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Chapter 3

Cost and Benefits of Sustainability Reporting: Literature Review

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In today's business world, profit-seeking companies face a new reality where they must comply with international and national regulations requiring them to prepare non-financial statements and engage in sustainable activities. However, if these activities and their reporting are voluntary, company managers and shareholders may require additional arguments to justify their implementation due to the need for economic benefit. Therefore, the literature suggests that businesses should use cost-benefit analysis as a tool to assess the impact of sustainability activities on their current and future performance. A cost-benefit analysis should include all financial and non-financial impacts of the activity to provide rational and persuasive arguments for sustainability reporting. Despite the potential benefits of sustainability reporting, companies should ensure that the benefits outweigh the costs, particularly during the initial implementation phase, where sustainability activities and reporting may increase costs and reduce financial results.

The capital-intensive nature of sustainability activities means that they are generally more relevant to profitable companies with the necessary resources to pursue additional objectives. For companies primarily concerned with survival, these ideas may not be as relevant unless the company's activities align with sustainability goals.

The main objective of this chapter is to investigate the costs and benefits of sustainability reporting for companies, both in financial and non-financial terms, based on empirical studies conducted over the last decade in developed countries.

It is important to note that this analysis does not evaluate the potential costs and benefits of sustainability activities. The focus is on the economic effects of sustainability reporting. Additionally, the impact of individual standards for specific industries or activities on businesses was not analysed.

Given the various terms used to describe a company's sustainability activity, such as 'sustainability', 'Corporate Social Responsibility' (CSR), 'ESG', 'non-financial', 'integrated', 'triple bottom line', 'reporting' and 'disclosure' we have taken all of these into consideration in our literature review. To simplify our analysis, we have combined these activities under the umbrella term 'sustainability'. Since it is often challenging to distinguish between CSR activities and reporting (Christensen, Hail, & Leuz, 2021), we assume that a company's sustainability performance is accurately reflected in its statements without any greenwashing. Therefore, the benefits of sustainability reporting can be seen as equivalent to those of sustainability itself. While the costs of sustainability reporting may sometimes be difficult to differentiate from the costs of sustainability activities, we will attempt to identify and address these issues in our research.

This literature review followed a rigorous methodology with the following stages.

1. The search for relevant studies was conducted using the SCOPUS (Elsevier) database, which is one of the largest online databases for academic sources.

2. The search terms used in the advanced search included various terms related to sustainability reporting: '*sustainability reporting' OR 'sustainability disclosure' OR 'social responsibility reporting' OR 'social responsibility disclosure' OR 'ESG disclosure' OR 'ESG reporting' OR 'non-financial disclosure' OR 'non-financial reporting' OR 'integrated reporting' OR 'integrated disclosure' OR 'triple bottom line reporting' OR 'triple bottom line disclosure' AND 'benefit' OR 'cost' OR 'impact' AND effective**. The search was also limited to sources that used the term 'effective'.

The following inclusion criteria are as follows. The inclusion criteria for the study were original and peer-reviewed meta-analyses, literature reviews, research articles, conference papers, and working papers (and some additional studies of KPMG) that were fully online accessible and written in English. The publications had to be from the period of 2010 to March 2023 to ensure up-to-date research.

3. After the initial research, we narrowed down our selection by reading the abstracts and conclusions of the articles while adhering to our eligibility criteria. These criteria included focusing on profit-seeking companies rather than the macro level, empirical research instead of theoretical, and a financial or commercial perspective rather than an environmental one, such as biodiversity, climate change, consumption, emissions, human rights, and so on.

The decision was made to focus on sources that conducted research in developed economies such as the U.S., Europe, Canada, and Australia, rather than in developing or emerging economies, based on the analysis of Atz, Van Holt, Liu, and Bruno (2023) which indicated that up to a third of studies in a global sample (29%), the U.S. (33%), and Europe (25%) were focused on these regions.

3.1. Costs of Sustainability Reporting

When investigating the costs of sustainability reporting, it is important to differentiate between direct costs associated with the preparation of sustainability reports and indirect costs incurred in implementing sustainability activities within the company.

