

COMPARATIVE STUDY OF METHODOLOGIES FOR MEASURING CORPORATE SOCIAL RESPONSIBILITY

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ABSTRACT

The Corporate Social Responsibility (CSR) is a current issue increasingly present in the strategic planning of the companies. Although managers of public or private organizations have turned their attention to social and environmental issues in their strategic actions, measuring the social responsibility of a company is not an easy task. This paper aims to observe the eight most relevant methodologies of CSR measurement and establish a comparative analysis among them by considering the scope and feasibility of each methodology. The most relevant CSR methodologies were selected. The main characteristics of each of the eight tools were observed and compared. The results demonstrated that although most methodologies have strong measuring characteristics the Ethos Indicators consist of the most effective tool for measuring CSR mainly regarding the institutional issues

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INTRODUCTION

The Corporate Social Responsibility (CSR) is a current issue increasingly present in the strategic planning of the companies. The institutions are under pressure to observe the impact of their operations on the society and environment. They also have to carefully check the impact of their policies and actions on the employees, customers, suppliers, shareholders, competitors, communities, and society as a whole (Melo Neto & Froes, 2004). The formal studies on the concept and definition of CSR began in the 60's (Carroll, 1991). Early on, the view was that CSR was to provide a maximum profit to the shareholders; nevertheless, that view has changed over the time. The relations of companies with external agents and the effects of their decisions and actions on the entire social system began to be recognized. According to Grajew (1999), CEO of Ethos Institute, the concept of social responsibility goes beyond philanthropy, which is the socially committed relationship of the company with the community. CSR covers all the relationships of the company with its internal and external public.

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Melo Neto and Froes (2004) reported that many institutions have adopted new practices with their internal and external public, which have resulted in important decisions and practical strategies. This new attitude is based on the following parameters:

- Good relationship with the community;
- Good relationship with environmental agencies;
- Environmental policy;
- Efficient environmental management system;
- Safety of employees and neighboring communities;
- Use of clean technology;
- Substantial investments in environmental protection;
- Definition of an environmental commitment;
- Environmental actions associated with the principles for sustainable development;
- Environmental actions based on international agreements;
- Contribution to sustainable development of the neighboring communities.

Although managers of public or private organizations have turned their attention to social and environmental issues in their strategic actions, measuring the social responsibility of a

company is not an easy task. There are several indicators and methodologies to measure CSR. Indicators of sustainable development and social responsibility are often developed through dynamic and interactive process. This process is based on the dialogue with a large number of stakeholders, including government representatives, technical experts, and civil society representatives. This practice allows participants to define sustainability through their own perspectives, to talk about relevant aspects of their locality considering their principles and values (CSD, 2007). There are many methodologies to measure social responsibility based on indicators. The methodologies help identify and clarify what should be measured, what should be expected from the measurement, and what kinds of indicators should be used. Diversity of core values, indicator processes, and sustainable development theories have resulted in the development and application of different frameworks. The main differences among the methodologies are the ways in which they conceptualize the key dimensions of sustainable development and social responsibility, the inter-linkages among these dimensions, the way they group the issues to be measured, and the concepts by which they justify the selection and aggregation of indicators (CSD, 2007). This paper aims to observe the eight most relevant methodologies of CSR measurement and establish a comparative analysis among them by considering the scope and feasibility of each methodology.

MATERIALS AND METHODS

The methods consisted of two parts

- Study of the most relevant measurement methodologies;
- Qualitative assessment of the methodologies.

Study of the most relevant methodologies: In the organizational context, there are more guidelines for the dissemination of corporate actions related to CSR than measurement systems for decision making (Delai & Takahashi, 2008). The methodologies studied in this work serve as tools to help set goals, monitor and report the progress of the goals, and to explore future alternatives. They are essential for the design of effective strategies for sustainable development, adaptive management, and information of the evolution of economic, social and environmental goals. The methodologies in this study were chosen based on the following criteria: 1 - The most referenced studies in the literature. 2 - Methodologies that address at least three dimensions of CSR: the economic, the social, and the environmental dimensions. 3 - Methodologies or measurement initiatives of CSR that have a significant number of indicators and are widely used and referenced in the measurement theory of CSR. Table 1 shows the most relevant methodologies and initiatives selected for this study. The CSR measurement methodologies will be briefly described in the following sections.

