**Doctoral School of Social Sciences** 

Ph.D. Area: Finance

# PH.D. THESIS

# DETERMINANTS OF FIRMS' SUSTAINABLE VALUE IN THE CONTEXT OF CIRCULAR ECONOMY

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# CONTENTS

INTRODUCTION	4
PART I. CURRENT SUSTAINABILITY CONCERNS IN THE CONTEXT OF THE	14
CIRCULAR ECONOMY	14
CHAPTER 1. CONSIDERATIONS REGARDING THE TRANSITION TOWARDS SUSTAINABILITY	15
1.1. THE NEED FOR THE TRANSITION TOWARDS SUSTAINABILITY	. 15
1.2. CONCEPTUAL DELIMITATION OF SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT	. 16
1.3. THE VARIOUS DIMENSIONS AND PERSPECTIVES OF SUSTAINABILITY	
1.4. APPROACHES TO THE CORE OBJECTIVE OF COMPANIES IN RELATION TO VALUE CREATION	.22
1.5. GLOBAL STRATEGY ON SUSTAINABLE DEVELOPMENT	
1.6. THE NEW ECONOMY MODEL - THE CIRCULAR ECONOMY	
1.7. BUSINESS MODELS IN THE CONTEXT OF THE CIRCULAR ECONOMY	
PRELIMINARY CONCLUSIONS	37
CHAPTER 2. THE ROLE OF THE FINANCIAL SYSTEM IN THE CONTEXT OF SUSTAINABILITY	39
2.1. THE CONTRIBUTION OF SUSTAINABLE FINANCE IN THE TRANSITION TO SUSTAINABILITY	39
2.2. FRAMEWORKS FOR INSURANCE OF SUSTAINABLE FINANCES	41
2.3. SUSTAINABLE FINANCING TOOLS	
2.3.1. GENERAL CHARACTERISTICS	
2.3.2. THE BOND MARKET, CORRELATED WITH SUSTAINABILITY GOALS	51
2.3.3. PRINCIPLES AND REQUIREMENTS REGARDING THE ISSUANCE AND EVALUATION OF GREEN BONDS	52
PRELIMINARY CONCLUSIONS	54
CHAPTER 3. ORIENTATION OF COMPANIES TOWARDS SUSTAINABILITY: VOLUNTARY OR MANDATORY?	56
3.1. LIMITATIONS OF FINANCIAL REPORTING AND THE NEED FOR NON-FINANCI REPORTING	56
3.2. INTERNALIZATION OF NEGATIVE EXTERNALITIES	60
3.3. NATIONAL LEGISLATION AND EU SUSTAINABILITY REPORTING REQUIREMENTS 62	2002
3.4. TYPES OF SUSTAINABILITY REPORTING	65
3.5. THE BENEFITS OF SUSTAINABILITY REPORTING	
PRELIMINARY CONCLUSIONS	
CHAPTER 4. THE IMPACT OF SUSTAINABILITY ORIENTATION ON	

