

12th International Strategic Management Conference, ISMC 2016, 28-30 October 2016, Antalya, Turkey

The Fifth Pillar of the Balanced Scorecard: Sustainability

Zeynep Tuğçe Kalender^{a*}, Özalp Vayvay^a

^a*Marmara University, Istanbul Goztepe Campus, 34722, Turkey*

Abstract

In today's business environment, sustainability is a trend which can allow companies to implicate social, economic and environmental pillars to the strategy and management of the company. Although the sustainability concept is not new, many organizations still do not know how to implement or measure its outputs. This study aims to look closer to sustainability issue as a fifth pillar of the balanced scorecard which combines financial and nonfinancial issues into a comprehensive performance management system. Balance scorecard was being adopted by companies all over the world to implement corporate strategy, thus it can be considered as a bridge to implement sustainability strategy and link corporate sustainability objectives with actions and performance outcomes.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of ISMC 2016.

Keywords: Balanced scorecard; Sustainability; Strategic management; Sustainable balance scorecard

1. Introduction

Every business usually determines the profit or the form of profit as their main goal. This situation is the main reason that the management is traditionally focused on profitability, market share and etc. Therefore, many of them view the sustainability as only a companion to financial reporting. However, it is a well-known fact that in the new markets, decisions context changes fast and enterprise strategy management more challenging than it used to be.

* Corresponding author. Tel.: +0-216-347-13-60; fax: +0-216-550-52-13.
E-mail address: tugce.simsit@marmara.edu.tr ; ztsimsit@gmail.com

Information is not enough and new measures are needed for evaluating the impact of the strategies and actions that companies prefer. Modern entities are now facing an emerging business phenomenon which is described as sustainability performance management which addresses the social, environmental and economic aspects of corporate management. Several factors have motivated companies to investigate and improve environmental performance. Stakeholders and customers increasingly may require consideration of the environmental issues. Although the sustainability concept is not new, many organizations still do not know how to implement or measure its outputs. What is more, implementation of performance management systems is challenging due to the differences amongst the companies and users of performance management system.

During the last decades, the mounting global attention to sustainability has led to a worldwide debate on how a sustainable world could be realized. In this debate, companies are regarded as crucial actors in contributing to global sustainability goals. Not only do they play a core role in modern society, by offering employment and contributing to wealth creation but they are also responsible for numerous social and environmental problems. Lansituoto and Jarvenpaa (2010) pointed out in their study that environmental issues may become strategic because they have an influence on a company's image, profitability, competitiveness, markets and products which will affect its future economic survival. In recent years, many corporations have implemented environmental and social management systems in order to manage and control sustainability related issues. However, these management systems often fall short in companies' practice. The underlying reason of this situation is, in many cases these management systems are run on the operating level thus they are not linked to the strategic planning and management of the company.

Balanced scorecard has high potential to integrate environmental and social aspects into the general management system. It has to be noted that the balance scorecard is not a tool for the formulation of strategies, it serves to describe an existing strategy consistently in order to enhance, its successful execution (Leon-Soriano et al., 2010). It allows companies and organizations to clear their visions and strategies while translating them into action. According to Kaplan and Norton (1996), model provides feedback on the internal business processes and the external outcomes of those actions. Therefore, it can be used as a continuous improvement tool for finding the most strategic performance and results (Johansson and Larson, 2015). Using the balanced scorecard approach based on sustainable development parameters is a powerful and useful methodology to evaluate the sustainable performance of organization or company.

2. Literature Review of Balance Scorecard

Performance measurement/management systems are widely explored by managerial and accounting scholars (Ferreira and Otley, 2009). Set of activities to determine the aims and supports the implementation of planning, control, measurement, rewarding and learning mechanisms are defined as the performance measurement system (Agostino and Arnaboldi, 2012). Traditional performance evaluation systems have the common weakness which overemphasizes the financial parameters and other perspectives were neglected. In the new market context where information highly influences companies' success, no single performance indicator could fully capture the complexity of an organization's performance. With multiple and often conflicting demands from various stakeholders, a company's performance objectives are multidimensional.

