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Sustainability accounting and reporting: from theory to practice in a transition economy

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Abstract: The aim is to explore the development of sustainability accounting theory and practice in a transition economy through a longitudinal analysis of sustainability reporting in Lithuania. The research methodology, based on a longitudinal analysis of the country case study in 2000–2020, is twofold: chronological analysis of the institutional environment and systematic literature review of sustainability accounting research based on the identified sustainability accounting approaches. The first signs of sustainability reporting practices and research appear only at the beginning of the 21st century in Lithuania, while the two first stages have passed in non-transition economies. Initiatives to implement sustainability and improve reporting come from EU legal legislation and foreign capital companies. The stakeholders are not interested in reported sustainability information; society has no expectations of such reporting, not even regarding the harmful activities of a company. Lithuanian case is similar to developing countries where sustainability reporting is influenced by external forces/powerful stakeholders.

Keywords: sustainability accounting; sustainability reporting; corporate social responsibility; transition economy; Lithuania.

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1 Introduction

Corporate social responsibility (CSR) emerged in the 1960s when companies first faced pressures from environmental and human rights activists to refrain from or limit harmful behaviour (Lynn, 2021). In the mid-1970s issues of responsibility towards society were giving way to environmental responsiveness strategies (Milne, 1991), which provided new opportunities for performance and measures (Carroll and Shabana, 2010). Failures in the pursuit of sustainable development have influenced the emergence of sustainability accounting, which focuses on the societal and ecological impacts of organisations (Bebbington and Larrinaga, 2014). Overall, sustainability accounting has a strong socio-political context in which accounting rules and instruments aim to ensure financial control and support accountability changes (Bebbington et al., 2020).

Although the theoretical debate about sustainability accounting development is ongoing for already several decades (Lai and Stacchezzini, 2021; Dumay et al., 2016), it still the gaps exist when comparing its evolution among developed, developing or transition countries (Ali et al., 2017; Sharma, 2019; Odera et al., 2016). In addition, most empirical research on sustainability accounting and reporting has been carried out in more developed countries such as the US, Western Europe, and Australia, which have historically had higher levels of civic society and a market economy (Dagilienė and Nedzinskienė, 2018). This is particularly relevant to Eastern European countries, which experienced market economies more than 20 years ago, as many rules of law have come directly from Western European legislation. Thus, the tradition of corporate social responsibility and sustainability reporting did not emerge naturally as a result of the demands of key stakeholders or civic society but rather was adopted under the influence of the European Union legislation. Moreover, comprehensive and longitudinal research on single national sustainability accounting and reporting cases is still missing (Fifka, 2011; Pedersen et al., 2013; Chauvey et al., 2015; Horvath et al., 2017b).

Considering the foregoing, we raise the *research question*: what are the approaches to sustainability accounting, and how do they evolve in practice over time?

By using the institutional approach and theoretically identified approaches to sustainability accounting, the paper explores the development of sustainability accounting theory and practice in a transition economy. Our empirical focus is on a 20-year longitudinal case study of one transition country – Lithuania.

We use the overarching term ‘sustainability accounting’ to characterise accounting practices and norms that include social and environmental issues. This term includes environmental accounting, corporate social responsibility (CSR) accounting, sustainable development accounting, etc. As an alternative to conventional accounting, sustainability accounting stems from the various approaches taken by accounting scholars to link accounting to sustainability (Lamberton, 2005). Although the regulation of sustainability accounting has a mostly voluntary character, sustainability reporting (as a way of communication outside corporate boundaries) tends to be more regulated.

The main contribution of this paper is twofold. First, we have identified approaches to sustainability accounting and proposed a matrix bridging these approaches within the practice. The proposed matrix allows us to analyse empirical context at the micro (corporate) and macro (institutional environment) levels and to better understand features of sustainability accounting and reporting. Second, this paper contributes to the existing literature by providing insights into the evolution of the institutional environment (both legal and professional) related to sustainability accounting and corporate reporting patterns in the post-communistic transition economy. While previous case studies mostly have tended to focus on an organisational level, we have attempted to relate corporate sustainability reporting practices within institutional environments in the case of a single national country.

The article consists of six parts. Section 2 presents the main groups of research exploring approaches to sustainability accounting. Section 3 briefly describes the research methodology used in this work. The results of the research are presented in Sections 4 and 5. Finally, Section 6 provides a discussion in the broader context, study limitations, and opportunities for future research.

2 Approaches to sustainability accounting

Research exploring approaches to sustainability accounting can be divided into several groups: sustainability accounting as a way for sustainable management decisions; sustainability accounting as a way for stakeholders’ management; and sustainability accounting as the only way for reputation building.

2.1 Sustainability accounting as a way for sustainable management decisions

Gray is credited with much of the conceptual development of sustainability accounting. Gray (1992) explains how accounting helps to construct reality (broadly) and influences decisions and demonstrates accountability (literally). Accounting for the environment can make grand changes in organisations. Gray (1992) introduces the term ‘environmental accounting and information systems and the three methods used, such as sustainable cost, natural capital inventory accounting, and input-output analysis. It is important to note that both sustainable cost and full-cost accounting seek to integrate and measure the external environmental costs of a company to present a more comprehensive view of the total cost (Lamberton, 2005), although these approaches are not equivalent (Atkinson, 2000).

Following this sustainability accounting trend, there is a number of studies that focuses both conceptually and empirically on how organisations should account for and measure their environmental impacts (e.g., Rapih and Che, 2020; Lehman, 2017; Russell et al., 2017; Milne and Patten, 2002; Bebbington, 2001). It should be noted that organisational tools for assessing environmental impacts at different stages have evolved [for more see the review (Iacovidou et al., 2017)], however, most of the different approaches to sustainability accounting are based on conventional accounting principles and usual practices (Lamberton, 2005; Milne, 1991).

At the macro level, sustainability accounting has an important role to play as a supporting tool for governments' decision-making in response to climate change and resource scarcity (Lehman, 2017), and could help to assess decisions for more sustainable growth. Many countries and their accounting boards are also developing natural capital approaches to incorporate environmental externalities into national accounting and decision-making. They also provide guidance that could help companies make judgments on the materiality of climate-related financial risks. Standard-setting bodies can also review and adapt international accounting rules to be more representative of business sustainability. This may include adapting depreciation and residual value approaches for assets that retain their value over multiple lifetimes (e.g., building materials), and aligning recognition of repair and refurbishment costs of assets with recurring revenue streams in business models (including, for example, product-as-a-service models).

It is therefore also important to mention the recent studies analysing interactions between accounting and the United Nations (UN) Sustainable Development Goals (SDGs). Bebbington and Unerman (2018) critically review how accounting research can contribute to the achievement of SDGs. While the SDGs have the potential to catalyse, incentivise and mobilise many companies' sustainability efforts, they can also be used (to some extent by some organisations) to mask business-as-usual through the sustainability rhetoric associated with the SDGs (Bebbington and Unerman, 2018). For example, using the case of seafood production, Bebbington et al. (2020) problematise the intersection of accounting and the anthropocene.

In general, this perspective covers how organisations should account for and measure their environmental impacts. From a corporate governance perspective, this might lead to benefits such as energy efficiency and waste reduction (and to some extent avoidance), carbon footprint reduction, and monitoring of negative impacts through sustainability accounting tools.

2.2 Sustainability accounting as a way for stakeholders' management

Accounting practices reflect the social context (Gray, 1992) and might help to create social reality as well. The way a company is valued in the market and society is based on accounting. Thus, the public perception of what is and what is not a successful company is largely based on accounting practices. Therefore, it must be acknowledged that in the current market environment, corporate reporting has moved beyond the traditional stakeholders, i.e., shareholders and potential investors. Pluralism through the Triple Bottom Line approach (Elkington, 1993) and the reinforcement of CSR issues in business (Carroll and Shabana, 2010; Lai and Stacchezzini, 2021) allow sustainability accounting to be seen as a communication channel with a wider range of stakeholders (i.e., customers, suppliers, employees, government, potential capital providers, and NGOs). The perceived need from stakeholders encourages more condensed (narrative) reporting

with meaningful forms of linkages between the different parts of the report so that the user can understand the way companies create value for all stakeholders (Lai and Stacchezzini, 2021). The stakeholder perspective has become even more important with the increasing focus on measuring corporate financial performance in the long term (Burritt and Schaltegger, 2010). In addition, new forms of accounting and multidisciplinary professional partnerships, are becoming significant (Suddaby and Greenwood, 2005), as sustainability has an interdisciplinary nature (Bebbington et al., 2017; Lamberton, 2005).

