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Analysis of a company's value creation through socially responsible activities

Doctoral Thesis Abstract

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1. Research topic relevance

Corporate social responsibility as a scientific conception is increasingly being investigated, and socially responsible activities in business practice are observed on an unprecedented scale. The natural consequence of such a situation raises the question of the cost-effectiveness of socially responsible activities. So far, the unambiguous answer to this question has not been delivered. It may be presumed that the reason for such a situation is the insufficient recognition of a company's value creation mechanism through socially responsible activities.

The effective use of socially responsible activities to increase a company's value for the owners requires the proper coordination of these activities. In this context it is justified to reach for controlling, in which coordination is the main function. As far as socially responsible activities are concerned, the effects of coordination are visible in plans as well as the current activities in a company. It is not possible to coordinate socially responsible activities in terms of creating company's value for the owners, as well as developing appropriate corrections, without understanding how socially responsible activities contribute to the company's financial condition and results. Taking into account that the assessment of the company's financial condition and results is the purpose of financial analysis, the question is how to analyze financial conditions and results of a company in terms of creating a company's value for the owners through socially responsible activities. The lack of proper solutions in this area makes it justified to develop a model approach to such an analysis on the basis of recognition of the important relationships between the socially responsible activities and a company's value for the owners.

When developing a model approach to the analysis of a company's value creation for the owners, taking into account the relationships between the socially responsible activities and a company's value for the owners, two issues need to be kept in mind. First, socially responsible activities are so heterogeneous that they can affect a company's value for the owners in different ways and with different magnitude. Secondly, the relationship can be mediated, that is, socially responsible activities can affect a company's value for the owners indirectly through so-called mediators. Then the direct relationship observed between socially responsible activities and a company's value for the owners becomes weaker or even disappears.

Analysis of a company's value creation for the owners through socially responsible activities relies in practice on the proper use of measures and indicators, taking into account the relations identified in the mechanism of a company's value creation for the owners

through socially responsible activities. This practical point of view should be enriched by recommendations of how to operationalize proposed measures and indicators.

The fundamental perspective adopted in the dissertation is creation value for the owners, while the other stakeholders, benefiting from the company's socially responsible activities, are treated as a tool for creating value for the owners. The realization of the dissertation is therefore based on the assumptions of shareholder theory. It should be noted, however, that the results obtained can also be used in companies whose activities are exemplary of the stakeholder theory. Then the value of a company for the owners will primarily be the subject of control.

The research gap identified in the literature chiefly concerns an unstructured approach to the analysis of a company's value creation for the owners through socially responsible activities. Adopting the controlling perspective as well as identifying the mechanism of the relationship between the socially responsible activities and company's value for the owners aims to fill this gap.

The research problem identified in the dissertation is expressed by the following question: how to analyze the creation of a company's value for the owners through socially responsible activities?

2. Research objectives and hypotheses

The main objective of the dissertation is to develop a model approach to analysis of a company's value creation for the owners through socially responsible activities.

Detailed objectives of the dissertation, subordinated to the appropriate realization of the main objective, have been formulated as follows:

- determining the meaning of financial analysis in controlling for coordination of socially responsible activities (Chapter 1);
- clarifying the role of socially responsible activities in creating value for the owners and other stakeholders of a company (Chapter 2);
- determining the usefulness of measures and indicators of sustainable development to assess the creation of a company's value through socially responsible activities (Chapter 3);
- developing a descriptive model of creating a company's value for the owners through socially responsible activities (Chapter 4);

- determining the strength and direction of the relationship between socially responsible activities in social and environmental dimensions and a company's value to the owners (Chapter 5);
- developing indicators of indirect effects in relationship between socially responsible activities in social and environmental dimensions and a company's value to the owners (Chapter 5).

Objectives in the cognitive layer in the theoretical dimension are addressed in chapters from first to fourth, while objectives in the cognitive layer in the empirical dimension are addressed in the fifth chapter.