Direct costs of sustainability reporting

Direct costs include the expenses related to preparing, certifying, and disseminating sustainability reports (Christensen et al., 2021). Some studies have found that the costs of sustainability reporting can vary widely depending on factors such as the size of the company, industry, the scope of the report, the reporting framework used, and the level of assurance required (e.g., by external auditors) (Christensen et al., 2021), the level of integration of sustainability into a company's overall strategy, the use of digital reporting tools, and the quality of data collection and analysis. These costs are typically not disclosed in financial statements and are, therefore, not included in most research studies. However, some studies provide examples of direct costs with precise figures (Table 3.1).

Table 3.1. Costs of creating and verification of sustainability reports

Size of the company by number of employees	Cost of creating the report (€)		The cost of getting the report verified (€)	
	Reasonable estimate	High estimate	Reasonable estimate	High estimate
500 to 999	17 000	33 300	7 200	11 000
1000 to 4999	30 300	61 600	11 000	18 000
5000 +	197 000	357 000	30 000	100 000
Evaluation from CAC 40 (top companies in France)			60 000	200 000

Source: (KPMG, 2013).

A survey of large global companies conducted by KPMG in 2013 found that the average cost of creating a sustainability report was €193,000, with an additional €37,000 in verification costs (KPMG, 2013). A study conducted by Lozano, Nummert, and Ceulemans (2016) focusing on large corporations primarily situated in Europe revealed that the projected expenses associated with the preparation and dissemination of a sustainability report averaged €57,532, with a standard deviation of €64,458. Notably, the highest cost for a report was €310,000, while the lowest was €3300. However, the cost varied greatly depending on the industry, with the highest costs reported in the financial sector ($1.1 million per year) and the lowest costs reported in the technology and communications sector ($250,000 per year). A more recent study of Danish companies found that the average cost of preparing a sustainability report was DKK 316,000 (approximately €42,000), with larger companies spending more than smaller ones (Christensen et al., 2021).

It can be inferred that companies that undertake various sustainability initiatives encounter significant challenges in calculating the requisite resources for the collation of information, computation of pertinent indicators, as well as the preparation and dissemination of high-quality non-financial statements following their chosen set of standards. Moreover, there may be discrepancies in costs between initial and subsequent reports, which may entail modifications in data, indicators, and strategy. In addition, companies must contemplate the verification of such reports, as not all jurisdictions require an audit, albeit mandatory social audits are anticipated shortly by the EU, thus necessitating further financial resources.

Indirect costs of whole sustainability activities

To obtain relevant information to be included in a sustainability report, companies must undertake diverse sustainability initiatives aligned with the sustainable development goals (SDGs). Costs appear at the first moment of implementing strategy in the company (Bielawska, 2022). The implementation of such strategies incurs costs from the outset, with the most significant challenges stemming from the need to conform to Corporate Social Responsibility (CSR) requisites. To fully understand social responsibility, it is crucial to collaborate with suppliers, ensure responsible production processes, deliver sustainable services, engage with stakeholders, and practice good corporate governance (Bielawska, 2022). Costs can emerge from the regular operations of the company and can be classified into different categories.

Only some studies were used to research real amounts or ratios of sustainability (environmental and social) expenditures, such as environmental expenditures, environmental R&D expenditures, donations, and training expenditures.

Environmental expenditures measure all firm expenditures on environmental protection, that is, those used to prevent, reduce, and control environmental aspects, impacts, and hazards. In addition, they include disposal, treatment, sanitation, and clean-up expenditures. Environmental R&D expenditures focus instead on firm expenditures that are used for the development of environmentally friendly products and services. Donations capture a firm's monetary cash and in-kind donations while training expenditures capture firm expenditures on all training undergone by employees (Grassmann, 2021). The descriptive statistics show that, on average, firms spend more on environmental than on social expenditures, i.e., environmental expenditure is 3.1% of net sales, and the maximum for social expenditures is 0.9% of net sales (Grassmann, 2021). Firms that publish integrated reports have significantly higher social expenditures (Grassmann, 2021).

