1925935
Financials	-.059694	.1135535	-0.53	0.599	-.2822548	.1628667
ConsumerGoods	.0575009	.1064334	0.54	0.589	-.1511047	.2661065
Industrials	-.0905658	.1071141	-0.85	0.398	-.3005057	.119374
BasicMaterials	.0058167	.134885	0.04	0.966	-.258553	.2701864
HealthCare	.0775423	.1193496	0.65	0.516	-.1563786	.3114633
Utilities	-.0369861	.1377511	-0.27	0.788	-.3069732	.2330011
Technology	-.0338676	.1461372	-0.23	0.817	-.3202913	.2525561
_cons	.0358599	.122953	0.29	0.771	-.2051237	.2768434
sigma_u	.08066409					
sigma_e	.07082264					
rho	.56469272	(fraction of variance due to u_i)				

Table 9 Random effects GLS regression results for regression B1

Although regression A1 revealed no significant relationship between overall company CSR activities and financial performance, regression B1 indicates that some CSR

categories significantly affect company ROA. As the results of regression B1 show, CSR activities related to market place and other CSR activities are significant at explaining financial performance. This results because some of the insignificant CSR variables, namely community and work place, have a large weight in the combined *TotalCSR* variable. The descriptive statistics in section 5 revealed that work place related CSR activities are the most common in the Baltics comprising on average 37% of all CSR activities. The large weight of this category is likely to cause the *TotalCSR* variable to be insignificant, while some of the separate CSR categories have significant effect on firm financial performance.

The results of regression B1 reveal that CSR activities related to market place, for example, new product development, changes in product quality, customer service etc. have a significant negative effect on ROA at the 10% level of significance. On average, an increase in market place related CSR activities by one unit (e.g. one additional sentence disclosing market place related CSR activities) reduces ROA by 11.8 basis points. Possibly, in the Baltics customers are not willing to pay a premium for improved products or services and the costs of market place related CSR activities out-weight the financial benefits, thus having a negative effect on financial performance. Taking into account the recent economic downturn in the Baltic States, where internal currency devaluation was carried out by reducing salaries and social benefits, it is likely that customers are very price sensitive and demand more basic products for a cheaper price, thus making any product or process improvements for companies unprofitable.

Further, regression B1 shows that other CSR activities, for example, introduction of codes of conduct, ethical standards, adherence to CSR standards etc., are positively related to financial performance at the 10% level of significance. On average, an increase in other CSR activities by one unit increases ROA by 55.1 basis points. It is possible that customers reward companies that claim adherence to CSR standards, embed CSR in their long term vision and engage in other less tangible CSR activities. Another explanation of the increase in ROA could come from the supply side. Possibly, companies that communicate their ethical standards, adhere to ISO etc. can attain lower costs. For example, employees may be willing to work for lower salaries, knowing that the company is an ethical market player and that in case of economic

downturn, they will not be fired without receiving fair compensation. Similarly, adherence to ISO standards may allow companies to negotiate better terms with their suppliers. It may be the case that a supplier, being itself a CSR conscious company, is willing to deal to other CSR conscious companies, even if it means providing their products or services for a lower fee. This willingness might be self imposed or come from external pressures (e.g. scrutiny of media, investors, government, local community etc.)

Similarly to regression A1, regression B1 reveals that leverage is a significant explanatory factor for explaining ROA at the 5% level of significance. According to the results of regression B1, more leveraged companies have lower financial performance. An increase in leverage across time and companies by one unit causes ROA to decrease on average by 1.6 basis points, so, similarly to regression A1, the effect is rather small. As discussed before, a possible explanation of this direction of relationship might be that more profitable companies generate sufficient cash to finance their investment and working capital needs from internal funds, therefore their external borrowing needs are lower, resulting in lower debt to equity ratios.

Similarly to the previous regressions, the Wald chi2 statistic at the 5% level of significance indicates that at least one of the regression coefficients is not equal to zero and, therefore, explains the dependent variable. For regression B1, the R-sq statistic shows that all the independent variables together explain only 37% of the overall variation in ROA. Therefore, similarly to regression A2, we run regression B2 by adding EBIT as an additional independent variable.

Regression results for regression B2 are presented in Table 10.

