SUSTAINABILITY AS A CORPORATE VALUE CREATOR

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Abstract. The article explores current theoretical and practical approaches to expanded implementation of the principles of sustainable development paradigm within corporations. The essence of Sustainable Corporation and Sustainability as a factor of formation of the long-term corporation value is determined; the relationships between corporate social and financial performance are described; the existing methods for developing sustainability key performance indicators are discussed. The authors present a structural-logical scheme and algorithm of assessment of sustainable value added using indirect method. The scheme characterizes the distribution of the value among internal and external, financial and non-financial stakeholders.

Keywords: sustainable development, corporate social responsibility, sustainable corporation, sustainable finance, sustainable value added, stakeholder value added.

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Introduction

The world has changed, and now the slogan “Be Sustainable” is becoming a trend in shaping the development strategies of modern corporations. Today, it is not enough to be a socially responsible corporation, you need to be Sustainable Corporation. The emphasis on developing corporate business strategies shifts from discrete activities on sustainable development to the creation of resilient business strategies based on sustainable development opportunities (BSR report, 2018).

Longstanding scientific research prove that comprehensive implementation of the principles and goals of sustainable development contributes to creation of long-term corporation value, therefore it creates a financial basis for achieving the main goal for shareholders and benefits for a wide range of other stakeholders. Running a corporation in new realities requires instruments that measure the corporation’s sustainable development performance as well as evaluate its positive or negative impact on society and the environment. The CEO and the Board of Directors of the vast majority of corporations believe that in these circumstances it is necessary to integrate the results of corporate social and environmental activities into the corporation value (Olsen, 2009; BSR report, 2018). In the pursuance of management goals, the Sustainable Value Added is to be determined as a strategic target performance indicator allowing to integrate the environmental, economic, and social performance of corporations into a single index of the company’s value.

Today, scientific research is underway to develop indicators for measuring the performance of corporations in the social and environmental spheres and convert them into
Sustainability and Sustainable Corporation

Though the most well-known management approach that attributes the three components of the macroeconomic paradigm of sustainable development to corporations is the concept of Triple Bottom Line (TBL) proposed by J. Elkington (Elkington, 1997). According to the TBL concept, managers must take managerial decisions based on both predicted financial indicators and indicators reflecting social and environmental goals of the corporation. The central thesis of the TBL is the preservation of three types of capital – economic, environmental and social in order to ensure long-term economic development of society (Vasylchuk, 2014). Elkington’s concept serves as the basis for the concepts of “Sustainable Corporation” and “Corporate Sustainability”. Sustainable Corporation is referred to as a complex of factors shaping its image in the business environment and society and leading to balanced development in the context of the Triple Bottom Line (Eppel, 1999; Beardsel, 2008; Hauff, Kleine, 2009). According to Artiach et al (Artiach et al., 2010:31) ‘corporate sustainability is considered to be a business and investment strategy that seeks to use the best business practices to meet and balance the needs of current and future stakeholders’. A. Savitz and C. Weber suggest that ‘sustainable corporation is one that creates profit for its shareholders while protecting the environment and improving the lives of those with whom it interacts’ (Savitz, Weber, 2006:x); and practical aspect of sustainability can be expressed through its definition as ‘the art of doing business in an interdependent world’. The authors contend that the concept of “sustainability” concerning corporations in modern sense is wider than corporate social responsibility (CSR). At the same time, it is widely thought that the term Social Responsibility (SR) should be considered in the context of sustainable development while interpreting “social” as oriented on positive impact on society and environment (Beardsel, 2008; Van der Laan, Van Ees, Van Witteloostuijn, 2008). Besides, the development of CSR policy is considered to necessarily include balance of three equally important components of sustainable development (Beardsel, 2008). This approach regards CSR as an instrument to achieve corporate performance based on the fundamental assumption that business success largely depends on company’s capability to meet the interests of all groups of stakeholders, both directly related to the company and indirect – those from a wider social environment. Today, researchers promote the term Corporate Sustainability and Responsibility instead of Corporate Social Responsibility with the same abbreviation (Visser, 2011).