In 1990s, Kaplan and Norton introduced a methodology to combine both financial and non-financial issues into a performance management system which is called Balance Scorecard (BSC). The BSC approach involves identifying key components of operations, setting goals for them and finding ways to measure progress towards their achievement (Leon-Soriano et al., 2010). The innovation of BSC is to evaluate an organization from for perspectives which are financial, customer, internal and learning perspective. In Figure 1 general framework of BSC which is determined by Kaplan and Norton (1996) is presented. BSC lets executives see whether they have improved in one are at the expense of another.

Financial perspective simply measures the revenue growth, investment return and cost reduction by gathering financial data and reviewing business performance based on financial performance. Financial analysis as the sole

business performance measurement had lost its utility since it could only tell a company about its past. Hannabarger et al. (2007) stated that business management and measurement needed to change because the world changed and the structure of business management has evolved through time. The financial perspective can measure the effectiveness of all the other perspectives. Johansson and Larson (2015) stated that this perspective indicates whether the previous strategies have been used to lead to economic success and seeks to define the financial performance of strategies meant to achieve revenue growth and cost reduction.

Customer perspective consists of measures relating to the most desired customer groups. This perspective focuses on market share, customer satisfaction, loyalty and acquisition. Especially customer values and profitability can be considered as key measures that enable an organization to create a clear vision of the customers whom it should target in terms of their needs and expectations from the company. In other terms, this dimension makes it possible to get the internal processes, services and products into line with the necessities of current and future markets.

Internal business processes perspective generally identifies more effective processes for the organization to achieve high efficiency in terms of its objectives. These can include both short-term and long-term objectives as well as incorporating innovative process development in order to stimulate improvement. Companies should identify and structure efficiently the internal value driving processes that are vital regarding the goals of customers and shareholders.

Learning and growth perspective consists of employee skills, training and administration of routine processes. In other words this perspective focuses on internal skills and capabilities, in order to align them to the strategic goals of the organization.

