# Trends and determinants of social and environmental information disclosure in Lithuanian companies: a literature review

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#### Abstract

The paper presents the findings of a literature review of the empirical studies on the social and environmental information (SEI) disclosure that were carried out in Lithuanian companies in 2000–2015 with the aim to identify determinants of the phenomenon and trends of its development. Having reviewed 14 papers included in the national database of scientific journals, Lituanistika, the authors identify both qualitative and quantitative studies which present the results of content analysis of SEI or corporate social responsibility (CSR) reports. Content-wise they tend to explore the relationship between SEI disclosure and company profile such as industry sector, company size, financial leverage, profitability, and pollution. The findings are of a mixed character except for the industry sector, which is an unambiguous determinant of SEI disclosure in Lithuanian companies. Disclosed information by Lithuanian companies is less numerous and includes fewer stakeholders (i.e. employees, society and environment) compared to the reports of multinational companies or enterprises operating in advanced economies. As Lithuania is a post-Soviet society with a long tradition of presenting a better reality in reports, the contents of SEI could be analysed through the integrity perspective which would inevitably draw researchers' attention not only to the text in annual or CSR reports, company websites or press releases, but also to the practices as perceived by the companies' stakeholders.

**Keywords**: corporate social responsibility, reporting, information disclosure, Lithuania, social and environmental information.

### Streszczenie

### Trendy rozwoju oraz determinanty ujawniania informacji społecznych i środowiskowych w litewskich przedsiębiorstwach: przegląd piśmiennictwa

W niniejszym artykule przedstawiono wyniki przeglądu badań empirycznych prezentowanych w literaturze na temat ujawniania informacji społecznych i środowiskowych (*Social and Environmental Information* – SEI), które przeprowadzono w litewskich przedsiębiorstwach w latach 2000–2015. Celem artykułu było wskazanie determinant tego zjawiska i trendów w jego rozwoju. Po przanalizowaniu 14 artykułów

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znajdujących się w narodowej bazie danych prac naukowych "Lituanistika" autorzy wyróżnili zarówno jakościowe, jak i ilościowe badania przedstawiające wyniki analizy treści SEI lub raportowania odpowiedzialności społecznej korporacji (*Corporate Social Reporting* – CSR). Autorzy tych artykułów najczęściej opisują zależność pomiędzy poziomem ujawnień SEI oraz profilem przedsiębiorstwa obejmującym takie elementy, jak sektor gospodarki, wielkość spółki, wskaźnik dźwigni finansowej, rentowność czy też zanieczyszczenie środowiska. Przedstawione wnioski z badań są różne z wyjątkiem takiego czynnika, jak sektor gospodarczy, który stanowi jednoznaczną determinantę ujawniania SEI w litewskich przedsiębiorstwach. Informacje ujawnione przez litewskie korporacje nie są tak rozbudowane i są kierowane do mniejszej liczby interesariuszy (tj. pracowników, społeczeństwa i środowiska) w porównaniu z raportowaniem międzynarodowych spółek lub dużych przedsiębiorstw działających w rozwiniętych gospodarkach. W związku z tym, że Litwa jest krajem postsowieckim o długiej tradycji przedstawiania w raportach rzeczywistości w lepszym świetle, treść SEI może być analizowana przez pryzmat integralności, co nieuchronnie zwróciłoby uwagę badaczy nie tylko na tekst zawarty w raportach rocznych lub CSR, na stronach internetowych czy też w komunikatach prasowych, ale także na działania postrzegane przez interesariuszy przedsiębiorstw.

**Slowa kluczowe**: społeczna odpowiedzialność przedsiębiorstwa, sprawozdawczość, ujawnianie informacji, Litwa, informacje społeczne i środowiskowe.

### Introduction

Fast changes in the economic and social environment and increasing competition demand that companies consider society's expectations and needs as well as apply the principles of corporate social responsibility (hereafter – CSR) in their activities and be accountable for them. These changes have given rise to social and environmental accounting (hereafter – SEA) as an extended accountability of organizations beyond the traditional reporting on financial performance to the owners of the capital (Gray et al., 1987). Since the 1970s, the extending practice of corporate social and environmental reporting has been accompanied by an increased academic interest in this phenomenon, with a number of empirical studies on SEA increasing noticeably from 1995 onwards. The number of published SEA empirical studies during the post-2000 period proliferated. For example, 132 studies were published during the 2000–2006 period, nearly doubling the number that had been published during the preceding decade (O'Connor, 2006).

The results of SEA are reflected in the social and environmental information disclosures in a variety of annual financial, environmental, social responsibility or sustainability reports and company websites. From 2016, large listed companies operating in the EU are obliged to report on social and environmental impacts. Until then, the disclosure of social and environmental information (hereafter – SEI) by companies had been voluntary. This aspect of SEA has met with criticism which claims that the disclosed information is trivial and directed at impression management rather than a reflection of the corporate progress in managing social and environmental impacts or adding value to a company's valuation (Cho et al., 2012, 2015; Gray et al., 1987).