Here are some examples of costs associated with sustainability activities that have been identified in various sources: 1) implementing sustainable practices often involves the use of renewable energy sources (for example, solar or wind power), upgrading facilities or equipment to improve energy efficiency or reduce emission, which can result in higher upfront costs for equipment and installation; 2) adopting sustainable practices may require changes in materials and products used, which may come at a higher cost than traditional options; 3) obtaining certifications for sustainable practices, such as LEED certification for buildings or Fairtrade certification for products, can involve fees and additional costs; 4) companies may need to invest in training and educating employees on sustainable practices, which can also come at a cost; 5) sustainability reporting and auditing can involve costs for preparation, certification, and dissemination of reports; 6) compliance with environmental and social regulations can so-metimes result in higher costs for companies, particularly in industries such as energy and manufacturing; 7) implementing sustainable supply chain practices, such as using recycled materials or reducing waste; 8) conducting life cycle assessments to identify opportunities to reduce environmental impacts throughout a product's life cycle; 9) developing and implementing new policies or programs to promote social responsibility and ethical practices; 10) undertaking research and development (R&D) to identify new sustainable technologies or products; 11) engaging with stakeholders, including customers, employees, and communities, to ensure alignment with sustainable values and goals; 12) creating and maintaining sustainability reporting systems to track and report on progress towards sustainability goals; 13) engaging with external sustainability standards organizations and initiatives, such as the Global Reporting Initiative or the United Nations Global Compact.

The adoption of sustainability strategies in a corporate setting can prove to be a financially demanding venture, primarily attributed to the need to adhere

to CSR standards, the direct costs incurred during the implementation of sustainability initiatives, and the necessity to engage with suppliers and stakeholders. The expenses incurred from sustainability initiatives can be broadly categorized into three primary classifications: economic costs, environmental costs, and social costs. Economic costs pertain to the financial aspects of sustainability activities, whereas environmental costs are related to the impact of sustainability activities on the natural environment. Lastly, social costs are attributed to the impact of sustainability activities on society and stakeholders. Businesses may face costs related to mitigating greenhouse gas emissions, preserving biodiversity, conserving natural resources, managing waste, controlling pollution, and rehabilitating the environment.

3.2. Benefits of Sustainability Reporting

Although implementing sustainability activities and reporting incurs significant costs, it also generates various positive impacts, both financial and non-financial, in the short and long term.

Financial benefit

A significant number of studies have examined the link between sustainability reporting and the financial performance of companies (CFP). To ensure objectivity, we have reviewed meta-analyses and literature reviews conducted on this topic (Table 3.2).

Herefore, as we see from meta-analyses and literature reviews, the overall trend of sustainability reporting and corporate financial performance relationship is positive or U-shaped, but in the specific sector, in the specific country under specific conditions, it may not necessarily be positive. Corporate financial performance in research studies is mostly measured by accounting-based indicators such as return on assets ratio (ROA), return on equity ratio (ROE), and others, but many studies were performed using market-based indicators, but results on the relationship between sustainability reporting and financial performance are the same.

Kocmanová, Pavláková Dočekalová, Škapa, and Smolíková (2016) found that despite the positive economic value, most of the selected Czech companies exhibited negative value added. Li, Gong, Zhang, and Koh (2018) reported a positive association between ESG disclosure level and firm value and also observed a positive relationship between higher CEO power and ESG disclosure and firm value. Fatemi, Glaum, and Kaiser (2018) discovered a positive association between ESG strengths and firm value but a negative association between ESG weaknesses and firm value. The study also found that ESG disclosure could dampen the negative impact of weaknesses and decrease the positive impact

of strengths on firm valuation. Petrescu et al. (2020) identified several factors, such as process efficiency, cost reduction, waste reduction, and efficiency improvement, that lead to an improvement in a company's financial performance.

