The Balanced Scorecard for Sustainability

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Abstract
Robert Kaplan and David Norton (1992), professors at Harvard Business School, were among the first researchers to emphasize that a firm's performance does not rely exclusively on financial measures. Their "Balanced Scorecard" (1992) includes financial measures and some operational measures related to customer satisfaction, innovation and other non-financial issues. After 2000, researchers and professionals became interested in other non-financial performance measures, such as the sustainability performance of the firm. This paper presents a balanced scorecard for sustainability (BSS) that provides senior executives with a set of measures for assessing the environmental and social performance of the firm. In order to design the BSS, the case study method (Yin, 2003) has been used. Data were collected from Danone Group's "Sustainability reports" for a ten year period (2006-2015). This Group is a champion of sustainable development, according to its "Dow Jones Sustainability Index" score. The BSS comprises 121 indicators and their metrics. These metrics are grouped into the seven following categories: (a) corporate governance and compliance, (b) eco-efficiency, (c) supply chain management, (d) involvement in the community, (e) human capital management, (f) product stewardship and customers, and (g) sustainability-related costs and financial performance. These indicators, their metrics and the merits and limitations of the BSS are discussed in the article.

Key words: Sustainable Development (SD), Balance Scorecard for Sustainability (BSS), Corporate Sustainability (CS), Corporate Sustainability Performance (CSP), Danone.

JEL classification: M10, M14, Q50, Q56.

1. Introduction

A survey by the Conference Board of Canada shows that companies' Boards of Directors are becoming increasingly interested in sustainability issues (Singer, 2012). It also reveals that almost 50% of the companies that were surveyed assigned specific responsibilities for the oversight of sustainability performance to the Board of Directors or one of its committees. These bodies must develop "mechanisms for tracking sustainability metrics," establish "targets to track performance against those metrics," and propose an executive compensation system that is based on both financial performance and sustainability performance (Singer, 2012).

This article presents a balance scorecard for sustainability (BSS) that enables managers to look at the business from seven different perspectives. They are: (a) corporate governance and compliance, (b) environmental management, (c) supply chain management, (d) involvement in the community (e) human capital management, (f) product stewardship and customers, and (g) sustainability-related costs and financial performance. Each of these perspectives involves specific indicators and their metrics. In total, 121 non-industry specific metrics are proposed in this article for the seven perspectives of the BSS.

2. Literature review

The term 'Corporate Sustainability' (CS) emerged in the early 1990s. It suggests that companies should develop strategies for responding to their stakeholders' present needs, while protecting and enhancing human and natural resources for the future (Steurer et al., 2005).
Many scholars approach the topic of CS through the lens of the stakeholder management theory. The company's Board of Directors should improve the relationships with stakeholders

by an adequate processes of corporate governance (Steurer et al., 2005). According to Orlitzky (2011) and Clarkson (1995), stakeholder satisfaction contributes to the improvement of a firm's reputation and financial viability (Orlitzky, 2011). The competitive advantage that a firm could eventually gain by engaging repeatedly with its stakeholders "on the basis of mutual trust and cooperation" comes from reductions in agency costs, joint-production costs, and liability costs (Barnett, 2007; McWilliams et al., 2006). However, many issues of the stakeholder management theory remain unclear. How many stakeholder categories should a firm consider and how frequently should the Board of Directors engage with each of them, as such an initiative leads to higher transactions costs and higher complexity costs? Accordingly, to use the stakeholder model in management practices "it is important to have a clear idea of what we mean by stakeholders" (Jasson, 2005, p. 5). According to Freeman (2010), a stakeholder is any group or individual who (a) could benefit from, or be harmed by, the firm's actions, (b) may have specific claims against the firm, and (c) whose rights should be respected by the company. Moreover, according to this author, all stakeholder categories are equally important and "the management should keep the relationships among stakeholders in balance." However Fassin (2008) suggests that one should differentiate between stakeholders in the firm's immediate business environment (e.g., shareholders, employees, suppliers and customers) and those in the broader environment. Accordingly, the relationships with the various stakeholder groups should not be equally important, but should be tailored to the company's specific interests in each of them.