4.1. GENERAL ASPECTS REGARDING CORPORATE PERFORMANCE	73
4.2. LITERATURE REVIEW REGARDING THE IMPACT SUSTAINABILITY – CORPORATE PERFORMANCE	
PRELIMINARY CONCLUSIONS	84
PART II. CONCEPTUAL, METHODOLOGICAL AND INSTRUMENTAL CONTRIBUTIONS TO SUSTAINABLE CORPORATE VALUE RESEARCH	86
CHAPTER 5. CLASSIC APPROACHES TO THE ANALYSIS OF ECONOMIC VALUE AT THE CORPORATE LEVEL	
5.1. VALUE - GENERAL ASPECTS	
5.2. VALUE, IN RELATION TO THE MAIN THEORIES DEVELOPED OVER TIME	
5.3. CLASSIC APPROACHES AND METHODS OF EVALUATING A COMPANY	
PRELIMINARY CONCLUSIONS	
CHAPTER 6. INTEGRATION OF THE ENTROPIC AND EVOLUTIONIST PERSPECTIVE IN THE ANALYSIS OF ECONOMIC VALUE	
6.1. VALUE CREATION, FROM AN ENTROPIC PERSPECTIVE	
6.2. VALUE, ITS SPECIES AND SUBSPECIES	
6.3. THE PROCESS OF SUSTAINABILITY OF THE COMPANY'S VALUE AND ITS STAGES	
PRELIMINARY CONCLUSIONS	105
CHAPTER 7. A NEW FRAMEWORK DEVELOPMENT FOR THE ANALYSIS SUSTAINABLE CORPORATE VALUE (VSC)	OF
7.1. MODEL FOUNDATION BASED ON THE INTERACTION OF THE MICROECONG AND THE MACROECONOMIC ON THE CREATION OF SUSTAINABLE VALUE	OMIC
7.2. PROPOSAL CONCERNING THE CONCEPTUALIZATION OF SUSTAINABLE CORPORATE VALUE	111
7.3. SPECIFIC CHARACTERISTICS OF SUSTAINABLE CORPORATE VALUE	112
PRELIMINARY CONCLUSIONS	
CHAPTER 8. PROPOSAL FOR MEASURING SUSTAINABLE CORPORATE VALUE AND TESTING ITS IMPACT ON PERFORMANCE	
8.1. FINANCIAL AND NON-FINANCIAL VALUE MEASUREMENT INDICATORS	114
8.2. SUSTAINABLE CORPORATE VALUE MEASUREMENT MODEL CREATION	122
8.2.1. RESEARCH METHODOLOGY AND DATA	122
8.2.2. RESEARCH STUDY'S RESULTS	128
8.3. THE IMPLICATIONS OF SUSTAINABLE CORPORATE VALUE ON FIRM'S PERFORMANCE	131
8.3.1. GENERAL CONSIDERATIONS REGARDING THE SUSTAINABLE VALUE - PERFORMANCE RELATIONSHIP	
8.3.2. THE VSC-PERFORMANCE RELATIONSHIP, A MULTIPLE LINEAR REGRESSION MODEL	
PRELIMINARY CONCLUSIONS	
FINAL CONCLUSIONS	
BIBLIOGRAPHICAL REFERENCES	150

LIST OF ABBREVIATIONS	162
LIST OF TABLES	
LIST OF FIGURES	
APPENDICES	166

# **SUMMARY**

The motivation for choosing the topic, novelty, topicality and scientific relevance

Current global requirements, risks and challenges require companies to organize and manage resources and economic processes in new ways in order to survive and perform economic activities. In these conditions, the transition towards circularity emerges as a necessity of contemporary economic reality. Leaving aside the fact that it is a controversial topic, some authors are more supportive of the benefits, while others consider it to be just an illusion, looking at the principles and basic operation of the circular economy, we admit that it can represent one among the most appropriate models to follow, taking into account the current trends of ensuring and maintaining sustainability.

The realization of a performing economic activity, in the context of sustainability, capable of generating a positive impact on society and the planet, attracting by itself long-term economic growth, has become one of the major concerns for both the private and the public environment, needing the constant interaction of the microeconomic with the macroeconomic. In order to transition from the traditional way of doing business to sustainable business, there is a need for the involvement and interaction of all interested parties, from companies, investors, employees, financial and commercial creditors, customers, the state, etc., with the final objective of creating and generating a sustainable value, which will be felt by the users of the outputs, the members of the economic activity environment.

An essential role in the generation of sustainable value belongs to sustainable finance, meaning a financial system capable of defining and elaborating sustainable financing frameworks and tools adapted and useful for establishing the best directions regarding the effectiveness of financing to achieve the global objectives of sustainable development.

Of major importance is the reporting and provision of information that provides the most realistic picture of the position of a business on a certain market. For this, in the context of sustainability, the classic reporting of financial statements is no longer sufficient, not having the ability to capture all dimensions of a company's value. Current conditions, in which corporate culture, customer loyalty or innovation capacity, have become essential in establishing the level of corporate performance, indicating the limits of financial information reporting and the need to also report sustainability elements, including monitoring the level of corporate sustainable value.