Table 3.2. Meta-analyses and literature reviews on the relationship between sustainability reporting and a company's financial performance

Authors	Sample	Main results
Friede, Busch, and Bassen (2015)	2200 studies since the mid-1990s	Roughly 90% of studies find a nonnegative ESG–CFP relation. More importantly, the large majority of studies report positive findings. The positive ESG impact on CFP appears stable over time.
Busch and Friede (2018)	25 meta--analyses	All CSP–CFP summary effects are highly significant and positive. It was not detected statistically significant differences between the effects of environmental and social-related CSP on CFP.
Saha and Cerchione (2020)	114 papers (1958–2016)	CSR has a direct positive impact on CFP.
Velte, Stawinoga, and Lueg (2020)	73 studies (2008–2019)	Carbon performance increases financial performance and has a negative impact on the cost of capital.
Veltri and Silvestri (2020)	27 papers (2011–2020)	Investors value financial (and non-financial) information disclosed by corporate IR. IR is associated with greater analyst forecast accuracy, lower cost of capital, higher stock liquidity, higher firm market value, and expected cash flows.
Christensen et al. (2021)	over 380 CSR studies up to 2020	The results are mixed (positive, U-shaped). CSR increases financial performance or firm value. Firms that are less susceptible to CSR or ESG shocks offer lower returns, and vice versa.
Velte (2022)	85 studies (2012–2020)	IR adoption and IR quality are linked with positive consequences on firm valuation, as they lead to higher total performance measures.
Khan (2022)	672 papers (2012–2020)	EU and US-based studies reported ESG disclosure has a positive impact on financial performance that is statistically insignificant. ESG performance increases firm value.
Bosi, Lajuni, Wellfren, and Lim (2022)	358 articles (1998–2022)	Sustainability reporting is becoming more generating benefits and environmental impacts. CSR reporting can help companies be more resilient in difficult times. ESG improves financial transparency.
Atz et al. (2023)	1,141 papers and 27 meta-reviews (2015–2020)	ESG investing provides asymmetric benefits, especially during a social or economic crisis. There exists a robust and positive association between sustainability and financial performance on the firm level.

Source: own presentation.

Lang, Lins, and Maffett (2012) reported that reduced transaction costs and increased liquidity can lead to benefits. Boţa-Avram, Groşanu, Răchişan, and Gavriletea (2018) found that increased liquidity is related to the lower implied

cost of capital and higher valuation as measured by Tobin's Q, implying that liquidity acts as a mechanism linking transparency to firm valuation and equity cost of capital. Sustainable corporations with high ESG performance and transparent reporting experience lead to higher market returns, which benefits both shareholders and sustainable development (Khan, 2022; Kocmanová et al., 2016; Lozano et al., 2016; Weber, 2014). Serafeim and Yoon (2022) found that prices respond only to financially material ESG news, with a stronger reaction to positive news, news with more coverage, and news related to social capital issues. The market effect size is not consistent across the primary studies, which can be attributed to the geographical diversification of the sample of primary studies (Khan, 2022).

Fatemi et al. (2018) found that CSR expenditures could reduce the cost of capital. Vena, Sciascia, and Cortesi (2020) also confirmed that IR adopters, on average, benefit from a 1.4% decrease in the cost of capital. Christensen et al. (2021), after the analysis of existing studies, concluded that better CSR performance is associated with lower loan spreads and, hence, a lower cost of debt. Transparency through the communication of sustainable activities categories can attract a considerable number of investors and lower the costs of capital in competitive markets (Petrescu et al., 2020). Grassmann (2021) studied a global and listed sample between 2012 and 2017 and observed that environmental expenditures follow a U-shaped relationship, while social expenditures follow an inverted U-shaped relationship with firm value. The study also showed that IR positively moderates the association between environmental expenditures and firm value for firms with either a low or high level of environmental expenditures but appears to have a negative moderating effect for firms that have moderate environmental expenditures. The study, however, found no indication of a moderating effect of IR for the inverted U-shaped relationship between social expenditures and firm value. Therefore, investors should consider social expenditures to be important for firms, but there is a limit to how much they value such expenses. This limit can be described as 'too much of a good thing', as exceeding it can decrease a firm's value. To put it simply, companies need to find the right balance between social expenditures and firm value, as exceeding the optimal level may have negative effects on their value.