One important shareholder group is that of the firm's employees. Based on 92 empirical studies that examined the relationship between human resources polices and firm's financial performance, Bernstein and Beeferman (2015) conclude that "there is sufficient evidence of human capital materiality to financial performance." In this regard, Clarkson (I995) suggests that companies that invest in the development of training programs, career planning, occupational health and safety, employment equity and non-discriminatory policies, will gain a competitive advantage. However, Bernstein and Beeferman (2015, p.22) show that "some or even a significant number of companies might lose more than they gain from training programs," because training is expensive, the training programs are not always aligned with firm's strategy, and the employees do not necessarily utilize the knowledge that they acquired in the work that they perform.

The sustainable compliance programs represent the second important link between corporate governance and sustainability. These programs are triggered "by regulatory requirements and by how well businesses manage regulatory risks" (Kaminski et al., 2017). Some of these regulatory risks concern product safety, shareholder rights and occupational health and safety (Clarkson 1995).

For some other scholars, a high CSP is the result of a strategy of "product and process stewardship" that provides a means to improve a firm's reputation and reduce its liability (Hart, 1995). According to this approach to sustainability, products and processes that are designed with the intention of minimizing their environmental and social impact, can gain a differentiation–based advantage for the firm. This type of competitive advantage is defined in Porter (1985). However, Barin Cruz et al. (2015) extended the concept of differentiation from the product level to the firm level. Thus, a firm can differentiate itself from competitors through specific social and environmental initiatives "that are valued by its stakeholders." Examples include involvement in specific social projects for local communities. Branco and Rodrigues (2006, p. 123) argue that firms that "build community ties and become socially integrated" gain a competitive advantage.

With regard to environmental issues, the researchers agree on the main environmental initiatives that a firm should take, such as reducing pollution, recycling, and minimizing emissions and waste. Some scholars argue that firms that are able to build specific capabilities

in eco-efficiency could gain a competitive advantage (Hart, 1995; McWilliams et al., 2006). Most scholars do not appear to be interested in the topic of 'cost-benefit analysis' of sustainability-related initiatives. However, some critics argue that social ratings lack transparency (Chatterji et al., 2009) and that, "after more than thirty years of research, we cannot conclude whether a one-dollar investment in social initiatives returns more or less than one dollar in benefit to the shareholder" (Barnett 2007, p. 794).

3. Research Design

This study seeks to answer the following research question: "What are the relevant indicators for measuring sustainability and what metrics should a firm use to measure and monitor sustainability performance?" This research question must be operationalized into nominal categories of sustainability indicators and their metrics, for subsequent integration into the BSS. A balance scorecard is a tool that "provides senior executives with a comprehensive view of the business" and "a set of measures" to assess various dimensions of the firm's performance (Kaplan and Norton, 1992). To design their balanced scorecard, Kaplan and Norton (1992) used the multiple-case study method, and collected data on the operational performance indicators monitored by twelve firms (e.g., innovation and customer relationship management). Following a similar research protocol, we used the case study method (Yin, 2003) and collected data from Danone's sustainability reports, social reports and financial annual reports for a ten-year period (2006 to 2015). Danone has four divisions that operate in distinct business sectors, as follows: the "Fresh Dairy" division (49% of Danone's sales in 2016), Danone Waters (23%), "Early Life Nutrition" (21%), and "Medical Nutrition" (7%) (Danone Annual Report, 2016). Danone can be considered to be a paradigmatic case. A case is said to be paradigmatic when it is the most representative one ("the exemplar") for a certain class (Palys, 2008, p. 697). Danone released its first annual social and environmental responsibility report in 1998 and, for many consecutive years, has been a leader in sustainable development, according to the Dow Jones Sustainability Index scores, and various NYSE Euronext Vigeo indices.

During the pilot stage, the research design was descriptive (working through the text according to pre-established categories). Data has been collected and classified according to the research protocol into five nominal categories, which arose from the review of the literature: (a) corporate governance and stakeholder management, (b) environmental issues, (c) product and process stewardship, (d) human resource management, and (e) the community.

