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EFFECTS OF ENTERPRISE SUSTAINABILITY ON PERFORMANCE[4]

Abstract

Contemporary business environment imposes new business rules. The maximization of profit and shareholder value cannot be the only aim of an enterprise. Instead, enterprises are forced to maximize value of all stakeholders in order to survive in the long run. The issue of sustainability has become of crucial significance, and especially measurement and reporting on sustainability, as well as, its effects on financial performances, as still dominant ones in the contemporary business performance measurement models. Hence, the subject of the research is the enterprise sustainability in the contemporary business environment. The aim of the research is to stress the role and the significance of the sustainability in the process of improving the enterprise efficiency. The research results show that the enterprise sustainability has the positive implications on the business performances in the long run, as well as on the welfare of all stakeholders. In order to be more transparent, it is desirable for enterprises to create the sustainability report, in the integration with the traditional business report, which would give the complete overview of enterprise efficiency.

Key words: *sustainability, corporate sustainability, enterprise sustainability, sustainability measurement, performance.*

JEL classification: *M21, L25, M41.*

ЕФЕКТИ ОДРЖИВОСТИ НА ПЕРФОРМАНСЕ ПРЕДУЗЕЋА

Апстракт

Савремено пословно окружење намеће нова правила пословања предузећа. Максимирање профита и максимирање вредности за акционаре не може више бити једини циљ предузећа. Уместо тога, предузећа су, у циљу одржања у дугом року, принуђена да максимирају вредност за све стејкхолдере.

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Питање одржања предузећа постаје од круцијалног значаја, а посебно мерење и извештавање о одрживости и како се исто одражава на финансијске перформансе предузећа, као доминантних и у савременим моделима мерења перформанси предузећа. Отуда је предмет истраживања одрживост предузећа у савременом пословном окружењу. Циљ истраживања је да се истакне улога и значај одрживости у процесу унапређења ефикасности предузећа. Резултати истраживања указују да одрживост предузећа има позитивне импликације на перформансе предузећа у дугом року и благостање свих стејкхолдера. У циљу боље транспарентности, пожељно је да предузећа састављају посебан извештај о одрживости, који би у интеграцији са традиционалним извештајем о пословању дао комплетну слику о ефикасности предузећа.

Кључне речи: *одрживост, корпоративна одрживост, одрживост предузећа, мерење одрживости, перформансе.*

Introduction

The issue of sustainability has become more and more popular both in academic and professional public, and it is an integral part of the decision-making process and shareholder value creation. As the world faces with the serious sustainability challenges, the threat of the resource degradation, the impact of the increasing population of climate changes and environment, the business community is simply forced to include the sustainability issue into its long-term aims (Nigam, Benetti & Mbarek, 2017, 571).

Non-financial performance measures are gaining more and more importance in the process of enterprise's efficiency evaluation (Stevanović, Ivanović-Đukić, Rađenović, & Radović, 2018). The maximization of the short-term profit has become a thing of the past in the modern business conditions (Ivanović-Đukić, Stevanović, & Rađenović, 2019). The stakeholder theory is becoming dominant in the contemporary business environment, which is characterized by the remarkable heterogeneity, complexity, dynamism and unpredictability. Thus, in today's business environment, the economic, social and environmental dimension of corporate excellence should be equally considered (Rađenović & Krstić, 2020, 85). In terms of global warming and environmental condition degradation, the corporations must determine the executive compensations according to the stakeholder approach. The environmental protection might require the significant investments and thus short-term profit reduction. Some of the corporate sustainability motives are better image and reputation, cost savings, improved employee motivation, enhanced competitiveness, risk reduction, etc.

However, despite the undeniable importance of sustainability, the problem with measuring and reporting on enterprise sustainability exists. The question is whether the sustainability issue can be incorporated into existing traditional enterprise performance measurement models, or whether it is necessary to design a new stand-alone one, or create an integrative model that incorporates both the elements of traditional model and enterprise sustainability dimensions. Hence, the *subject of research* is the sustainability of enterprises in the contemporary business environment; sustainability measurement

and reporting mechanisms, as well as, the relationship between enterprise sustainability and performance. The *aim of the research* is to highlight the role and importance of enterprise sustainability in the process of managing enterprise performance over the long term, as well as, to highlight the potential models of sustainability measurement and reporting, with particular reference to the impact of sustainability on enterprise performance. Starting from the defined subject and objective of the research, the basic scientific hypothesis is that enterprise sustainability leads to improved enterprise performance in the long run.