Short-term and long-term effects

Investing in contemporary, energy-efficient technologies or renewable energy sources (RES) incurs costs at the time of investment but can result in increased profitability of production in the future. Similarly, hiring highly skilled employees may increase wage costs; however, their competence may lead to a reduction in production costs, ultimately strengthening the company's competitiveness. These activities must be carried out systematically, integrated into the long-term

strategy of the company, and aligned with its values and objectives (Bielawska, 2022). Rassier and Earnhart (2011) found a positive relationship between publicly owned firms in the 53 chemical manufacturing industries between tighter clean water regulation and financial performance in both the short run and long run, with a stronger effect in the long run. Horváthová (2012) identified that increased Czech firms' emissions deplete company profitability in the two years lag period but improve in the one-year lag period. The results suggest that while the effect of environmental performance on financial performance is negative for environmental performance lagged by one-year lag, it becomes positive for two years lag. Dobre, Stanila, and Brad (2015) detected a positive correlation between social or environmental performance and stock market returns one year after the changes occurred in Romanian-listed companies.

As previously mentioned, sustainable practices have been found to have a positive influence on a company's financial performance. This can be attributed to the enhanced cost management and profitability generated in the future by investing in modern, energy-efficient technologies or hiring highly qualified employees. Despite the potential short-term decrease in profitability, the long-term benefits of sustainability activities are believed to outweigh these costs and ensure the company's continued sustainability.

Non-financial benefits

Sustainability and its reporting also have many non-financial benefits in the short and long terms. Sustainability reports are a good tool in the hands of companies to communicate and manage relationships with stakeholders. The disclosure of sustainability is a differentiating factor in a competitive industry, encouraging investors' confidence, confidentiality, and loyalty of employees (Petrescu et al., 2020). The benefits include increased market recognition, improved company image, increased trust, an offer of cooperation from companies obliged to sustainability reporting, etc. (Table 3.3).

We can identify other non-financial benefits investigated in empirical studies:

1. Reputation and differentiation: sustainability communication can signal the quality of the company and lower the cost of equity in competitive markets (Fernández-Kranz & Santaló, 2010); sustainability efforts can differentiate companies in some industrial sectors (Fernández-Kranz & Santaló, 2010); positive differentiation can be achieved by disclosing sustainability commitments (Fernández-Kranz & Santaló, 2010); the social, economic, and formal practices dimensions of sustainability positively affect competitive advantage (Cantele & Zardini, 2018); CSR reporting can improve organizational commitment in SMEs (Cantele & Zardini, 2018); sustainability reporting can help improve brand image and increase consumer confidence in the company's products/services (Petrescu et al., 2020).

Table 3.3. Non-financial benefits of sustainability reporting

Authors	Improved reputation, image	Enhanced stakeholder relations	Increased consumers loyalty	Increased access to capital	Improved internal management	Help manage risks	Meet the growing demand for information from society
Fernández-Kranz and Santaló (2010)	☑	☑					☑
Servaes and Tamayo (2013)			☑				
Henisz, Dorobantu, and Nartey (2014)		☑					
Lozano et al. (2016)	☑	☑			☑	☑	
Pérez and Lopez-Gutierrez (2017)	☑						
Cantele and Zardini (2018)	☑		☑				
Li et al. (2018)		☑					
Petrescu et al. (2020)	☑	☑	☑	☑	☑	☑	
Bielawska (2022)	☑		☑		☑		☑

Source: own presentation.

2. Stakeholder engagement and communication: sustainability reporting can maintain contact with external stakeholders and local/global communities (Fernández-Kranz & Santaló, 2010); firms engaged in sustainability initiatives can contribute to their success, reduce the negative social influence, and increase the benefits to society in general (Fernández-Kranz & Santaló, 2010); sustainability reporting can foster stakeholder dialogue (Lozano et al., 2016).

3. Anticipating and mitigating risks: sustainability reporting can broaden companies' horizons and identify new ways to institute environmental practices (Lang et al., 2012); sustainability reporting can help anticipate problems in a particular community and prepare appropriate actions, thus avoiding future material shortages (Morioka & Carvalho, 2016).