Both authors used the same research protocol and worked independently to collect data, using the Quantitative Content Analysis (QCA) method (Altheide, 1987). This method is recommended when the concepts "yield enumerative data for purposes of measurement" and are used to "verify or confirm hypothesized relationships" (Altheide, 1987, p. 68). After comparing their respective memos, the authors concluded that the QCA method helped greatly to capture the quantitative data, but not the relevant contextual data. Consequently, in the second stage of the process, an exploratory research design was adopted (an inductive approach for new category and sub-category development). Altheide's (1987) Ethnographic Content Analysis method (ECA) was used to collect numerical and narrative data. This method permits the comparison of relevant "situations, settings, meanings and nuances" in order to obtain "categorical and unique data for every case studied" (Altheide, 1987, p.68). Accordingly, it was decided to not limit the collection of data to the initial pre-established categories, but to use a coding process that permitted new sub-categories to emerge. The final sample was a saturation sample. Seven core categories (main topics), 34 sub-categories or factors (grouped according to seven core categories) and 121 SD indicators and their metrics were discovered.

4. Results and discussion
4.1 The Balance Scorecard for Sustainability

Figure 1 presents the Balance Scorecard for Sustainability (BSS).

Supply Chain Management (SCM; 13)
SCM1. Information-sharing
SCM2. Supplier Audit Procedure
SCM3. Standards for suppliers
SCM4. Supply chain control for critical materials
SCM5. Responsible procurement

Community Involvement (CI; 7)
CI1. Local hiring
CI2. Impact of operations on communities
CI3. Selecting local suppliers
CI4. Support to local communities
CI5. Philanthropy

Corporate Governance and Compliance (CGC; 23)
CG1. Board composition and SD responsibilities
CG2. Stakeholder management
CG3. Compensation system for the management
CG4. Risk Management
CG5. Compliance

Sustainability -related costs and financial performance (SCF; 17)
SCF1. Investment in SD projects
SCF2. Additional operations and compliance costs
SCF3. Additional monitoring and reporting costs
SCF4. Other related costs
SCF5. Impact of SD on financial performance

Product Stewardship and Customer Man. (PSC; 11)
PPS1. Product stewardship
PPS2. Process stewardship
PPS3. Customer satisfaction
PPS4. Others -industry specific

Human Capital Management (HCM; 28)
HCM1. Working conditions and employee satisfaction
HCM2. Wages
HCM3. Career planning and training
HCM4. Workplace health and safety
HCM5. Diversity

Eco-efficiency and Biodiversity (EEB; 23)
EEB1. Water use /Water consumption
EEB2. Energy Management
EEB3. GHG emissions
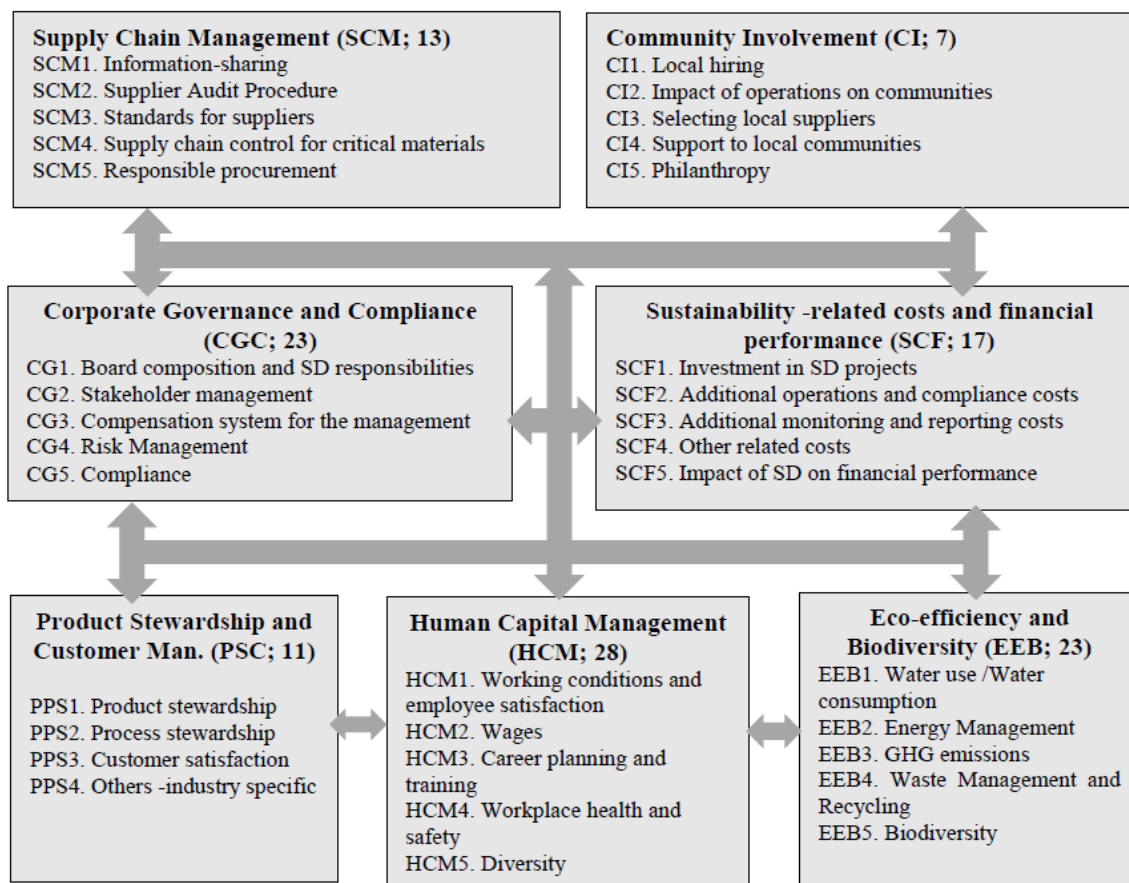EEB4. Waste Management and Recycling
EEB5. Biodiversity