In summary, this perspective includes reflecting sustainability impacts in the financial statements and stand-alone sustainability reports, improving narrative reporting, determining materiality in response to the needs of different stakeholders, and identifying an external assurance approach that enhances the credibility of an organisation's sustainability disclosures. At the macro level, the stakeholder perspective emphasises market-wide transparency, the systematic engagement of key stakeholders (ensuring that environmental and social needs are taken into account), and multidisciplinary partnerships to establish sustainability reporting standards and external assurance systems.

2.3 *Sustainability accounting as the only way for reputation building*

The third strand of research examines sustainability accounting through the lens of legitimacy and reputation building. When a company does not comply with the acceptable social rules, values, and belief systems in which it is rooted, its legitimacy is threatened, and the social contract is violated (Suchman, 1995). Florio and Sproviero (2020), using the case of the 2015 Volkswagen diesel engine scandal, examine how companies employ hybrid legitimation strategies to restore pragmatic, moral, and cognitive legitimacy (Suchman, 1995). Interestingly, the results show that Volkswagen uses a panic-avoidance strategy (Suchman, 1995) to restore pragmatic legitimacy by mitigating customer harm and protecting shareholders' financial concerns.

De Micco et al. (2020) investigate the challenges of sustainability reporting and the available mechanisms that can be applied to overcome them. Dissemination of the sustainability strategy and principles, employee involvement, consistency and institutionalisation of sustainability reporting, and management commitment were the most effective mechanisms applied by the case company. By contrast, other mechanisms (for example, data management and stakeholder engagement) highlighted as powerful in the literature were only partially successful.

Depending on the circumstances, companies apply alternative strategies to gain, maintain or repair their reputation (Suchman, 1995). For example, companies may seek to change the public's perception of the company, try to change the public's expectations of the company's performance, or try to focus society's attention on certain positive things (Laine, 2010).

In summary, the perspective of partial greenwashing involves carrying out business-as-usual (usually to the extent required by law), while disguising it with sustainability rhetoric. When it comes to 'total' greenwashing, it means that the business is unsustainable, but it is masked by the sustainability rhetoric. Finally, the legitimacy of unsustainable practices has a lasting impact on the transparency and trust-building of the whole society (for example, Volkswagen Diesel, Grigeo).

Table 1 A matrix bridging sustainability accounting theory and practice

<i>Approaches* sustainability accounting issues</i>	<i>Sustainability accounting as a way for sustainability management</i>	<i>Sustainability accounting as a way for stakeholders' management</i>	<i>Sustainability accounting as reputation building</i>
Perspectives	<ul style="list-style-type: none"> • <i>Micro</i>: performance measurement and control • <i>Macro</i>: national accounting, SDGs 	<ul style="list-style-type: none"> • <i>Micro</i>: external reporting, communication, multi-stakeholders • <i>Macro</i>: transparency, inclusiveness, auditability 	<ul style="list-style-type: none"> • <i>Micro</i>: partial greenwashing, total greenwashing • <i>Macro</i>: the legitimacy of the unsustainable business, sustainability scandals
Stakeholders	<ul style="list-style-type: none"> • Focus more internal • Different departments involved, employees 	<ul style="list-style-type: none"> • Focus more external • Identified key stakeholders (partners, suppliers, investors) 	<ul style="list-style-type: none"> • Focus more external
Focus of decisions	<ul style="list-style-type: none"> • Focus on better decision-making and effective risk management 	<ul style="list-style-type: none"> • Focus on stakeholders' informational needs 	<ul style="list-style-type: none"> • No clear focus • To be compliant with the regulation • To build a reputation and get external financing
Dominating topics	<ul style="list-style-type: none"> • Focus on business strategy • Single-topic, multi-perspective topics 	<ul style="list-style-type: none"> • Focus on key stakeholders' needs 	<ul style="list-style-type: none"> • Not related to business strategy or stakeholders • Popular topics
Standardised accounting methods/frameworks	<ul style="list-style-type: none"> • Principally any methodology • More derived from management accounting tools: <i>sustainable cost, total impact accounting, natural capital inventory accounting, input-output analysis, material flow analysis, life cycle assessment, etc.</i> 	<ul style="list-style-type: none"> • Triple bottom line accounting such as <i>ESG, Global Reporting Initiative (GRI), carbon disclosure project (CDP), etc.</i> 	<ul style="list-style-type: none"> • No clear methodology/framework

Note: *Hybrid approaches/perspectives are also possible, e.g., reputation-building and management tools.

Source: Made by authors

Table 1 A matrix bridging sustainability accounting theory and practice (continued)

<i>Approaches* sustainability accounting issues</i>	<i>Sustainability accounting as a way for sustainability management</i>	<i>Sustainability accounting as a way for stakeholders' management</i>	<i>Sustainability accounting as reputation building</i>
External environment (professionalism / NGOs)	<ul style="list-style-type: none"> • Usually strong national professional NGOs, active engagement in CSR networks 		<ul style="list-style-type: none"> • Weak national professional NGOs • Little engagement in CSR networks or, on contrary, too active engagement (without fulfilling responsibilities)
External environment (legal norms)	<ul style="list-style-type: none"> • To be compliant with legal norms • To do more than legal norms 		<ul style="list-style-type: none"> • To be compliant with legal norms • To do less than legal norms

Note: *Hybrid approaches/perspectives are also possible, e.g., reputation-building and management tools.

Source: Made by authors

Obviously, the approaches to sustainability accounting are closely interrelated and rarely exist in its pure form in the reality (see Table 1). At the best, businesses can continuously account for and measure/manage their environmental impacts through integrated management control and performance measurement systems, as well as respond to the multiple needs of stakeholders (reported through a consistent reporting framework), and ultimately benefit from building a reputation. If all approaches are not followed consistently and in an integrative way, sustainability accounting will have less positive outcomes for organisations and at a wider level.

Table 1 provides an analytical categorisation of the three sustainability accounting approaches. The main criteria are the level of perspective, key stakeholders, the focus of decisions, and dominating topics. Following an institutional approach, a legal and professional environment is meaningful for the development of sustainability accounting practices. This matrix aims to analytically describe and highlight the differences as well as the similarities between different sustainability accounting approaches.

3 Research methodology

The country case study approach is based on an in-depth investigation of a single country (Gerring, 2011). For this reason, the use of a country case study can provide an explanation of the institutional setting within which companies' actions take place to improve understanding of the context in which the investigated development of the sustainability accounting theory and practice may be interpreted.

The research methodology, based on a longitudinal analysis of the country case study, is twofold:

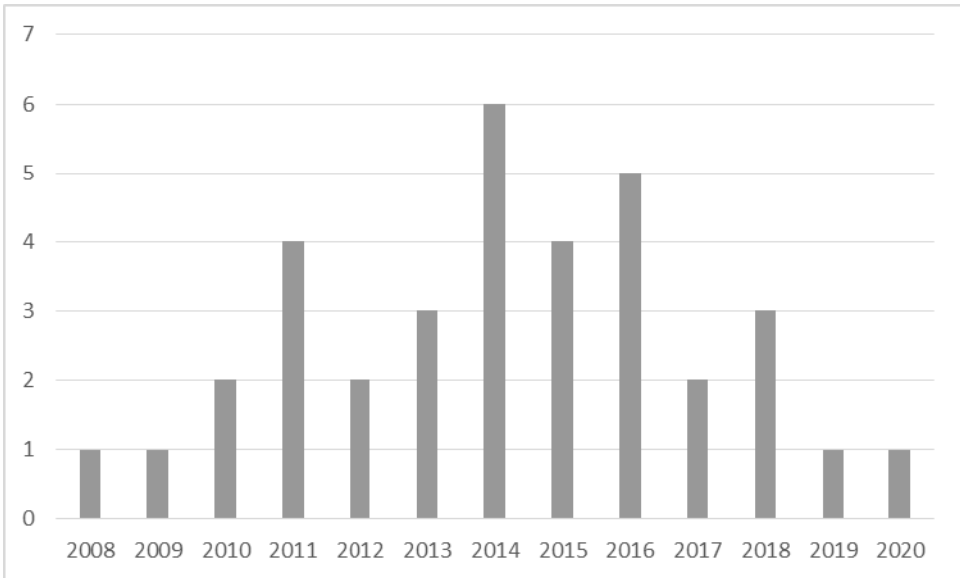
- 1 Chronological analysis of the Lithuanian institutional environment that supports or hinders companies in the context of sustainability accounting. This consists of legal regulation analysis and actors (NGOs and governmental organisations) that facilitate the normative development of sustainability accounting (Smith et al., 2011; Hahn and Kühnen, 2013; Rosati and Faria, 2019; Latif et al., 2020).
- 2 Systematic literature review of previous sustainability accounting/reporting research in Lithuanian organisations based on the identified sustainability accounting approaches (see Table 1).