Random-effects GLS regression		Number of obs	=	102
Group variable: ID		Number of groups	=	34
R-sq: within	= 0.5992	Obs per group: min	=	3
between	= 0.4850	avg	=	3.0
overall	= 0.5071	max	=	3
corr(u_i, X) = 0 (assumed)		Wald chi2(10)	=	108.02
		Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
COMM	.0430156	.1069552	0.40	0.688	-.1666127	.2526438
WORK	.1606679	.0984551	1.63	0.103	-.0323005	.3536363
ENV	-.1914709	.1094451	-1.75	0.080	-.4059793	.0230375
MARKT	-.095248	.0545612	-1.75	0.081	-.202186	.01169
OtherCSR	.4642038	.2654614	1.75	0.080	-.0560911	.9844986
SIZE	-8.07e-08	4.89e-08	-1.65	0.098	-1.76e-07	1.50e-08
DE	-.0081308	.0058136	-1.40	0.162	-.0195253	.0032638
EBIT	3.32e-06	4.20e-07	7.91	0.000	2.50e-06	4.14e-06
Estonia	-.1858392	.0759532	-2.45	0.014	-.3347047	-.0369737
Lithuania	-.1078053	.0712835	-1.51	0.130	-.2475185	.0319078
ConsumerServices	.1120209	.1090671	1.03	0.304	-.1017468	.3257885
Financials	.1514075	.1124068	1.35	0.178	-.0689057	.3717208
ConsumerGoods	.1883628	.1034775	1.82	0.069	-.0144494	.3911749
Industrials	.0869152	.1062887	0.82	0.414	-.1214068	.2952373
BasicMaterials	.1459719	.1324619	1.10	0.270	-.1136486	.4055924
HealthCare	.0656416	.1166739	0.56	0.574	-.1630349	.2943182
Utilities	.0975057	.1288364	0.76	0.449	-.1550091	.3500204
Technology	-.0382802	.1448586	-0.26	0.792	-.3221978	.2456374
_cons	.0277924	.1190918	0.23	0.815	-.2056232	.261208
sigma_u	.08322989					
sigma_e	.04933263					
rho	.74001405	(fraction of variance due to u_i)				

Table 10 Random effects GLS regression results for regression B2

Similarly to regression B1, regression B2 shows that CSR activities related to market place and other CSR activities affect financial performance at the 10% level of significance and the direction of relationship is the same. On average, an increase in market place related CSR activities by one unit causes ROA to decrease by 9.5 basis points, while an increase in other CSR activities by one unit increases ROA by 46.4 basis points. Additionally, adding EBIT as an explanatory variable results in environment related CSR activities becoming a significant explanatory variable for ROA at the 10% level of significance. Regression B2 results show that, on average, a one unit increase in environment related CSR activities leads to a 19.1 basis point decrease in ROA. A possible explanation of this negative direction of relationship between environment related CSR activities and ROA could be similar to that of

market place related CSR activities. Namely, the costs of investing in environment protection, recycling, resource preservation etc. out-weight the benefits. As discussed before, customers in the Baltics may not be willing to pay a premium for products and services that are created in an environmentally sustainable way. In addition, the concept of environment protection might not be developed well enough in the Baltic States. For example, in the EU, on average 25% of all generated waste were recycled in 2011, while the respective figures for the Baltic States were 20% in Estonia, 10% in Latvia and 9% in Lithuania (Eurostat, 2011). Therefore, customers may not reward companies for environment related CSR activities. Similarly, investors may consider them profit eroding.

Similarly to regression A2, regression B2 reveals that EBIT is positively related to ROA at the 1% level of significance, but the effect very small. On average, an increase in EBIT by 1000 EUR leads to a 0.0003 basis point increase in ROA.

Additionally, regression B2 results indicate that company size is a significant factor explaining ROA, which is in line with regression A2. The results show that larger companies have lower ROA at the 10% level of significance, but the effect is extremely small. An increase in total assets by 1000 EUR causes on average only a 0.000008 basis point decrease in ROA. As discussed before, the direction of relationship between company size and ROA can possibly be explained by the fact, that larger companies may have more bureaucratic inefficiencies and they may be less able to adapt to external changes and pressures. However, as noted before, the magnitude of this effect is extremely small.