Determining the strength and direction of the relationship between socially responsible activities and company's value to the owners, taking into account the possible division of this activity into social and environmental dimensions, was achieved by statistical verification of the following hypotheses:

- H1. The greater the involvement in socially responsible activities, the higher the company's value for the owners;
- H2. The degree of involvement in socially responsible activities predicts the company's value for the owners above and beyond the effect of the control variables;
- H3. The greater the involvement in socially responsible activities in the social dimension, the higher the company's value for the owners;
- H4. The greater the involvement in socially responsible activities in the environmental dimension, the higher the company's value for the owners;
- H5. The relation between socially responsible activities in the social dimension and the company's value for the owners is weaker than the relation between socially responsible activities in the environmental dimension and the company's value for the owners;
- H6. The degree of involvement in socially responsible activities in the social and environmental dimensions predicts the company's value for the owners above and beyond the effect of the control variables.

Developing indicators of indirect effects in relationship between socially responsible activities in the social and environmental dimensions and the company's value to the owners was achieved by statistical verification embracing seven potential mediators, i.e. scale of recommendation, business outlook, corporate culture, innovativeness, scale of relations with stakeholders, degree of relations with stakeholders, corporate agility. The hypotheses concerning these variables were formulated as follows:

- H7.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the greater the scale of recommendation and the value of a company to the owners;
- H7.2.1 (2) The scale of recommendation is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H8.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the higher the business outlook and the value of a company to the owners;
- H8.2.1 (2) Business outlook is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H9.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the higher the corporate culture and the value of a company to the owners;
- H9.2.1 (2) Corporate culture is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H10.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the greater the innovativeness and the value of a company to the owners;
- H10.2.1 (2) Innovativeness is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H11.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the greater the scale of relations with stakeholders and the value of a company to the owners;
- H11.2.1 (2) The scale of relations with stakeholders is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H12.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the greater the degree of relations with stakeholders and the value of a company to the owners;

- H12.2.1 (2) The degree of relations with stakeholders is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners;
- H13.1.1 (2) The greater the involvement in socially responsible activities in the social (environmental) dimension, the greater the corporate agility and the value of a company to the owners;
- H13.2.1 (2) Corporate agility is a mediator in the relationship between socially responsible activities in the social (environmental) dimension and the value of a company to the owners.

3. Sources and methods

For developing a descriptive model of creating a company's value for the owners through socially responsible activities, the systematic review of the literature was conducted in accordance with the SALSA procedure (Search, Appraisal, Synthesis, Analysis).

Scopus database was employed to find literature on the basis of an appropriate keyword matrix during the search phase. Searching was limited to the literature published in the selected study areas between January 1, 2010 and February 19, 2015. At the appraisal stage, duplicates, non-English literature, literature from the domains out of the dissertation's subject, and non-journal literature were excluded. Moreover articles published during 2010-2012, which had fewer than 5 citations in the Scopus database were removed, as well as articles that were not published in the journals listed in the Journal Citation Reports, or articles that were incomplete or paid. Finally, the articles were appraised for their title, abstract and proper content. The synthesis was carried out in accordance with the CIMO approach (Context, Intervention, Mechanisms, Outcomes). The analysis was performed with the use of induction method, supported by the guidelines of the realist synthesis method.

For the statistical verification of the hypotheses, an empirical study was conducted on a sample of 300 companies from around the world, recognized in 2017 by Corporate Knights, headquartered in Toronto, as the world's most sustainable companies. The ranking used was based on 2015 data which corresponded to the time frame of the conducted study. The hypotheses on the relationship between socially responsible activities and company's value for the owners were verified using multiple regression analysis. Hypotheses regarding indicators of indirect effects were verified in accordance with Baron and Kenny's mediation analysis approach, defined in the literature as a traditional approach to mediation analysis.

This approach relies on carrying out a multiple regression analysis for many regression models in a strictly defined order and interpretation rules of the obtained results.