In order to test the starting hypothesis, a qualitative methodology, based on a descriptive study, comparison and interpretation of relevant results, will be applied, with the aim of synthesizing different attitudes, on the basis of which general conclusions will be drawn about the impact of sustainability on company performance. Theoretical verification is achieved by applying methods of analysis and synthesis, deduction and induction, with the aim of reaching sufficient general conclusions by abstraction and generalization.

In addition to the introduction and the conclusion, the paper contains three parts. The first part provides the conceptual basis and elaborates on the sustainability measurement issues. The second part is dedicated to the reporting on enterprise sustainability. The third part analyzes the effects of sustainability on enterprise performance. Finally, conclusions are drawn, limitations are given, and future directions of research are defined.

1. Enterprise sustainability: conceptual foundations and measurement

Corporate sustainability implies a balance between economic profit, environmental and social responsibility and the demands of all stakeholders (Jiang, Liu, Liu, Cong, Zhang, & Shi, 2018, 625). This means that business performance has multiple dimensions - economic, environmental and social. Searcy (2012) points out that corporate sustainability is a complex problem and that there is no one universal approach to sustainability. Searcy (2012, 240) points out that stakeholder theory is one of the most widely accepted theoretical models for research on corporate sustainability. Budsaratragoon & Jitmaneeroj (2019, 293) under corporate sustainability mean integrating "environmental, social, governance and economic performance, so-called quadruple bottom line sustainability". Kang, Chiang, Huangthanapan, & Downing (2015) highlight different sustainability deficits. Most popular is that a company is sustainable when it achieves economic prosperity, the quality of its business environment and social justice. This definition can be further clarified as economic, environmental and social responsibility.

Enterprise sustainability is a broader concept than corporate sustainability, and includes: corporate sustainability, supply chain sustainability and sustainability context. Enterprise sustainability can be understood as "creating intra- and inter-organizational stakeholder-focused business systems dedicated to integrated economic, environmental and social aspects of performance in the short and long term within the boundaries imposed by society and nature" (Searcy, 2016, 121).

Corporate sustainability motives are improved image and reputation, cost savings, improved employee motivation, enhanced competitiveness and reduced risk. Yet, in many corporations, employees are simply not prepared and trained enough to commit to corporate sustainability. This is mainly due to the lack of education and training and the inability to see what sustainability and other corporate initiatives are all about, as well as, to the lack of authority. Corporate sustainability is a complex problem characterized by a plurality of goals, ambiguity, uncertainty, emergence and context dominance (Searcy 2009).

Given the importance of enterprise sustainability in today's business environment, it is understandable to elaborate on the issue of sustainability measurement. Of particular importance is how to measure sustainability and which index or composite indicator would most accurately reflect the essence of enterprise sustainability. The problem here is about defining, first, individual indicators for each dimension, and only then integrating individual indicators into one comprehensive indicator. Environmental performance indicators include: consumption of materials/energy, environmental protection, air/water pollution, solid waste, land use; Social performance indicators are: security, justice, diversity, workforce, services, education; Economic performance indicators include: profit, tax burden, research and development, internal controls, investments (Jiang, Liu, Liu, Cong, Zhang, & Shi, 2018, 628). The Sustainability Performance Measurement System (SPMS) differs from the performance measurement system in that it measures the ability of the system to adapt to change and to continue to function for an extended period of time. The SPMS is an indicator system that provides information to assist in the short and long-term management, control, planning and performance of economic, environmental and social activities undertaken by the corporation.

Today, all kinds of pollution, human and labor rights, child labor, political disruption and changing global climate are just some examples of factors that managers need to think about. El-Khalil & El-Kassar (2018) highlight six major categories for measuring sustainability: education, health, employee compensation, employee well-being, resource management, and energy management. In addition, the four main performance outputs are: productivity, efficiency, quality and well-being of employees. Pryshlakivsky & Searcy (2017) point out that sustainability measurement systems are subsystems of performance measurement systems that have taken different forms for several decades.