CSD Indicators of Sustainable Development: The Commission on Sustainable Development (CSD) – a set of indicators developed by the United Nations Division for Sustainable Development – was first released in 1995. The CSD Indicators of Sustainable Development serve as reference for countries to develop or revise national indicators of sustainable development. The methodology aims to make the indicators of sustainable development accessible to decision-makers by

defining the indicators, explaining and providing training for the use of the methodology (CSD, 2007). The previous two editions of the CSD indicators were published in 1996 and 200. They have been intensively tested and applied by many countries around the world (CSD, 2007).

In 2007, a new set of 50 core indicators was created as a part of a larger set of 96 indicators of sustainable development. The new set of indicators allows for a more comprehensive and differentiated assessment of sustainable development by countries. Due to the creation of a core set, the CSD indicators remain manageable. The Core indicators fulfill three criteria: a) cover issues that are relevant for sustainable development in most countries; b) provide critical information not available from other core indicators; c) able to be calculated by most countries with data that are readily available or can be made available within reasonable time and costs. Moreover, CSD indicators continue to be placed in a framework of 14 themes and sub-themes, which have been slightly modified since the previous edition. (CSD, 2007). Table 2 shows the main themes of the CSD Indicators of Sustainable Development.

Dashboard of Sustainability (DS): The Dashboard of Sustainability (DS) is a software package with 57 indicators of environmental, social, and economic as outlined by the CSD. It contains data obtained from the United Nations Statistical Division (UNSD), the World Bank, and the Organization for Economic Co-operation and Development (OECD). The tool has robust features that allow for comparative measurement of Sustainable Development indicators, real-time graphic data representation, plotting, sliding-scale forecasting capacities, with full data citations and the ability to link off to other websites' data or incorporate simple user-supplied spreadsheets to further expand its reach. (Hardi, 2002). The DS assists developing countries in achieving the Millennium Development Goals (MDGs). The MDG process had its origin in the United Nations Millennium Summit held in 2000, where world leaders agreed on establishing eight critical economic and social development priorities to be achieved by 2015. These goals are: eradicate extreme poverty and hunger; achieve universal primary education; promote gender equity and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development (UNSD, 2005). The DS indicators help define poverty reduction strategies and monitor the achievement of the MDGs. The main features of the DS are shown in Table 3 (IISD, 2002).

Barometer of Sustainability (BS): The Barometer of Sustainability (BS) is a tool for combining indicators and displaying the progress toward sustainability. It is designed to measure human and ecosystem wellbeing together without submerging one in the other. It consists of two axes, one for human wellbeing and the other for ecosystem wellbeing. The axis with the lower score overrides the other axis. Each axis is divided into five bands for greater flexibility and control of the scale (Guij and Moiseev, 2001).

The axis human wellbeing considers the following indexes

- Life expectancy at birth: years;
- Child deaths / 1.000 live births;
- Total fertility rate: children / woman;
- Children with low weight for height: %;

- Population with access to safe water: %;
- Real gross domestic product (gdp) / person: purchasing power parity (ppp) \$;
- Average annual inflation rate;
- Average annual unemployment rate;
- External debt service: % of exports;
- Central government deficit: % of gdp;
- Net primary school enrolment rate: %;
- Net secondary school enrolment rate: %;
- Adult literacy rate: %;
- Phone lines + cell phones / 100 persons;
- Homicides/100.000 population;
- Assaults/100.000 population;
- Military expenditure: % of gdp;
- Richest 20%'s income: poorest 20%'s;
- Female share of earned income: %;
- Decision-making posts: % females.

The axis ecosystem wellbeing considers the following indexes

- Cultivated + built land: % of total land;
- Natural land as % of total land;
- Change in area of native forest: % year;
- Protected area index: weighted %;
- Degraded land index: weighted %;
- Total suspended solids in rivers: mg/l
- Water withdrawal: % of supply;
- Nitrogen dioxide in city air: $\mu\text{g}/\text{m}^3$;
- Particulars in city air: $\mu\text{g}/\text{m}^3$;
- Carbon dioxide emissions: t/person;
- Use of ozone depleter: g/person;
- Threatened plant species: % of total;
- Threatened animal species: % of total;
- Threatened animal breeds: % of total;
- Energy requirement: gigajoules/person;
- Food crop production: t/harvested ha;
- Fertilizer consumption: t/100 ha;
- Fishing capacity: t/km² fishing area;
- Fish catch: t/t of fishing capacity;
- Timber removals + imports: % of vol.