Thomson Reuters Eikon was the primary source of data, including corporate social responsibility data, for verifying hypotheses. Moreover Glassdoor data, Facebook data, as well as data published by the World Bank were used. Calculations were performed using IBM SPSS statistical program.

With regard to the realization of other detailed objectives, methods such as analysis, synthesis, comparison, reasoning through analogy, and syllogism were used. Polish and English literature were considered.

4. Structure of the dissertation

The structure of the dissertation was subordinated to the detailed objectives of the research. It consists of an introduction, five chapters and conclusion.

The first chapter presents the meaning of financial analysis in controlling for coordination of socially responsible activities. The subsections show the types of coordination in controlling, as well as the concept and types of controlling, with particular emphasis on financial controlling and ecological controlling. In this context, the reasons why controlling should be defined as a management subsystem were delivered. Moreover the differences between controlling, management accounting and controllership were presented. In the end, the relationship between financial analysis and controlling was presented, as well as the concept of financial analysis, and methods and tools used within it.

The second chapter shows how socially responsible activities can create value for the owners and other stakeholders of the company. In the subsections, the development of corporate social responsibility in the context of related concepts, including sustainable development, was shown. The definition of socially responsible activities was developed and theories of social responsibility were characterized. The types of socially responsible activities in the context of their financial results were discussed. Moreover, the company's relationship with stakeholders was characterized, value creation for the owners as a corporate goal was discussed, value standards in the context of social responsibility were defined, and the relationship between socially responsible activities and financial results of a company was described. In the end, the role of non-shareholder stakeholders in creating company's value for the owners was presented.

The third chapter presents the usefulness of measures and indicators of sustainable development to assess the creation of a company's value through socially responsible

activities. The subsections show the requirements for measures and indicators used to steer a socially responsible company. International institutions involved in developing measures and indicators of sustainable development have been identified. Exemplary measures and indicators of economic, social and environmental development of a company were presented. The problem of integration of measures and indicators of sustainable development has been discussed. Finally, a framework guideline on the use of measures and indicators for the analysis of a company's value creation for the owners through socially responsible activities was developed.

The fourth chapter presents a descriptive model that illustrates the relationship between socially responsible activities and a company's value for the owners. In developing the model, the framework guideline developed in chapter three, and results of the systematic literature review were used. The results of the review were used not only to construct a descriptive model of a company's value creation for the owners through socially responsible activities, but also to justify the hypotheses formulated in the dissertation. Furthermore, these results enabled a better designing of the quantitative study, especially in terms of the operationalization of control variables. The descriptive model is the basis for the development of the model approach to analyze a company's value creation for the owners through socially responsible activities. The subsections show the assumptions and stages of a systematic review of literature, as well as selected aspects of the research on the relationship between socially responsible activities and a company's value for the owners. Finally, the hypotheses formulated in the dissertation, as well as the descriptive model were discussed.

The fifth chapter presents the model approach to the analysis of a company's value creation for the owners through socially responsible activities using indirect effects indicators. The development of the model approach was possible due to a syllogistic scheme of reasoning, combining the results of the quantitative research over the selection of indirect effects indicators with the descriptive model of creating a company's value for the owners through socially responsible activities. The subsections show the methodology of mediation analysis in accordance with Baron and Kenny's approach. Then, the results of the analysis were presented with the reference to the hypotheses of the dissertation. Finally, the model approach to analysis of creating a company's value for the owners through socially responsible activities using indirect effects indicators was presented. The recommendations in the field of measuring proposed indicators were also developed.

5. Results of the dissertation

In the theoretical dimension of the dissertation, it was established that the analysis of creating a company's value through socially responsible activities, located in controlling, should chiefly use an indicator analysis, which is the "heart" of financial analysis.