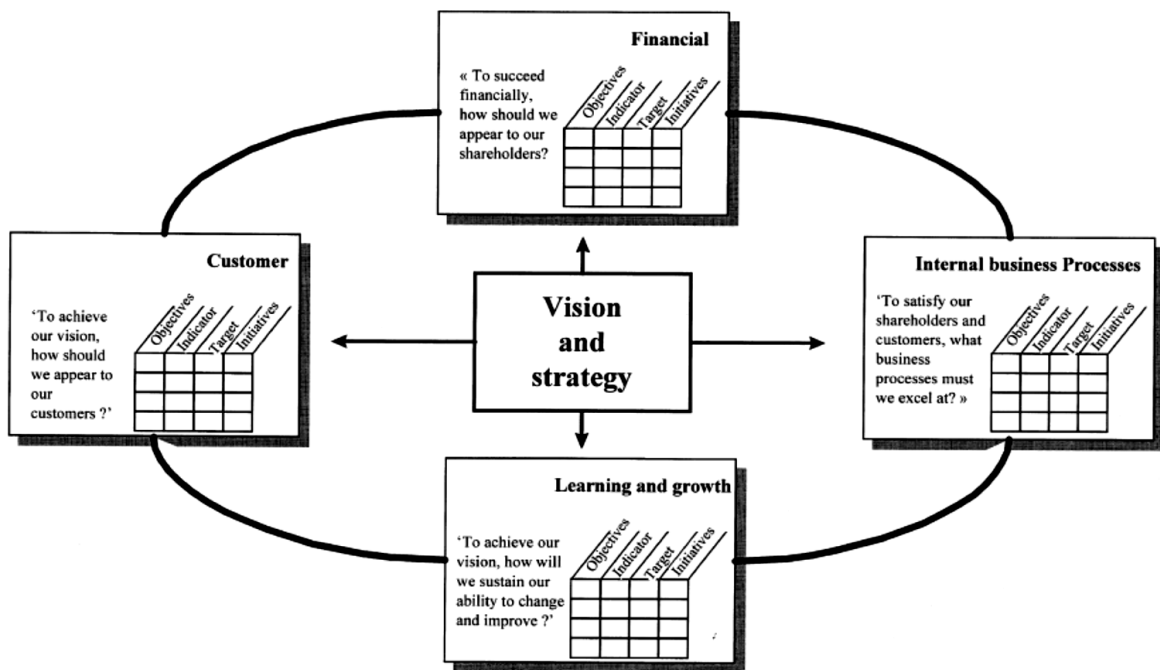


Figure 1: The Balanced Scorecard Framework adapted from Kaplan and Norton (1996)

Since its introduction as a performance measurement tool in 1991, an increasing number of roles have been identified for the BSC (Mooraj et al., 1999). BSC is a systematic approach which helps integrating physical and

intangible assets into a comprehensive model and builds a meaningful relationship among different criteria (Rabbani et al., 2014). BSC is generally used to clear or update business strategy of the companies and then link strategic objectives to long-term targets. According to the report published by Bain & company, BSC defines an organization's performance and measures whether management is achieving desired results (Rigby, 2015). In other words, mission and vision stated in the company translating into set of objectives and performance measures that can be quantified and appraised. The strategy is the reference point for the entire management process. Model increases companywide understanding of the corporate vision and strategy. Education and open communication about strategy are considered the basis for employee empowerment. BSC also identifies strategic initiatives clearly and depending on these strategies investments are determined. Kaplan and Norton noted that BSC is a strategic management tool not a measurement where assessment, improvement and reporting linked together to form a strategic plan. In the model, feedback system is used to test the hypotheses on which strategy is based. In simple words, BSC is a model in which strategy turn into actions.

BSC is a widely used methodology in today's business environment. According to Rabbani et al. (2014) study, more than 1000 organizations %80 of the organizations that regularly use the BSC reported improvements in operating performance and %66 of them also reported an increase in profit. It is used not only in business and industry but also in government and non-profit organizations. Grigoroudis et al. (2012) studied on strategic performance measurement in healthcare organization. Lin et al. (2013) evaluated operating room performance in hospitals. Dreveton (2013) and Elbanna (2013) studied on public sector. Haskemkhani et al. (2013) searched performance evaluation of private universities. It is expected to continue to be popular well into the near future.

3. The fifth Pillar of Balance Scorecard

Sustainability and or related issues with sustainable environment are one of the vital elements in today's organization strategy. Sustainable development can be defined as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Danchev (2006) stated that the organization's performance is coupled with its sustainable growth and behavior. Sustainability includes broader issues in area of ecology, sociology and environment as well as well-being of people and standard of life (Zavodna, 2013). For that reason from production sector to the non-profit service sector, all organizations from all around the world try to integrate sustainability into their organization's strategic management. From this point of view, sustainability concept impacts the organizations future.

BSC technique ignored environmental and social aspects as essential pillars of a sustainable business in its original form. Figge et al. (2002) believed that BSC can help to take all aspects relevant for achieving sustainability into account simultaneously and in a balanced manner. The Sustainable BSC is a promising framework for measuring, managing, and reporting the results of corporate sustainable strategy (Hsu and Liu 2010; Lansituoto and Jarvenpaa 2010; Schaltegger and Wagner 2006). According to the study conducted by Butler et al. (2011), to implement sustainable strategy in BSC model organizations with the sustainable strategy have 3 possible scenarios as follows;

- 1st scenario: Environmental and social aspects can be integrated in the existing four standard dimensions.
- 2nd scenario: An additional perspective can be created to take social and environmental aspect into account.
- 3rd scenario: A specific environmental or social scorecard can be formulated.