As in the previous regressions, the Wald chi2 statistic of regression B2 shows that, at the 1% level of significance, at least one of the regression coefficients is not equal to zero and, therefore, affects the dependent variable. Compared to regression B1, the R-sq statistic has improved with independent variables explaining 51% of the variation in ROA. Therefore, adding EBIT has increased the explanatory power of the regression.

To sum up, regressions B1 and B2 show that in the Baltic States market place and environment related CSR activities affect ROA negatively, while other CSR activities have the opposite effect on firm's financial performance.

When adding previous period ROA as an independent variable to regression B2, there are no changes in the coefficient directions for any of the variables, but all the CSR category variables become insignificant, which is in line with results obtained from regression A3. Previous period ROA is significantly positively correlated to current period ROA, meaning that current financial performance depends on the company's financial performance in the past. The overall R-sq statistic of the regression improves to 58%. The lagged value of ROA is supposed to reduce endogeneity, therefore the fact, that all the CSR category related variables become less significant in regression B3 may somewhat limit the overall findings of regressions B1 and B2.

6.4. POTENTIAL LIMITATIONS

The next two sections discuss the threats of potential statistical limitations of empirical results – multicollinearity and endogeneity.

6.4.1. MULTICOLLINEARITY

In order to recheck the robustness of our results, we first examine the correlation matrix of all the variables, depicted in Table 11.

	COMM	WORK	ENV	MARKT	OtherCSR	EBIT	SIZE	LagROA	Estonia	Lithua~a	Consu~es	Financ~s	Consu~ds
COMM	1.0000												
WORK	0.7147	1.0000											
ENV	0.3514	0.4521	1.0000										
MARKT	0.7090	0.7273	0.4042	1.0000									
OtherCSR	0.6047	0.7169	0.4729	0.7090	1.0000								
EBIT	0.1544	0.3226	0.2701	0.2006	0.3702	1.0000							
SIZE	-0.0388	-0.0672	0.2048	-0.0829	0.1598	0.3203	1.0000						
LagROA	0.1043	0.2020	0.1888	0.2115	0.2359	0.2856	-0.0542	1.0000					
Estonia	0.3593	0.3869	0.0507	0.3645	0.3460	0.0877	-0.0480	-0.1603	1.0000				
Lithuania	-0.3148	-0.3263	-0.0168	-0.4517	-0.2771	0.1004	-0.0038	0.1967	-0.7418	1.0000			
ConsumerSe~s	-0.0112	0.0355	-0.1990	0.0863	0.0656	0.2156	0.2142	-0.0802	0.3569	-0.2251	1.0000		
Financials	-0.0499	-0.1415	-0.1524	-0.2832	-0.1805	-0.2166	0.2684	-0.3352	-0.0994	0.2044	-0.1516	1.0000	
ConsumerGo~s	-0.2542	-0.1977	0.0718	-0.1046	-0.2175	-0.0420	-0.3216	0.1443	0.0234	0.1674	-0.2680	-0.2357	1.0000
Industrials	0.0381	-0.0328	-0.0512	-0.0990	0.0935	-0.3164	0.0278	-0.0745	0.0484	-0.1886	-0.2114	-0.1859	-0.3287
BasicMater~s	-0.1156	-0.0859	0.1335	-0.1247	-0.1270	-0.0251	-0.0886	0.0016	-0.1370	0.1846	-0.0723	-0.0636	-0.1124
HealthCare	-0.0711	0.0375	0.0225	0.1904	0.1105	0.1566	-0.1037	0.1524	-0.2448	-0.0855	-0.1292	-0.1136	-0.2008
Utilities	0.6728	0.3349	0.3983	0.4823	0.4048	0.2434	0.1300	0.1548	0.0605	0.0147	-0.1038	-0.0913	-0.1614
Technology	0.1064	0.1892	0.0322	0.1085	-0.0333	-0.0463	-0.1083	-0.0772	-0.1370	-0.1641	-0.0723	-0.0636	-0.1124
	Indust~s BasicM~s Health~e Utilit~s Techno~y												
Industrials	1.0000												
BasicMater~s	-0.0886	1.0000											
HealthCare	-0.1584	-0.0542	1.0000										
Utilities	-0.1273	-0.0435	-0.0778	1.0000									
Technology	-0.0886	-0.0303	-0.0542	-0.0435	1.0000								

Table 11 Correlation matrix for independent variables

Since the correlation matrix reveals several pairs of variables with correlations above 0.6, which might be a sign of multicollinearity, we perform variance inflation factor (VIF) tests. VIF tests are used to quantify the severity of multicollinearity and the results of the tests are provided in Table 12.