According to Lai and Stacchezzini (2021), there are four phases in the development of corporate sustainability reporting: neglecting sustainability (the 1960s to 1970s); experimenting with sustainability niches (1980s to 1990s); enhancing sustainability (2000s to 2010s); integrating sustainability (2020 and onward). In the case of Lithuania, the first signs of corporate sustainability reporting practices and research appear only in the third and fourth stages, that is, at the beginning of the 21st century. For this reason, the 20 years from 2000 to 2020 were analysed.

To identify the situation of empirical studies on sustainability reporting in Lithuania it was carried out a descriptive content analysis of the available literature. It helped to compare the historical trends and changes in sustainability information disclosure and distinguish systematic determinants of reporting. Searches in databases Lituianistika (<https://www.lituanistika.lt>) and Scopus were conducted, using keywords ‘social responsibility’, ‘non-financial’, ‘CSR’, ‘sustainability’, ‘social reporting’, ‘social information’, ‘report*’, ‘disclosure’, ‘Lithuania’, ‘Baltic’ in English and Lithuanian. The founded results were analysed and selected only articles which presented performed empirical research on the reporting of social responsibility or sustainability in Lithuania or Baltic states. There were selected 37 scientific articles which include the results of empirical research which analysed sustainability reporting in the period 2000–2020. While many scientists describe CSR as a stakeholder-driven, social pillar of sustainable development, it is logical to consider these two terms ‘sustainable development’ and ‘CSR’ as synonymous (Ebner and Baumgartner, 2006), we applied this approach which allowed us to examine studies covering both sustainability reporting and CSR reporting.

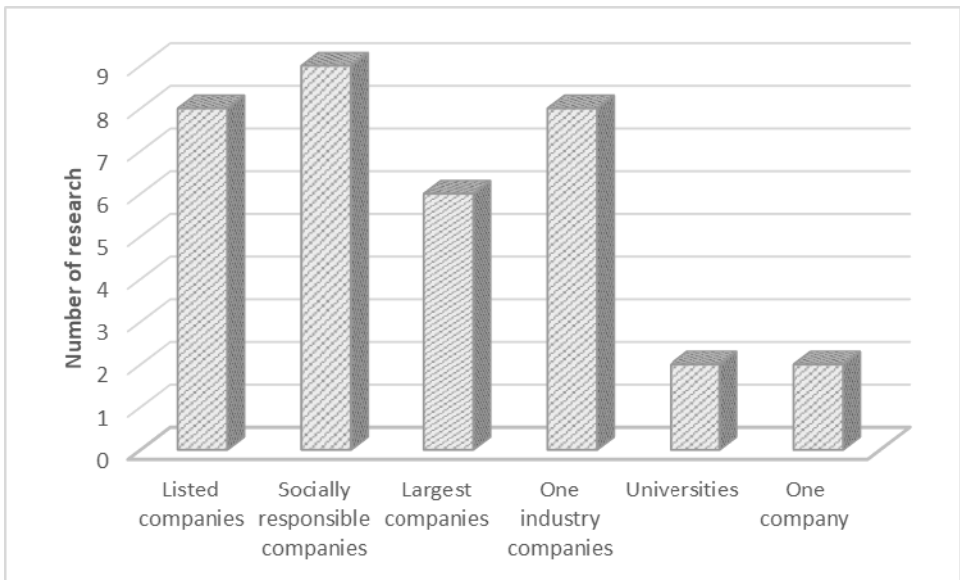
Figure 1 shows the number of articles published each year. The fact was found that no article had been published until 2008. Then the most productive year was 2014 when six publications analysing sustainability reporting were published. And 2011–2016 periods was the most productive with an average of four publications per year. It should be taken into account that Lithuania is a small country that has some big universities with departments of accounting or directly working scientists whose research interests are sustainability reporting. For this reason, a certain group of scientists dominates in performing research in this research field: 16 of all 37 publications are written by one author (some co-authored).

Figure 1 The number of publications by years



Twenty-three studies (62%) include an analysis of the current situation – the status quo in one year. Only one study includes an analysis of the 10 years. Other studies analysed a 2–7 year period. The period 2008–2014 was analysed mostly – more than 4 times, while other years were included in studies 1–3 times. Data from 2012 were analysed in 12 studies. As the authors use different research methodologies in their research it is difficult to draw reasonable comparisons and conclusions.

Figure 2 The sample of research



Under the Lithuanian Sustainability Reporting Regulation, all companies prepared sustainability reports voluntarily until 2017. Some of them had joined the UN Global Compact, while others had not. Therefore, some researchers chose to conduct their research on companies that claim to be committed to sustainability goals i.e., that have joined the UN Global Compact. Researchers choose to study the largest or listed companies because of the public availability of their financial and non-financial reports. However, there may be companies that prepare sustainability reports but were not included in any of the research samples because they are smaller and not public.

Figure 2 shows the samples which were analysed. Only two studies analysed the disclosure of social responsibility in Lithuania universities and two analyses described the case of one company. Listed companies, socially responsible companies which are members of the National Network of Responsible Enterprises, largest (highest revenues, international) companies, and companies from one specific industry (banks, dairy, water supply, energy, brokers, beer producers) were explored equally – 7–9 times. The sample of Lithuanian listed companies is usually small, especially excluding financial institutions, therefore, samples of 4–44 Lithuanian listed companies were investigated. Sustainability disclosure in 71–78 listed in NASDAQ OMX Baltic (Estonia, Latvia, and Lithuania) companies was analysed. Sustainability reports of 12–48 socially responsible companies which are members of the National Network of Responsible Enterprises were explored. The largest companies were investigated, from 19 big international enterprises to 106 companies with the highest revenue. Three studies cover a sample of more than one country – 50 and 116 largest Central and Eastern Europe (CEE) companies. When one industry was selected to be analysed, 3–7 companies were surveyed.

Only two studies used case studies as the research methodology; other studies for data collection used content analysis of CSR reports, and annual accountability including notes to financial statements, annual prospects, and websites. Most researchers created the disclosure index and were looking for its elements in company reporting, while authors of some studies counted words or sentences.

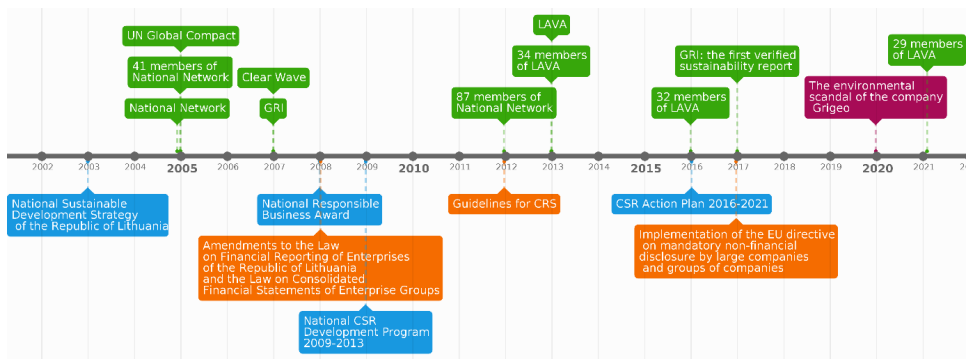
4 The institutional environment of sustainability reporting in Lithuania

4.1 The first stage (2003–2008) – voluntary sustainability reporting

For purposes of understanding, we use the term ‘sustainability reporting’, although this is not explicitly used in legislation. Legal preconditions for CSR initiatives were created during the period of Lithuania’s preparation for EU membership (see Figure 3). On 11 September 2003, the Government of the Republic of Lithuania approved the National Sustainable Development Strategy (Astromskienė and Adamonienė, 2009).