In the first scenario, environmental/social aspects become an integral part of the scorecard when they are integrated into the basic four dimensions. By this way, these aspects are automatically integrated in organization's cause and effect links and hierarchically oriented towards the financial perspective. There can be several reasons for integrating environmental issues into existing system since the integration may allow the reduction of costs. Although this model works well for companies that have a BSC and willing to extend it, companies should consider the level of integration in detail before adopting the new additional measures. Butler et al. (2011) stated in their study that using partial

approach in which only a few sustainability indicators are added into some of the perspectives can cause the risk of having minimal effects on corporate sustainability practices and outcomes.

Second scenario is considered as a more likely acceptable approach. Kaplan and Norton also point out that the firm-specific formulation of a BSC may involve a renaming or adding of perspective (Kaplan and Norton, 1996). Adding a new perspective can be considered as the simplest approach for companies which want to make the sustainability as a key value of their company.

In the third scenario, companies establish a separate BSC for their social responsibility strategies or sustainability are seen as main strategy to gain advantage in competitive environment. A separate sustainability BSC can be used by companies which have no existing BSC but want to measure or integrate sustainability or companies which have already have functioning BSC and do not want to change it. Dias-Sardinha et al. (2002) suggested that sustainable BSC can consist of four perspectives such as, sustainability, stakeholders, processes and learning. However there can be some problems to help company tie sustainability directly into corporate strategy.

The main focus of this study is the second scenario in which an additional perspective can be created. In the adding a new perspective approach, Sidiropoulos et al. (2004) studied on improvements in marketing and in implementation of the sustainability strategy, Thanaraksakul and Phruksaphanrat (2009) tried to find better evaluation of potential suppliers Moreo et al. (2009) searched improvements in understanding the role of environmental goals in corporate strategy, Van der Woerd and Van den Brink (2004) investigated improvements in implementation of sustainable strategy and Wu and Liu (2010) studied on better evaluation of ISO14001 certified industries. Hansen and Schaltegger (2016) tried to answer how can architecture of the BSC be adapted to integrate corporate sustainability question in their study. They searched the sustainability related strategic objectives addressed in the generic sustainable BSC architectures and they found that both conceptual and empirical papers have the highest percentage in sustainability issue. In environmental view there more empirical papers, from stakeholders view there more conceptual papers. All these studies advocated the five perspectives for the framework's articulation.

This fifth perspective approach could provide more visibility. The sustainability perspective consists of social and environmental performance indicators and highlights the importance of social, environmental and economic responsibility as a corporate goal. However, companies define sustainability differently from each other. For that reason, indicator system which is set up to measure sustainability will vary from company to company because these indicator systems will be based on the strategy and goals of the related company. Weights of the BSC dimensions will also depend on the goals and culture of each company (Epstein and Wisner, 2001). There are no rules about the number of indicators that each perspective should include but too many indicators can be distracting and draws attention away from the main strategy. Organization's strategic management should develop certain metrics for achieving sustainability goals. Butler et al. (2011) stated in their study that management goals should be quantifiable, controllable and include all components. In figure 2 general framework of the BSC with a new sustainability pillar which is developed by Rabbani et al. (2014) is presented.