This being the context, the problem that arises at this point is related to the need to redefine the economic value at the corporate level, in the form of a sustainable value, a current topic in the field of finance. If until recently, specialized literature focused on the study of the aspects related to the economic value materialized in the form of price, the innovative character and major importance of the addressed topic consists in the development of a new framework for the analysis and measurement of the economic value at the level of company, in the context given by the transition towards sustainability, by integrating the entropic and evolutionary perspective. More precisely, we propose the conceptualization of corporate sustainable value (CSV), based on the identification of some logical attributes, followed by the development of a model for determining the most relevant factors in the creation of CSV and then measuring CSV, by substantiating a mathematical model that correlates the data financial with non-financial, so that users are able to monitor and manage existing risks

and opportunities. It is thus about the development of a general tool for measuring CSV, necessary to establish the position of a company in comparison with benchmark companies (for example, component companies of a certain sector of activity, stock market index, etc.).

Therefore, the doctoral thesis is developed with the aim of understanding the nature of the real problems facing today's society, at the level of the private environment, in the context of sustainability, more precisely the transition to a circular economy and bringing added value to the research field. Through an in-depth study of the subject, we mainly followed aspects related to the importance of implementing sustainability, the characteristics and specific approaches of this process, the role of the financial system in supporting the sustainable and circular economy, the identification of the factors that create and influence the sustainable value of a company, but also their impact on company performance.

Therefore, the motivation for the choice of the scientific research theme presented above takes into account multiple aspects, among which we mention:

- the context given by the dynamics of global risks and challenges, along with the transition towards a circular economy, an increasingly popular, promoted, but at the same time controversial topic;
- the issue regarding the redefinition of value and from perspectives other than purely monetary, arising with the change over time of theories regarding value and the evolution of approaches regarding the basic objective of companies, in relation to value creation;
- the relevance of the theme in the context of sustainability;
- the desire to contribute to the knowledge of the stages that mark the period of global and national transition towards sustainability;
- the lack of a unitary framework in the specialized literature regarding the concept of sustainable corporate value;
- the desire to contribute to a research aimed at establishing a method of measuring the sustainable value at the level of a company;
- the few theoretical and practical concerns that explain what are the main determinants of sustainable value at firm level;
- the increased interest of researchers and practitioners towards the subject of reporting elements of sustainability, which has become essential to follow in establishing the level of corporate performance.

The added value of the research consists in the original proposals it contains, which aim, among other things, to approach value from an entropic and evolutionary perspective at the expense of the monetary approach specific to the existing specialized literature, or to define the concept of sustainable corporate value, from a logical perspective, based on the identification of logical attributes called sufficiency predicates. Also, the results obtained in the thesis may be of interest both to researchers and to practitioners in the field of company finance. More concretely, due to the objective based on which the proposal of CSV determinants was pursued and a way of measuring it, we affirm that the studies carried out in this doctoral thesis have the ability to provide useful and practical information, which can be developed and improved, providing the necessary framework for the development of new models, more realistic, more robust, more efficient, more comprehensive, in the direction of the analysis of corporate performance through the creation of sustainable value. Also, the research can be assimilated by large companies, who want to benefit from the opportunity to track the level of sustainable value achieved and therefore the evolution of global corporate performance, influencing strategies and future long-term action decisions. Last but not least, taking into account the fact that it draws directions including for the implementation of sustainable finance, the study contributes to the development of a new and up-to-date niche in the field of finance, addressing investors, financial or banking institutions that take part in the economic activity, financing companies that make real steps towards the transition to a sustainable or circular economic system, with the ultimate goal of ensuring a fair and rapid transition to a sustainable economy and society.

### State of knowledge and representative bibliography

The doctoral thesis "Determinants of firms' sustainable value in the context of circular economy" is a complex research aimed at capturing the various approaches and theories of the value of the company, adapted to the current context of the global transition towards sustainable business models.