The BS's framework is represented in Figure 1. Figure 2 demonstrates the graphical representation of the BS.

Global Reporting Initiative (GRI): The Global Reporting Initiative (GRI) is a leading organization in the sustainability field. GRI promotes the use of sustainability reporting as a way for organizations to become more sustainable (Anon., 2015). A sustainability report published by a company or organization includes the economic, environmental, and social impacts caused by its daily activities. Moreover, a sustainability report presents the organization's values and governance model, and demonstrates the connection between its strategy and its commitment for a sustainable global economy (Anon., 2015). GRI has pioneered and developed a comprehensive Sustainability Reporting Framework that is used worldwide. The GRI's Framework includes the Reporting Guidelines, Sector Guidance and other resources. It enables greater organizational transparency and accountability, which can build stakeholders' trust in organizations, among other benefits. Thousands of organizations of all sizes and sectors use GRI's Framework to analyze and communicate their

sustainability performance (Anon., 2015). By using the GRI Guidelines, reporting organizations disclose their most critical impacts on the environment, society, and the economy. They generate reliable, relevant, and standardized information, which allows accessing opportunities and risks and enable more informed decision-making – both within the business and among its stakeholders. GRI is designed to be applicable worldwide to all organizations of all types and sectors, large and small. Tables 4 and 5 show the categories and subcategories of GRI.

Triple Bottom Line (TBL): To measure performance in American companies the Triple Bottom Line (TBL) was developed during the 1990's. Besides the traditional profit measurement, return on investment, and shareholder value this new framework incorporated environmental and social dimensions. It aims to measure the financial, social, and environmental performance of corporations over a period of time (Slaper and Hall, 2015). The TBL consists of three P's: profit, people, and planet (Figure 3). The three P's (KMH, 2015):

Profit

Implementing a TBL approach is a challenge; however, there are immediate positive short-term and long-term impacts on an organization's growth and profitability such as:

- Cost reduction due to improved processes and supply chain management;
- New markets and increased revenues due to the development of green products and services;
- Greater productivity due to increased employee retention and engagement;
- Access to new avenues for capital due to a corporate reputation for sustainability.

People

Adopting a TBL approach to the strategic planning enhances all aspects of an organization's human resources – both internal and external. Immediate tangible benefits include:

- Attraction and retention of top talents due to enhanced corporate reputation and practices;
- Productivity improvement due to the alignment of corporate vision with goals and objectives;
- Improved efficiency and sustainability due to clarity in approach to supply chain relationships towards achieving common goals.

Planet: A TBL approach requires incorporating awareness and concern into the strategic planning process in relation to the impact of the organization on the Planet. A healthy Planet means a sustainable business model for organizations relying on ready access to capital and supplies, new market opportunities, and innovation for long-term growth. By including the Planet in the strategic planning process, an organization can benefit from:

- Improved operational efficiencies with better supply chain management and reduced manufacturing expenses;

- Improved risk management in the face of changing regulatory requirements;

Table 1. CSR Measurement Methodologies

CSD Indicators of Sustainable Development
Dashboard of Sustainability (DS)
Barometer of Sustainability (BS)
Global Reporting Initiative (GRI)
Triple Bottom Line (TBL)
Dow Jones Sustainability Index (DJSI)
Global Compact (GC)
Ethos Indicators of Corporate Social Responsibility

Table 2. Themes of the CSD Indicators of Sustainable Development

Themes		
Poverty	Natural Hazards	Economic development
Governance	Atmosphere	Global economic partnership
Health	Land	Consumption and production patterns
Education	Oceans, sea, sand and coasts	
Demographics	Freshwater	
	Biodiversity	

Table 3. Main Features of the Dashboard of Sustainability (DS)

Main Features
Performance evaluation with individual indicators and aggregate indices
Country comparison with distribution curves and maps
Comparison within country groups
Linkage analysis and scatter plots
Multi-lingual functions
Internet connectivity
Extended help function