Variable	VIF	1/VIF
ConsumerGo~s	13.18	0.075866
Industrials	11.45	0.087352
Lithuania	9.01	0.111010
Estonia	8.64	0.115770
Financials	8.38	0.119385
ConsumerSe~s	8.32	0.120257
Utilities	7.29	0.137096
WORK	5.99	0.167076
HealthCare	5.72	0.174877
COMM	5.48	0.182487
MARKT	5.00	0.200034
OtherCSR	3.91	0.255702
SIZE	3.72	0.268724
EBIT	3.34	0.299325
Technology	2.89	0.346367
BasicMater~s	2.78	0.359972
DE	2.54	0.393466
ENV	2.29	0.437269
LagROA	1.48	0.674945
Mean VIF	5.86	

Table 12 VIF tests for independent variables

Table 12 shows that most of the variables have VIF lower than the generally accepted level of 10, which indicates, that the problem of multicollinearity is not severe. Exceptions are the two industry dummies of Consumer Goods and Industrials, with VIFs of 13.18 and 11.45, respectively. In order to check if these two multicollinear variables cause distortions in regressions, we rerun regression B2 by excluding the two industry dummies. The results show that excluding the two dummies does not change the direction of coefficients for all the major variables, however the CSR related variables become less significant. Since the theoretical foundation does not allow us to drop the two multicollinear variables, these results somewhat limit the generalizability of results from regressions A and B.

6.4.2. ENDOGENITY

Regressions A3 and B3 indicate that adding previous period ROA as an independent variable changes the significance level of the CSR related variables. As discussed before, most previous researches that look for the relationship between CSR and firm financial performance, have not included lagged values of dependent variable as

independent variables, therefore they have not corrected for endogeneity and may suffer from serious limitations. Several researchers (e.g. Bird et al. (2006)), have tried looking at the causal relationship between CSR and company profitability, but, as mentioned before, the overall results in this field are inconclusive. Therefore, generalization of the results of our research and also most other researches that look for the CSR - CFP relationship may have limitations.

7. MAIN FINDINGS

This section summarizes the main conclusions regarding CSR activities in the Baltic States, CSR development trends over time and between industries. Further follows a summary of the main findings from the regression analysis, firstly, about the overall CSR – CFP relationship and, secondly, about the CSR – CFP relationship for the individual CSR categories of workplace, market place, environment, community and other CSR.

7.1. CSR ACTIVITIES IN THE BALTIC STATES

In the Baltics, companies devote two thirds of their CSR effort to workplace and market place, which, as discussed before, might be an indicator that CSR awareness is in an early stage in the region. Customers and employees are the most influential stakeholders, so most CSR effort is directed to “please” these stakeholder groups.

After correcting for outliers, all three countries have roughly the same amount of CSR related disclosure of around 60 sentences per annual report, therefore the amount of CSR activities should be similar, too. This is also a sign that the three countries are in a similar state of CSR development.

Estonian companies have relatively more focus on workplace, market place and community related CSR activities. Meanwhile, Latvian companies focus most on market place, but Lithuanian companies engage relatively more in workplace and environment related CSR activities.

Company CSR activities have increased over time in the Baltics, which is represented by the increase in CSR related disclosure from 67 to 79 sentences per annual report on average. This means that the region is developing and thus, more attention is paid to socially responsible business practices.

Utility companies engage most in CSR activities, followed by health care and technology companies. As discussed before, the results are no surprising, since utility companies are using up relatively more natural resources and contribute to polluting the environment, so they compensate by engaging in more CSR activities. Health care and technology companies represent sophisticated industries and focus more on “pleasing” the end consumer. On the opposite side are basic material companies that,

as discussed before, have a simple business-to-business orientated model and therefore, feel less need or pressure to engage in CSR activities.