In the dissertation socially responsible activities were described as activities, which are undertaken in responsibility for society and the environment, resulting from these stakeholder expectations, which are not simultaneously economic expectations for the owners. This approach highlights the question of how socially responsible activities can create value for the owners. In the dissertation, it was assumed that meeting the expectations of non-shareholder stakeholders may and should have such consequences that ultimately will contribute to value creation for the owners. Recognizing these consequences in the short and long term is crucial for coordinating socially responsible activities within controlling. Moreover, it should be kept in mind, that some of the consequences of meeting the stakeholders' expectations is not seen by the market, which leads to some deviation of fair market value from the intrinsic value of the company.

The fundamental difficulty of using indicator analysis to analyze a company's value creation for the owners through socially responsible activities is to reflect the integrity of all areas of sustainable development of a company, i.e. economic, social and environmental areas. The proposed solution to such a problem is a system of measures and indicators, which is based on cause-effect relations in all areas of sustainable development.

It has been established that it is necessary to distinguish such measures and indicators, which show direct and indirect relations between socially responsible activities and company's value for the owners. As proven, the analysis of the direct relations between the socially responsible activities and the company's value for the owners, based on individual activities, is an easy task in controlling. Although it is much more difficult to analyze indirect relations, i.e. relations resulting from meeting the expectations of non-shareholder stakeholders. This is mainly due to uncertainty about the magnitude and time of these consequences. In this context, it was established in the dissertation, that the indirect impact of socially responsible activities on a company's value for the owners may be analyzed in less detail, i.e. through the sets of social and environmental activities.

In the empirical dimension of the dissertation, it was most of all established that:

- changing the degree of involvement in socially responsible activities, without distinguishing between the types of these activities, is irrelevant to a company's owners, since it cannot be confirmed that it has any influence on a company's value;

- the greater the involvement in socially responsible activities in the social dimension, the lower the company's value for the owners;
- the greater the involvement in socially responsible activities in the environmental dimension, the higher the company's value for the owners;
- socially responsible activities in the social dimension are less relevant to the company's value for the owners than socially responsible activities in the environmental dimension;
- the degree of involvement in socially responsible activities in the social and environmental dimensions predicts the company's value for the owners above and beyond the effect of the control variables;
- there is no indirect effect between the socially responsible activities in the environmental dimension and the company's value for the owners;
- business outlook and innovativeness are the mediators in the relationship between socially responsible activities in the social dimension and the value of a company for the owners;
- the greater the involvement in socially responsible activities in the social dimension, the higher the business outlook and the value of a company to the owners;
- innovativeness is positively related to the company's value for the owner, but socially responsible activities are negatively related to innovativeness;
- the negative indirect effect of innovativeness is stronger than the positive indirect effect of business outlook.

The above results show that the relationship between socially responsible activities in the social dimension and the company's value has seeming nature to a large extent. The "new road" from socially responsible activities to a company's value goes through the level of business outlook and the level of company innovativeness. These variables can be used as indicators of indirect effects.

In the context of the model approach to the analysis of a company's value creation for the owners through socially responsible activities, it was established that socially responsible activities can create or destroy a company's value for the owners in three ways. First, socially responsible activities influence classical value drivers, named in the descriptive model as the direct value drivers. Secondly, socially responsible activities can lead to socially responsible outcomes that, like socially responsible activities, influence direct value drivers. Third, socially responsible activities in the social dimension and their socially responsible outcomes

may influence the direct value drivers in a roundabout way, i.e. through indirect value drivers, which are the level of business outlook and the level of company innovativeness.

Shaping a company's value with the use of indirect effects of business outlook and innovativeness is associated with the possibility of undertaking additional supportive actions, e.g. actions aimed at making stakeholders aware of the scale of the socially responsible activities undertaken by a company. These actions may lead to greater effects in terms of indirect as well as direct value drivers.

The model approach presented in the dissertation is enriched with recommendations on the measurement of the proposed measures and indicators, as well as the recommendations on estimation of their impact on a company's value for the owners.