4. Innovation and efficiency: sustainability reporting can broaden companies' horizons and identify new areas of economic and social growth (Lang et al., 2012); sustainability reporting can improve processes and increase response speed (Morioka and Carvalho, 2016); CSR expenditures may increase the firm's probability of survival (Fatemi et al., 2018); investors' reactions to CSR performance. Investors who are not explicitly assessing CSR performance tend to estimate higher fundamental value in response to positive CSR performance and lower fundamental value in response to negative CSR performance (Elliott, Jackson, Peecher, & White 2014); sustainability reporting can promote waste reduction and efficiency, innovations (Petrescu et al., 2020); objectives of reporting are transparency of sustainability performance; promoting sustainability efforts; and fostering change (Lozano et al., 2016).

5. Investor relations: the issuance of stand-alone CSR reports is associated with lower analyst forecast error (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012). This relationship is stronger in more stakeholder-oriented countries, i.e., in countries where CSR performance is more likely to affect a firm financial performance; CSR disclosure reduces the information disadvantage of foreign investors and facilitates cross-border investment (Cai, Lee, Xu, & Zeng, 2019).

6. Other social benefits: CSR expenditures can lead to value creation, such as a more loyal customer base and dedicated workforce, and avoid the costs associated with adverse actions by labour unions, consumer-advocacy groups, or governmental agencies empowered to monitor its activities (Fatemi et al., 2018); sustainability reporting can improve employee loyalty and recruitment (Petrescu et al., 2020); sustainability reporting can have positive effects on competitive advantage and value generated by the organization (Shad, Lai, Fatt, Klemeš, & Bokhari, 2019); sustainability reporting can bring social benefits such as supporting environmental programs and increasing consumer confidence, as well as helping companies identify new consumer segments and improve standard running (Petrescu et al., 2020); the correlation between CSR and positive media coverage is more robust in specific situations, including firms operating in 'sin' industries,

periods of low investor sentiment, and before equity offerings. Firms that demonstrate exceptional social responsibility and receive favourable media coverage experience a notable interaction that amplifies their equity valuation while reducing their cost of capital (Cahan, Chen, C., Chen, L., & Nguyen, 2015).

The different situation with sustainability reporting can be in small and medium enterprises (SMEs) because they are not obliged to report this activity, and it is difficult to research the impact of reporting because of the absence of empirical data.

Aragón-Correa, Hurtado-Torres, Sharma, and García-Morales (2008) found that SME Southern Spanish automotive repair firms with the most proactive practices exhibited a significantly positive financial performance. They also showed a positive and significant relationship between innovative-preventive environmental practices and eco-efficient practices and firm performance for the sampled SMEs. These results show similar relationships for large and small firms.

Cantele and Zardini's (2018) study of small and medium Italian manufacturing firms indicated that sustainability aspects' have a positive impact on a competitive edge; this edge afterwards had a constructive influence on companies' financial positions in the market.

The research of Bielawska (2022) has shown that the implementation of CSR brings many benefits to micro-, small-, and medium-sized enterprises SMEs. Bielawska (2022) identified 11 benefits possible from CSR activity: 1) improving organizational governance; 2) the production of (obligatory or voluntary) standardized CSR/ESG reports can facilitate the transformation towards a socially responsible enterprise, can contribute to cooperation opportunities with large enterprises, and can be an incentive for investors to co-finance the enterprise. These reports can also enable SMEs to cost-effectively communicate information to contracting parties; 3) the benefits a company obtains from implementing CSR, to a large extent, are determined by the attitude of its employees. That is why it is so important to treat employees fairly; 4) improve image and reputation; 5) customer loyalty; 6) consumers who are well-informed about CSR seek information that is less price-oriented and more about the company's environmental and social responsibility; 7) product differentiation and competitive advantage; 8) contact management. If a company takes up the challenge and initiates interesting, effective CSR projects, it will gain a pioneering position; 9) enhance commitment to sustainable development; 10) overcome public relations crises; 11) location and regional development; 12) transparency in charity. The most frequently mentioned benefits are a positive impact on financial performance, improved image, and reputation, increased market recognition, strengthened competitive position, increased attractiveness as an employer, increased employee loyalty, increased acceptance among customers, and increased prestige of the owner and their family in the community.