Moving from voluntary to mandatory reporting by large companies may set a different benchmark to the disclosure of SEI, which is able to withstand the above-mentioned criticism. Therefore, it is necessary to identify conceptual, methodological and practical challenges to companies in SEI disclosure as this knowledge could improve organizational practice and establish SEI disclosure as a managerial tool to advance the well-being of societies. In addition, identifying peculiarities of SEI disclosure which undermine its credibility in practice could provide political recommendations which can be taken into consideration when setting national regulations for SEA and respective reporting.

Prior research on SEA as a disclosure of SEI is quite abundant. The contents and forms of CSR reports, and the determinants for this kind of reporting in different national contexts have been the focus of researchers for a number of years (O'Connor, 2006; Parker, 2011, 2014; Oliveira et al., 2013; Cho et al., 2015). However, most of the research findings come from economically leading countries and developed regions in which CSR ideas and principles have been rooted in the mindset, behaviour and expectations of societies and companies. Research on disclosure of SEI as a necessity in responding to society's expectations and the practice of enhancing the well-being of the business and future generations has been scarce in the new and emerging economies of Eastern and Central Europe, such as Lithuania.

We chose Lithuania as a context for studying SEA and SEI disclosure because of its post-Soviet past that had accustomed its members of society to there being a gap between normative statements and factual behaviour (Pučėtaitė, Lämsä, 2008; Ryan, 2006), creative report writing, and imitating standards (Ivanauskas, 2006). To this day, large parts of society regards CSR reports and SEI disclosure as lip service rather than an effort to be accountable to stakeholders and improve its performance. In this respect, shedding light on the reported aspects of social and environmental performace by Lithuanian companies and the stakeholders to which they feel accountable and identify the socio-cultural peculiarities of SEI disclosure may be of interest to international audiences. So far, a large part of the publications on SEI disclosure in Lithuania have been conceptual: they attempt to define the phenomenon and analyse the determinants but they do not discuss empirical data (Juščius, Snieška, 2008; Dagilienė, 2009; Leitonienė, Šapkauskienė, 2012; Dagilienė et al., 2014 etc.). To our knowledge, no attempts have been made to systematize the research, particularly the empirical studies in this field in Lithuania, or identify respective gaps which should be addressed in further research.

Therefore, to advance the research on, and the practice of company reporting on social and environmental impacts in this region, we attempt to systematize the findings of prior empirical studies in the field. In particular, in this paper we are interested in trends and determinants of SEI disclosure in Lithuanian companies in 2000–2015. To achieve this purpose we carried out a literature review of the research findings on social and environmental reporting of Lithuanian companies.

## 1. Background of social and environmental information disclosure and practice

The development of SEI disclosure practices dates back to the early and mid-1990s, when companies started the trend of disclosing environmental and social policies, practices and/or impact within their annual reports. As such, SEI became a part of the financial reports, growing in extent, which accounted for companies publishing separate social and environmental reports (Deegan, 2007).

In some countries, mandatory reporting established by national laws and other legal regulations oblige companies to report based on their size, legal status, national accounting system, dominant financial resources and other determinants. In most countries, financial accounting, which provides information about the economic/financial performance of an entity, is heavily regulated according to corporation laws and accounting standards. On the other hand, there is a relative absence of requirements relating to the public disclosure of information about the social and environmental performance of an entity (Deegan, 2007). Therefore, the company's relationship with the natural environment, its attitude to environmental protection and information disclosure significantly depend on the legal regulations of the state in which an entity is founded.

SEI disclosure can be explained by a systems-oriented view. In accordance with Gray et al. (1996, p. 45): "(...) a systems-oriented view of the organisation and society (...) permits us to focus on the role of information and disclosure in the relationship(s) between organisations, the State, individuals and groups". The term is interchangeably used with the one of social and environmental reporting, which is commonly referred to as corporate social responsibility or CSR reporting (Deegan, 2007). The concept has been explored through the perspectives of disclosure theories (e.g. institutionalism) and socio-political theories (e.g. stakeholder or legitimacy).

During the last three decades, stakeholder theory and legitimacy theory have been applied primarily to explain why organisations disclose their social and environmental performance within their annual reports. Stakeholder theory (Freeman, 1984) holds that individuals and groups who are influenced by or who influence the company, i.e. stakeholders, have intrinsic rights which should be respected (Deegan, 2003, p. 268). Respectively, they have a right to be provided with the information on which ways the organisation has an impact on them (e.g. through pollution, community sponsorship, provision of employment, workplace safety or well-being initiatives, etc.), even if they choose not to use the information (Deegan, 2003, p. 269). Therefore, the company has a moral obligation to report on its impact. Moreover, as stakeholder influence on companies has increased over the years, companies have to take into consideration stakeholders' expectations on the character and extent of information that should be reported (Gray et al., 1995). Therefore, it is not sufficient just to report plain numbers but also provide qualitative characteristics of SEI (Wong, 2011).