Meanwhile, the application of the social responsibility system in Lithuania started in 2005. In the beginning, twelve Lithuanian companies voluntarily joined the UN Global Compact initiative. In this step, companies voluntarily undertook to follow the ten principles of CSR in their activities as well as to disclose the results in CSR reports. In addition, the initiative group of the Lithuanian Global Compact Network was formed in 2004, and the official National Network of Responsible Business Enterprises (National Network) was founded in 2005. The National Network united Lithuanian responsible business enterprises and organisations, main members of the UN Global Compact.

Figure 3 Legislation and normative environment of sustainability reporting in Lithuania (see online version for colours)



The National Network aimed to support the development of CSR activities in Lithuania, to exchange experience, to organise training, and at the same time to implement projects that are beneficial to society. The National Network was an informal organisation without a clear management structure and membership fees. The National Network organised monthly meetings of members, annual conferences, and annual meetings of the directors-general. Members of this non-governmental organisation could, on a voluntary basis, prepare annual progress reports, which were completed online. However, not all members of the National Network submitted progress reports. For example, only six progress reports were submitted in 2006, eight reports in 2007, 11 in 2008, 12 in 2009, 16 in 2010, and 21 in 2011 (Leitonienė and Šapkauskienė, 2012, 2016; Dagilienė et al., 2014).

Thus, the Global Compact in Lithuania in 2005 was presented by the UN Development Program (UNDP), which curated social responsibility activities in Lithuania and patronised the National Network. In addition, the collective action initiative Clear Wave, which promotes business integrity and transparency, was founded in 2007. These three non-governmental organisations (NGOs) curated the social responsibility activities of companies and organisations in Lithuania. Clear Wave was a project of the National Network, which itself was a part of the Global Compact. All three organisations were involved and adhered to the principles of the Global Compact in certain areas.

From the beginning, the Ministry of Social Security and Labour curated the area of CSR in Lithuania. The Tripartite Council of the Ministry of Social Security and Labour of the Republic of Lithuania has been publishing information and methodological publications on CSR for organisations since 2006.

During this period, disclosure of CSR was a voluntary decision, and companies were not required to provide information on social responsibility in their annual reports or separate reports in Lithuania.

4.2 *The second stage (2009–2013) – is the partial regulation of sustainability reporting*

Only since 2008, the Law on Financial Statements of Companies of the Republic of Lithuania and the Law on Consolidated Financial Statements of Groups of Companies

require that the annual report include an analysis of the financial and non-financial performance of the company or group of companies and environmental and personnel information. However, not all companies are required to prepare an annual report: it depends on the size of the company. Thus, in 2009, the partial regulatory phase of CSR information disclosure begins. To create the necessary conditions for the development of CSR and to induce companies to apply its principles in their practices, the National Program for the Development of CSR for 2009–2013 was prepared and approved by the Government of the Republic of Lithuania. The program aimed to create a legal and institutional environment conducive to the development of CSR, to promote a deeper knowledge of CSR, and social and environmental awareness, to increase the competence of companies and stakeholders in the area of CSR.

Moreover, the National Responsible Business Award (NAVA) is an initiative of governmental institutions in Lithuania implemented since 2008, which aims to increase awareness of the benefits of CSR for business, the state, and everyone, and to encourage the country's companies to implement CSR principles in their activities. From 2008 to 2012, the NAVA was awarded to companies in three categories: small and medium-sized companies; large Lithuanian companies; and foreign companies. During this period, the NAVA awards were mostly given to financial institutions and telecommunications companies. For example, 'Swedbank' won the award three times, and the telecommunications company 'Teo LT' four times. Meanwhile, manufacturing and service companies, which tended to fall into the small and medium-sized business categories, changed every year. Since 2013, additional nominations have been established together with the Socially Responsible Company of the Year nomination: 'Workplace of the Year', 'Most Community-Friendly Company of the Year', 'Most Environmentally Friendly Company', 'Company Creating the Most Favourable Emotional Environment' and 'Family-Friendly Workplace'. Five manufacturing companies, two of which were companies in the chemical industry, were recognised as Socially Responsible Company of the Year. This award has also been presented to one life sciences and one financial sector company.

In 2012, the CSR Guidelines were prepared for joint-stock companies listed on the NASDAQ OMX Vilnius Stock Exchange. These guidelines have helped companies to adopt social and environmental requirements for their businesses and to improve the transparency and quality of social responsibility reporting.

Moreover, in 2012, the informal network of specialists in sustainable development and social responsibility, CSR Network Lithuania, was established, aiming to unite the knowledge and experience of specialists and promote social and environmental responsibility of the private and public sectors and society.

4.3 The third stage (2014–2020) – monitoring and valuation of the progress and results of CSR

In 2013, UNDP terminated its activities in Lithuania, and the National Network decided to formalise and expand its activities to become a Lithuanian Responsible Business Association (LAVA). LAVA has become the only contact point for the UN Global Compact in Lithuania, the world's largest CSR initiative. Interestingly, the number of members of the National Network, which had grown every year, has decreased significantly in recent years. For example, as stated by the annual activity reports of the LAVA, this network comprised 41 companies and organisations in 2005; 57 in 2008;

61 in 2009; 65 in 2010; 67 in 2011; and 87 in 2012. However, this number decreased in 2013, when there were only 34 companies and organisations as members of LAVA. This decrease in the number of members was mainly due to the changed conditions of membership and the related membership fee. In 2021, 29 companies and organisations belong to the LAVA. According to the membership requirements of LAVA in 2021, the organisation must have prepared a sustainability report or undertake to prepare one upon becoming a member. Thus, all LAVA members are required to submit sustainability reports to the association and on their website. Nevertheless, previous empirical studies have shown that in 2020, for example, only 53% of companies, members of LAVA, provided CSR reports, and 58% disclosed CSR information on their websites (Leitonienė and Kundelienė, 2021).

The Global Reporting Initiative (GRI) is not very common in Lithuania. This initiative developed detailed guidelines for social reporting on how to disclose social and environmental information, economic performance, and the impact on organisations. The information provided in the reports increases the transparency of a company's activities. Nonetheless, since 2007 some Lithuanian companies state that they prepare CSR reports in accordance with the recommendations of The GRI. However, the first verified report of the Lithuanian company was submitted only in 2017 as stated by the database of The GRI (Waniak-Michalak et al., 2018). Only one Lithuanian company, 'Kauno Energija', submitted a consolidated sustainability report in accordance with GRI standards for 2016, 2017, 2018, and 2019. One state-owned company, 'Registru centras', submitted this report for 2019.

In 2016, the new CSR Action Plan for 2016–2021 was provided by the Government of the Republic of Lithuania. The aim was to develop an effective social responsibility system that would motivate organisations to apply CSR principles in their activities, actively involving the public in this process. One of the objectives was to ensure the coordination of CSR development between authorities and social partners. Second to create a mechanism for encouraging motivation and improving the competence of CSR. Third, to make monitoring of the process of CSR activities and develop valuation tools and methods at both levels: company and country.

In 2016, legal acts came into force in Lithuania, which implemented the new European Union Directive for large companies and groups of companies on mandatory disclosure of non-financial information, including the diversity aspect. Therefore, starting in 2017, the financial reporting and annual reports of companies are prepared considering the requirements for the preparation and disclosure of CSR reports, set out in the Law on Financial Reporting of the Republic of Lithuania. This means that information on environmental protection, social responsibility, and management must be published by public interest companies or groups of companies (with 500 or more employees) once a year. Social and environmental information could be disclosed in different ways. For example, as a part of the annual report or as a separate report such as the Social Responsibility Report, the Sustainable Business Report, the Sustainable Development Report, and the Progress Report. As a result, the number of companies providing sustainability reports has increased. The financial statements of these companies are audited. However, under the Corporate Financial Reporting Act, the auditor verifies that a sustainability report has been provided and indicates this in the auditor's report. Thus, the auditors only state that the report has been prepared and that there is no legal obligation to check its quality. Therefore, the problem of the reliability of sustainability

information remains. This is confirmed by the pollution scandal of the manufacturing company 'Grigeo' that took place at the beginning of 2020.