The results of Bielawska's research indicate that many entrepreneurs act intuitively; they do not realize the need and benefits of conducting CSR systemically, that is, in a way that allows them to anticipate all the factors, elements, situations, and other circumstances that may occur. 62% of respondents stated that CSR positively influences their company's financial performance. Studies conducted in Spanish SMEs also confirmed this favourable correlation.

Benefits sometimes emerge only when the effects of companies' social and environmental commitment become visible. The results of the research indicate that, in many cases, the relationship between CSR and the unmeasurable effects of this activity, e.g., employee loyalty and customer loyalty, are visible only in specific situations (Bielawska, 2022).

The quality of reports produced by small companies is comparatively lower and may not meet the expected standards. As a result, their impact and benefits may vary from those of larger companies that produce high-quality reports. This is due to several factors, such as limited resources and expertise in reporting, which may lead to incomplete or inconsistent disclosure of information. Consequently, stakeholders may have difficulty assessing the true performance and sustainability of small companies, which may affect their investment decisions and perception of the company. Thus, it is important to address the challenges faced by small companies in producing high-quality reports in order to improve their transparency and accountability.

3.3. Conclusions

The objective of this chapter was to investigate the costs and benefits of sustainability reporting for companies, both in financial and non-financial terms, based on empirical studies conducted over the last decade in developed countries. The literature review has revealed that the costs associated with sustainability reporting are substantial, and these costs vary depending on the size and complexity of the organization, the extent of the sustainability reporting, and the reporting standards adopted. The costs associated with sustainability reporting include direct costs such as data collection, analysis, and reporting and indirect costs such as management time and effort, training, and consultancy fees. However, despite these costs, the evidence suggests that sustainability reporting can generate significant benefits for organizations, including improved financial performance, access to capital, lower cost of capital, and stakeholder engagement in developed countries. Non-financial benefits of sustainability reporting include reputational benefits, increased employee motivation, and enhanced risk management. While meta-analyses and literature reviews demonstrate a positive trend between sustainability reporting and corporate financial performance, it is important to note that the relationship may not be uniformly

positive across all sectors, countries, and conditions. The managers of firms should also evaluate that relationship between environmental and social reporting and corporate financial performance can be U-shaped form.

The benefits of sustainability reporting have been found to be particularly pronounced for small and medium-sized enterprises (SMEs), as it can enhance their competitiveness, improve their access to capital, and provide them with a means of engaging with stakeholders. However, SMEs face several challenges in implementing sustainability reporting, including a lack of resources, expertise, and awareness of reporting standards. To overcome these challenges, SMEs can adopt a phased approach to sustainability reporting, focusing initially on a few key sustainability issues and gradually expanding their reporting over time.

Therefore, the implementation of sustainability and its reporting may result in short-term negative impacts for businesses, but the long-term positive effects are likely to outweigh any disadvantages. In the long run, the costs would be 'compensated' by more efficient and/or more economical production, e.g., by using less water or electricity, and therefore investments in CRS, although sometimes costly, contribute to laying the foundations for increased profitability of the business.

In conclusion, the costs and benefits of sustainability reporting are significant, and organizations should carefully weigh these factors when deciding whether to engage in sustainability reporting. Despite the costs, sustainability reporting can generate significant benefits for organizations, particularly for SMEs, in both financial and non-financial terms. Therefore, organizations should carefully evaluate their sustainability reporting practices and adopt a phased approach, if necessary, to ensure that they can reap the benefits of sustainability reporting while minimizing the associated costs. Additionally, future research should focus on developing more accurate methods for measuring the costs and benefits of sustainability reporting, particularly for SMEs, as well as investigating the impact of reporting standards and frameworks on the costs and benefits of sustainability reporting.

As this study was based on articles published in the SCOPUS (Elsevier) database between 2010 and March 2023, which presented studies in developed countries, these choices constitute limitations of this study. In the future, it may be possible to systematise existing research on this topic over a longer period of time around the world, both for all companies and for specific industries, large and small companies, private and public sectors including as more as possible performed research in other scientific journals, conference papers in English and other languages.

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