An important challenge for sustainable corporation is the formation of long-term thinking, the development of a corporate business strategy to achieve sustainable development goals, and the creation of sustainable long-term value (Olsen et al., 2004; Clark et al. 2015; BSR report, 2018). In our opinion, the definition of the term “Sustainable Corporation” should combine three components: first, it is the unity of the economic, environmental and social perspectives (goals) of the corporation; second, ensuring its long-term development and creating long-term value for all stakeholders; and third, achieving sustainability through the realization of sustainable development opportunities and risk management. As a result of successful implementation of the corporate strategy to achieve sustainable development goals, the corporation gains in stability. On this basis, a
sustainable corporation can be referred to as the corporation that has ensured the balance of goals by the triple criterion, their achievement and generation of sustainable (economic, environmental, social) value in the long run for all stakeholders (external and internal, present and future generations) through innovative solutions which promote public welfare and the preservation of the environment.

The financial market was also affected by the trend of sustainability, which resulted in the emergence of Sustainable Finance. The change in the target criteria for corporations has made the financial market participants to review their approaches to choosing criteria for decision-making on financing (investing, lending) corporations (Schoenmaker, 2017; OECD, 2017). Henceforth, the decision to provide capital for corporations rests upon their success in achieving the goals of sustainable development on the basis of the Environmental, Social and Governance criteria (ESG-factors). At the same time, investors pay special attention to the quality and effectiveness of corporate governance as a condition for the stable and harmonious development of the corporation and a guarantee of stakeholder benefits. It is proved that any company whose management does not improve its corporate governance system would inevitably suffer a loss.

To give proper weigh to new realities on the financial markets, the international investment community has developed and adopted the Principles for Responsible Investment. This initiative has launched a mechanism for incorporating ESG-factors into investment decision making processes for allocating investment to sustainable companies and projects. It has acted as a catalyst for deepening the implementation of sustainable development principles and goals in their activities and information disclosure in non-financial reports.

The integration of ESG-issues into corporate decision-making on financing sustainable development goals is a two-way process that involves both financial capital providers and corporations: in order to maximize their market value, corporations need to more actively integrate ESG-issues into managerial decision-making processes; in turn, sustainability performance is the basis for making decisions on providing capital to corporations by investors and creditors.

The relationship between corporate social and financial performance

A great deal of scientific studies investigates the impact of CSR activities on financial performance (CFP), market value and reputation of corporations. In particular, CSR is proved to have an asymmetric effect on financial performance: poor reputation in social and environmental activities has a greater impact on financial performance by lowering it than the positive effect of “good reputation” in CSR (Van der Laan, Van Ees, Van Witteloostuijn, 2008). Hence, corporations must necessarily behave responsibly, since their financial performance depends on activities aimed at financing social and environmental programs.

Academic literature already contains more than ten meta-analyses and reviews (Orlitzky, 2003; Margolis, Elfenbein, Walsh, 2007; Fifka, 2012; Clark et al., 2015) casting light on the relationship between corporate social performance and financial performance. In general, recent meta-analyses show a positive correlation between corporate social performance and financial indicators. For example, Clack et al. in their meta-study (Clark et al., 2015: 9) note that the researchers confirmed the positive relationship between successful CSR practices and better operational performance of firms (88% of research) and between good sustainability practices and market stock price performance of companies (80% of studies).
An important component of the study of the links between the company’s performance in integrating ESG-issues and its financial efficiency is the assessment of the impact of corporate social performance on the cost of capital of the company. According to empirical studies, expanded management of social and environmental risks positively affects the company’s market value since companies that do not act responsibly face higher capital costs (DBCCA, 2012:10). The company’s corporate social performance (CSP) reduces its overall risk: if analysts and investors acknowledge the lower risk, then companies benefit from a lower risk premium and consequently from a lower cost of capital. In order for investments in the company to be profitable, the capital gain should be higher than the cost of capital. Hence, successful ESG practices can decrease the cost of capital by reducing risks (Mill, 2006; Attig et al., 2013). This conclusion is supported by the results of the research by K. Ye and R. Zhang (Ye, Zhang, 2011) for China revealing a positive correlation between the CSP and the decline in the cost of debt financing. The authors postulate a U-shaped relation between the CSP and the cost of debt financing in the context of emerging markets. Companies with CSP much higher or lower than the optimal level face the higher cost of debt capital. In addition, the authors confirm that the optimal level of CSP is higher for small and medium-sized companies, as opposed to large-sized companies (Ye, Zhang, 2011:197). Clark et al. (Clark et al. 2015:9) have found that sound sustainability standards lower the cost of capital of companies.