5 Corporate sustainability reporting research in Lithuania

5.1 Sustainability reporting as a sustainability management tool

According to Lithuanian laws, management accounting is not the object to report in financial statements and other annual reports. This fact may hinder the evaluation of how companies manage sustainability by reporting information. The best example of such management would be the case analysis of a company going deep into this company's sustainability accounting in some period, but we have only two case studies that analysed external information presented in annual reports. Dagilienė and Bruneckienė (2010) after the analysis of one listed company reporting concluded that the annual notes of financial statements and reports mainly provide information on product groups, sales volumes, and markets. Environmental activities are most broadly described in the annual report. Data on participation projects, characteristics of products sold, organic products, and implemented quality management and environmental systems are available on the company's websites. Szadziewska et al. (2020) revealed that the 'Coca-Cola HBC Baltics' Sustainability Report for Lithuania had the smallest number of GRI indicators. Lithuanian non-financial reports disclosed information that was common for the entire group, without the details pertaining to a particular country. Thus, authors having analysed case data, do not get specific information about a company's performance measurement and control systems, and all information presented is focused more on external stakeholders.

If we look at the research of one industry, we can find analysed reports of banks, water supply, dairy, and beer producers in Lithuania. The sustainability reporting of the biggest banks was studied three times in 2009–2012. These studies concluded that reporting does not have a regular structure (Dagilienė, 2014) and still has very poor content in terms of relevance, comparability, objectivity, and reliability (Dagilienė et al., 2016); most attention was devoted to human resources, least – to products and services (Dagilienė, 2014). Banks mostly use GRI standards (Dagilienė et al., 2016). Research performed in 3 water supply companies and a study of 4 dairy companies revealed that most information was provided on areas related to environment protection, product/service safety and quality, and investments in the modernisation of equipment.

Two content analyses of social responsibility disclosures on websites, and reports in universities and colleges revealed that most high education institutions present their international mobility and welfare for students, indirect economic impacts, environmental expenditures and energy, human rights, and the quantity of disclosed information is increasing (Dagilienė and Mykolaitienė, 2015, 2016).

Only two studies found the management systems companies use: 42.1% of companies did not provide any information on implemented standards (most popular are ISO 14001 and GRI) (Juščius and Griauslytė, 2014) and in the CEE region, it was 9.4% of companies that have implemented the SA8000 standard (Šneiderienė, 2016).

5.2 Sustainability reporting as a stakeholder's management tool

As sustainability reporting was regulated from 2009 by the laws of the Republic, research studies of a sample of listed companies, socially responsible companies, and the largest companies have analysed their compliance with legal norms.

Reporting of listed Lithuanian companies was investigated in five research studies in 2008–2014 and authors found that disclosure of CSR is not comprehensive and varies greatly (Dagilienė, 2010), but the quantity of the presented CSR information was increasing every year until 2009 (Smirnova and Rudžionienė, 2012). Most of the reported information was related to product quality and safety, green products (Dagilienė, 2010), human resources [presenting employee training, materials and resources used, labor unions, and fines paid (Bartkus and Grunda, 2011)]. Information on employees is disclosed mainly in digital form and in tables (Dagilienė, 2010). Environmental information is second by frequency of disclosure and is the most actual to manufacturing companies. Lithuanian listed companies that operate in the service sector disclose most non-financial information (Dagilienė, 2013).

Two studies have analysed 71–78 listed Lithuanian, Latvian and Estonian (Baltic States) companies in 2012–2015 and identified that the analysed companies did not increase disclosures materially. Mostly was provided positive information about the descriptive character (Dagilienė and Nedzinskienė, 2018). 94% of Lithuanian companies disclose environmental information, this is more than Latvian or Estonian companies (Karlonaite and Rudžionienė, 2014). Lu et al. (2019) after case studies of the Baltic States' energy utilities sector found different results in sustainability reporting, where Estonia showed the best situation, the second was Lithuania.

Nine studies investigated the sustainability reporting of companies that belong to Global Compact Network Lithuania in 2009–2016. It was found that banks, and fuel and oil companies have an extremely high level of disclosure, while the trading sector is extremely low (Leitonienė and Šapkauskienė, 2016). The information about human and employee rights consists in most CSR reports, less information is presented about environmental protection and the least attention is paid to the fight against corruption (Leitonienė and Šapkauskienė, 2012). Most information related to commitment to society was of a descriptive character (Dagilienė and Gokienė, 2011). The greatest amount of social information was provided by the financial and insurance companies (Leitonienė et al., 2015). Comparing with our region's situation it was also stated that, the lowest number of GRI reports is provided by companies belonging to the CEE model, but the number of reporting companies is increasing by 2014. This number has increased more than ten times. Large and multinational corporations predominate among the reporting companies (Šneiderienė, 2016).

Six investigations of Lithuania's largest companies from 2011 to 2014 explored publicly available information in CSR reports and websites (but usually reports are presented on websites). 95% of organisations published separate CSR reports, and 32% – integrated reports. Companies in Lithuania tend to provide more information on environmental initiatives and relationships with employees, but this information is abstract and fragmentary (Juščius and Griauslytė, 2014). The quantity of voluntary information disclosure is small. After studies of more countries in CEE, authors concluded that the Baltic States disclose less CSR information than the other CEE countries (Horvath et al., 2017a). Dagilienė et al. (2014) in their research also stated that Lithuanian companies present a small amount of social information, but it is increasing

during this period. 30% of companies present stand-alone reports and 16% of companies give information in their annual report. Both numbers are in the middle compared with other countries in the sample (Horvath et al., 2017b).

After the analysis of the main determinants of sustainability reporting we may conclude that the significant determinants explored most frequently are the size of a company and industry type (Lapinskaitė and Rudžionienė, 2008; Smirnova and Rudžionienė, 2012; Leitonienė and Šapkauskienė, 2012, 2015; Dagilienė, 2013; Karlonaitė and Rudžionienė, 2014; Rudžionienė and Petraškaitė, 2014; Dagilienė, 2017; Dagilienė and Nedzinskienė, 2018; Kundelienė and Stepanauskaitė, 2018). Neither profitability (ROA, increasing sales) nor leverage had any relationship with sustainability reporting (Smirnova and Rudžionienė, 2012; Dagilienė, 2013; Rudžionienė and Petraškaitė, 2014; Kundelienė and Stepanauskaitė, 2018). Some authors' (Lapinskaitė and Rudžionienė, 2008; Leitonienė and Šapkauskienė, 2012) logical conclusion is that foreign investments and listing in the stock exchange encourage socially responsible companies to report more sustainable information and the higher concentration of capital suggests that the enterprise will disclose less information. In conclusion, the results of the reviewed studies are controversial. Horváth et al. (2017a) defined the culture and globalisation level of the country are correlated with information reporting at the national level; and Dagilienė and Nedzinskienė (2018) stated the country of origin of the company, company's approach to reporting non-financial information are correlated with sustainability reporting in the company level.

6 Discussion and conclusions

A retrospective overview of the Lithuanian institutional environment, and previous research about corporate sustainability reporting practices, allows us to evaluate how diverse is sustainability accounting and how it evolved over time. Overall, we can observe a slightly increasing regulatory trend. However, the strengthening of regulation happens because of the EU sustainability and transparency policies, rather than national or local pressure.

In summary, three stages in the development of corporate sustainability reporting practices in Lithuania can be distinguished.

In the first stage (2003–2008), the reporting of sustainability information was voluntary. Governmental institutions and international and national NGOs focused on promoting social responsibility or sustainability. Lithuanian companies were not yet actively involved in CSR activities. The number of members of the National Network was growing steadily, but only a small proportion of companies submitted sustainability reports or provided sustainability information on their websites. Sustainability reporting as a reputation-building approach dominated at this stage.

