Revista de Contabilidad y Dirección
Vol. 33 año 2022, pp. 119-129

Corporate Sustainability: the Fit between Demand and Measurement

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Fecha recepción: 17-10-2021
Fecha aceptación: 23-12-2021

ABSTRACT

In the last two decades corporate sustainability has gained significant attention from both research and practice, and fundamentally shapes managerial decision-making, investors' pricing of financial instruments as well as policy-makers envisaging taxes (or levies) on certain industries or production-types. In this article we focus on two aspects among the several surfacing in the literature: (a) who is interested in *corporate sustainability*, and *why*? And (b) how to overcome and reconcile issues related to measurement and assessment of sustainability performance. I argue that the debate on corporate sustainability can be approached from several perspectives (e.g., society, investors, and regulators) and each has its unique features (e.g., sustainability is in the eye of the beholder); in turn, such differences matter also in terms of measurement and disclosure. The latter is the field in which most of the progresses are expected to be made in the future.

JEL classification: M14, M40, Q5, R11.

KEYWORDS

Corporate responsibility; CSR; ESG; performance measurement; sustainability; integrated reporting.

RESUMEN

En las últimas dos décadas, la dimensión medioambiental de la empresa ha ganado una atención significativa tanto por parte de la investigación como de la práctica, y da forma fundamentalmente a la toma de decisiones gerenciales, la fijación de precios de los instrumentos financieros por parte de los inversores, así como a los formuladores de políticas que prevén impuestos sobre ciertas industrias o tipos de producción. En este artículo nos enfocamos en dos aspectos entre los varios que surgen en la literatura: (a) ¿quién está interesado en los temas medioambientales y por qué? Y (b) cómo superar y conciliar los problemas relacionados con la medición y evaluación del desempeño en sostenibilidad. Se sostiene que el debate sobre la sostenibilidad empresarial se puede abordar desde varias perspectivas (por ejemplo, la sociedad, los inversores y los reguladores) y cada uno tiene sus características únicas (por ejemplo, la sostenibilidad está en el ojo del público); a su vez, estas diferencias también son importantes en términos de medición y revelación. Este último es el campo en el que se espera lograr la mayor parte de los avances en el futuro.

Clasificación JEL: M14, M40, Q5, R11.

PALABRAS CLAVE

Responsabilidad corporativa; RSE; ESG; medición del desempeño; sustentabilidad; informes integrados.

'By Corporate Sustainability we refer to an intentional strategy to create long-term financial value through measurable social and environmental impact.'

—Grewal and Serafeim (2019)

1. Introduction

There are few topics or broad themes that can bridge worlds otherwise far apart: corporate sustainability is one of those. Academics and practitioners, corporations and financial institutions, regulators, and customers appear all to have a stake in the current manifolded debate. Although the topic first emerged in the 19th century and was further reinvigorated in the 1970s, the last two decades witnessed a surge in the attention towards corporate sustainability (Grewal & Serafeim, 2020). A quick internet search may help us to test this assertion and would result in dozens of mentions in news feeds, business press, and articles.

The reasons behind such heightened attention can be traced back to two main factors: first, corporate sustainability is a novel topic in many areas (e.g., production, energy, agriculture, engineering, chemistry, to name just a few) with great potential for future developments in social sciences, economics, and business (Mayer, 2020). The quantity of resources mobilized by governments, NGOs and corporations in the pursuit of social and environmental objectives alongside financial performance is remarkable. One example is the recent approval from the European Council of the 'Next Generation EU' framework, in July 2020, which dedicates € 750 BN to the relaunch of the economy, an objective tightly intertwined with the pursuit of sustainability-related goals. Second, it is a call for action to better define, identify, and measure what corporate sustainability entails for firms and stakeholders, including customers, financers, regulators (Boesso, Favotto, & Michelon, 2015). What are the key risks and opportunities? How to manage, measure, and disclose them? Who should be using them and for what purposes?

2. Why Corporate Sustainability Matters

Although there is near consensus that corporate sustainability matters, interestingly there are many reasons why it features high in the list of many actors. Clarifying what the drivers of such attention are also helps us attending to the most pressing issues corporations, investors, and regulators face in terms of defining boundaries and impact of corporate sustainability.