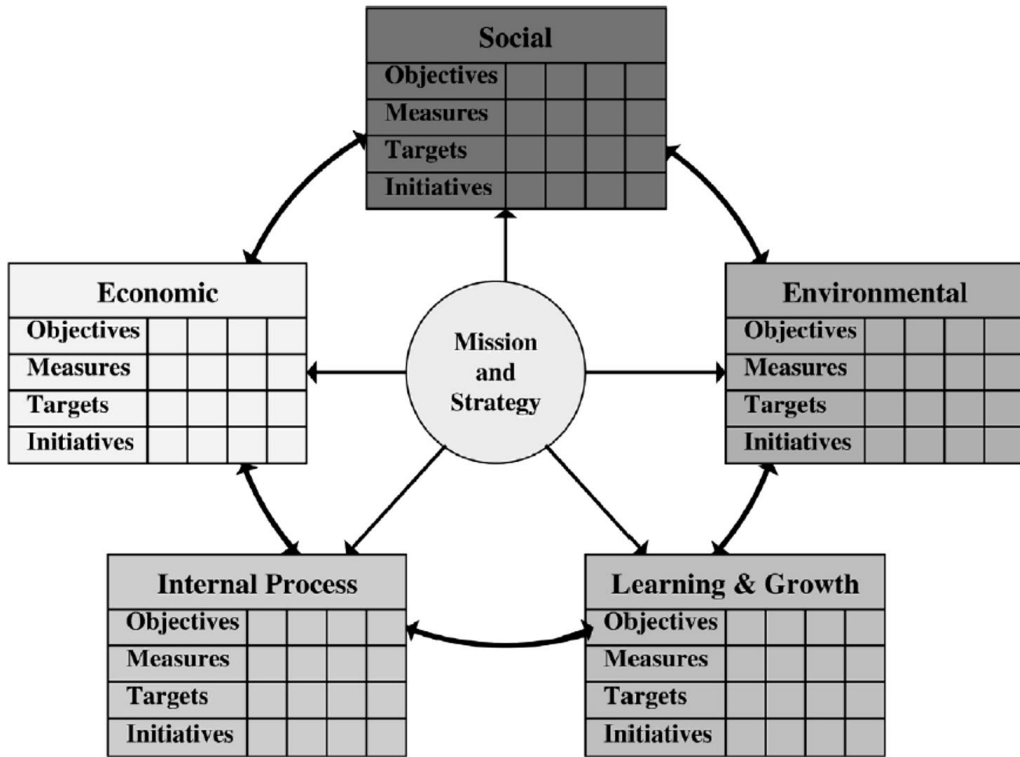


Figure 2: The general framework of Sustainable BSC adopted from Rabbani et al. (2014)

Sustainable BSC is a tool that has been developed to focus on more qualitative aspects and based on the traditional BSC. Not only it provides a broader scope by integrating all three dimensions of sustainability but also provides a methodology to bridge the gap between the strategic and operative levels of companies. Adding a new perspective can be considered as a simple way for companies on the other hand, proponents pointed out that linking sustainability measures to a company’s economic well-being and strategies may be difficult or even impossible. Figge et al. (2002) stated that market based prices for goods and services may not fully reflected environmental and social activities. What is more, isolating sustainability measures in a separate perspective might weaken environmental initiatives by not providing clear ties to the other perspectives (Butler et al., 2011). This kind of gap in the clarity, effect the management of sustainability in the company.

Bieker (2005) stated that Sustainable BSC can be used as a planning tool. Thus, potentials of value added processes which are in the social and ecological aspects revealed. So this situation, prepare the implementation process of the strategy. In addition to the advantage of preparation, company can gain experiences in terms of environmental and sustainability department. This will led to increases in the internal acceptance about sustainable BSC.

4. Conclusion and Further Studies

It is an accepted fact that companies still struggle to understand the importance and implement the sustainability strategies correctly. However, one of the biggest problems of today's companies is not the understanding the importance of the sustainability. In this competitive business environment every company should have already realize the importance of the sustainability aspects. Now they have to adapt their system with several strategies to this rapidly changing business environment conditions with accepting sustainability as their core strategy. Even though there are several studies in literature about sustainability management and measurement systems, in practice it is hard to achieve the full integration. Christmann (2000) and Wagner (2007) stated in their study that under certain conditions, when companies add environmental concerns to their typical management systems, several financial benefits will occur. The basic problem here is the determination of the connections between environmental and social management and financial benefits.

Kaplan and Norton position the BSC as a tool for organizations to manage the demands of relevant stakeholders such as shareholders, customers or employees and to translate strategies into action. The vital idea behind this model is maintaining the sophisticated tool to management of intangible or qualitative assets since they have a key role in competitive environment. So, BSC provides enablers to focus on the achievement of strategic goals in the future as well as results to depict the effectiveness and efficiency of measures in the past.