The second stage (2009–2013) began with the partial regulatory phase of sustainability information reporting. While the focus was still on the idea of sustainability, at this stage the national NGOs in the field of sustainability gained strength. Together the active engagement in CSR networks of organisations was monitored. In addition, the first government efforts to regulate sustainability accounting and reporting were visible. At this stage, sustainability reporting was beginning to emerge as a tool for managing and communicating with stakeholders.

In the third stage (2014–2020), government institutions and NGOs increasingly focused on monitoring and evaluating the progress and results of CSR. This also aimed to increase the competence of CSR. While the partial regulation of sustainability information reporting remained at this stage, national NGOs tightened sustainability requirements for their members. At this stage, the approach of sustainability reporting as a way for stakeholders' management is increasingly dominated. In addition, the strengthening of the competence of CSR created preconditions for the implementation of sustainability accounting as a way for a sustainability management approach.

Undoubtedly, these stages of sustainability reporting practices have an impact on the scope of sustainability research. In the case of Lithuania, it is clear that the period of voluntary reporting by companies until 2009 has been the least studied, with individual initiatives by companies joining international organisations. Yet, reports to the public are still quite chaotic and the adherence to key sustainability principles in day-to-day operations is very fragmented. Mandatory disclosure of sustainability reporting (from 2017) was not investigated and published until 2020. Therefore, the most investigated period was relatively unregulated, so the quality of disclosure was examined mostly in annual reports and websites.

Taking into account the historical consequences of this region, we may state that post-communist countries could implement sustainability ideas only from 1990, whereas the first ideas about sustainability in Western European countries had arisen in the 1960s. In the case of Lithuania, as an example of a transition economy, the first signs of corporate sustainability reporting practices and research appear only in 2000–2008, that is, at the beginning of the 21st century, while two first stages had already taken place in non-transition economies. Therefore, all company activity in the field of sustainability or CSR began basically in the two last decades and reached its peak, while research into this activity increased only in 2010–2014. In Lithuania, when state regulation as regards reporting information related to environmental and personnel issues were implemented in 2009, the practice changed rapidly. While Western countries had sustainability stages over seven decades, post-communist transition countries developed sustainability practices in only two decades. At that time, these countries had to take over some theoretical ideas, and the implementation of sustainability in practice had to be faster. Therefore, transition countries missed out on the first few phases of the evolution of sustainability and had to quickly adapt to existing practices. In this regard, the government and NGOs play an important role in Lithuania more than in other non-transition economies. But due to the different cultures (Horvath et al., 2017a), and the level of public understanding, stakeholder pressure is small.

Greenwashing. Unsurprisingly, from our research, we identified features of greenwashing:

- a sustainability reporting as means of communication for unsustainable companies (e.g., ecological scandals)
- b sustainability reporting as means of communication for companies from controversial industries, such as oil and gas refinery, chemistry, etc.

This trend aligns with sustainability accounting as a reputation-building approach.

As the result of this study, we can identify the wide range of sustainability reporting among companies in Lithuania: there are few leaders of excellent sustainability reporting to controversial cases of the sustainability reporting not supported on accounting data.

Dagilienė (2014) identified that a telecommunication company disclosed a relatively large amount of information. Dagilienė (2017), Dagilienė and Nedzinskienė (2018) analysed relationships between disclosure of one element with another and concluded that if companies voluntarily disclose one of the non-financial aspects (e.g. social aspects), they tend to disclose more of the other non-financial aspects in their reports. Hence, it shows a company's (i.e., its managers') approach to reporting sustainability information and, of course, sustainability as a whole.

- *Mandatory-voluntary.* The results show that businesses usually provide only as much sustainability information as required by law. Voluntary sustainability reporting is still fragmented. Lapinskaitė and Rudžionienė (2008), and Leitonienė and Šapkauskienė (2012) in their studies stated that if the activity of a company involves environmental pollution, this also determines the disclosure of more information. Furthermore, researchers generally do not have the opportunity to verify that the information provided in the reports is accurate. If state laws do not require a social audit, this problem remains significant because the gap between sustainability reporting in annual statements of companies and the real situation (actual pollution of water in the 'Grigeo' case) in practice exists.
- *Civic society – foreign capital.* As we see from the research that many initiatives to implement sustainability and improve reporting come from legal legislation from the EU (such as the Directive on non-financial reporting), foreign capital companies, and regulation for listed companies also played an important role in sustainability reporting practice. The main problem is that real stakeholders are not interested in reported sustainability information, there are no expectations from society in such reporting and even in actual harmful activities of the company, especially for long period. Therefore, the Lithuanian case of transition economy is similar to developing countries, where external and powerful stakeholders such as global brands, foreign investors, international media concerns, and international regulatory bodies influence CSR reporting. The whole society makes little pressure on companies to disclose their CSR, which means that the society of developing countries is less interested and informed about companies' social and environmental activities (Ali et al., 2017).

We identified approaches to sustainability accounting and proposed a matrix that connects patterns of distinct approaches both at the micro (organisational) and macro levels. This can be helpful both for academia and practitioners. The researchers can use this mapping matrix for future research to determine the state-of-the-art of sustainability accounting by linking corporate and institutional environment levels.

Furthermore, we provide insights into the development of an institutional environment for sustainability accounting both in the selected transition country and compare how it fits into the global evolution of sustainability reporting (identified by Lai and Stacchezzini, 2021).

The main limitation of the study is that it used secondary data. The results are based on the analysis of the previous research articles. However, in future research, the opinion of practitioners-experts and a review of practical problems should be considered, since this would help to more deeply identify the nature of the sustainability accounting theory and practice. Another limitation is that the research was based on a longitudinal case study of only one country. A similar study of other countries would help confirm general

trends and identify specifics in the development of sustainability accounting and reporting in countries of the economy in transition.

References

- Ali, W., Frynas, J.G. and Mahmood, Z. (2017) 'Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: a literature review', *Corporate Social Responsibility and Environmental Management*, Vol. 24, pp.273–294, <https://doi.org/10.1002/csr.1410>.
- Astromskienė, A. and Adamonienė, R. (2009) 'Tendencies of enterprise social responsibility initiatives in Lithuania', *Economics and Management*, No. 14, pp.217–222.
- Atkinson, G. (2000) 'Measuring corporate sustainability', *Journal of Environmental Planning and Management*, Vol. 43, No. 2, pp.235–252, <https://doi.org/10.1080/09640560010694>.
- Bartkus, E.V. and Grunda, R. (2011) 'Business sustainability assessment: comparing results of two studies', *Engineering Economics*, Vol. 22, No. 1, pp.32–40. <http://dx.doi.org/10.5755/j01.ee.22.1.216>.
- Bebbington, J. (2001) 'Sustainable development: a review of the international development, business and accounting literature', *Accounting Forum*, Vol. 25, No. 2, pp.128–157, <https://doi.org/10.2139/ssrn.257434>.
- Bebbington, J. and Larrinaga, C. (2014) 'Accounting and sustainable development: an exploration', *Accounting, Organizations and Society*, Vol. 39, No. 6, pp.395–413, <https://doi.org/10.1016/j.aos.2014.01.003>.
- Bebbington, J. and Unerman, J. (2018) 'Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research', *Accounting, Auditing and Accountability Journal*, Vol. 31, No. 1, pp.2–24, <https://doi.org/10.1108/AAAJ-05-2017-2929>.
- Bebbington, J., Österblom, H., Crona, B., Jouffray, J.B., Larrinaga, C., Russell, S. and Scholtens, B. (2020) 'Accounting and accountability in the anthropocene', *Accounting, Auditing and Accountability Journal*, Vol. 33, No. 1, pp.152–177. <https://doi.org/10.1108/AAAJ-11-2018-3745>.
- Bebbington, J., Russell, S. and Thomson, I. (2017) 'Accounting and sustainable development: reflections and propositions', *Critical Perspectives on Accounting*, Vol. 48, pp.21–34, <https://doi.org/10.1016/j.cpa.2017.06.002>.
- Burritt, R.L. and Schaltegger, S. (2010) 'Sustainability accounting and reporting: fad or trend?', *Accounting, Auditing & Accountability Journal*, Vol. 23, No. 7, pp.829–846, <https://doi.org/10.1108/09513571011080144>.
- Carroll, A.B. and Shabana, K. M. (2010) 'The business case for corporate social responsibility: a review of concepts, research and practice', *International Journal of Management Reviews*, Vol. 12, No. 1, pp.85–105, <https://doi.org/10.1111/j.1468-2370.2009.00275.x>.
- Chauvey, J.N., Giordano-Spring, S., Cho, C.H. and Patten, D.M. (2015) 'The normativity and legitimacy of CSR disclosure: evidence from France', *Journal of Business Ethics*, Vol. 130, No. 4, pp.789–803.
- Dagilienė, L. (2010) 'The research of corporate social responsibility disclosures in annual reports', *Engineering Economics*, Vol. 21, No. 2, pp.197–204.
- Dagilienė, L. (2013) 'The influence of corporate social reporting to company's value in a developing economy', *Procedia Economics and Finance*, Vol. 5, pp.212–221, [https://doi.org/10.1016/S2212-5671\(13\)00027-0](https://doi.org/10.1016/S2212-5671(13)00027-0).
- Dagilienė, L. (2014) *Social Accounting: Theoretical Reasoning and Evaluation*, Technologija, Kaunas.