Figure 1. The Balanced Scorecard for Sustainability

Figures 2 to 4 present the 121 SD indicators and their metrics.

Corporate Governance and Compliance (CGC)

CG1. The Board and its specific responsibilities
1.1 Existence of a SD Committee, and clear responsibilities of its members
1.2 Clear statements of mission or values relevant to SD
1.3 Number of meetings per year
1.4 Number of reports produced per year
1.5 Number of projects monitored per year
1.6 Monitoring conflicts of interest and corruption: number of suspected and proven cases
1.7 Code of conduct and business ethics rules: number of issues addressed

CG2. Stakeholder management
2.1 Existence of a list comprising the stakeholder groups
2.2 Number of stakeholder groups and priorities assigned
2.3 Frequency of the relationships

CG3. Compensation system for the management
3.1 Linking rewards to financial, social and environmental performance measures
3.2 Number of variables measured, and their respective weights (importance)
3.3 Evaluation of each business units: number of criteria used, their relevance and their respective weights in the final score of the business unit

CG4. Risk Management
4.1 Existence of a Risk Committee
4.2 Percentage of business units analyzed for potential risks every year
4.3 Number of risk audits of internal units

CG5. Compliance with...
5.1 Environmental laws: number of fines and non-monetary sanctions, and value
5.2 Financial contribution to political parties and related institutions, by country: value
5.3 Product safety legislation: number of incidents of non-compliance with regulations
5.4 Product and service information and labeling: total number of incidents
5.5 Advertising and promotion legislation: total number of incidents
5.6 Data security regulation (privacy policy): total number of incidents (confidential data lost or stolen, or other security breaches)
5.7 Market and competition regulations - total number of legal actions and fines ($)

Supply Chain Management (SCM)

SCM1. Information-sharing concerning social, environmental and ethical issues
1.1 Number of self-declarations by suppliers concerning their SD related issues, exchanged annually through an information-sharing platform

SCM2. Supplier Audit Procedure
2.1 Percentage of suppliers that have undergone screening (audits)
2.2 Number of screening criteria and their relevance
2.3 Non-compliance issues found (percentage of total issues verified)

SCM3. Standards for suppliers
3.1 Environmental standards and number of incidents of non-compliance (preservation of resources; chemicals; climate change & greenhouse gases emissions; environmental management; animal testing)
3.2 Health and safety standards: number of incidents
3.3 Human rights standards (child labor; forced labor; discrimination; working hours): number of incidents
3.4 Business Ethics standards, including corruption and brierberry: number of incidents