The research began by exploring the major changes that have taken place in the business environment since the Earth Summit in Rio in 1992, which represented a pivotal moment in bringing environmental and sustainable development issues to the public's attention. Based on these considerations, we argue that the adoption of sustainability is emerging as a necessity of contemporary economic reality, based on the need to ensure a circular economic process. Therefore, the concepts of sustainability, sustainable development, and circular economy are experiencing significant development recently. One of the common concerns of companies is the supply of goods and services for which there is demand and which ensure them significant profits. But, in a world where resources have become limited, the business environment must rethink production and consumption models to generate sustainable development (Rădoiu, Bătușaru, 2022). Moreover, the problem of the main objective of the companies has undergone various approaches over time, but in the current context, companies are increasingly looking for the maximization of a sustainable value for all members of the community, meaning much more than the maximization of profits for shareholders. In this sense, there was an increasing trend of research on the topic of understanding the impact of sustainability on value creation, a fact that gives the current doctoral thesis a topical character.

Some relevant bibliographic sources for understanding these aspects, which were taken into account in the preparation of the doctoral thesis, are: Carson (2018); Carroll (1991); Dinga (2016); McDonough, Braungart (2002); Stahel (2010); Stahel, Reday-Mulvey (1977); Tyrol (2017).

Out of the desire for specialization in the field of sustainability, having strictly analyzed aspects related to the importance of the efficient management of sustainable finances from the perspective of ensuring sustainable value at the company level, we consulted other relevant bibliographic sources, among which we mention: Andreeva et al. (2018); Dusík, Bond (2022); Jenkins (2022); Rufus (2022); Sandberg (2018); Schoenmaker, Schramade (2019); Schoenmaker (2017); Ziolo et al., 2021.

The current doctoral thesis also aims to study the sustainability-performance relationship at the company level. In this sense, starting from the presentation of the general aspects regarding corporate performance, meaning both financial, but also environmental and social performance, we extracted a series of variables, which were the basis of the development of the mathematical model for measuring corporate sustainable value. According to the specialized literature, among the variables that influence the corporate performance of a company, in the context of sustainability, in addition to those of a financial-economic nature, we identified:

- consumer behavior (Nikolaou and Tsalis, 2018),
- eco-efficiency (Kucukvar et al., 2021),
- domestic environmental policies (Sakshi et al., 2020),
- individual perception (Kühnen et al., 2022),
- respect for human rights (Mulya and Prabowo, 2018),
- continuous learning and training of human capital (Birou et al., 2019),
- brand image (Kwarteng et al., 2016),

- process innovation (Baridwan and Zaki, 2020; Shahid et al., 2020),
- the level of digitization (Najaf et al., 2022),
- the level of sustainability reporting (Abdi et al., 2022; Al Hawaj et al., 2022; Thomas et al., 2021).

Considering the fundamental objective of more and more companies, namely maximizing their value by creating sustainable value, we need to start from the understanding of the term value. We can assign various definitions to the concept depending on the perspective and field from which it is viewed, but also in relation to the various economic theories that have appeared over time. Although we accept the fact that the spectrum of approaches is wide, we believe that in defining the concept of economic value, several main theoretical branches must be taken into account: the theory of labor value, the theory of use value, the theory of rarity value, the marginal and subjective theory of value. To these four theories, we consider it necessary to add the analysis of value from an entropic perspective, according to the vision of Nicholas Georgescu-Roegen, (1971) who supports the second principle of thermodynamics transposed into the functioning of the economy. So, in Nicholas Georgescu-Roegen's approach, the economic process is an entropic process, given the fact that any production process is an open system with an input (input), a by-product that involves energy discharge (a physical human effort and mental) - which is desired to be as small or reduced as possible - and an output, i.e. a final product (output) - which is desired to be as large or increased as possible.

In the context of the current economic rationality of the transition towards sustainability, it is desirable: 1) as little as possible entropy consumption of the economic system (of the company) and 2) as little as possible acceleration of entropy in the environment of the economic system, because this phenomenon represents useless energy that is "thrown" into the environment of economic activities and felt by the next users of a company's products and services.