In the empirical literature, there are four distinct patterns that clearly represent the form of the relationship between the effectiveness of CSD and the financial performance of the company: 1) linear positive relationship; 2) linear negative relationship; 3) the nonlinear relationship of a parabolic form; 4) the nonlinear relationship of the mirror-inverted parabolic form (Fig. 1).

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**Fig. 1. Alternative models of the relationship between corporate financial performance and corporate social performance**

Source: Brammer, S., Millington, A. (Brammer, Millington, 2008: 1328)

Most empirical studies on the problem postulate the existence of a linear positive relationship (Model 1), supported by the statistical results (Margolis, Walsh, 2003: 274; Orlitzky, Schmidt, Rines, 2003:403). The presence of a linear positive relationship can be
explained from the standpoint of different theories – stakeholder, legitimacy and neoinstitutional. The hypothesis of the existence of a linear positive relationship between the CSP and the CFP advanced on the basis of the aforementioned theories, is known in the literature as a “good management hypothesis”. All the three theories are based on the assumption that companies are the part of the social system that affects their activities (Brammer, Millington, 2008:1328).

Good corporate social performance along with reduced risk leads to a decrease in production costs, for example, by increasing the ecological compatibility of production processes and diminishing their costs. Thus, reducing the use of energy and emissions of pollutants draws more efficient use of resources (Porter, Linde, 1995; Ambec, Lanoie, 2008). Caring for employees within the appropriate CSR endeavours can reduce operating costs by reducing staff turnover, loss of disease downtime, which contributes to increased productivity (Ambec, Lanoie, 2008). Another indicator of success in corporate social activities may be seen in the increase of sale proceeds. Boosting the company’s reputation and producing its image as a socially responsible contributes to higher customer loyalty and spurs demand for products (Ambec, Lanoie, 2008; Brammer, Millington, 2008). Companies can also offer innovative products and services the production of which is consistent with the goals of sustainable development that allows to occupy new market niches. The growth of demand is reflected in increased revenue, which in turn leads to enhanced financial performance of the company (Ambec, Lanoie, 2008: 48).

In contrast, Model 2 argues in favor of the linear negative association between CSP and CFP. This correlation is explained from the standpoint of neoclassical economics and the principal-agent paradigm. The neoclassical theory reflects the assumption of the negative relationship between CSP and financial performance based on Trade-off Hypothesis. The companies which invest the capital and resources in environment and social spheres incur additional costs and losses. On the contrary, the companies that don’t adhere to sustainable development policy incur fewer direct costs and reap higher profits. As a result, socially responsive companies have worse financial performance (Brammer, Millington, 2008: 1328). Along with the neoclassical theory, the linear negative relationship can be interpreted by the principal-agent model. The agent (manager) can actively invest in the CSR and sustainable development practices to pursue his/her own goals, e.g. uphold his/her reputation. At the same time, the agent loses sight of the principal’s goals – provide good financial performance and significant returns for shareholders. Consequently, excessive investments in social and environmental projects can lead to deterioration of financial performance.