Searcy (2012) points out that corporations need to develop sustainability measurement models that are tailored to the situation. Corporate sustainability performance measurement systems must fit the existing organizational infrastructure and evolve over time in accordance with the internal and external requirements that are imposed. Hence, the Dow Jones Sustainability Index, 2008; Global Reporting Initiative - GRI, 2006 and international standard guidelines appeared (Social Accountability - SA 8000; ISO 14000 and 26000). Such approaches have been criticized for being merely recommendations, superficial but ineffective.

Searcy (2016) defines the enterprise sustainability performance measurement system as an integrated system of indicators and indices that provide information on the progress of goals to facilitate the management of local, regional and social impacts of the firm as well as its forward and reverse supply chains in the short and long term. Searcy (2016) points out that measuring the sustainability of a business requires consideration of

the entire value chain, including the following: supply network, focal firm, distribution network, consumers and end-of-life network.

Enterprise sustainability performance measurement systems must meet the following requirements (Searcy, 2016):

1. The system must reflect the internal structure of the enterprise;
2. The choice of partner must be connected to the system;
3. The system must measure performance in the forward supply chain;
4. The system must measure performance in the reverse supply chain;
5. The system must consider the sustainability context in which the business operates;
6. The system must comply with key stakeholder requirements;
7. The system must be dedicated to managing the sustainability of the enterprise in the short and long term.

Morioka & Carvalho (2016) investigated the measurement of sustainability in practice on the example of companies in Brazil. The authors further clarified the notion of sustainability and make a distinction. The data study highlights three main aspects of the concept of sustainability: timeframe, integrating the needs and requirements of the stakeholders, and integrating sustainability into the core of the business. The authors explore the possibilities of integrating sustainability into existing corporate performance measurement systems. The authors conclude that there are four performance measurement systems that contain sustainability indicators, namely: a periodic performance measurement system for a particular part/department; individual performance appraisal, sustainability reporting and project evaluation. The authors point out that the triple-bottom concept implies that managers should consider three pillars when deciding economically, environmentally and socially. The causal consequence of these pillars has been the topic of research by many authors.

Kang, Chiang, Huangthanapan & Downing (2015) examine the possibilities of measuring sustainability performance according to the most sophisticated modern model of measuring and managing enterprise performance - the Balanced Scorecard (BSC) model, using the example of family-owned hotels. The BSC model is the foremost instrument of strategic management and management accounting, which originally measures enterprise efficiency from four perspectives - finance, customers, internal business processes, and employee learning and development (Kaplan & Norton, 1992). The authors show that corporate sustainability performance can be evaluated according to the BSC model. Figge, Hahn, Schaltegger, & Wagner (2002) proposed to introduce another non-market perspective into the BSC model, incorporating environmental and social aspects into the enterprise strategy and called this Sustainability Balanced Scorecard.

Hansen & Schaltegger (2016, 194) analyze the sustainability balanced scorecard (SBSC). The SBSC goes one step further than the ordinary BSC by integrating strategically relevant environmental goals, social and ethical goals. Environmental strategic goals and social strategic goals can be integrated into existing BSC model perspectives or incorporated as a separate perspective. An Australian report states that in practice, BSCs often contain non-traditional perspectives, such as the environment (50%) and community (53%) (Bedford, Brown, Malmi & Sivabalan, 2008, 27). Hansen & Schaltegger (2016)

examine how it is possible to adapt the architecture of BSC models in order to integrate corporate sustainability, thus creating SBSCs. Although controversial, the BSC model is one of the most popular models for measuring and managing performance and in the context of corporate sustainability. Corporate sustainability involves systematic management efforts to voluntarily integrate environmental and social issues into general management issues. The SBSC differs from the BSC in explicitly recognizing the importance of goals and performance measures related to enterprise sustainability.