SCM4. Supply chain control (chain-of-custody) for critical materials
4.1 Number of critical resources
4.2 Industry specific indicators related to each critical resource

SCM5. Responsible procurement
5.1 Environmental and social issues associated with supplies' intrinsic characteristics and origin
5.2 Number of responsible procurement criteria
5.3 Number of commitments or priority product categories

Figure 2. CSP Metrics. CGC (23 metrics) and SCM (13 metrics)
Source: the authors

Eco-efficiency and Biodiversity (EEB)

EEB1. Water use /Water consumption
1.1 Water consumption: [volume of water removed from nature] minus [volume of water incorporated into products] (in thousands of m3)
1.2 Water use intensity in the production process $(m^3/ton$ of product)
1.3 Number of water sources that are significantly affected by firm's activity
1.4 Percentage and total volume of water recycled and reused, and;
1.5 Percentage of total industrial sites that are recycling used waters
1.6 Water treatment (DCO Milligrams per liter of water)

EEB2. Energy Management
2.1 Direct energy consumption (in MWh) by primary energy source (natural gas; coal; thermal energy consumption (with steam))
2.2 Indirect energy consumption by primary source: electricity and thermal energy (with steam) (in MWh)
2.3 Energy consumption's intensity (in KWh/metric ton of product)
2.4 Number of initiatives to reduce indirect energy consumption
2.5 Energy saved due to these initiatives (in MWh; percentage of total)

EEF3. GHG emissions
3.1 SCOPE 1: direct and indirect greenhouse gas emissions (t CO2 eq.)
3.2 SCOPE 1, 2 and 3 (carbon footprint): ratio of total emissions t CO2 equivalent per ton of production (market-based ratio)
3.3 Number of "SCOPE 3" initiatives
3.4 Number of external audits on GHS emissions

EEB4. Waste Management and Recycling
4.1 Number of categories of hazardous and non-hazardous industrial waste (number of triage and recycle centers; number of reports on waste data that were produced)
4.2 Materials used: by weight or volume and per 1000 tons of production
4.3 Percentage of materials used that are recycled input materials
4.4 Percentage of materials used that are sustainable resources
4.5 Packaging consumption: tonnage and monetary value
4.6 Total waste: kg per kg of production
4.7 Waste reduction (elimination): percentage
4.8 Recycling/Waste recovery rate: average per plant

EEB5. Biodiversity (Industry specific metrics)

Product Stewardship and Customer Management (PSC)

PSC1. Product stewardship
1.1 Number of new energy-efficient or renewable energy- based products
1.2 Number of projects for the development of eco-responsible products
1.3 Number of projects for r the development of social –responsible products

PSC2. Process stewardship
2.1 Number of eco-certified sites (percentage of total)
2.2 Rate of coverage of sites reporting data
2.3 Amounts invested in eco-responsible processes (energy-efficient or renewable energy; reducing the carbon footprint, resource consumption, etc.)
2.4 Quality management certifications and scores: ISO 9000 and ISO 22000 norms; DJSI score, etc.
2.5 Environmental certifications: ISO 14001 certification; GREEN environmental risk audits, etc.

PSC3. Customer satisfaction
3.1 Results of surveys measuring customer satisfaction
3.2 Number of customer complaints
3.3 Number of initiative s to improve product safety and product traceability; number of product recalls and recall costs

PSC5. Others: Industry- specific

Community Involvement (CI)

CI1. Local hiring
1.1 Proportion of senior management hired from the local community

CI2. Impacts of firm's operations on communities
2.1 Total number of incidents or violations
2.2 Others: industry-specific metrics

CI3. Local suppliers
3.1 Locally-based suppliers as percentage of total suppliers
3.2 Proportion of spending on locally-based suppliers for a given activity

CI4. Support to local communities
4.1 Number of initiatives and monetary value

CI5. Philanthropy
5.1 Number of initiatives and monetary value

Figure 3. CSP Metrics. EEB (23 metrics), PSC (11 metrics) and CI (7 metrics).
Source: the authors

Human Capital Management (HCM)