As in the traditional BSC, Sustainable BSC also turns sustainability visions and strategies into action. Intangible assets may contribute to the sustainability of companies and this vital issue can be quite understandable with the help of sustainable BSC approach. Both researchers and practitioners tried to understand how these intangible dimensions can contribute the sustainability strategies. Integration of the environmental and social aspects to the core management of the companies is an important part of today's business life and sustainable BSC provides a high potential to solve this problem. On the other hand, in practice implementation of sustainable BSC is not as easy as explained. Although this can be considered as a huge step for the environmental and social management, practical experiences proved that development and implementation of sustainable BSC is more than the definition of objectives or determining the indicators. Companies should realize that this process is long and challenging road requiring a lot of patience and persistence.

As a further study, relationships between current strategies and sustainability aspects should be investigated in detail. As it is mentioned before, application of sustainable BSC is not easy so better understanding about the current strategies provide better future plan for the implementation of a right measurement system. Moreover, connections and the benefits should be explained and new methodologies to increase the value which can be achieved with a sustainable management system should be developed. For this purpose, after the correct measurement systems defined for the companies the integration process should be created via using management approaches. At that point, integration process can supported with provided benefits of sustainable BSC. To prove what benefits can be achieved with sustainable BSC, game theoretical approach can be used. Selected strategies for each dimension can be used in game theoretical approach to see which strategies provide highest benefits in terms of profit.

References

- Agostino, D. & Arnaboldi, M. (2012) Design issues in Balance Scorecards: The "what" and "how" of control, *European Management Journal*, 30, pp. 327-339
- Bieker, T. (2005) *Sustainability Management with the Balanced Scorecard*, Corporate Sustainability, Munich
- Butler, J. B., Henderson, S.C. & Raiborn, C. (2011) Sustainability and the Balanced Scorecard: Integrating Green Measures into Business Reporting, *Management Accounting Quarterly*, vol: 12, no: 2, pp. 1-10
- Christmann, P. (2000) Effects of 'Best Practice' of Environmental Management on Cost Advantage: the Role of Complementary Assets, *Academy of Management Journal* 43 (4): 663–680.
- Danchev, A. (2006) Social capital and sustainable behaviour of the firm, *Industrial management & Data systems*, vol. 106, no.7, pp. 953-965