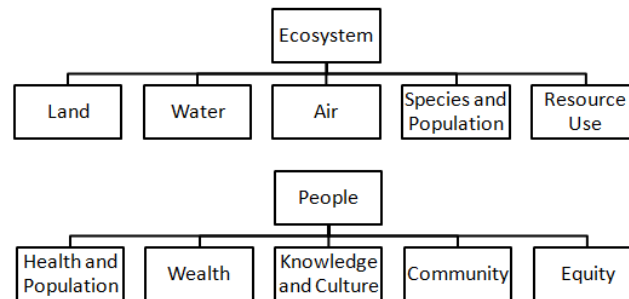


Figure 1. BS's Framework

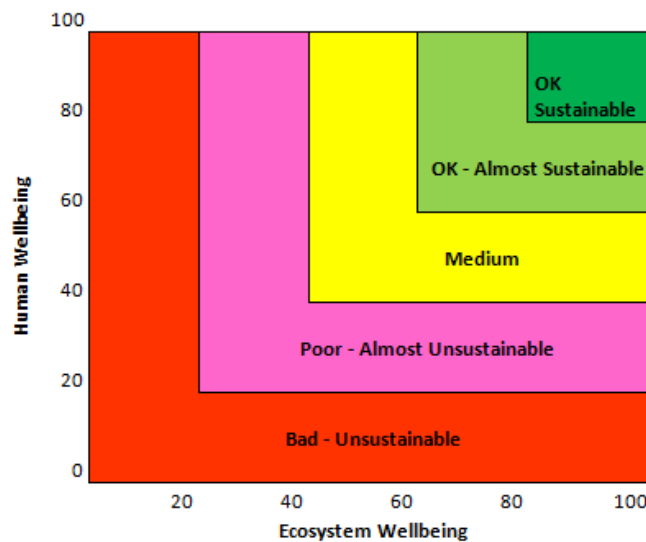


Figure 2. Barometer of Sustainability

Table 4. Economic and Environmental Categories

Category	Economic	Environmental
Aspects	Economic performance Market Presence Indirect Economic Impacts Procurement Practices	Materials Energy Water Biodiversity Emissions Effluents and Waste Products and Services Compliance Transport Overall Supplier Environmental Assessment Environmental Grievance Mechanisms

Table 5. Social Category and Sub-Categories

Category	Social			
Sub-Categories	Labor Practices	Human Rights	Society	Product Responsibility
Aspects	Employment Labor/Management Relations Occupational Health and safety Training and Education Diversity and Equal Opportunity Equal Remuneration (women and men) Supplier Assessment for Labor Practices Labor Practices Grievance Mechanisms	Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms	Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for impact on Society Grievance Mechanisms for Impacts on Society	Customer Health and Safety Product and Service Labeling Marketing Communications Customer Privacy Compliance

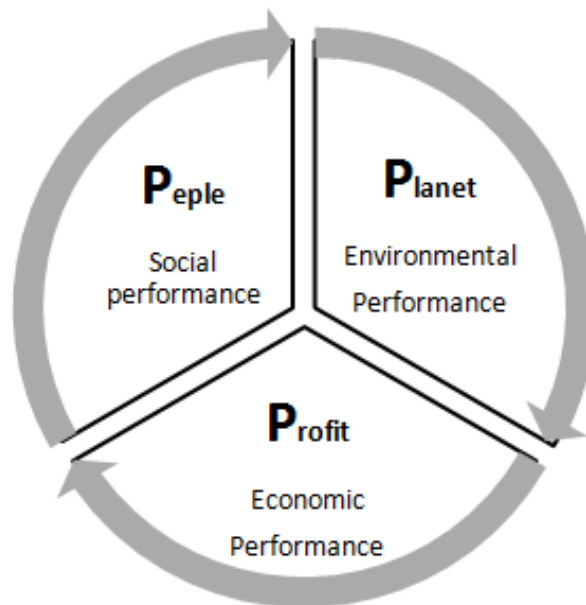


Figure 3. The Tree P's.

- Market differentiation for products and services;
- Enhanced corporate reputation.

Despite the difficulty to add up the three separate accounts, TBL can be an efficient tool to support sustainability goals, take longer-term perspective, and evaluate the future consequences of decisions (Slaper and Hall, 2015).