Therefore, this capacity to reduce the company's entropy in the environment of economic activity, in which the users of the outputs of the economic systems are also found, the measure of the entropic economic value, which in the context of ensuring sustainability we called it corporate sustainable value.

On the topic addressed, there are many researches that deal with the subject from different perspectives, relevant being those of the following authors: Smith (2011); Georgescu-Roegen (1971); Rodríguez, Cáceres-Hernández (2018); Shannon (1948).

Along with the dynamics of the development of the term value, we witness the evolution of approaches and methods for determining the current economic value of the business. Based on the most common classification accepted by the majority of specialized literature, there are three types of classic approaches to evaluating a company, within each of which several methods can be used. On an axis of time, the three classic approaches aim to estimate either a past, present or future value, depending on the perspective or direction from which the evaluation process is viewed, for example the situation of the liquidation of a business or the continuity of the activity. In the context of the transition towards a sustainable economy, company management should also take into account the application of modern methods for determining the sustainable value of companies, which serve as a guide in making more informed and responsible decisions. In this sense, our proposal regarding the analysis and measurement framework of the corporate sustainable value confirms its necessity and usefulness. A selection of bibliographic sources considered relevant for this topic refers to: Deaconu (2019); Ion et. al., (2010); Petrescu (2012).

The doctoral thesis with the title "Determinants of firms' sustainable value in the context of circular economy", is embodied in a research aimed at laying the conceptual foundations and establishing the implications of the links between the key concepts used, with the main objective of identifying the determining factors of the creation of sustainable corporate value needed to develop a CSV analysis and measurement framework.

In order to achieve the main objective, the following secondary objectives were pursued:

- defining the concepts of sustainability, sustainable development, circular economy;
- analysis of approaches regarding the various dimensions of sustainability;
- presentation of the role of the financial system in the context of sustainability;
- analysis of the characteristics of financial and non-financial (sustainability) reporting;
- delimitation of the concept of corporate performance;
- establishing the variables that influence the company's performance;
- analysis of the evolution of the approaches regarding the basic objective of the companies, in relation to the creation of value;
- the analysis of general aspects regarding the classic methods and tools for evaluating a company;
- redefining economic value in the form of corporate sustainable value;
- establishing a system of indicators for measuring sustainable value at the company level;
- the selection of the most significant and relevant indicators that influence the level of corporate efficiency;
- proposing a framework for analyzing and measuring sustainable corporate value;
- analyzing the implications of sustainable value on corporate performance.

#### Research hypotheses

The hypotheses underlying the scientific approach and which we sought to test in the research undertaken are the following:

H1: Sustainability represents a goal in ensuring the prosperity of companies;

H2: Sustainable finance represents the engine of the transition to sustainability;

H3: Corporate performance is given by both financial and non-financial factors;

H4: There is a significant relationship between corporate sustainable value and performance.

#### Research methodology

In the elaboration of the doctoral thesis entitled "Determinants of firms' sustainable value in the context of circular economy", the following stages were completed:

- establishing the research area and identifying the problem, taking into account the current challenges encountered by economic systems (firms) in the context of the transition towards sustainability;
- organizing the research activity by establishing the research directions, respectively, setting the objectives, hypotheses and research questions;
- the collection, processing and analysis of information from various bibliographic sources: specialized literature, legislation, studies, courses, treaties, reports;
- substantiating and developing solutions based on the relationship between sustainability - corporate performance - economic value;

 analyzing results and disseminating information, as well as formulating conclusions and proposals regarding possible future research directions.