2.1. The Societal Case

The first and perhaps stronger impulse comes from the social case. Since the Sustainable Development Goals of the United Nations were established in

2015, corporations, customers, investors, and governments have been constantly turning their attention to the 17 items on that list. The 17 items are inspirational and serve the purpose of paving the way towards sustainable development in terms of climate change, social inclusion, and fighting poverty.

These goals affect corporations in three ways: (a) heightened societal expectations that firms deliver in areas where other institutions may fail (e.g., welfare, equality, environment). This is an ongoing and rather controversial topic that requires deep thinking. For the sake of the current reasoning, it suffices to juxtapose the fact that these domains had been primarily within the scope of governmental and supranational activities. (b) Customers' preferences are often aligned with the objectives mentioned above, thus entailing a real change in their purchasing behaviors. The most visible consequence is the loss in clients – hence revenues – upon discovery of misaligned behaviors. (c) Access to public and private financial resources may depend on the organization's ability to deliver in these key areas. Green investing is a pointed example, and firms failing to meet certain requirements fall out of the radar of large institutional investors.

2.2. The Investors' Perspective

It is a well-established fact that any potential change in the way corporations create, measure and distribute value inevitably affects investors' behaviors and preferences. The noticeable changes due to the quest for corporate sustainability have been echoed by several investors, CEOs, and CFOs of large investment funds. In 2019, Larry Fink, CEO of BlackRock, the largest investment fund worldwide, addressed the CEOs of all firms in which they invest and alerted them that BlackRock will monitor their performance not only in terms of their financial targets but also in relation to their corporate purpose and ability to satisfy a broad array of stakeholders (BlackRock, 2019). The reactions to the now famous letter in the business community were voiced strongly. The follow-up letters in 2020 and in 2021 re-stated markedly these principles.

Approximately at the same time as Larry Fink's letter in 2019, the Business Roundtable group – whose constituents represent the largest US corporations – expressed similar concerns and went even further by detailing the 'purpose of a corporation'. It is worth clarifying that this is not just boilerplate or wishful thinking because large funds now adhere to the ESG related metric in their investment decisions, thus affecting the availability and cost of funding to corporations. To further emphasize the latter point, a recent wave of potential mergers and acquisitions failed because of the ina-

bility to perform due diligence on ESG of the target firm or for the lack of sufficiently high standards to warrant the investment. The takeaway is that ESG matters when it comes to investing. Target firms are increasingly scrutinized along the ESG dimension and will likely continue to do so. Failure to meet buyer / investor standards results in a missed bargain.

Another topic of growing interest in the business and financial community is Green Financial Investment. This type of investment consists of investing in companies that meet certain environmental and social standards. This type of investment not only considers risk and profitability criteria, but also considers environmental, social, and governance elements in the investment analysis and decision-making process (Epure, 2021). A sign of interest in this investment alternative is that in 2020 these funds increased their volume by 30% internationally (according to data from the UPF-BSM). And stock market indexes have even appeared that measure the profitability of companies with good environmental, social, and governance practices (ESG: Environmental, Social, and Governance), such as the FTSEGood Index.

2.3. The interest of regulators

The increased attention to corporate sustainability has inevitably affected regulators, standard makers, and several bodies involved in setting the 'rules of the game' for businesses, or in charge of monitoring their behaviors.

A noteworthy example is the unexpected request of the European Central Bank for a report report report commissioned to a large financial institution to assess the systemic risk that stems from financial stability due to climate risk. This would have been unthinkable just a few years ago, and most remarkable are the plausible consequences of such a move: the likely outcome of the ECB action will be the incorporation of sustainability metrics to define minimum capital requirements a bank should ensure to continue their lending. Interestingly, the report issued in August 2021 raises two issues (please see Sect. 3 below): there is little consensus in terms of what ESG is, nor on how to define and measure it (Flammer, Hong, & Minor, 2019). Second, a debate will likely arise in terms of the weight to be assigned – in terms of relevance – when estimating its effects on bank capital.

3. Measuring Corporate Sustainability

The broad nature of the concept of corporate sustainability makes it harder to land on a univocal way of measuring it. The increased social and

environmental awareness of companies paired with the interests of consumers in the consequences of of corporate actions; this imposes a substantial change in the way we measure the creation of the creation of corporate value (Flammer, 2021). In addition to generating economic value, companies are also required to report on their impact on society and the environment. This relates to the concept of externalities, which is defined as the 'unintended' cost or benefit derived from a transaction or activity affecting parties outside of this transaction or activity. A cargo spilling petrol in the sea or a plane freeing CO_2 in the air are examples of a negative externality. On the other hand, firms planting trees to enable reforestation generates a positive externality.