Dow Jones Sustainability Index (DJSI): The Dow Jones Sustainability Indices (DJSI) were launched in 1999 as the first global sustainability benchmark. By considering economic, environmental, and social criteria, the DJSI measure the stock performance of the world's leading companies (Rebeco 2016). The indices serve as benchmarks for investors, who consider the corporate sustainability an important practice; moreover,

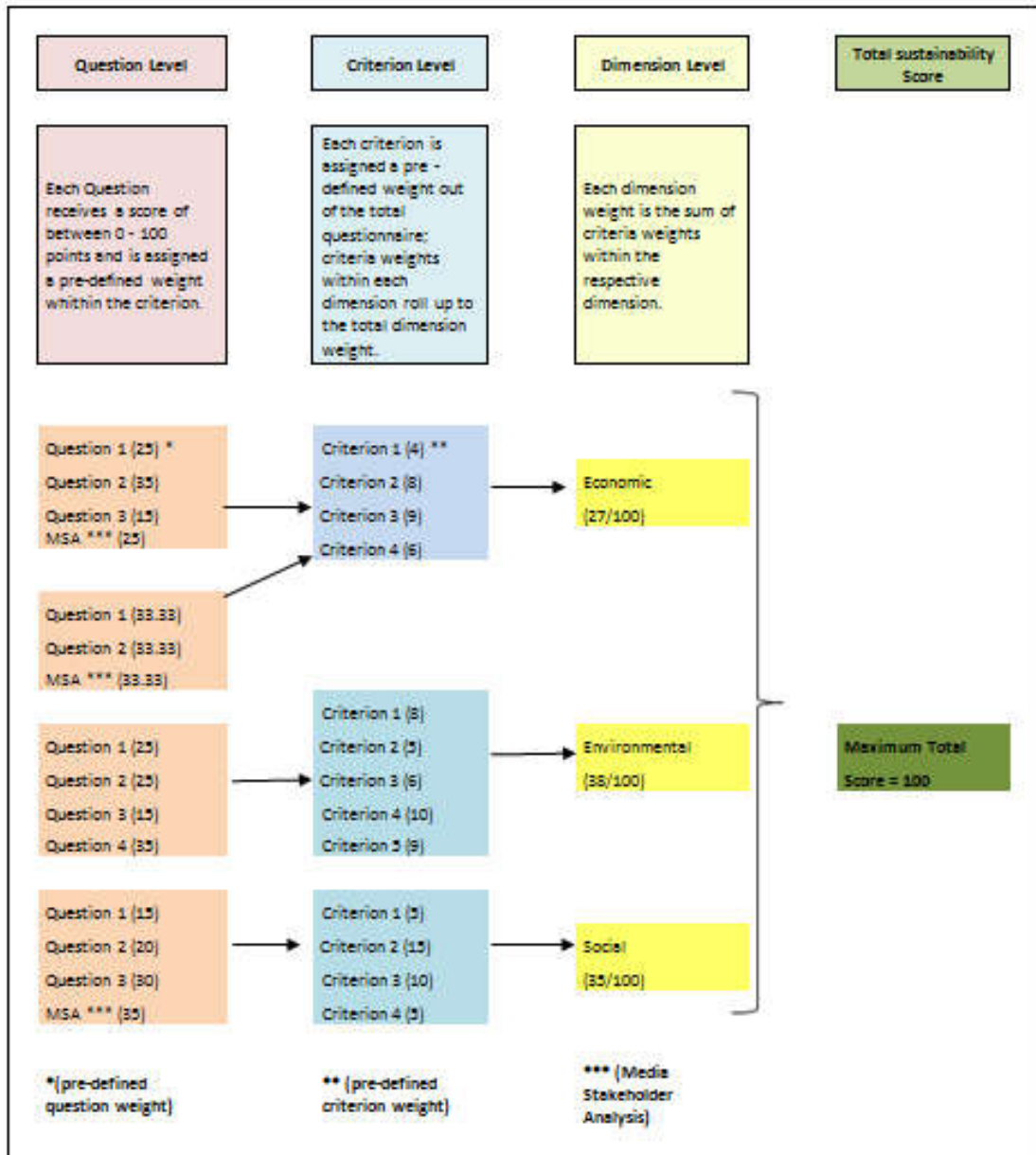


Figure 4. Structure of the Rebeco SAM CSA

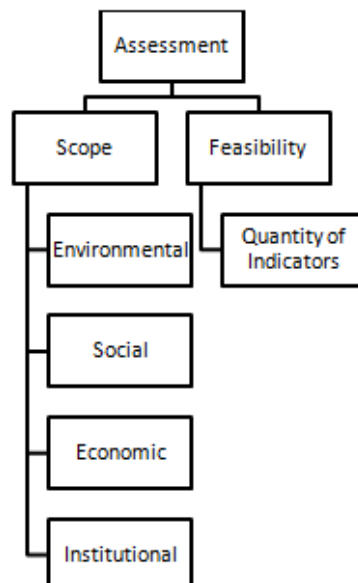


Figure 5. Aspects analyzed in the methodologies

Table 6. Ethos Indicators.