7.2. OVERALL CSR – CFP RELATIONSHIP

Overall, we find no evidence that CSR activities have any effect on firm financial performance in the Baltic States. Further we find that leverage, earnings before interest and taxes and company size significantly affect company financial performance, however, the magnitude of the influence is extremely small for all these factors.

7.3. CSR – CFP RELATIONSHIP OF INDIVIDUAL CSR CATEGORIES

We find evidence, that certain CSR activities affect firm financial performance. Firstly, market place related CSR activities have significant negative relationship with ROA, indicating that customers in the Baltics are not ready to reward companies for improved products or services. Secondly, environment related CSR activities were found to have significant negative relationship to ROA, possibly signaling that environmental awareness is still at its infancy in the Baltics and customers are not willing to pay more for sustainably produced products and services. Thirdly, other CSR activities, such as adherence to different standards (e.g. ISO), codes of conduct and ethical guidelines, a long term vision or strategy that promotes CSR, development plans and socially responsible R&D effort as well as other values and more abstract CSR related disclosure have a significant positive impact on firm financial performance. Since it seems that the end customers tend not to reward company CSR effort, which is illustrated by the negative relationship between environment and market place related CSR activities and ROA, the better financial performance of companies that engage in the abovementioned other CSR activities might be explained by the business to business market. As discussed before, this effect might be coming from the supply side, with CSR conscious suppliers rewarding their CSR conscious counterparts, meaning that companies that are socially responsible in their business conduct and work in the business to business market, prefer to sell their products to other CSR conscious companies, probably at better prices. Another explanation could be that in general, the end consumers tend not to reward direct company CSR spending, but are willing to reward the more abstract notion of CSR –

standards, values, vision, strategy and the other abovementioned CSR activities that were grouped under other CSR.

Among the three significant CSR categories, other CSR activities have the largest impact – one such activity increases ROA by roughly half a percent. It is followed by environment and market place related CSR activities reducing ROA by roughly 0.2% and 0.1%, respectively.

Similarly to the previous findings for total CSR activities, we find that leverage, earnings before interest and taxes and company size significantly affect company financial performance, however, the magnitude of the influence is extremely small for all these factors.

Next, a more detailed discussion and analysis of the main findings is provided.

8. DISCUSSION AND ANALYSIS OF THE CSR – CFP RELATIONSHIP

The following chapter discusses and compares the findings to the results of previous researches of the CSR – CFP relationship. Further, it draws managerial implications for the Baltic companies and outlines our theoretical contributions.

8.1. OVERALL CSR – CFP RELATIONSHIP

As discussed before, the CSR – CFP relationship has been examined extensively using various research methodologies. For the sake of relevance this section compares the results of this study to those other researches that have used either a similar methodology or covered a developing region.

Overall, the results of this research do not seem to support any of the CSR theories, because no significant effect on firm's profitability was detected if it had invested extra effort in CSR activities in general. Consequently, the overall findings of this research have no support for the good management theory, which states that good management practices, such as taking care of major stakeholders, should eventually have a positive effect on company financial performance. Neither we find support for the trade-off theory, which, as discussed before, claims that socially responsible companies devote much resources to CSR related activities and, as a result, that makes them disadvantaged compared to socially less active enterprises, which concentrate on profit seeking. These findings are in line with the results of Hackston & Milne (1996) and Aras et al. (2010) who used a similar methodology of content analysis and did not find significant relationship between CSR and CFP. The study of Hackston & Milne (1996) was done in the generally more developed market of New Zealand, but the sample year of 1992 indicates the probable infancy of CSR awareness in the region at that time, which could be similar to the Baltics nowadays. The second study of Aras et al. (2010) investigated their home country Turkey, which is an emerging region, possibly being at a similar CSR development stage as the Baltic States. A contradicting result of significant positive CSR – CFP relationship was obtained by Evareart et al. (2009) using a similar methodology. The authors tested companies in Belgium, which is more on the tier of mature countries than the Baltics, so this could indicate that the overall development stage of a region shapes the CSR – CFP relationship. Two other studies that had similar conclusions of no

relationship between CSR and CFP, though used other methodologies to measure CSR performance, were Mahoney & Roberts (2007) who tested the developed market of Canada for the years 1996-1999 and Ahmed et al. (2012), who looked at companies in Bangladesh in 2009.