Nigam, Benetti & Mabarek (2018) examine the extent to which the correlation of manager fees with sustainability performance can lead to a viable business model. The authors conducted a survey on a sample of 16 companies from 4 continents in which executive compensation is linked to sustainability goals. Integrating sustainability into decision-making, strategy and planning allows for better management and risk avoidance. The corporate governance model has implications for incorporating sustainability into enterprise goals. In the Anglo-Saxon model, there is less correlation, indirectly between the goals and strategy of the enterprise and sustainability, while in the European model, there is a significant direct link between the strategies and the goals of enterprise sustainability (Nigam, Benetti, & Mabarek, 2018, 578). This is understandable given the fact that the Anglo-Saxon countries adopt a shareholder model of corporate governance, while in the countries of Europe, Brazil, South Africa and Japan there is a stakeholder model of corporate governance. Krstić & Sekulić (2018, 123) point out that "stakeholder theory tries to balance the goals of all stakeholders for the business of the enterprise and their optimal structure in the set of corporate goals". The shareholder model implies that managers should strive to maximize shareholder value, while the stakeholder model implies that managers should strive to maximize value for all enterprise stakeholders.

2. Enterprise Sustainability Reporting

In its International Corporate Responsibility Reporting Survey 2011, KPMG points out a significant increase in sustainability reporting, "95 percent of the 250 largest companies in the world in 2011 from 80 percent in 2008 ... 80 percent of these businesses report on sustainability according to GRI guidelines" (GRI Annual Report 2011/12, 3). The GRI publishes guidelines globally to maximize transparency in the sustainable development reporting system. The GRI standards are based on three pillars: strategy, corporate governance and company profile reporting; managerial approach to sustainable development issues; performance measures in the field of sustainable development (GRI, 2011; Knežević, Pavlović, & Stevanović, 2017, 88). The Global Reporting Initiative (2015) states that a business sustainability report should include the positive and negative aspects of a firm's performance by items classified in three dimensions - economic, environmental and social. The economic dimension is measured by nine items classified into three sub-dimensions: direct economic performance, market presence and indirect impact on society. The environmental dimension has three sub-dimensions: inputs (material, energy and water), outputs (emissions, wastewater and waste) and compliance (environmental compliance, etc., environmental expenditures and impacts of products and services). The social dimension is divided into: work practices and decent work, human rights, society and product responsibility.

In the European milieu, the problem of reporting on sustainable development has been addressed by the adoption of a new Directive of amendment 2014/95/EU. This Directive obliges all companies in the EU with more than 500 employees to produce a report on sustainable development (Knežević, Pavlović, Stevanović, 2017, 85; 2014/95/EU). The non-financial report of the companies would also include the environmental, social and human resources effects of business activities, then the effects of business activities on respect for human rights, the fight against corruption and bribery issues (Knezević, Pavlović, & Stevanović, 2017, 89). The European Commission published non-mandatory guidance in 2017 to increase the consistency and comparability of non-financial reporting (http://bit.ly/2FHJuQU). Key principles in the guidelines include the materiality of information; fair, balanced and understandable characteristics of information; the comprehensive but concise nature of the publication. The European Commission recently published "Guidelines on Reporting Climate-Related Information," available in a 44-page guidebook (http://bit.ly/2Xi8U2w) and a two-page summary (http://bit.ly/2KQ5TQk).

Knežević, Pavlović, & Stevanović (2017, 85-86) point out that "The Republic of Serbia has the task, in accordance with its strategic commitment to accession to the European Union, to harmonize the Companies Act and the Accounting Law with the newly added Directive and to oblige companies with more than five hundred employees to disclose the non-financial information required by the Directive in the (consolidated) business report or in the form of a separate report". The results of the research conducted by the aforementioned authors show that companies listed on the Belgrade Stock Exchange generally report on sustainable development, paying more attention to the form rather than the content and usefulness of information within the business reports. Conversely, on a global scale, the need for sustainability reporting is superfluous, it is only a question of how to improve the same in terms of comparability, materiality of information and external verification of them (Knežević, Pavlović, & Stevanović, 2017, 98).