HCM1. General working conditions and employee satisfaction
1.1 Long-term vs short-term and temporary contracts (percentage from total)
1.2 Full time vs part time personnel (percentage from total)
1.3 Employee turnover: by age group, gender, and region on a comparable structure basis
1.4 Net job creation and dismissals (number)
1.5 Minimum notice period (number of days)
1.6 Percentage of employees covered by collective bargaining agreements
1.7 Percentage of workforce represented in formal joint management–worker committees
1.8 Average weekly time worked per employee
1.9 Average weekly overtime worked per employee
1.10 The absenteeism rate
1.11 Incentive and profit-sharing plans for employees
1.12 Other social benefits: percentage of coverage

HCM2. Wages
2.1 Ratios of standard entry level wages compared to local minimum wages (by category)
2.2 Ratio of basic salary of men to women by employee category
2.3 Employee- management income ratio: annual wage received by a full time employee compared to the median income for all managerial and executive categories

HCM3. Career planning and training
3.1 Number of lifelong learning programs and total hours of employee training
3.2 Average number of hours of training per year and employee
3.3 Percentage of employees receiving training
3.4 Percentage of employees receiving regular perf. and career development reviews

HCM4. Workplace health and safety- frequency of workplace accidents:
4.1 Number of accidents involving at least one day of absence, per million of hours worked over a twelve-month period
4.2 Annual frequency rate of workplace accidents with medical certificate
4.3 Annual frequency rate of fatal accidents
4.4 Annual frequency rate of occupational diseases

HCM5. Diversity and equal opportunity
5.1 Gender diversity: proportion of female managers
5.2 Minority membership: proportion of managers from minorities
5.3 Rate of integration of people with disabilities
5.4 Number of procedures to deal with discriminatory actions
5.5 Total number of incidents of discrimination and proportion of solved cases

Sustainability - related Costs and Financial Performance (SCF)

SCF1. Investments in projects related to product and process stewardship
1.1. Amounts invested (R&D costs) in eco-responsible products
1.2. Amounts invested (R&D costs) in social - responsible products
1.3. Return on investment (ROS) of these projects

SCF2. Additional operations and compliance costs
2.1 Costs related to compliance with standards; per year; percentage of total costs
2.2 Personnel costs: (a) sustainability supervision and reporting; (b) personnel training cost (salaries of the trainers, worktime lost, costs of materials, etc.): per-participant training cost; percentage of total costs
2.3 Cost of industrial treatment (waste, water, emissions): per year; percentage of total costs
2.4 Cost of recycling and packaging collection/ recycling (net of economies realized)
2.5 Cost of obligatory CO2 emissions trading
2.6 Provisions and guarantees for environmental risks

SCF3. Additional monitoring and reporting costs
3.1 New management positions and Board Committees created (SD Committee; Risk Man. Committee, Health and safety committees, etc.)

SCF4. Other related costs
4.1 Eco taxes
4.2 Depreciation costs of the eco-equipment acquired

SCF5. Impact of SD related costs and investments on financial performance
5.1 Sales Growth
5.2 Gross Profit margin
5.3 Net Cash-flow
5.4 ROS (Return On Sales ratio)
5.5 ROCE (Return On Capital Employed)

Figure 4. CSP Metrics. HCM (28 metrics) and SCF (17 metrics).
Source: the authors.

Between 2006 and 2015, Danone monitored more than 100 social and environmental indicators at any given time. There were some additions and deletions during those years. Most of these indicators applied to all of the company's divisions and manufacturing units around the world, but Danone did not use a centralized balance scorecard to track performance and corroborate these SD indicators. The responsibilities for monitoring some indicators were assigned to

specialized departments. For other indicators, these responsibilities were integrated into SD programs that Danone introduced at different points in time, and which were managed by various steering committees. Some of these committees reported directly to the Board of Directors, whereas others reported to the specialized SD departments. For example, during the period under study, Danone had an "Environment Department" at the group level that comprised a specific sub-department called "Sustainable Development and Social Responsibility." This sub-department worked with the Group's "Human Resources Department" to consolidate social and environmental data that each unit collected from the Group's production sites and subsidiaries worldwide. Additionally, the "Sustainable Development and Social Responsibility" department developed 20 procedures and specific indicators to use in evaluating and ranking Danone's subsidiaries each year. The social initiatives were supervised by two different Board Committees, the Social Responsibility Committee and the Social Innovation Committee. The latest was responsible for approving each social innovative project and managing some community-related projects. The Scientific and Regulatory Affairs Department, within the General Secretariat, was responsible for compliance related issues, and a "multi-stakeholder task force" was responsible for managing the relationships with stakeholders. The number of sustainability projects, initiatives, performance indicators and supervision bodies grew every year, and so did the number of internal reports.