3.1. Measurement of social value

Some of the most widely adopted approaches when it comes to assessing social value are described below (Amat & Lloret, 2021):

The SROI (Social Return on Investment) measures the return on an organization's investment in social issues. Calculated by dividing the (social) result by the (financial) investment made to generate the output. For example, JVS Boston is a non-profit organization that operates in Boston with programs to improve the employability of the population. In 2020, it offered support to 21,000 people. A few years ago, it used SROI to evaluate its social impact and found that for every dollar invested, it managed to improve the wages of its users by $20. Therefore, the SROI in this case is 20.

Items	Information provided
Employment	Number of employees, average salary; welfare
Personnel-related changes	Medical Leaves, Health, and Safety
Gender Diversity	% of female managers / directors; Salary divide and gender gap
Labor security	Investment in security and prevention of causalities and injuries in the workplace
Professional Development	Investment in terms of employee skills, upscaling; annual bill for education and development
Environmental Issues	Environment-related investments; energy consumption; paper consumption; CO_2 emissions

Figure 1. Examples of main parts of a social balance sheet.

The Impact Assessment was launched in 2006 by the nonprofit organization B Lab, to enable firms in their self-assessment of their social and environmental impact based on a questionnaire on four aspects: governance, workers, community, and environment. A score of 80 or higher (out of 200), qualifies the firm as a B Corp certification. Currently, more than 40,000 companies worldwide use this assessment tool, and 3,500 companies in 70 countries are B Corp certified. Although this tool does not quantify the different impacts in monetary terms, it does allow comparison with organizations in the same sector and identifies areas for improvement. Figure 2 shows the synthesized example of the Californian company Patagonia. In this case, Patagonia is found to have a higher impact in all social and environmental categories, except for the Community category.

	Average Score of peer firms in the same industry	**Patagonia**
Governance	10	15
Employees	22	25
Community	32	20
Environment	9	47
Impact Score of Patagonia	80	107

Figure 2. B Corp impact of Patagonia.

The Sustainability Report is commonly included in the annual report of corporations of corporations and provides data on environmental policies and results, such as CO_2 emissions, waste management, energy consumption, etc. According to an international study by KPMG, in 2019, 75% of large companies worldwide included sustainability reports in their annual report. The most widely used methodology is that of the GRI (Global Reporting Initiative).

The substitution method estimates the social and environmental costs incurred by an organisation and compares them with those that would be incurred if the organisation did not exist. For example, in the case of a public transport company, the costs of traffic congestion, travel times, accidents, energy consumption, noise, and air pollution are estimated in the hypotheses the company existed or not. The social and environmental value is the difference between the two costs. This approach is commonly used in public infrastructures: for example, it has been used in the London and Madrid metro and in TMB (Barcelona metro and bus). In the case of TMB, in

2019, it had a total revenue of € 894 million, but generated a Social and Environmental Value (savings to society in social and environmental issues) of € 932 million.

3.2. Measuring environmental value

Although in many cases environmental issues are dealt with jointly with social issues, there are also organizations that include in their annual report data on their environmental impacts (CO_2 emissions, energy consumed, waste, and other aspects of an environmental nature). The Environmental Profit and Loss Account was launched in the 1990s: Many companies active in environmental issues began to calculate this accounting statement. It is in principle mimicking an income statement in which environmental expenses and environmental revenues are reported, thus calculating the environmental result. Figure 3 reports an example from the Japanese company Ricoh.

Environmental Costs		**Environmental gains**	
Prevention of Pollution	14,6	Energy Savings	24,5
Recycling of Materials	113,9	Sales of recycled products	164,9
Restoration of materials	1,6		
Research expenditures on environmental impact	76,5		
TOT expenses	206,6		189,4
Environmental Income (Loss)	-17,2		

Source: Ricoh (2013).

Figure 3. Ricoh's environmental income statement (data in 100M yen).

