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Sustainability Assessment Using Sustainable Value Added

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Abstract

Sustainability assessment is a mainstream business activity that demonstrates the link between the organization’s strategy and commitment to a sustainable global economy. Since company’s contribution to sustainability is still hard to measure small and medium-sized businesses/enterprises (SMB/SME) show a low level of engagement in sustainability assessment.
In this paper, improved method of Sustainable Value Added calculation is presented. It takes into account not only the economic value, but also the value created by all used resources. According to this approach, corporate sustainable performance takes into account external costs caused by the three additional pillars of sustainability assessment (environmental, social and governance).

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Keywords: DEA; efficiency; EVA; sustainability assessment; SVA; information and communication system

1. Introduction

Sustainability performance can be said to be an ability of an organization to remain productive over time and hold on to its potential for maintaining long-term profitability. It shouldn’t be acted only on the basis of economic results, whereas it should take into consideration non-financial factors (Kaplan and Norton, 2001; Carroll, 2000; Waddock and Smith, 2000; Siew, 2015). Because of that all the current trends and frameworks depend on more comprehensive sustainability pillars; environmental, social, economic and governance performance. Therefore by following these frameworks and integrating associated activities, companies will be able to achieve long-term benefits (Chabowski et al., 2011; Cruz et al., 2006). This will be done by engaging different companies in disclosure of their overall economic, environmental, social, and governance (ESG) impacts and helping them in understanding, measuring and communicating their sustainability performance. However, the main reason stands behind not

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engagement of the small and medium enterprises in this process is that the contribution of the companies to sustainability is still hard to measure.

One of the most famous and common methods for measuring corporate sustainability which incorporates the three dimensions (economic, environmental and social) is called the triple bottom line approach (Figge and Hahn 2002, 2004, 2012, Hahn et al. 2015; Siew, 2015). It calculates the value by using not only financial but also non-financial resources. This value is called sustainable value added (SVA). This approach simplifies the measurements and enables sustainable performance to be measured in monetary terms depending on the data availability on the enterprise level as well as on the benchmark (Kuosmanenand Kuosmanen, 2009). It shows how much value or damage is created as a result of using economic, environmental and social resources, compared to a benchmark (Figge and Hahn 2012, 2013, Hart, Milstein 2003).

The objective of the paper is to propose a modified and more accurate model for measuring the corporate sustainability performance. The model integrates environmental, social, economic and corporate governance indicators. It aggregates many indicators from different frameworks and allows the enterprises to compare their performance effectively. For this reason the paper is structured as follows. In Section 2, materials and methods used for sustainability assessment is described. This is done by presenting an overview about the used indicators. Then two main factors of sustainability assessment (EVA and SVA) are depicted. The proposed method of sustainability value added calculation is presented in Section 3. Finally, Section 4 concludes the paper.

2. Materials and Methods

2.1. Sustainability Indicators

There are many international standards for implementing and certifying like different indicators to increase business efficiency and customer satisfaction (ISO 9000:2015), improve environmental management efforts like ISO 14001:2015 and EMAS (EMAS 2014), effectively assess and address social responsibilities as ISO 26000:2010 (ISO 26000, 2014) and manage occupational health and safety (ISO 45001:2016) (ISOHelpline, 2014). According to these standards, different frameworks for sustainability assessment are created. Recently, the most widely used frameworks for sustainability reporting are Global Reporting Initiatives (GRI) (G4 Guidelines, 2013), Sustainability Assessment of Food and Agriculture (SAFA)(SAFA Guidelines, 2013) and DVFA framework for key performance indicators for environment, social and governance (ESG 3.0, 2010). Table 1 briefly describes these frameworks.

Table 1. Frameworks for corporate sustainability measurement.

Organization	Manuals	Description
Global Reporting Initiatives.	GRI G4 Guidelines: Reporting Principles and the Standard Disclosures, and the Implementation Manual.	Developing a comprehensive, credible and transparent sustainability reporting framework regardless of the size, sector or location of studied organization. Their vision is a sustainable global economy where organizations manage their ESG and economic performance impacts responsibly, and report transparently.
Food and Agriculture Organization of the United Nations (FAO).	Sustainability assessment of food and agriculture system framework	A holistic global framework designated for the assessment of sustainability along food and agriculture value chains. This framework can be applied to SMB/SMEs and large-scale companies and organizations. The guiding vision of the SAFA framework is that food and agriculture systems worldwide are characterized by four dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being.
DVFA Society of Investment Professionals in Germany in	Key Performance Indicators for Environment, social and Governance	It provides a credible and transparent framework for sustainability reporting suitable for all entities regardless of size, scope and legal form it has been specifically designed for stock listed companies and issuers of