Legitimacy theory asserts that organisations continually seek to convince society that they operate within the bounds and norms of their respective societies, i.e. they attempt to ensure that their activities are perceived by outside parties as being legitimate (Deegan, 2003). Therefore, the role of corporate reports is to inform society how it carries out the assumed responsibility (Deegan, 2007). As a significant tool for corporate communication, the annual report may be used by corporate management to signal its current level of performance to the community (Godfrey et al., 2006, p. 639). Therefore, corporate reporting, as an information distribution tool controlled by management, plays an important role in achieving corporate legitimacy (Godfrey et al., 2006, p. 639–640).

The development of SEI disclosure practices. Since the 1990s in advanced economies, issues related to environmental accounting have outgrown those in social accounting. Environmental issues are perceived as essential to human survival, the scope of disclosed environmental information increases, and companies and governments announce sustainable development reports. Reports on corporate social impact are more frequent in the cases when companies operate in developing countries with high unemployment, low living standards and underdeveloped mechanisms of law enforcement.

During the post-2000 period, three key developments in empirical research in the social and environmental accounting field can be distinguished:

- 1) the relative proliferation of empirical studies published in academic journals in the SEA field;
- 2) a significant increase in the depth of empirical work being undertaken, evidenced by
  - a) a growing number of studies explaining social and environmental reporting practices;
  - b) a growing number of studies investigating the faithfulness of social and environmental reporting practice;
  - c) the emergence of studies aiming to establish the degree to which SEA is leading to organizational change; and
- d) a significant increase in the number of studies using multiple sources of data; and
   3) a significant increase in the number of studies located outside of North America (O'Connor, 2006).

Most research in the post-2000 period had the primary aim of describing the practice in developed countries such as Australia, the UK or the USA (O'Connor, 2006), and social and environmental information quality or its materiality were less studied (Wong, 2011). In particular, environmental disclosure within annual reports was more frequent among companies with either vested interests in the natural environment or those subject to pressures from public or regulatory authorities, e.g. chemical, petroleum, water and power companies (Godfrey et al., 2006, p. 644). Moreover, to this day these companies are criticized for providing predominantly "good news" in SEI disclosure rather than admitting failures and describing measures for dealing with them. The most popular research method of studying SEA was content analysis. The data were collected by using the methods of document analysis such as company websites and

reports; survey responses, interviews and combinations of these research methods were less popular data sources (O'Connor, 2006; Wong, 2011).

Research on environmental accounting in countries where disclosure of environmental information has not become widespread is usually characterised by more general, pilot studies with the aim of identifying the state, characteristics and prevalence in the country. One of the major trends in the field of this research is analysis of the organization-level determinants of SEI disclosure. This body of research highlights the characteristics of companies which make SEI available to the society. For example, a meta-study by Tian and Chen (2009) of the empirical findings of the research on SEI disclosure has distinguished the company size, financial leverage, assets, profitability, headquarters of the parent company, and capital structure. Disclosure of extra information also depends on the type of company's shares (listed or not).

The results of the overview of other studies in the field are presented in Table 1. SEI disclosure has been explored from various perspectives. One group of research findings relates to the determinants of disclosing financial, social and environmental information in general and in the internet particularly. The other focuses on the contents of social information alone. Based on these findings, diverse economic determinants of SEI disclosure can be distinguished, however, company size is the most often used control variable in empirical studies of SEI disclosure.

Table 1. Determinants of corporate social and environmental information disclosure

Authors/studies	Determinants			
M.R. Mathews (1995); T.H. Ismail (2002); W. Mendes-Da-Silva,				
L.A. de Lira Alves (2004); W.M. da Silva, T.E. Christensen (2004);	1);			
R. Prabowo, J.J.C. Tombotoh (2005); J. Guthrie (2006); A. Andri-	Company size			
kopoulos, N. Diakidis (2007); Y. Tian, J. Chen (2009); L.S. Yao, J.				
Wang, L. Song (2011); R.P. Guidry, D.M. Patten (2012)				
M.R. Mathews (1995); T.H. Ismail (2002); W. Mendes-da-Silva,				
L.A. de Lira Alves (2004); J. Guthrie (2006); Y. Tian, J. Chen	Industry sector			
(2009); S. Yao, J. Wang, L. Song (2011); A.H. Khasharmeh,				
M. Desoky (2013)				
T.H. Ismail (2002); W. Mendes-Da-Silva, T.E. Christensen (2004);				
R. Prabowo, J.J.C. Tombotoh (2005); A. Andrikopoulos, N. Diaki-	Profitability			
dis (2007); Y. Tian, J. Chen (2009); A.H. Khasharmeh, M. Desoky	Tiontaomty			
(2013)				
T.H. Ismail (2002); W. Mendes-Da-Silva, T.E. Christensen (2004);	Financial leverage			
A. Andrikopoulos, N. Diakidis (2007); Y. Tian, J. Chen (2009)				
W. Mendes-Da-Silva, T.E. Christensen (2004); K. Hussainey,	Liquidity indicators			
M. Elsayed, M.A. Razik (2011)				
W. Mendes-Da-Silva, T.E. Christensen (2004)	Earnings per share			

Source: own analysis.