Overall, as it is stated in the before mentioned aggregated studies of the CSR – CFP relationship by Margolis & Walsh (2002) and Orlitzky et al. (2003), previous researches have found the CSR – CFP to be more existent than not. Though, most of the sample studies were carried out in the US and UK, where both – stock markets and CSR awareness are more developed than in the Baltic States. The somewhat contradicting result of this research that found no significant CSR – CFP relationship is in line with other researches that have looked at developing regions using the same methodology. This indicates, that the CSR – CFP relationship is different in regions of different development stages. It seems that in less well-developed regions, including the Baltic States, customers do not reward company CSR effort. On the other hand, more mature economies, such as the UK and US, tend to have positive CSR – CFP relationship, meaning that customers are willing to pay more for the products and services delivered by CSR conscious companies. These differences might exist because the notion of CSR might not be yet established well enough in the societies of developing regions.

According to the institutional organization theory, “structures, including schemas, rules, norms and routines, become established as authoritative guidelines for social behavior” (Scott, 2004). CSR might be considered as a norm that becomes established or institutionalized in the environment, where companies operate. In developed regions, the notion of CSR has become institutionalized and serves as an authoritative guideline for company behavior. This means that the society expects companies to be CSR considerate and, consequently, reward them for their CSR effort, which is represented by the positive CSR – CFP relationship found by many researches carried out in the developed markets. On the contrary, in less well developed regions, the notion of CSR has probably not become institutionalized, so the society does not care whether companies are CSR conscious or not. The CSR – CFP researches of developing regions, including this one, that do not find any significant CSR – CFP relationship, support this statement. In the future, as the concept of CSR becomes

more established in the societies of developing regions, we expect the CSR – CFP relationship to become positive.

Further, although no significant relationship was found on the overall level between CSR and firm financial performance, it might be the case that certain CSR activities tend to reduce risks. For example, taking care of employees by providing them career development opportunities and pleasant working conditions might help to prevent strikes. Similarly, spending on community CSR activities might reduce the risk of boycotts against the company. Therefore, ignoring CSR even in developing regions where it does not seem to be institutionalized in the society, might not be a forward looking managerial decision.

8.2. CSR – CFP RELATIONSHIP OF INDIVIDUAL CSR CATEGORIES

As discussed before, we find that market place and environment related CSR activities have significant negative relationship firm to financial performance, indicating that customers do not reward companies that produce their products and services in a sustainable way, probably due to the fact, that the concept of CSR has not yet been institutionalized in the Baltic States. On the other hand, other CSR activities, which include the more abstract part of CSR, for example, adherence to different standards, a vision or strategy that promotes social responsibility, introduction and adherence to codes of ethic and social conduct, stakeholder approach in communication and other less tangible CSR effort, were found to have significant positive relationship with firm financial performance. As discussed before, it might be the case that end customers reward these types of CSR activities, or the companies are able to negotiate better deals with their suppliers, who themselves might be socially responsible. The results of this study are partially in line with Saleh et al. (2008) – they also found significant negative relationship between environmental CSR activities and financial performance in the Malaysian market, while contrary to this study, market place CSR disclosure was rewarded by higher profitability.

With regard to company activities concerning individual CSR categories, the findings are in line with other researches. Workplace related CSR actions have been identified as the most popular CSR activity in studies by Hackston & Milne (1996), Everaet et al. (2009), Adams et al. (1998) and Dagiliene (2010), while market place related

disclosure had the second place in those studies or even the first one as in Aras et al. (2010). As discussed before, those two categories are the ones that are supposed to have the highest impact on company's stakeholders, thus spending more effort there seems to be a rational decision. According to the results of this study, environment and community actions seem to represent the "luxury" or the minority part of CSR. Generally, companies in the Baltics engage less in these types of CSR activities and as our findings suggest, they may be profit eroding.

8.3. MANAGERIAL IMPLICATIONS

Judging purely on the findings of this study it is possible to claim that managers in the Baltic States should not expect to experience direct positive profit effects from paying more attention to CSR activities in general, except for such activities as adherence to CSR standards, codes of ethics etc. Though, as mentioned before, neglecting CSR may be a dangerous decision.