Before 2009, Danone produced two distinct reports – an annual report that provided the financial indicators, and a sustainability report. In 2009, Danone added a third report. Thus, between 2009 and 2015, Danone prepared three major reports each year – the annual financial report, the "Sustainability Report" (between 175 and 270 pages), and the "Economic and Social report" (about 35 pages). For this reason, each category of performance indicators appeared to have been managed in a vacuum. With three exceptions (corporate governance, company's mission and values, and some sustainability-related costs), the company's sustainability strategy for that period appeared to be disconnected from its business strategy. It also appears that its SD strategy was extremely complex, very standardized, and centrally managed.

4.2 Corporate Governance indicators

Between 2006 and 2015, Danone used a list of stakeholders in which all of them appeared to have equal importance. They were grouped by type of relationship, as follows: (a) the social sphere (employees, consumers and consumer associations); (b) the public sphere (public authorities, social and environmental associations and NGOs, and the media); (c) the economic sphere (the shareholders, the financial community, the social and environmental notation agencies, the distributors, and the suppliers), and; (d) the industrial and scientific sphere (professional organizations and the scientific community). For each of these categories and sub-categories, the company prepared specific procedures for managing the relationship (called "Methods of dialogue") and established the frequency of contact with each of them (Sustainability report 2006). In 2008, Danone changed the system of bonuses for its managing directors, by linking the bonus to three performance metrics. Each metric accounted for 33% of the final individual performance measure. They were: (a) economic, (b) social and environmental, and (c) business level-related indicators. The economic indicators integrated the turnover growth rate, the profitability and the free cash flow. The social and environmental indicators included employee training, workplace safety, reduction in water consumption and measurement of the carbon footprint. Finally, the business-level-related indicators make references to innovation and management methods (Danone Sustainability Report, 2008).

4.3 Eco-efficiency indicators

Danone's energy management initiative is driven by long-term plans and quantitative

objectives that have been established for the entire group. According to these objectives ("lean plant" program), during the 2000-2010 period, Danone had to reduce its energy consumption by 20%, its water consumption by 30%, and the packaging weight by 10%. It also had to obtain an 80% recovery rate of manufacturing waste (Danone Sustainability Report, 2010). In 2008, Danone established a goal of reducing its greenhouse gas emissions intensity by 30% over five years, which was exceeded in 2012 (Danone Sustainability Report, 2013).

4.4 Supply Chain Management indicators

Between 2006 and 2015, Danone's policy for managing relationships with its suppliers focused mainly on sustainable procurement and supplier audits within the "RESPECT" program, which were undertaken to monitor the SD performance of Danone's major suppliers. This program is based on the Sedex platform, an online information-sharing and pooling platform where those suppliers who register should conduct self-evaluations using specific criteria. For example, thirty one percent of Danone's suppliers' non-compliance incidents in 2010 were related to workplace health and safety, versus 49% in 2011. In 2010, 23% of these incidents were related to the failure of the suppliers to respect employees' working hours, whereas these incidents represented only 15% of all incidents that occurred in 2011.

4.5 Sustainability costs vs financial performance

During the 2010 - 2014 period, the number of sustainability initiatives and indicators that Danone measured continued to grow and Danone's sustainability performance continued to improve. However, its financial performance deteriorated (Table 1).