DIMENSION	INDICATORS
Vision and Strategy	1 Strategies for Sustainability 2 Value Proposition
Governance and Management	3 Business Model 4 Code of Conduct 5 Organization Governance (private companies) 5 Organization Governance (publicly traded companies) 6 Voluntary Commitments and Participation in CSR/Sustainability Initiatives 7 Stakeholder Engagement 8 Investor Relations and Financial Reporting 9 Sustainability and Integrated Reports 10 Communication with Social Responsibility 11 Fair Competition 12 Anti-Corruption Practices 13 Contributions to Election Campaigns 14 Involvement in Public Policy Development 15 Participatory Management 16 Integrated Management System 17 Supplier Management System 18 Mapping the Impacts Operation and Risk Management
Social	19 CSR/Sustainability Management 20 Business Impact Monitoring on Human Rights 21 Child Labor in the Supply Chain 22 Forced Labor (or similar to slavery) in Supply Chain 23 Promotion of the Diversity and Equity 24 Relationship with Employees (effective, outsourced, or temporary partial) 25 Relations with Unions 26 Compensation and Benefits 27 Commitment to Professional Development 28 Behavior against Dismissals and Employability 29 Health and Safety of Employees 30 Working Conditions, Quality of Life and Working Hours 31 Relationship with the Consumer 32 Impact of the use of the Products Services 33 Communication Strategy Officer and Education for Conscious Consumption 34 Management of the Company's Impact on the Community 35 Commitment to Community Development and Management of Social Actions
Environmental	36 Support to Supplier Development 37 Governance of Claims Relating to Climate Change 38 Adaptation to Climate Change 39 Environmental Management System 40 Prevention of Pollution 41 Sustainable Use of Resources Materials 42 Sustainable Use of Resources Water 43 Sustainable Use of Resources Energy 44 Sustainable Use of Biodiversity and Restoration of Habitat 45 Environmental Education and Awareness 46 Impacts of Transportation, Logistics and Distribution 47 Reverse Logistic

Table 7. Methodologies described in the study.

CSD Indicators of Sustainable Development
Dashboard of Sustainability (DS)
Barometer of Sustainability (BS)
Global Reporting Initiative (GRI)
Triple Bottom Line (TBL)
Dow Jones Sustainability Index (DJSI)
Global Compact (GC)
Ethos Indicators of Corporate Social Responsibility

Table 8. Number of Indicators.

Methodologies	Number of Indicators
CSD Indicator of Sustainable Development	96
Dashboard of Sustainability (DS)	57
Barometer of Sustainability (BS)	40
Global Reporting Initiative (GRI)	46
Index Triple Bottom Line (TBL)	11
Dow Jones Sustainability Index (DJSI)	100
United Nations Global Compact (UN Global Compact)	10
Ethos Indicators of Corporate Social Responsibility	47

the DJSI provide an effective engagement platform for investors, who wish to encourage companies to increase their sustainability practices (Rebeco, 2016). The DJSI World administers a clear, rule-based component selection process based on the total sustainability scores of companies resulting from the annual RobecoSAM Corporate Sustainability Assessment (CSA). According to the selection process only the top ranked companies within each industry are included in the DJSI (Rebeco, 2016). The CSA includes both general and industry-specific criteria covering the economic, environmental, and social dimensions. Figure 4 provides an overview of the general structure of the CSA (RebecoSAM, 2016).

The United Nations Global Compact (UN Global Compact)

The United Nations Global Compact (UN Global Compact) is an initiative to encourage companies worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The UN Global Compact is a voluntary initiative aiming to advance universal principles on human rights, labor, environment, and anti-corruption through practices of the corporate community in cooperation with civil society and representatives of organized labor. A set of integrity measurements is adopted to guarantee that the integrity of the Global Compact is safeguarded at all times (UN Global Compact - 1, 2015). The integrity measurements aim to promote greater public accountability and transparency of participants for their corporate sustainability performance and are comprised of reporting policies, logo policy, and dialogue facilitation process. The implementation of the integrity measurement is overseen by the UN Global Compact Board (UN Global Compact - 1, 2015). The ten principles of the UN Global Compact are derived from: the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption (UN Global Compact - 2, 2015).