First of all, there is a general tendency of increasing CSR awareness in the developed markets and previous researches have found an associated financial pay-off. Having the assumption that the Baltic States are on their track to catch the Western European countries in terms of economic and cultural development, this is a matter of time when CSR activities start playing a significant role in corporate profitability. Consequently, companies that are engaged in CSR at the moment will have more experience in good practices and corresponding communication, making them better equipped for competition.

The other argument for being socially responsible in the Baltic States may be hidden in one of the four business cases for CSR practice as discussed by Kurucz et al. (2008) – "Risk and cost reduction". It may be so that a certain level of CSR activities is a hygiene factor for corporations, i.e. failing to manage the basic needs of the main stakeholders may result in both – bad internal atmosphere and bad external image of the company. So, even without expectations to have higher profits because of CSR practice, managers should be aware of investing a minimum amount of effort in keeping up a sufficient level of social responsibility.

From what this study suggests, currently it makes the most sense to invest in the category of Other CSR activities, for example, expressing CSR focus in the

company's long term vision and strategy, introducing codes of conduct, ethical standards, adhering to CSR standards and using a stakeholder approach when communicating. However, as discussed before, with the further development of the Baltic region, other CSR activities may start to pay-off, leading to positive CSR – CFP relationship as found in other developed markets by, e.g., Everaet et al. (2009).

8.4. THEORETICAL CONTRIBUTIONS

This research has contributed to the theoretical understanding of the CSR – CFP relationship in several ways. Firstly, it provides insight into the CSR activities of the Baltic companies and the findings regarding CSR – CFP relationship in the Baltic States. Secondly, we have developed a methodology that allows looking at the effect of individual CSR categories to firm financial performance. We have also found indication that CSR relationship to profitability may change over time as a region develops economically and socially and the notion of CSR becomes institutionalized. The last point is of a particular interest, since the main available theories, namely the trade-off theory, the good management and the slack resources theory that explain the CSR – CFP relationship are of a static nature. It might be the case that all the theories can be observed in practice at some period of time depending on the development stage of the region. At first, the trade-off theory, where all emphasis is on profit maximization might prevail. Further, as a region develops economically, the slack resources theory might explain a shift to more CSR spending, when more free resources become available to companies. This seems to be the case in the Baltics now, because the amount of CSR disclosure has been growing despite no evidence that these efforts bring financial benefits. Also, as discussed before, there are signs of possible endogeneity in the CSR – CFP relationship in the Baltics, meaning that the causality might be reverse, which would further support the slack resources theory. Lastly, when a region attains a well-developed state, the good management theory may be the dominating and CSR efforts finally lead to better financial performance.

9. CONCLUSION

This section summarizes the main conclusions and provides suggestions for future research.

9.1. MAIN CONCLUSIONS

The aim of this research was to examine the CSR relationship to firm financial performance in the developing Baltic States of Estonia, Latvia and Lithuania by answering the research question: “Which CSR activities of publicly listed companies in the Baltic States have impact on firms’ financial performance?”

We found that in the Baltics, companies devote most of their CSR effort to workplace and market place related CSR activities, which is in line with previous researches. Customers and employees are the most influential stakeholders, so most CSR effort is directed to “please” these stakeholder groups.

In line with previous researches that have used a similar methodology or looked at markets in a similar state of development, we found that overall CSR activities have no significant impact on ROA, thus finding no conclusive support for any of the CSR – CFP theories.

However, certain individual CSR activities were found to affect CFP. Firstly, market place related CSR activities were found to have significant negative relationship with ROA, indicating that customers in the Baltics are not ready to reward companies for improved products or services. Secondly, environment related CSR activities have significant negative relationship to ROA, possibly signaling that environmental awareness is still at its infancy in the Baltics and customers are not willing to pay more for sustainably produced products and services. Thirdly, other CSR activities, such as adherence to different standards, have a significant positive impact on firm financial performance. We speculated that either end customers reward the more abstract part of CSR, or this effect might be coming from the supply side, with CSR conscious suppliers rewarding their CSR conscious counterparts.