In addition to linear models, there are also nonlinear models to explain the relationship between improved social performance and financial performance. Model 3 of a parabolic form describes a situation of association of either very high or very low levels of social responsibility with the company’s high financial performance. Companies that have not yet taken on the full social performance and assume discrete measures suffer from a deterioration in financial results or even losses (Brammer, Millington, 2008:1329). The rationale for this dependence is the concept of a general competitive strategy, according to M. Porter.

Model 4 is the opposite form of the previous model and is presented as an inverted U-letter. The form of the curve is consistent with the neoclassical theory and one of its well-known laws formulated by P. Samuelson stating that the company receives maximum profit at the point where the marginal cost and marginal revenue are the same (Marom, 2006:195). This economic law can be applied to explain the aforementioned relationship. In this case, at the point of intersection of the marginal revenue from sustainable development measures and
its corresponding marginal costs, maximum growth of value is achieved with the optimal satisfaction of the stakeholders’ needs (Marom, 2006:195; Harrison et al, 2010: 65).

Hence it follows that sustainable development activities can be enhanced as long as the actual output for the stakeholders (marginal revenue) exceeds the increase in the cost of such activities. This relationship between marginal costs and marginal revenue has an inverted U-shaped form, and it denies the utility of the managerial policies grounded on the principle “the more the better”. Thus, the growth of corporate investment in sustainable development (Corporate Social Investment) contributes to the improvement of financial results only to the point of intersection of the marginal costs and the marginal revenue from sustainable development. After this point, likewise in a linear negative relationship, resources are not used optimally, which is accompanied by loss of productivity and worse financial results (Lankoski, 2006:14; Marom, 2006:195).

Since more and more investors want their portfolios to be formed with investments in successful sustainable corporations, the demand for stocks of such corporations is increasing. That is why they become the leading contenders for capital. In our opinion, there are three main factors to spur the development of this trend. First, in the modern world, the views of investors who are increasingly willing to engage in the development of a sustainable world are changing. Second, the concept of sustainable development is attractive to investors since it allows along with “good deeds” to maximize the shareholder’s long-term value according to the principle of ‘doing good to do well’ (Preuss, 2011:19; Porter, Kramer, 2011). Third, the leading companies in sustainable development have higher financial results compared to market indices and better risk-income profiles. Given that sustainable development performance of corporations can be measured financially, it determines the investment attractiveness of the concept. The widening circle of investors is convinced that sustainable development concept is a catalyst for good management and, therefore, a factor that creates value.

**Sustainability key performance indicators: the existing approach**

Recent years saw the increasing number of corporation incorporating ESG-issues in a sustainable value creation process. Experts call on the corporations to develop resilient business strategies for sustainable growth as a means of long-term value creation and innovation (BSR report, 2018: 11). At the same time, business and investors need to have metrics to assess the sustainable development performance of corporations in the context of measuring the value created and positive company’s impact (positive social and/or environmental impact) on society and environment.

Most of the existing methods for measuring the sustainable development performance are resource-oriented approaches, i.e. they attempt to calculate costs and losses from the environmental and social activities of the corporation (Figge, Hahn, 2004a:129). F. Figge and T. Hahn propose an indicator for measuring the contribution of the environmental performance – the Environmental Value Added (Figge, 2001; Figge, Hahn, 2004) and the Sustainable Value Added (Figge, Hahn, 2004a) algorithm which takes into account the contribution of the economic, ecological and social components to the overall performance based on the benchmark method. In contrast to other methods, the Sustainable Value Added indicator enables sustainable development performance to be measured taking into account alternative costs. In this interpretation, Sustainable Value Added shows how much added value is created because the company uses its resources more effectively than the benchmark.
company (Figge, Hahn, 2004:173). The Sustainable Value Added indicator, calculated from this methodology, is a multi-faceted and outward-facing indicator. It shows both how effectively the corporation uses its capital in comparison with the benchmark, and whether the corporation can create value through the effective use of natural and social capital (Hahn, Liesen, Figge, 2008: 73).