- Dagilienė, L. (2017) 'Sustainability reporting in Lithuania: the perspective of integrated reporting', in Horváth, P. and Pütter, J.M. (Eds.): *Sustainability Reporting in Central and Eastern European Companies: International Empirical Insights*, pp.87–108, Springer, Cham, https://doi.org/10.1007/978-3-319-52578-5_6.
- Dagilienė, L. and Bruneckienė, J. (2010) 'The role of voluntary disclosure in corporate social responsibility', *Economics & Management*, No. 15, pp.451–456.
- Dagilienė, L. and Gokienė, R. (2011) 'Valuation of corporate social responsibility reports', *Economics and Management*, No. 16, pp.21–27.
- Dagilienė, L. and Mykolaitienė, V. (2015) 'Disclosure of social responsibility in annual performance reports of universities', *Procedia – Social and Behavioral Sciences*, Vol. 213, pp.586–592, <https://doi.org/10.1016/j.sbspro.2015.11.454>.
- Dagilienė, L. and Mykolaitienė, V. (2016) 'Sustainability reporting in the higher education sector – case study of Lithuania', *ZögU – Zeitschrift für öffentliche und gemeinwirtschaftliche Unternehmen, Nomos Verlagsgesellschaft mbH & Co. KG*, Vol. 39, Nos. 1–2, pp.163–174, <https://doi.org/10.5771/0344-9777-2016-1-2-163>.
- Dagilienė, L. and Nedzinskienė, R. (2018) 'An institutional theory perspective on non-financial reporting: the developing Baltic context', *Journal of Financial Reporting and Accounting*, Vol. 16, No. 4, pp.490–521, <https://doi.org/10.1108/JFRA-06-2016-0054>.
- Dagilienė, L., Leitonienė, S. and Grenčikova, A. (2014) 'Increasing business transparency by corporate social reporting: development and problems in Lithuania', *Engineering Economics*, Vol. 25, No. 1, pp.54–61, <https://doi.org/10.5755/j01.ee.25.1.2356>.
- Dagilienė, L., Leitonienė, S. and Šapkauskienė, A. (2016) 'Social responsibility in banking sector: declaration vs. quality of disclosure', in Schaltegger, S. (Ed.): *20th EMAN Conference: Two Decades of Corporate Environmental and Sustainability Accounting – What has Been Achieved?*, pp.70–73, Leuphana University Lüneburg, Germany, Lüneburg.
- De Micco, P., Rinaldi, L., Vitale, G., Cupertino, S. and Maraghini, M.P. (2020) 'The challenges of sustainability reporting and their management: the case of Estra', *Meditari Accountancy Research*, Vol. 29, No. 3, pp.430–448, <https://doi.org/10.1108/MEDAR-09-2019-0555>.
- Dumay, J., Bernardi, C., Guthrie, J., and Demartini, P. (2016) 'Integrated reporting: a structured literature review', *Accounting Forum*, Vol. 40, No. 3, pp.166–185, DOI: 10.1016/j.accfor.2016.06.001.
- Ebner, D. and Baumgartner, R.J. (2006) 'The relationship between sustainable development and corporate social responsibility', *Corporate Responsibility Research Conference 2006*, Queen's University Belfast, Dublin, pp.1–12.
- Elkington, J. (1993) 'Coming clean: the rise and rise of the corporate environment report', *Business Strategy and Environment*, Vol. 2, No. 2, pp.42–44, <https://doi.org/10.1002/bse.3280020204>.
- Fifka, M.S. (2011) 'Corporate responsibility reporting and its determinants in comparative perspective – a review of the empirical literature and a meta-analysis', *Business Strategy and the Environment*, Vol. 22, No. 1, pp.1–35, <https://doi.org/10.1002/bse.729>.
- Florio, C. and Sproviero, A. F. (2020) 'Repairing legitimacy through discourses: insights from the Volkswagen's 2015 diesel scandal', *Meditari Accountancy Research*, Vol. 29, No. 3, pp.524–542, <https://doi.org/10.1108/MEDAR-08-2019-0547>.
- Gerring, J. (2011) 'The case study: what it is and what it does', in Goodin, R.E. (Ed.): *The Oxford Handbook of Political Science*, pp.1–38, Oxford University Press, <https://doi.org/10.1093/oxfordhb/9780199604456.013.0051>.
- Gray, R. (1992) 'Accounting and environmentalism: an exploration of the challenge of gently accounting for accountability, transparency and sustainability', *Accounting, Organizations and Society*, Vol. 17, No. 5, pp.399–425, [https://doi.org/10.1016/0361-3682\(92\)90038-T](https://doi.org/10.1016/0361-3682(92)90038-T).
- Hahn, R. and Kühnen, M. (2013) 'Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research', *Journal of Cleaner Production*, Vol. 59, pp.5–21, <https://doi.org/10.1016/j.jclepro.2013.07.005>.