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labour

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;

- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Ethos Indicators of Corporate Social Responsibility:

Founded in 1998, Ethos Institute Business and Social Responsibility is a non-governmental organization aimed to mobilize, sensitize and help companies manage business in a socially responsible way. Ethos Institute has developed a set of tools that can help companies to analyze their management practices and deepen their commitment with corporate responsibility (Instituto Ethos, 2013). Ethos indicators for sustainable and responsible business is a tool that presents a new approach to the management of companies, integrating CSR principles and behaviors related to sustainability based on a concept of sustainable and responsible business (Instituto Ethos, 2013). Ethos indicators are focused on evaluating how sustainability and social responsibility have been incorporated into business, assisting in developing strategies, policies and processes. While providing performance measurements in sustainability and social responsibility, this tool is not intended to measure the performance of companies or organizations recognized as sustainable or responsible (Instituto Ethos, 2013).

The new generation of the Ethos Indicators is designed to be a business service with applications and features that allow full flexibility in their application, generating reports of business reality, which effectively support the management, the mechanisms for planning, the data sharing with stakeholders, and the development of sustainability in value chains (Instituto Ethos, 2013). These indicators are easily integrated with leading management tools currently used by companies. They emphasize the ISO 26000 standards and apply concepts of GRI (Anon., 2015). ISO 26000 provides guidance on how businesses and organizations can operate in a socially responsible way. This means acting in an ethical and transparent way to contribute to the health and welfare of society (Anon., 2015). Ethos indicators are organized in four major dimensions based on ISO 26000 concepts: vision and strategy, governance and management, social, and environmental. CSR Indicators are incorporated in each dimension. The dimensions and the indicators are shown in Table 6 (Instituto Ethos, 2013).

Qualitative assessment of the methodologies

This study described eight methodologies (Table 7). The methodologies had the scope and the feasibility analyzed. Concerning the scope, the analysis considered whether the methodology addresses the four dimensions of CSR – environmental, social, economical, and institutional – and how the dimensions are addressed. The analysis also included whether the indicators can be easily understood and applied to a company. The amount of indicators used by each methodology was also considered for the analysis. While the absence of indicators does not provide parameters for an assertive assessment, excessive number of indicators makes the administration of the tool very tiresome and the

respondents may answer the questions without precision. Figure 5 shows the aspects analyzed in each methodology.

Scope Analysis: The scope analysis aimed to verify whether each methodology addresses the four dimensions of CSR – environmental, social, economical, and institutional – and how the dimensions are addressed. The institutional dimension is not addressed by the following methodologies: CSD Indicator of Sustainable Development, DS, BS, TBL, and UN Global Compact. The DJSI addresses some institutional aspects and serves as benchmarks for investors who consider the corporate sustainability an important practice and wish to encourage companies to increase their sustainability practices.

GRI also addresses institutional issues and provides reports that are important for the reporting organizations to disclose their most critical impacts on the environment, society, and the economy. They also generate reliable, relevant, and standardized information, which allows accessing opportunities and risks and enable more informed decision-making – both within the business and among its stakeholders. Among the eight methodologies, Ethos indicators is the tool that most broadly addresses the institutional dimension. It is designed to be a business service generating reports of business reality, which effectively support the management, mechanisms for planning, data sharing with stakeholders, and development of sustainability in value chains. Concerning the environmental aspects, all methodologies except the DS include environmental indicators in their framework. The CSD Indicators includes themes such as: natural hazard, atmosphere, land, oceans, freshwater, and biodiversity. While the BS uses about 20 indicators related to the environment, the GRI addresses only 12 themes related to environment. Additionally, the TBL incorporates the environmental dimension in its framework, being the Planet one of the three P's aiming to measure the performance of the corporations. Aiming to encourage companies worldwide to adopt sustainable and socially responsible policies, The UN Global Compact has 10 principles, being 3 related to environment. While 38 indicators provided in the DJSI's framework are related to environment, in Ethos' framework there are 47 indicators addressing the theme.