At the same time, to manage the value creation process, corporate managers need a metric that focuses on assessing the effectiveness of internal business processes and measures value added for stakeholders as a result of the integrated interaction of economic, environmental and social factors.

**Stakeholder Value Added – key performance indicator for sustainability**

The authors’ view of the creation and distribution of value added is the synthesis of existing concepts of value added, in particular, the “economic value generated and distributed” (EVG & D) for GRI (2011a) and the “economic value added” (EVA) of the SIGMA project (The SIGMA project, 2003). In contrast to the mentioned approaches, we propose to integrate three components of sustainable development into the structural-logical scheme for both creation and distribution of value and featuring the distribution function of corporate finance – the distribution of Sustainable Value Added providing for the interests of all stakeholders (external and internal, financial and non-financial) (Fig. 2).

The concept of value added has its roots in macroeconomics. Value added is considered as an indicator that evaluates the creation of national wealth. Transferred to the level of the corporation, this concept is based on the idea of residual return derived from the sale of products and services created through the use of production capacities as well as non-financial and financial capital. The value added for corporation-level stakeholders can be calculated directly (1) and indirectly (2) (Landis, Haller, van Staden, 2015: 4):

\[
(1) \text{Value added} = \text{Output} - \text{Input}
\]

\[
(2) \text{Value added} = \text{Remuneration to employees} + \text{Pay direct and excise taxes to state treasuries} + \text{Remuneration to capital providers} + \text{Retained Value}
\]

The first equation describes the principle of value creation, and the second refers to its distribution among stakeholders. Thus, the value added for stakeholders is dual in nature (Landis, Haller, van Staden, 2015: 5) as it characterizes both the economic performance of the corporation (performance aspect) and the social impact of its activity (social aspect).

Based on these calculations, the following algorithm of Sustainable Value Added assessment as Stakeholder’ Value Added using the indirect method can be proposed (3):

\[
(3) \text{Value Added} = \text{Wages and bonuses} + \text{Taxes and other payments to government and local authorities} + \text{Dividends to shareholders and payments to creditors (financial stakeholders)} + \text{Value added distributed on a voluntary basis (non-financial stakeholders)} + \text{Retained Value}
\]

One of the important components of Sustainable Value Added (value added for stakeholders) is its voluntary distributed part, i.e. the amount of voluntary corporate investment into the environment, personnel development, labor safety, corporate citizenship, charity, etc. It is this component that characterizes the financial aspects of corporate sustainable development and can be used to assess the performance of corporations in achieving sustainable development goals.
Fig. 2. Conceptual model of sustainable value added creation and its distribution among stakeholders

Source: Designed by authors

The proposed scheme allows corporation management to clearly demonstrate the link between formation and distribution of sustainable value among stakeholders, which ensures enhanced management of the value creation process.

Conclusions and suggestion

The results of the study enable the authors to form a structural-logical scheme and justify the algorithm of assessment of Sustainable Value Added by indirect method that characterizes the value distribution among internal and external, financial and non-financial stakeholders. One of the important components of Sustainable Value Added is its voluntary distributed part, i.e. the amount of voluntary corporate investment into the environment, personnel development, labor safety, corporate citizenship, charity, etc. It provides managers with a financial measure of the corporations’ contribution to sustainable development.
At the same time, the concept of Creating Shared Value (CSV) can be regarded as a new target and a managerial approach. It is generated along the value chain and distributed among all stakeholders (proposed by Porter and M. Kramer in 2011 (Porter, Kramer, 2011:76). By developing the concept of strategic CSR, scientists have modernized it and presented it as an updated, coherent concept for Shared Value, as opposed to the traditional concept of corporate responsibility. In addition, we believe that the creation of Shared Value is to be considered not only along the chain of supply (vertical integration), but also from cooperation with other network members of the same mind (horizontal integration) concerning building the economy and society on the basis of sustainable development. This conceptual basis should be foundation for elaborating measures of the contribution of all participants in all spheres of activity to the aggregate financial result – sustainable value added.

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