The findings for the individual CSR categories partly support the trade-off theory, which states that companies should focus on profit maximization and that CSR activities are profit eroding, as was the case for environment and market place related CSR activities. Some support is found also for the good management theory, because other CSR activities have positive effect on firm financial performance. We speculate, however, that the Baltic States are transitioning from a developing region to a more mature one, therefore, the CSR – CFP relationship might be evolving and will reach positive trend in the future as the concept of CSR becomes institutionalized.

9.2. SUGGESTIONS FOR FURTHER RESEARCH

There are at least a couple of streams for further research of the CSR – CFP relationship in general and also specifically in the Baltic States.

Firstly, this research suggests that the CSR – CFP relationship might be endogenous in the Baltics, so the causality of the relationship is not clear. Further research could be done in testing if higher profits result in more extensive CSR activities, in line with the slack resource theory, or more CSR activities lead to higher profits, in line with the good management theory.

Another area of future research could be to check the CSR relationship to short term financial results in the Baltics by either using the content analysis method and combining it with stock market returns or doing an event study, which checks if a CSR related announcement had a significant impact on stock returns within a couple of days around the announcement. This could help to understand if shareholders and stock market investors react to CSR activities in the Baltic States.

Further, in order to gain a better understanding of the possible dynamic nature of the CSR – CSP relationship, a meta-study of existing researches could be carried out to look for relationship patterns for countries in different development stages. We speculate that the existing researches of less developed countries would mostly support the trade-off theory, slowly moving to the slack resources theory and finally the good management theory, as the region reaches a well-developed stage.

Finally, in order to gain more evidence that individual CSR categories have different effects to firm financial performance, our developed methodology could be applied to

other countries. This could be beneficial for company managers to better target their CSR activities so that they bring value not only to their customers, suppliers, environment and community, but also to their shareholders, who could enjoy greater profits via being socially responsible.

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APPENDIX I. CSR CATEGORIES

Community

Infrastructure development
Citizen wellbeing
Community Health care
Donations
Charity
Sponsorship
Social responsibility
Employment of students
Aiding research

Workplace

Personnel development
Employee training, education
Employee satisfaction
Employee health care
Employee safety
Compliance with safety standards
Hazard reduction
Accident statistics
HR policy
Remuneration policy
Employee insurance
Pension schemes
Share repurchase schemes
Recreational activities
Employee statistics
Information about relationship with management
Job stability
Corporate events
Motivation
Workers union
Trade unions
Strikes
Information about maternity leave
Minorities
Social guarantees

Environment

Sustainability
Environment protection
Waste management
Green initiatives
Conservation of natural resources
Pollution control
CO2 emission control
Usage of recycled materials
Process efficiency
Environment related awards
Environment harmonuous constructions
Environmental impact studies

Market Place

Product development
Product safety
Product quality
Consumer information
Client relations (CRM)
Public relations (PR)
Creditor relations
Supplier relations
Competitors

Other

Long term vision/strategy
Codes of conduct
Adherance to any standards (ISO, etc.)
Risk management practices
Disclosure and reporting quality
Development plans
Stakeholder approach
R&D
Values
.

APPENDIX II. DECISION RULES FOR CSR DISCLOSURE CODING

- All disclosures must be specifically stated, they cannot be implied.
- Any disclosure, which is repeated, shall be recorded as a CSR related sentence each time it is discussed.
- If any sentence has more than one possible classification, the sentence should be classified as to the activity most emphasized in the sentence.
- Tables, graphs and pictures, which provide information, which is on the checklist, should be treated as one sentence by recording the sentence directly before the table.
- Discussions of directors' activities, including both, management and supervisory board are not to be included as a discussion on employees.
- All sponsorship activity is to be included, no matter how much of it is advertising.
- All innovations in products or services should be included unless it is explicitly stated that they were necessary in order to stay competitive in the marketplace or attract business.
- Discussions relating to the quality of goods and services will be treated as CSR unless they clearly state that the quality improvements were necessary in order to stay competitive in the marketplace or attract business.
- Discussions relating to Corporate Governance will not be included since Corporate Governance disclosures are mandatory in the Baltic States.
- Discussions related to accounting policies will not be included.
- The auditor's reports will not be included.
- Information provided as footnotes or endnotes will not be included.