Concerning the economical dimension, the study observed that the BS and The UN Global Compact do not provide economic measurement indicators in their frameworks. Both the CSD Indicators and the DS include themes such as economic development, global economic partnership, and consumption and production patterns; however, the themes are not broadly addressed. GRI, TBL, the DJSI, and Ethos Indicators have the most effective economic measurement indicators in their frameworks, providing information on production, trade, and services. The social dimension is widely addressed by the eight methodologies. The CSD Indicators includes themes related to health, poverty, and education. Likewise, DS is committed to eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equity and empowers women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases.

While the DJSI provides 35 indicators to measure the social aspects, Ethos has 17 indicators and the UN Global Compact has 7 principles related to the theme. The BS provides one axis for human wellbeing with indexes that include life expectancy at birth, child deaths, total fertility rate, population

with access to safe water, and education among other aspects. The GRI includes four sub categories in the social category: labor practices and decent work, human rights, society, and product responsibility. Each of these sub categories addresses effectively the social issues. TBL has three P's in its framework. One of the P's stands for People. Attraction and retention, improved efficiency, and sustainability and productivity improvement are the tangible benefits of this strategic planning.

Feasibility Analysis: The second analysis assesses the administration of the indicators in companies. The amount of indicators and their feasibility were considered for the analysis. Large quantities of indicators may not be effective since the long time needed to answer the questions may cause people to answer them without accuracy. However, few indicators may lead to inadequate measurement criteria since small quantity of information provided by the indicators make the measurement imprecise. Table 8 shows the number of indicators provided by each methodology. Although the CSD Indicators BS have satisfactory number of indicators, both methodologies are very effective for the measurement of CSR in countries and regions, but not indicated for institutional CSR measurement. Conversely, the DS may be applied to countries, regions, and/or companies. Although DS provides a great number of indicators, they are accessible and require simple answers. Moreover, the DS screenshot presents the results in highly communicative format.

GRI and the DJSI are the most widely used sustainability methodologies. Both governmental and non-governmental organizations have applied those methodologies for CSR measurement. Since they are broadly applied, the indicators provided in their framework are well known by companies. Furthermore, their indicators have been extensively tested and proved to be an effective tool for measurement. Both TBL and The United UN Global Compact can be a philosophy to attain a sustainable and well balanced business and operation model that benefits the business, people, and environment. Those methodologies are efficient tools to support sustainability and to predict the future consequences of present decisions. Ethos indicators are easily integrated with leading management tools currently used by companies. The questions proposed by Ethos can be easily understood and applied to any kind of business. The analyses of reports provided by Ethos lead to an assertive knowledge about the economic, social, and environmental management of a company. The reports are effective for planning, data sharing with stakeholders, and development of sustainability in value chains as well.

RESULTS AND DISCUSSION

The main features of each of the eight tools were observed and compared. Since the CSD Indicators is a tool aiming to measure the sustainability of government issues mainly, those indicators are not so efficient to the general business community. The framework of the CDS indicators provides perspectives on what sustainability means at a national level (government) as well as areas in which companies can offer their contribution. The DJSI does not consider environmental aspects such as the impact on the land, resource consumption and biodiversity, or the environmental impact of products and services in its guidelines framework. Nevertheless, it includes

major indices such as labor practices and attracting and retaining talent (social dimension). The UN Global Compact mainly focuses on issues related to human rights and the environment. It does not address directly the business institutional issues. GRI is the most business-focused widespread system and its influence is compared to the role that the CSD plays in the analysis of sustainability of countries. However, it has a more focused approach to reporting than to decision-making support system. Although the BS addresses human and ecosystem wellbeing, its framework does not address the economic and institutional issues in easily; thus, it is difficult to adapt its concepts to the organizational strategies.

The TBL operates in three dimensions effectively, but it does not address the institutional issues. The DS is concerned with the comparison of the three social dimensions and focuses on the differences among countries. Based on scope and feasibility, the Ethos Indicators of Corporate Social Responsibility is the most complete methodology, since it addresses all dimensions, especially those related to institutional issues.

Conclusion

The study observed and compared the eight most relevant methodologies of CSR measurement (CSD, DS, BS, GRI, TBL, DJSI, UN Global Compact and ETHOS). The results demonstrated that although most methodologies have strong measuring characteristics the Ethos Indicators of Corporate Social Responsibility is the most effective tool for measuring CSR mainly regarding the institutional issues.

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