- Dias-Sardinha, I., Reijnders, L. & Antunes, P. (2002) From environmental Performance Evaluation to Eco- Efficiency and sustainability Balanced Scorecards, *Environmental Quality Management*, pp. 51-64
- Dreveton, B. (2013). The advantages of the balanced scorecard in the public sector: Beyond performance measurement. *Public Money and Management*, 33(2), 131–136.
- Elbanna, S. (2013). Processes and impacts of strategic management: Evidence from the public sector in the United Arab Emirates. *International Journal of Public Administration*, 36(6), 426–439.
- Epstein, M. J. & Wisner, P. S. (2001) Using a Balanced Scorecard to Implement Sustainability, *Environmental Quality Management*, pp. 1-10
- Ferreira, A. & Otley, D. (2009) The design and use of performance management systems: an extended framework for analysis, *Management Accounting Research*, 20, 263-282
- Figge, F., Hahn, T., Schaltegger, S. & Wagner, M. (2002) The Sustainability Balance Scorecard-Linking Sustainability Management to Business Strategy, *Business Strategy & The Environment*, pp. 269-284
- Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. *Omega*, 40(1), 104–119.
- Hansen, E.G. & Schaltegger, S. (2016) The sustainability balanced scorecard: A systematic review of architectures, *J. Business Ethics*, 133, pp.193-221
- Hashemkhani Zolfani, S., & Ghadikolaei, A. S. (2013). Performance evaluation of private universities based on balanced scorecard: Empirical study based on Iran. *Journal of Business Economics and Management*, 14(4), 696–714.
- Hsu, Y.-L. & Liu, C.-C. (2010) Environmental Performance Evaluation and Strategy Management Using Balanced Scorecard, *Environmental Monitoring and Assessment*, 170 (1):, pp.599–607.
- Kaplan, R. & Norton, D. (1992) The Balanced Scorecard-Measures that Drive Performance, *Harvard Business Review*, pp. 71-79
- Kaplan, R. & Norton, D. (1996) *The balanced scorecard: Translating strategy into action*, Harvard Business School Press
- Lansiluoto, A. & Jarvenpaa, M. (2010) Greening th balanced scorecard, *Business Horizons*, 53, pp.385-395
- Leon-Soriano, R., Munoz-Torez, M. J. & Chalmeta-Rosalen, R. (2010) Methodology for sustainability strategic planning and management, *Industrial management & Data Systems*, vol.110, iss. 2, pp. 249-268
- Lin, Q. L., Liu, L., Liu, H. C., & Wang, D. J. (2013). Integrating hierarchical balanced scorecard with fuzzy linguistic for evaluating operating room performance in hospitals. *Expert Systems with Applications*, 40(6), 1917–1924.
- Mooraj, S., Oyon, D. & Hostettler D. (1999) The Balanced Scorecard: a Necessary Good or an Unnecessary Evil?, *European Management Journal*, vol. 17, no.5, pp. 481-491
- Moreo, A., DeMicco, F. J. & Xiong, L. (2009) Towards a Model to Measure the Quality of Environmental Sustainability: The Hospitality Environmental Scorecard, *Journal of Quality Assurance in Hospitality & Tourism* 10 (1): 44–58.
- Rabbani, A. , Zamani, M., Yazdani-Chamzini, A. & Zavadskas, E.K. (2014) Proposing a new integrated model based on sustainability balanced scorecard (SBSC) and MCDM approaches by using linguistic variables for the performance evaluation of oil producing companies, *Expert Systems with Applications* 41, pp. 7316–7327
- Rigby, D.K. (2015) *Management Tools: An Executive’s Guide*, Bain & Company Inc. Boston
- Schaltegger, S., & Wagner M. (2006) Managing Sustainability Performance Measurement and Reporting in an Integrated Manner. *Sustainability Accounting as the Link Between the Sustainability Balanced Scorecard and Sustainability Reporting*, In *Sustainability Accounting and Reporting*, edited by S. Schaltegger, M. Bennett, and R. Burritt, 681–697. Amsterdam: Springer.
- Sidiropoulos, M., Mouzakitidis, Y., Adamides, E. & Goutsos, S. (2004) Applying Sustainable Indicators to Corporate Strategy: The Eco-balanced Scorecard, *Environmental Research, Engineering and Management* 1 (27): 28–33.
- Thanaraksakul, W., & Phruksaphanrat, B. (2009) Supplier Evaluation Framework Based on Balanced Scorecard with Integrated Corporate Social Responsibility Perspective, *Proceedings of 2009 International Multiconference of Engineers and Computer Scientists*. Vol. II IMECS, Hong Kong, March 18–20
- Tsalis, A.T., Nikolaou, E.I. , Grigoroudis, E. & Tsagarakis, P.K. (2015) A dynamic sustainability Balanced Scorecard methodology as a navigator for exploring the dynamics and complexity of corporate sustainability strategy, *Civil Engineering and Environmental Systems*, 32:4, pp. 281-300
- Wagner, M. (2005) How to Reconcile Environmental and Economic Performance to Improve Corporate Sustainability: Corporate Environmental Strategies in the European Paper Industry, *Journal of Environmental Management* 76: 105–118.
- Wagner, M. (2007) Integration of Environmental Management with Other Managerial Functions of the Firm: Empirical Effects on Drivers of Economic Performance, *Long Range Planning* 40 (6): 611–628.
- Zavodna, L. S. (2013) Sustainability as a Part of Balanced scorecard, *Global Economic Observer*, vol. 1, issue 1, pages 110-116