Integrated reporting is important because it enables the true value of the enterprise to be determined now and in the future. Such reporting involves the publication of financial and business sustainability information and the like. Sustainability reporting provides information for a number of stakeholders, mainly taking into account environmental and social factors. Integrated reporting, therefore, is "much more than a transition from purely periodic annual or semi-annual static one-way reporting to reporting as a continuous activity that ensures the integration of financial and non-financial business information and dialogue with all stakeholders" (Prošić, 2015, 66). Prošić (2015, 82) also points out that in the Republic of Serbia, "reporting on non-financial indicators, economic, social and environmental impacts in Serbia are peculiar to those companies that use the Global Reporting Initiative (GRI)".

3. The impact of sustainability on enterprise performance

The effects of sustainability on business performance have been the subject of research by numerous authors (Epstein & Roy, 2001; Maron, 2006; Wu, 2006; Li, Choi, & Chow, 2015; Morioka & Carvalho, 2016; Hussain, Rigoni & Cavezzali, 2018; Ahmad & Wong, 2018; Nizamuddin, 2018; Jung, Nam, Jang & Kim, 2018; El-Khalil & El-Kassar, 2018; Budsaratragoon & Jitmaneeroj, 2019).

Epstein & Roy (2001) point out that a formal sustainability program can lead to cost reductions through better material management, lower energy consumption, waste reduction and the like. Maron (2006) and Wu (2006) find the positive impact of enterprise sustainability and business performance programs. Of course, such conclusions are valid for normal economic circumstances. The question is: What is the relationship between sustainability and business performance in volatile market opportunities? In these circumstances, sustainability and business performance programs may be negatively correlated (Li, Choi, & Chow, 2015). Morioka & Carvalho (2016) show that there is not always a positive correlation between environmental and social and economic performance. On the contrary, corporate sustainability can have a negative impact on economic performance. It is important to emphasize that this is valid in the short term, while in the long run, corporate sustainability leads to improved economic performance - profitability and market value of the company.

Hussain, Rigoni & Cavezzali (2018) point out that the uneven application of sustainability performance measures is one of the main causes for the ambiguity of research findings on whether it pays to be sustainable. The existing literature has so far neglected the multifaceted nature of sustainability measurement. In general, it can be said that there is confusion over what the measurement of sustainability performance and financial performance of the company is. To avoid this confusion, the aforementioned authors conducted an in-depth analysis of the relationship between sustainability disclosure, sustainability performance and financial performance. The measurement is based on the Global Reporting Initiative - GRI model. The empirical results point to several things: first, sustainability disclosure shows no significant relationship with any financial performance measure, while sustainability performance measures show a significant correlation with financial performance. The authors also conclude that not all dimensions of sustainability performance are equally related to financial performance. In addition, some sub-dimensions are negatively related within and among indicators. Second, environmental performance and social performance remain consistently positive and significant across all financial performance benchmarks. Third, the authors conclude that implementing a stable and comprehensive measurement of sustainability performance can yield definitive results.

Ahmad & Wong (2018) analyze studies addressing sustainability in the manufacturing industry from a triple-bottom line perspective, that is, economic, environmental and social. Today, manufacturing companies need to produce products with minimal environmental impact, conserve energy and natural resources, and provide security for employees and the community while achieving good economic performance. According to the TBL concept, all three aspects of sustainability are equally relevant and should not be neglected. Based on the analysis of past studies on sustainability, the authors conclude that economic and social indicators of sustainability should be more mainstreamed, while environmental indicators are rather included in the assessment of enterprise sustainability.

Nizamuddin (2018) points out that there is no one perfect benchmark for assessing corporate sustainability performance and corporate financial performance. The literature mentions more approaches for measuring corporate sustainability performance: reputation indices, content analysis, survey method and one-dimensional measurement, as well as more approaches for measuring financial performance, namely: market

method (stock returns, changes in stock returns, the market value of the company), the accounting method (ROA, ROE, ROS, net profit, net operating profit) and the accounting and market method (Tobin's Q and market value added). Table 1 shows the advantages and disadvantages of different methods.