In terms or frequency of use in empirical studies, after company size is industry sector. Khasharmeh and Desoky (2013) established that manufacturing companies more often disclose SEI than other sectors. Studies tackling other organizational determinants for SEI disclosure highlight financial determinants. Ismail (2002) states that companies disclose things other than financial information to prove to their stakeholders that they are capable of meeting their commitments. The statement is supported by Perrigot et al.'s (2012) study which argues that the higher the debt/private capital ratio, the higher the probability of SEI disclosure. However, other studies referred to in the table have yielded mixed results between financial performance and SEI disclosure. For example, Andrikopoulos and Diakidis (2007), and Tian and Chen (2009) established a positive relationship between positive financial performance and disclosure of SEI. Yet more studies articulated that a company's profitability has a positive impact on SEI disclosure. Based on the findings of prior research, we can conclude that disclosure of SEI positively depends on the company size and industry sector; profitability, financial leverage and the amount of assets have a mixed and, in the case of a positive effect, a weaker impact on the disclosure of SEI. The significance of liquidity and earnings per share is low.

The discussion of the determinants of SEI disclosure is based on the practice of foreign companies. Lithuanian companies have experience of just 20 years in reporting social and environmental impact. Therefore, it is important to reveal both the trends in SEI reporting and the contents of these reports and to identify the determinants of SEI disclosure.

### 2. Regulation of SEI disclosure in Lithuania

In Lithuania, the disclosure of environmental information is barely regulated: just a few legal acts set a requirement to disclose SEI in financial reports. The Law on Financial Statements of Entities of the Republic of Lithuania (2001) obliged all Lithuanian companies from 2006 on to prepare an annual note to the full financial statements and disclose information related to environmental and people management issues. Yet neither the content nor the form of the information disclosure is defined, therefore, business entities disclose the relative information subjectively. Such information may be insignificant and lack clarity about the company's relationship with nature and human resources. National accounting standards for business enterprises do not contain a note about dealing with SEI and its disclosure.

Information disclosure of listed entities in Lithuania is controlled by The Corporate Governance Code for the Companies Listed on the NASDAQ OMX Vilnius. They set more definite rules for information disclosure than legal acts but the scope and content of the information depends on company discretion. Companies have to comply with the Code, which requires that information be disclosed to the market appropriately, yet disclosure of the information related to CSR is voluntary.

In conclusion, the regulations regarding mandatory SEI disclosure in Lithuania are rather modest. The laws point to disclosing environmental information yet the content and the methods are not defined. The lack of clear and precise regulations leaves a lot of freedom to companies to disclose information which often takes on a rather declarative character.

Lithuanian companies which voluntarily disclose information rely on the Guidelines for Multinational Enterprises by the Organization of Economic Cooperation and Development (OECD) and Sustainability Reporting Guidelines by the Global Reporting Initiative. They set recommendations on how to report their actions with the labour force, environmental protection, consumer rights and anti-corruption. In 2005, 44 Lithuanian companies joined the Global Compact of the UN Development Programme, an initiative that started globally in 1999 and promotes business responsibility in the fields of human and employee rights, environment protection and anti-corruption. At the beginning of 2015, there were 73 companies of Lithuanian and foreign capital that had signed the initiative. These are companies, associations, trade unions operating in the sectors of finance, telecommunication, manufacturing, consulting and education etc. However, almost 40% of the companies fail to report their progress, which has been a mandatory UNDP condition since 2008. Hence, voluntary participation in the initiative does not result in strict(er) disciplinary action when failing to comply with the commitments.

Therefore, the missing legal basis for SEI disclosure and the lack of rigid requirements in the voluntary reporting result in a variety of information disclosure forms in Lithuania. It is given in financial statements or annual sustainability-related reports, placed in the company websites; the contents and the extent of comprehensiveness vary considerably. This explains a number of empirical studies which aim to analyze and systematize SEI disclosure forms and contents.

### 3. Empirical studies of SEI disclosure in Lithuania 2000–2015

To identify the situation of empirical studies on SEI disclosure in Lithuanian companies, we carried out descriptive content analysis of the available literature to compare the identified trends of SEI disclosure and distinguish systemic determinants of reporting. The search for data sources was accomplished in the national data basis of Lituanistika, a database of scholarly works in the field of humanities and social sciences which focus on the development and present situation of the Lithuanian state, society, culture, nation and language. It is coordinated by the Research Council of Lithuania in cooperation with Lithuanian research organizations and libraries. Scientific journals with the key words "social report(-ing)", "environmental report(-ing)", "corporate social responsibility [CSR] report", "social and environmental information [SEI] disclosure" from 2000 to 2015 yielded 14 papers which are further reviewed in a chronological order of the analysed data.