- Horvath, P., Putter, J.M., Dagiliene, L., Dimante, Dz., Haldma, T., Kochalski, C., Kral, B., Labas, D., Laats, K., Bedenik, N.O. and Paksiova, R. (2017a) 'Status quo and future development of sustainability reporting in Central and Eastern Europe', *Journal of East European Management Studies*, Nomos Verlagsgesellschaft mbH & Co. KG, Vol. 22, No. 2, pp.221–243, doi.org/10.5771/0949-6181-2017-2-221.
- Horvath, P., Putter, J.M., Dagiliene, L., Dimante, Dz., Haldma, T., Kochalski, C., Kral, B., Labas, D., Laats, K., Bedenik, N.O., Paksiova, R., Petera, P., Ratajczak, P., Buhovac, A.R., Sava, A., Sucala, V., Tirmitz, T.J. and Wagner, J. (2017b) 'Sustainability reporting in Central and Eastern European companies: results of an international and empirical study', in Horvath, P. and Putter, J.M. (Eds.): *Sustainability Reporting in Central and Eastern European Companies: International Empirical Insights*, pp.11–50, Springer, Cham, https://doi.org/10.1007/978-3-319-52578-5_2.
- Iacovidou, E., Millward-Hopkins, J., Busch, J., Purnell, P., Velis, C.A., Hahladakis, J.N., Zwirner, O. and Brown, A. (2017) 'A pathway to circular economy: developing a conceptual framework for complex value assessment of resources recovered from waste', *Journal of Cleaner Production*, Vol. 168, pp.1279–1288, https://doi.org/10.1016/j.jclepro.2017.09.002.
- Juščius, V. and Griauslytė, J. (2014) 'Corporate social responsibility reporting in Lithuanian business practice', *Management of Organizations: Systematic Research*, Vol. 69, pp.55–70, http://dx.doi.org/10.7220/MOSR.1392.1142.2014.69.4.
- Karlonaitė, I. and Rudžionienė, K. (2014) 'Quality assessment model of environmental information disclosure', *Accounting Theory and Practice*, Vol. 15, pp.76–87, https://doi.org/10.15388/batp.2014.15.7.
- Kundelienė, K. and Stepanauskaitė, A. (2018) 'Information disclosure and its determinants on Lithuanian companies' websites: a quantitative approach', *Engineering Economics*, Vol. 29, No. 4, pp.455–467, https://doi.org/10.5755/j01.ee.29.4.17271.
- Lai, A. and Stacchezzini, R. (2021) 'Organisational and professional challenges amid the evolution of sustainability reporting: a theoretical framework and an agenda for future research', *Meditari Accountancy Research*, Vol. 29, No. 3, pp.405–429, https://doi.org/10.1108/MEDAR-02-2021-1199.
- Laine, M. (2010) 'Towards sustaining the status quo: business talk of sustainability in Finnish corporate disclosures 1987–2005', *European Accounting Review*, Vol. 19, No. 2, pp.247–274, https://doi.org/10.1080/09638180903136258.
- Lamberton, G. (2005) 'Sustainability accounting – a brief history and conceptual framework', *Accounting Forum*, Vol. 29, No. 1, pp.7–26, https://doi.org/10.1016/j.accfor.2004.11.001.
- Lapinskaitė, A. and Rudžionienė, K. (2008) 'Environmental disclosure in Lithuanian companies' statements', *Accounting Theory and Practice*, No. 2, pp.20–29.
- Latif, B., Mahmood, Z., Tze San, O., Mohd Said, R. and Bakhsh, A. (2020) 'Coercive, normative and mimetic pressures as drivers of environmental management accounting adoption', *Sustainability*, Vol. 12, No. 11, p.4506, https://doi.org/10.3390/su12114506.
- Lehman, G. (2017) 'The language of environmental and social accounting research: the expression of beauty and truth', *Critical Perspectives on Accounting*, Vol. 44, pp.30–41, https://doi.org/10.1016/j.cpa.2016.11.005.
- Leitoniene, S. and Kundelienė, K. (2021) 'sustainability reporting: the environmental impacts of digitalization', *2021 IEEE International Conference on Technology and Entrepreneurship (ICTE)*, pp.1–6, https://doi.org/10.1109/ICTE51655.2021.9584743.
- Leitoniene, S. and Šapkauskienė, A. (2012) 'Analysis of social information as a criterion of ethical behavior of Lithuanian companies', *Economics and Management*, Vol. 17, No. 3, pp.836–843, https://doi.org/10.5755/j01.em.17.3.2091.
- Leitoniene, S. and Šapkauskienė, A. (2016) 'Information disclosure in corporate social responsibility reports: the case of Lithuanian companies', *Theoretical Journal of Accounting*, Vol. 88, No. 144, pp.73–85, https://doi.org/10.5604/16414381.1212004.

- Leitoniene, S., Šapkauskienė, A. and Dagilienė, L. (2015) 'Theoretical issues and practical implications of corporate social accounting and reporting in Lithuania', *Procedia Economics and Finance*, Vol. 32, pp.1713–1723, [https://doi.org/10.1016/S2212-5671\(15\)01477-X](https://doi.org/10.1016/S2212-5671(15)01477-X).
- Lu, J., Ren, L., Yao, S., Qiao, J., Strielkowski, W. and Štreimikis, J. (2019) 'Comparative review of corporate social responsibility of energy utilities and sustainable energy development trends in the Baltic states', *Energies*, Vol. 12, No. 18, pp.1–21, <https://doi.org/10.3390/en12183417>.
- Lynn, A. (2021) 'Why 'doing well by doing good' went wrong: getting beyond 'good ethics pays' claims in managerial thinking', *Academy of Management Review*, Vol. 46, No. 3, pp.512–533, <https://doi.org/10.5465/amr.2018.0250>.
- Milne, M.J. (1991) 'Accounting, environmental resource values, and non-market valuation techniques for environmental resources: a review', *Accounting, Auditing and Accountability*, Vol. 4, No. 3, pp.81–109, <https://doi.org/10.1108/09513579110003583>.
- Milne, M.J. and Patten, D.M. (2002) 'Securing organizational legitimacy: an experimental decision case examining the impact of environmental disclosures', *Accounting, Auditing and Accountability*, Vol. 15, No. 3, pp.372–405, <https://doi.org/10.1108/09513570210435889>.
- Odera, O., Scott, A.H. and Gow, J. (2016), 'Factors influencing corporate social and environmental disclosures: a systematic review', *International Journal of Business Governance and Ethics*, Vol. 11, No. 2, pp.116–134, <https://doi.org/10.1504/IJBGE.2016.078199>.
- Pedersen, E.R.G., Neergaard, P., Pedersen, J.T. and Gwozdz, W. (2013), 'Conformance and deviance: company responses to institutional pressures for corporate social responsibility reporting', *Business Strategy and the Environment*, Vol. 22, No. 6, pp.357–373, <https://doi.org/10.1002/bse.1743>.
- Rapiah, M. and Che, Z.M. (2020) 'The influence of environmental management accounting practices on environmental performance in small-medium manufacturing in Malaysia', *International Journal of Environment and Sustainable Development*, Vol. 19, No. 4, pp.378–392, <https://doi.org/10.1504/IJESD.2020.110643>.
- Rosati, F. and Faria, L. (2019) 'Addressing the SDGs in sustainability reports: the relationship with institutional factors', *Journal of Cleaner Production*, Vol. 215, pp.1312–1326, <https://doi.org/10.1016/j.jclepro.2018.12.107>.
- Rudžionienė, K. and Petraškaitė, V. (2014) 'The disclosure of corporate social responsibility which is presented in the financial information on the internet', *Science and Studies of Accounting and Finance: Problems and Perspectives*, Vol. 1, No. 9, pp.204–212, DOI: 10.15388/batp.2014.15.8.
- Russell, S., Milne, M.J. and Dey, C. (2017) 'Accounts of nature and the nature of accounts: critical reflections on environmental accounting and propositions for ecologically informed accounting', *Accounting Auditing and Accountability*, Vol. 30, pp.1426–1458, <https://doi.org/10.1108/AAAJ-07-2017-3010>.
- Sharma, E. (2019) 'A review of corporate social responsibility in developed and developing nations', *Corporate Social Responsibility and Environmental Management*, Vol. 26, No. 4, pp.712–720, <https://doi.org/10.1002/csr.1739>.
- Smirnova, R. and Rudžionienė, K. (2012) 'Factors of the corporate social responsibility disclosure in financial statements', *Accounting Theory and Practice*, No. 12, pp.31–40.
- Smith, J., Haniffa, R. and Fairbrass, J.A. (2011) 'Conceptual framework for investigating 'capture' in corporate sustainability reporting assurance', *Journal of Business Ethics*, Vol. 99, pp.425–439, <https://doi.org/10.1007/s10551-010-0661-4>.
- Šneiderienė, A. (2016) 'The regional differences of corporate social responsibility implementation', *Journal of Social Sciences, Regional Formation and Development Studies*, Vol. 2, No. 19, pp.127–136, <https://doi.org/10.15181/rfds.v19i2.1289>.
- Suchman, M.C. (1995) 'Managing legitimacy: strategic and institutional approaches', *Academy of Management Review*, Vol. 20, No. 3, pp.571–610, <https://doi.org/10.2307/258788>.

- Suddaby, R. and Greenwood, R. (2005) 'Professionals and field-level change: institutional work and the professional project', *Current Sociology*, Vol. 59, No. 4, pp.423–442, <https://doi.org/10.1177/0011392111402586>.
- Szadziewska, A., Kotowska, B., Klovienė, L., Legenchyk, S., Prša, D. and Speziale, M.T. (2020) 'Non-financial reporting by an international corporation in the light of new mandatory regulations', *Theoretical Journal of Accounting*, Vol. 109, No. 165, pp.105–138, <https://doi.org/10.5604/01.3001.0014.4344>.
- Waniak-Michalak, H., Šapkauskienė, A. and Leitonienė, Š. (2018) 'Do companies manipulate CSR information to retain legitimacy?', *Engineering Economics*, Vol. 29, No. 3, pp.352–360, <https://doi.org/10.5755/j01.ee.29.3.18946>.