3.3. Towards an Approach to Measuring Full Firm Value

If we are interested in measuring simultaneously the three types of Value (Economic, Social and Environmental) we can use several models. In some cases, monetary data are combined with more qualitative data, but there are also models that try to estimate value in monetary terms. One of the most successful attempts to capture the full value generated by a corpo-

ration arose in the late 1990s, under the auspices of the Triple Bottom Line. The approach gained popularity by portraying itself as a reporting framework that goes beyond traditional financial parameters to include environmental and social dimensions. There is no universal standard method for calculating these accounts, but the most common is one that combines financial data with qualitative indicators. Figure 4 offers a snapshot of the Samsung Triple Bottom Line disclosure:

Financial Value (distributed to various parties)	**Social Value**	**Environmental Value**
1. Procurement from suppliers 173.3 2. Contributions to the local community 0.53 3. Dividends to shareholders 9.6 4. Salaries to employees 28.1 5. Interest paid to banks 0.7 6. Taxes paid to government 9.7 (in trillions of Won)	1. Customer satisfaction 85.4% 2. # of workers injured per million working hours 0.059 3. % of suppliers rated excellent 70% 4. # employees 287,439 5. % of female employees 40.2% No. of training hours per employee 67.2 6. # of training hours per employee 67.2 7. Training expenditure per employee 1435 South Korean won 8. # of employees who have received compliance training 193,663 9. # of employees who have received anticorruption training 276,621 10. Cumulative # of people who have received support from Samsung 3,825,864	1. % of environmentally friendly products 97%. 2. Total CO_2 emissions 13,800,000 3. Reduction of CO_2 emissions 270,000 4. Recycled products 4,030,000 tonnes 5. Environmental investments of 1,517.6 billion South Korean won 6. Energy consumption 134,479,000 tonnes 7. % of water reused 51% of water reused 8. Consumption of chemicals 384,000 tonnes

Figure 4. Triple Bottom Line of Samsung (2010).

A cost-benefit analysis is a technique mainly applied to evaluate projects in health, infrastructure, or similar areas. It consists of comparing all the costs generated by a project with its benefits, considering all economic,

social, and environmental elements. Figure 4 shows an example of a cost-benefit analysis of a health prevention program in an agro-food company. In this case, for every euro spent on the prevention program, the company receives an income of 1.89 euros.

Corporations are increasingly assessed in terms of their sustainability through a systematic reference to ESG in addition to financial performance. The three dimensions offer specific guidance in terms of assessing corporations' performance and specifically:

Environmental entails:
1. Pollution and waste
2. Climate Change
3. Greenhouse emissions or carbon footprint

Social entails:
1. Community Engagement
2. Employee health and safety
3. Fighting poverty
4. Combating corruption

Governance entails:
1. Managerial and workers' compensation
2. Diversity and Inclusion
3. Accountability and Transparency
4. Tax avoidance

Corporations are ranked according to their positive or negative behaviors along these dimensions. Ratings are usually offered by rating agencies such as Fitch, Moody, or Refinitiv and are sold to investment companies.

4. Conclusions

In this chapter, we offered an overview of a timely and relevant topic: corporate sustainability. We start by laying out the reasons underlying its relevance and highlight how it impacts corporations and various stakeholders. It is common belief that attention will likely increase in the future.

We conclude the chapter by highlighting two potential 'issues' of interest to researchers and practice: first, at a higher level, there is an unsolved divide in terms of who should be first and foremost responsible for social-level outcomes (like welfare, equality, environment) and how to ensure

accountability (and punishment, if infringement occurs): the expecting that an individual (or group) of firms can address climate change may become unrealistic and boilerplate (BÉNABOU & TIROLE, 2010). Second, we emphasize issues related to measuring and communicating the value generated by corporations above and beyond financial performance and describe some of the most used approaches to measuring it. Disclosure practices are currently homogeneous, as often happens with voluntary disclosure.

We believe this area is promising and fruitful as it presents the most urgent challenges to practice: companies are increasingly issuing nonfinancial information, including information related to environmental, social, and governance performance. To make this information useful and exploit its potential, we emphasize that it is useful if it is comparable and standardized. The development of multiple – at times competing – approaches to measuring corporate sustainability is welcome, with different organizations attempting to develop different standards with complementary objectives: the Global Reporting Initiative is focused on a multi-stakeholder approach; the SASB has an explicit focus on investors and trying to measure the impact of corporate decisions in the ESG area in terms of financial value. Importantly, the IASB has recently issued a discussion document on the matter to gather the views of the constituents on how to incorporate this information into financial statements: The development and direction the IASB will take is likely to significantly shape the behaviors of corporations and constituents in the future.

References

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