The study of the dislosure of environmental information in the financial statements of Lithuanian companies (2003-2006). The study by Lapinskaitė and Rudžionienė (2008) focuses on the contents of 44 companies' statements listed in the NASDAQ OMX Vilnius stock exchange. 86% of the statements contain environmental information. One third of these companies present information on pollution taxes, environmental (management) standards, and pollution monitoring. The scope of the information depends on the sector: most information is disclosed by the oil and gas refinery as well as chemical manufacturing sectors. These are followed by textile, energy, oil and gas distribution, and sea transportation companies. The least information is disclosed by service, financial and diary companies. The results of the study provide evidence that manufacturing companies disclose more environmental information than others. This can be explained by the tendencies in the global market in which these companies carry out their production: there are many international stakeholders which demand disclosure of the companies' impact on the natural environment as a part of legitimizing their activities. Companies with higher revenues disclose more information about their impact on the natural environment, and companies with a high concentration of capital in one owner's hands disclose less SEI in their reports.

Disclosure of CSR information in the financial statements of Lithuanian companies (2008–2010). In this study, Smirnova and Rudžionienė (2012) relied on the content analysis method for identifying CSR-related information in the annual reports of 33 listed companies. 4 categories were used to analyse the empirical data: human resources, environment protection, products (and services), and social engagement. The quantity of information in the financial statements was measured by a number of words. Most of the disclosed information was related to human resources (40%) and environment protection (37%). Information on products and services comprised 15%, and social engagement 8% of the data. The quantity of the disclosed CSR information increased each year, reaching a peak in 2009. Larger companies disclosed CSR information more often or there was more of it, which was in line with prior research. The proposition about the positive role of financial leverage and an increase of sales as determinants of information disclosure was not supported.

The study of social information as a criterion for determining the ethical behaviour of Lithuanian companies (2006–2010). The study by Leitonienė and Šapkauskienė (2012) focused on the determinants of disclosing social information in CSR reports. The sample comprised companies in the National Network of Responsible Enterprises in Lithuania. The study identified that just 3 companies out of 21 had reported their progress annually since 2006, while the other 13 had done it irregularly. Most of the companies in the sample operated in the finacial service and insurance sector (7) and the fewest (1) in construction. The study indicated that finance and insurance service companies provided the largest amount of social information which is explained by the motivation to reduce the asymmetry of the information. Processing/refinery companies also presented a considerably large amount of social information. Based on the content analysis of the information, the authors conclude that the sector of information and

communication is most mature in the field of CSR while the sectors of consulting and education services, other services and construction are least open and are modest content-wise. The study allows us to conclude that the status of the company (e.g. limited liability) can explain the disclosure of SEI.

A study of CSR Disclosures in Annual Reports (2007–2008). The findings of a study by Dagilienė (2010) indicated an increase in the scope of disclosed social information: the number of pages focusing on voluntary disclosure of CSR information from 2007 to 2008 grew by several times, from half a page to 2.5 pages, or from 13 to 82 sentences in financial statements. Dagilienė points out that just 11 Lithuanian companies disclosed CSR information properly and made social reports for the year 2008 available to the community.

A study of voluntarily disclosed CSR information in a company's financial statement and website (2008). A case study by Dagilienė and Bruneckienė (2010) compares the extent of CSR information in the annual financial statement, its note and the website of a company. The study concludes that actions related to CSR policy are rather fragmented. The quantity, contents and communication channels of the same company's information are neither structured nor unified.

A study of CSR reports (2009). Dagilienė and Gokienė (2011) examined separate cases of social responsibility reports of companies listed in Global Compact Network Lithuania (just 12 companies publicly made and disclosed their social reports although there were 61 organizations which had signed the GC). The study indicates a lack of understanding of the impact of social and environmental determinants on companies' activities. CSR reports were of different content and volume. Only about a third of the reporting companies disclosed their environmental indexes about energy and water consumption, CO<sub>2</sub> emission, paper consumption and fuel costs. Half of the companies described their recycling programmes. The authors point out that 58% of companies distinguished commitments to customers (products/services) as a separate part of the CSR report; most information related to commitments to society was of a descriptive character.

A study of CSR information disclosure in water supply companies (2010). The findings of Zickiene et al.'s (2011) study give evidence that although the water supply industry is one of the most regulated sectors in the country there is a lack of clarity about their social responsibility. Such companies' activities are directly related with the use of natural resources and environmental pollution as well as with public health. Therefore, based on stakeholder theory, they should assume special responsibility. A content analysis of the annual reports and websites of 3 joint stock (water supply) companies indicates that the largest part of information was provided in the areas of environment protection, product/service safety and quality. Less information was provided about social activities and the least information was given about human resources (respectively, from 1 to 11 and from 2 to 88 sentences).