Danone : sustainability performance vs financial performance	2009	2010	2011	2012	2013	2014
Danone's DJSI score	75	74	81	83	87	NA
Operating income margin = Operating Income/Net sales	16.76 %	14.80 %	14.13 %	14.17 %	13.19 %	12.90 %
ROS = Net income from fully consolidated companies / Net sales	9.08 %	11.28 %	9.36 %	8.30 %	5.92 %	5.88 %
ROA = ROS*AT, where AT = Net sales/Total average assets	5.07 %	6.99 %	6.41 %	5.98 %	4.17 %	4.00 %
ROE = Net Income / Equity attributable to owners of the Company	10.27 %	16.35 %	14.95 %	14.14 %	11.75 %	10.71 %

Table 1. Danone: sustainability vs financial performance
Source: authors' calculations

In 2015, Danone put into place a revitalization plan. Thus, since January 2016, it no longer produced three distinct reports. Instead, it publishes only its financial report that integrates a separate chapter about "Social, societal and environmental responsibility." The goal is to integrate SD into its main processes and business activities across the various stages of the value chain, and "develop synergies" between SD and other business activities, such as sales, marketing and research and development (Annual Report, 2016). Moreover, Danone streamlined all of its SD policies by establishing priorities within each of the SD categories that appear in Figures 4.2 to 4.4 In regard to corporate governance-related issues, the list of stakeholders was revised and now makes a clear distinction between shareholders and other stakeholders ("the goal is to create value for shareholders and for all stakeholders"). The annual variable compensation for the management is still based on economic, sustainability and managerial indicators, although the weights (which used to be a third for each) have changed. Now, the economic indicators (organic sales growth, organic operating margin growth and free cash flow generation) account for 60 percent, the managerial indicators for 20 percent, and social performance for the remaining 20 percent.

For SCM, Danone continues to roll out the RESPECT program, but the policy of responsible procurement has become more market-orientated ("Market Risk Management" policy). The latter's main goal consists of "securing the physical supply and price setting with suppliers and/or financial markets, when they exist, for each raw materials category" (Annual Report, 2016).Danone's involvement in the community appears lately to be more market-driven and takes the form of social investments that have a positive impact on its economic performance.

In terms of environmental performance, Danone appears to focus now on three important issues and the related performance indicators. These are: (a) the efficient use of three categories of resources (milk, plastic and water), (b) the initiative of reducing the carbon intensity of its emissions by 50%, between 2015 and 2030, and; (c) that of reducing water consumption in its factories by 60% by 2020. The number of waste categories that are monitored fell from nine (2010) to four in 2016 (hazardous waste, non-hazardous organic waste, non-hazardous inorganic waste and sludge from water treatment facilities).

In the area of PSC (see Figure 1), Danone appears to have shifted the focus on consumer safety and product recall strategies in order to manage product traceability at all levels of the distribution and marketing stage.

Finally, most of the company's traditional HCM indicators (see Figure 4) remain in place for now, although Danone appears to focus mainly on three of them: diversity, social dialogue and individual employee development (Annual Report, 2016).

5. Conclusions and recommendations

This article presents a BSS. The case study method (Yin, 2003) was used and data was collected from Danone's annual reports (financial, sustainability and social reports) for the 2006-2015 period. Danone can be considered to be a paradigmatic case according to Palys's (2008) definition.

The BSS comprises 121 non-industry specific indicators, which are grouped into seven categories. The merits of our BSS are its general applicability and its comprehensibility. Unlike the balanced scorecard of Kaplan and Norton (1992), which includes only the core categories of indicators for the measurement of financial and operational performance, but not their metrics, the BSS includes all of the indicators for the measurement of the economic, environmental and social performance, and their metrics. It also includes the indicators that a firm should monitor in order to align the costs of SD with its financial performance. The BSS's limitation is its complexity. The case of "Danone" demonstrated that more indicators, more SD programs and more internal reports on SD are not synonymous with better financial performance. A firm should select those indicators from our BSS that are really relevant to its business strategy and assign clear priorities to them. Companies should also integrate their SD strategies into their business strategies, control the sustainability costs and strike a balance between sustainability performance and financial performance.

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Rachid Moustaquim contributed to the collection of data, analysis and/or interpretation of data, and made suggestions for the final draft of the manuscript. Camelia Dumitriu wrote the article, was responsible for the conception and design of the study, and of the BSS, and made the interpretation of data. The final draft of the manuscript was approved by both authors.

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