Table 1. Comparative analysis of approaches for measuring enterprise sustainability and financial performance

An approach for measuring sustainability	*Advantages*	*Disadvantages*
Reputation indices	• Data availability • Performance comparability • Multidimensionality	• Non-scientific approach • Defined by private agencies • Limited coverage • Differences in geographical location, size of business, branches and the like
Content analysis	• Flexibility of choice • Arbitrarily selected dimensions	• Subjectivity • Data are not published
Questionnaire method	• Flexibility of choice • Arbitrarily selected dimensions	• Subjectivity • Measurement error • Inappropriate answers • Respondents may hide meaningful information
One-dimensional measurement	• Data availability • Comparing businesses	• Theoretical invalidity • Bias
Corporate financial performance measurement		
Accounting measures	• Data availability • Data comparison	• Historical data
Market based measures	• Actuality of data	• Availability of data only from large listed companies • Coverage of systemic factors

Source: adapted from Nizamuddin, M. (2018). Corporate social responsibility and corporate financial performance: an exploratory study of measurement-approach selection issues. Retrieved January, 10, 2020, from http://irjrr.com/irjrr/January2018/2.pdf.

Jung, Nam, Jang & Kim (2018) conclude that corporate sustainability performance is positively correlated with financial performance, especially in the ICT industry, and especially in small, less-indebted firms.

El-Khalil & El-Kassar (2018) investigate the effects of corporate sustainability practices on performance, as exemplified by companies in the Middle East and North Africa (MENA region). Insights into the importance of sustainability vary from nation to nation. Research findings show the strong positive impact of each sustainability category on each performance category. Specifically, investing in every aspect of sustainability will increase productivity, quality and overall performance.

Budsaratragoon & Jitmaneeroj (2019) find that companies in the European developed markets show the highest ranking of corporate sustainability. Environmental, social and governance performances have a positive impact on economic performance. There is a causal link and synergy between the 4 pillars of corporate sustainability. This depends on the level of market development and geographic region. Social and environmental pillars are the most critical drivers of corporate sustainability.

In general, it can be concluded that there are the traditional and revisionist theories about the effects of sustainability on firm performance differ. According to revisionists, sustainability leads to better competitiveness, better relationships with stakeholders and compliance (Sekulić & Pavlović, 2018), higher rates of return on investment and lower financing costs, greater shareholder value and better stock performance. Traditionalists, by contrast, find that sustainability adversely affects financial performance. In addition, individual authors do not see at all the significant link between sustainability and financial performance.

Conclusion

In today's business environment, the issue of enterprise sustainability is gaining in importance. According to traditional economic theory, profit maximization is the sole objective of the enterprise. Traditional and revisionist theory are distinguished. According to auditors, sustainability leads to better competitiveness, better stakeholder relationships and compliance, higher rates of return on investment and lower financing costs, greater shareholder value and better stock performance. In contrast, traditionalists find that sustainability adversely affects financial performance. In addition, individual authors do not see at all the significant link between sustainability and financial performance.

Starting from the characteristics of the modern business environment, it can be definitely concluded that the performance of an enterprise can no longer have only an economic dimension, but also the environmental and social ones. This means that managers should take into account the effects of their managerial and business activities on economic, environmental and social performances. This is inevitable for the purpose of survival, growth and development of the enterprise in the long run. Enterprise sustainability is in itself a very complex phenomenon because it depends not only on the entity (focal firm), but also on all other entities in the supply chain and characteristics of the general and business environment in which the enterprise operates.

However, despite the undoubted importance of enterprise sustainability for the enterprise itself and the well-being of the entire society, in the Republic of Serbia it is still only declarative and formal in nature. It will take a long time for the sustainability issue to penetrate the minds of managers and for them to genuinely and fundamentally commit to it. This means also when the issue of sustainability is incorporated into legal frameworks into the Companies Act and the Accounting Act. The issue of measuring and reporting sustainability is particularly important. In truth, it is difficult to find a comprehensive indicator that measures and expresses economic, environmental and social effects. In addition, sustainability reporting could take the form of a separate report or as an adjunct to the traditional business report. It is possible to integrate sustainability elements into modern performance measurement models, such as the most prominent Balanced Scorecard model.

The given research has some limitations, which is the application of a purely qualitative methodology. Therefore, future research may focus on quantitatively expressing and measuring sustainability on a specific enterprise example, as well as on a comparative analysis of sustainability effects on firm performance over a period of time.

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