A study of CSR reports of Lithuanian business companies (2011). In their research, Juščius and Griauslytė (2014) state that 18 out of 19 studied organizations publish separate CSR reports, almost a third produce integrative reports and 5 companies

had mixed reports. The authors conclude that Lithuanian companies disclose more information on environmental initiatives and relationships with employees.

Case studies of social accounting of Lithuanian enterprises (2008–2012). The studies in this field can be grouped into 4 clusters. All of them were carried out by the same researchers (Dagilienė, Leitonienė, 2012; Dagilienė, 2014). The first group focuses on CSR reports of companies that belong to the National Network of Responsible Enterprises and was carried out in 2008–2011. The research findings indicate that the number of companies disclosing social information grew very slowly: in 2008, there were 11 companies out of 57 which disclosed social information, in 2009 – 12 out of 61, in 2010 – 16 out of 65, and in 2011 – 21 out of 67.

The second group of studies focuses on the banking sector (2010–2012). Global reporting of social accounting results usually distinguishes financial services into a separate group of which specific indicators of business impact on environment and society are characteristic. The social reports of four banks in the study were different in both scope and structure. Although all banks declared that they comply with the principles of responsible business, measurement and assessment of the extent to which the principles were realized were not carried out. The findings of quantitative content analysis indicate that the banking sector organizations devote most attention to their employees (41% of all information), the environment (26%), society (25%) and products/services (7%). Engagement with society was realized through participation in social initiatives, donorship and anti-corruption actions.

The third group in this field concentrates on companies operating in other sectors (2010–2012). In contrast to the banking sector, companies from other economic sectors disclosed much more information related to products (26%) while information about the company's human resource management practices was the greatest (33%). Environmental information comprised 20% of the disclosed information and was related to the activities of a chemical company. This followed companies in the banking, telecommunication, packaging and brewery sectors by the amount of the total disclosed information.

The scope of social reports by sentence as a unit of analysis varies: telecommunication companies disclosed most information (543 sentences). Additionally, these companies stood out from the others by describing their goals and their (under)achievements. Chemical and public utilities companies were the least open, disclosing their social information in 83 and 75 sentences respectively.

The last group of studies deals with annual reports and other disclosure resources of listed companies (2012). The study compares ROA (return on assets) and MVA (market value added) indicators with the extent of disclosed non-financial information. The highest rate of information disclosure was identified among companies which voluntarily disclose information in annual reports, websites and social reports. This group of enterprises included paper and corrugated paperboard, ingrated public utilities, electricity service and production, and telecommunication companies. An average rate was granted to one gas services and two dairy companies. Textile, milk processing, agricultural production, pharmacy, garment retail companies were given the lowest rate.

Dagilienė's (2014) research findings indicate that 8 companies disclosed most information about human resource management. Environmental information is the second by the frequency of disclosure and is mostly given by manufacturing companies. Information related to engagement with society is the least presented: 8 companies out of 13 did not disclose any information. Lithuanian listed companies that tend to disclose most non-financial information operate in the service sector. This tendency contradicts legitimacy theory as manufacturing companies do not seem to be active in social accounting. This suggests that legitimacy theory can be applied to SEI disclosure with some limitation, considering economic and social advancement of the society and the market in which a company operates.

A study evaluating the quality of disclosed environmental information (2012) by companies listed on the NASDAQ OMX Baltic. The research by Karlonaitė and Rudžionienė (2014) was based on a 4-stage framework. In each stage, information about the company, its environmental politics, environmental impact and financial data was evaluated. The framework was applied to a group of companies with the aim of evaluating the quality of environmental information disclosure. The findings suggested that 62 companies out of 78 companies (79%) listed on the NASDAQ OMX Baltic disclosed this information. Lithuanian companies, with a percentage of 94% (30 out of 32), had a lead over Latvian and Estonian listed companies in disclosing environmental information.

The evaluation of information disclosure by points suggests that the studied companied most frequently disclosed information about environmental costs (e.g. environmental taxes such as pollution or natural resources fees), different waste, pollution, and programmes, projects or public initiatives and legal regulations related to them. Higher quality information was provided by manufacturing companies, and the lowest by service companies.

A study of determinants of disclosing CSR information in the financial statements on the Internet (2012). Research by Petraškaitė and Rudžionienė (2014) used an innovative information disclosure index (with a maximum value of 45) to evaluate the quantity of CSR information disclosed on companies' websites. The CSR information was evaluated under 4 categories: environment (15 points), human resources (11 points), societal engagement (10 points), and products/services (9 points). The findings indicate the uneven quantity of disclosed CSR information. Analysis of the disclosure index based on average values suggests that banks provide most information, followed by fuel and oil refinery companies then retail companies, which disclose the least information. Additionally, the findings suggest that disclosure of CSR information on the websites depend on the sector of the economy. Companies in the same sector disclose similar amount of information. The dependence of CSR information disclosure on financial leverage is weak, and does not depend on profitability (i.e. ROA and ROE indexes).

Table 2 summarizes the determinants of SEI disclosure by Lithuanian companies which were idetified in the above discussed studies.

Table 2. Determinants of SEI disclosure in Lithuania

Authors (year of the publication)	Sample (period of the study)	Research methods	Studied determinants and their impact (the underlined determinant was confirmed)
A. Lapinskaitė, K. Rudžionienė (2008)	44 Lithuanian public limited liability companies (2003–2006)	Content analysis	Industry sector (most information is disclosed by oil and gas refinery, chemical companies and least in service, finance and milk processing companies), company size, pollution, concentration of capital (higher concentration of capital determines smaller amount of disclosed information)
R. Smirnova, K. Rudžionienė (2012)	33 public limited liability companies listed on the Vilnius stock exchange (2008–2010)	Content analysis	Company size, financial leverage, increasing sales, pollution
Š. Leitonienė, A. Šapkauskienė (2012)	21 companies  – members of the National Network of Responsible Enterprises (2006–2010)	Content analysis	Industry sector (finance and insurance companies provided the largest amount of social information)
I. Karlonaitė, K. Rudžionienė (2014)	78 companies listed on the NASDAQ OMX Baltic (2012)	Testing of created model us- ing con- tent analy- sis	Industry sector (manufacturing companies provided higher quality information, and service companies the lowest)
K. Rudžionienė, V. Petraškaitė (2014)	30 websites of the companies with the highest income (2012)	Content analysis	Company size, industry sector (banks provide most CSR information, and retail companies least), financial leverage, profitability, liquidity
L. Dagilienė (2014)	13 NASDAQ OMX companies with quoted shares (2012)	Content analysis	Industry sector, auditing of the annual reports, profitability, investor type (foreign vs national)

Source: own analysis.

The most frequently identified determinant of SEI disclosure is the industry sector. However, some studies yield mixed results. For example, a study by Lapinskaitė and Rudžionienė (2008) states that oil and gas refinery, and chemical companies disclose the most information while service, finance and milk processing companies the least. Additionally, Karlonaitė and Rudžionienė (2014) lend support to Lapinskaitė and Rudžionienė's (2008) assumption about service companies disclosing the smallest amount of SEI. Yet studies by Dagilienė and Gokienė (2011), Leitonienė and Šapkauskienė (2012) and Rudžionienė and Petraškaitė (2014) provide evidence that financial service companies (including insurance) disclose the largest amount of social information. These trends can be explained by the impact on the environment that a manufacturing company has in producing an end product with limited natural resources, which is a global issue. Therefore, to legitimize their activities they have to report their activities. SEI disclosure by finance institutions can be explained by their sector being the global leaders in CSR action and, respectively, reporting. As banks and insurance companies in Lithuania are foreign capital ones, global standards are transferred there as well. In addition, a study by Dagilienė (2014), which identifies a telecommunication company as disclosing a considerable amount of information, lends support to the industry sector as a determinant of SEI disclosure. Indeed, telecommunication companies in Lithuania are mostly owned by Nordic investors who come from societies with high expectations of responsible business behaviour. TEO LT, one of the first privatized companies by a Finnish investor was also the first company in the country to publicly disclose SEI in a separate CSR report in 2006 (the first company to disclose SEI in an annual report was the oil refinery "ORLEN Lietuva" or, at that time, "Mažeikių nafta" in 1998).

Pollution, which was argued by Lapinskaitė and Rudžionienė's (2008), Leitonienė and Šapkauskienė's (2012) studies to be a determinant of SEI disclosure, was not supported by Smirnova and Rudžionienė (2012). A company's income was found to be a determinant of SEI disclosure by Lapinskaitė and Rudžionienė (2008) and Smirnova and Rudžionienė (2012), but not confirmed by a later Rudžionienė and Petraškaitė (2014) study. Similarly, the dependence of SEI disclosure on the company's assets and financial leverage was not supported by Smirnova and Rudžionienė's study (2012), but the findings by Rudžionienė and Petraškaitė (2014) indicate that carrying the amount of the company's assets in the balance and partial financial leverage play a role in disclosing CSR information on the Internet. Finally, the relationship between profitability and information disclosure did not find support in Rudžionienė and Petraškaitė's (2014) study, although Dagilienė (2014) argued that a telecommunications company, which was leading from the perspective of non-financial information disclosure, had high ROA. In conclusion, the results of the reviewed studies are rather controversial. The industry sector is the only unambiguous determinant of SEI disclosure. Table 3 sums up the trends of SEI disclosure in Lithuania.

Table 3. Trends of SEI disclosure in Lithuania

Authors (year of the publication)	Sample (period of the study)	Research methods	Trends	
A. Lapinskaitė, K. Rudžionienė (2008)	44 large public Lithuanian limited liabil- ity companies (2003–2006)	Statistical analysis (correlation analysis), observation	An increasing average tendency to disclose environmental information, but separately SEI disclosure of companies was changing	
L. Dagilienė (2010)	4 dairy companies (2007–2008)	Case-study analysis, content analysis	The studied companies disclosed more CSR information in 2008: most information deals with the environment, product safety and quality	
Zickiene et al. (2011)	3 water supply companies (2010)	Content analysis	The largest part of the information was provided on areas related to environmental protection, product/service safety and quality. The least information was provided on areas related to human resources.	
L. Dagilienė (2014)	13 Lithuanian listed companies (2012)	Content analysis	Listed companies with high accounting or market value do not evolve social ac- counting. Investors or other stakehold- ers do not put pressure on them to dis- close SEI.	
I. Karlonaitė, K. Rudžionienė (2014)	78 companies listed on the NASDAQ OMX Baltic (2012)	Testing of created model us- ing content analysis	Manufacturing companies in the Baltic countries provide environmental information which is of higher quality than social information. A larger number of Lithuanian companies (94 %) disclose environmental information compared to the studied Latvian or Estonian companies.	
V. Juščius, J. Griauslytė (2014)	19 Lithuanian business companies (2011)	Content analysis	The overall degree of CSR reporting among Lithuanian companies is low. Just half of companies present their CSR strategy and account for their progress.	
L. Dagilienė (2014)	4 banks (2010–2012)	Content analysis	SEI reports by the banks do not have a regular structure or extent; the same bank may have different parts in the re- ports in a different year. Most attention is devoted to human resources, the least to products and services.	

Source: own analysis.

Summing up the trends, some researchers (Lapinskaitė, Rudžionienė, 2008; Dagilienė, 2010; Karlonaitė, Rudžionienė, 2014) argue that CSR information disclosure is gaining in scope while others, or even the same authors but in other studies (Dagilienė, 2014; Juščius, Griauslytė, 2014), claim that these reports will gain a wider scope in the future. Noticeably, there is a trend to disclose more environmental rather than social information (Dagilienė, 2010; Zickiene et al., 2011; Karlonaitė, Rudžionienė, 2014), however, this trend is restricted to the industry sector. For example, the finance sector focuses much more on human resources (Dagilienė, 2014).

### **Conclusions**

In this paper, we aimed to give an overview of the available empirical studies tackling the current situation of SEI disclosure among Lithuanian companies in 2000–2015. The scarce studies in the field, whose focus varies from a single case study to all companies listed on the Baltic stock exchange, tend to explore the relationship between SEI disclosure and company profile, such as industry sector, company size, financial leverage, profitability, and pollution. However, their findings are of a mixed character except for industry sector, which is an unambiguous determinant of SEI disclosure.

The available studies indicate that the amount of disclosed SEI increased over the period from 2000 to 2015. However, SEI disclosure has not yet become the main stream in the reporting of Lithuanian companies. It is either gaining in scope or, as argued by some research reviewed in this study, will gain a wider scope in the future. Noticeably, there is a trend in SEI disclosure to give more environmental rather than social information, and this trend is connected to industry sector to some extent. This trend is in line with studies in advanced economy contexts.

Limitations in the findings can be explained not only by a lack of reporting practices, but also by the research methods used in the studies. Most of the findings are based on the collection of data of companies' communication that are publicly available. Other methods of data collection have been scarcely used. The findings have been analysed by the content analysis method which gives some quantitative indicators such as the number of sentences or words used in the reports but does not reveal a deeper understanding of the studied companies of SEI with respect to the main stakeholders. Based on that, we propose using more diverse research methods for both data collection and analysis. In particular, research in the future could gain from mixed research methods (Riivari, 2015). As Lithuania is a post-Soviet society with a long tradition of presenting a better reality in reports, the contents of SEI could be analysed through the integrity perspective which would inevitably draw researchers' attention not only to the text in annual or CSR reports, company websites or press releases but also to the practices as perceived by the companies' stakeholders.

Another explanation for the scarcity of data sources for analysis is that Lithuania is still a young player in the market economy and the expectations of stakeholders towards business enterprises are not yet fixed. Foreign capital companies operating in Lithuania are an exception: they provide more SEI as they are listed in global indexes or their industry sector is a leader in providing this information globally, and they are influenced by more groups of stakeholders and their expectations are higher. However, local companies, even those listed on the stock exchange, are not yet motivated to disclose more information as local stakeholders are few and they have not learnt to mobilise and exert pressure on companies whose actions they disapprove of. As a result, the information disclosed by Lithuanian companies includes fewer stakeholders (e.g. employees, society and the environment) compared to the reports of multinational companies or enterprises operating in advanced economies. It can be expected that after 2016, following the requirement of the EU for large listed companies to report on their social and environmental impact, the number and scope of SEI reports will grow.

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