The main tools related to the research methodology used in this doctoral thesis are:

The critical analysis method aimed at theoretical documentation and complex

information on the chosen subject;

 The investigation method, which was based on the collection, processing and analysis of available data and information, substantiating the issuance of opinions and recommendations;

The synthesis method, offering the possibility of identifying links between economic processes and the key aspects studied, contributing to the

elaboration of conclusions;

The interdisciplinary research method, treating the research subject from a complex perspective of related fields, such as finance, economy, management;

The method of inductive and deductive analysis of the main correlations and dependencies that are established by approaching the link sustainability -

performance - entropy;

The descriptive method, which allowed the presentation of economic

processes and theoretical concepts;

 The statistical method and the graphic method, used for the purpose of synthesizing the research results and presenting them in an organized and relevant way for the verification of established hypotheses. In addition, with the help of the graphic method, we created numerous figures / schemes that, through our own approach, aim to highlight the way to achieve the proposed objectives:

The SWOT analysis method, carried out with the aim of identifying future development directions and conceptualizing the "sustainable finance

framework";

- The method of logical analysis in order to define the concept of sustainable corporate value, based on the identification of some sufficiency predicates;
- Statistical-mathematical and econometric methods, such as principal components analysis (PCA), with the aim of reducing the number of component variables in the form of CSV determining factors, but also the multiple linear regression method, used in order to verify and establish correlations between variables, more precisely the relationship between CSV and a company's performance.

#### Obtained results

The results of the research approach as well as the personal contributions are presented in the content of the doctoral thesis in the form of data processing, studies, analyses, proposals and recommendations, the most relevant being synthesized in the form of preliminary conclusions related to each main chapter.

Generally speaking, the doctoral thesis takes the form of a research aimed at laying the conceptual, as well as methodological and instrumental foundations, which

would underpin a model for measuring the corporate sustainable value.

So, starting from a logical structure, aspects related to the term value were analyzed: "value = utility", "value = work", "value = exchange", "value = rarity" and "value = entropy", presented through the lens of Adam Smith, Karl Marx, Leon Walras and Nicholas Georgescu-Roegen. Directly related to the generation of sustainable corporate value is also the process of sustaining the value of the company, which I treated through the prism of the stages and states that a company can experience throughout its life. We also aimed to establish a system of indicators for measuring sustainable value at the company level. For this objective, a series of financial and non-financial value measurement indicators, such as: human capital performance, employee satisfaction, share price, ESG scores, were taken into account in order to develop a mathematical model for measuring and evaluating sustainable corporate values. Relevant in this direction was the application of principal component analysis (PCA) on the 50 component companies of the STOXX Europe 50 index, the most important stock market index in Europe.

Following the research carried out, we believe that companies must establish the objective of maximizing corporate efficiency, in order to generate a sustainable corporate value. In other words, the five determinants of sustainable corporate value are: economic efficiency, corporate responsibility efficiency, internal process efficiency, human capital efficiency and marketing efficiency.

Considering the solution generated and the proposal of the mathematical model based on the calculation of corporate efficiency, but also the increasing requirement of reporting sustainability at the company level, the model has the ability to be used in practice by various entities. Properly integrated into the organization's strategy, it can become quantifiable by calculating the level of sustainable value created after the targeted objectives have been achieved.

Thus, the results obtained in this doctoral thesis can be useful for the financial system in Romania, in the direction of an integrated reporting system, which allows transparency and ease in the disclosure of information at the level of various projects or companies.

# The limits of the research carried out in the doctoral thesis

The topic addressed in the doctoral thesis is complex and has multiple facets, and the socio-economic challenges are in a continuous dynamic, which implies multiple evolutions and correlations between the variables to be taken into account for a more integrated approach. Thus, in this doctoral thesis we admit the existence of certain limits, inherent in a doctoral research in the socio-economic field, which allow a continuation and further development of thematic research in future works.

First of all, using the proposed mathematical model requires specific implementation knowledge and skills, starting with the management staff of a company. Also, there is a need for openness in terms of accepting and understanding the process regarding the transition towards sustainability in a broad sense, therefore it is necessary to understand the need to create, manage and report corporate sustainable value. In this sense, the reluctance to change, the lack of effort and collective determination regarding the transition to sustainability, together with the lack of a consistent and widely accepted framework at international level in the direction of the obligation to monitor and report the environmental and social impact, can lead to the reduced possibility of applying the proposed model.

In addition, following the application and testing of the model, it can be found that it is not relevant and comprehensive enough, requiring sustained efforts in the direction of development, improvement, continuous updating and adaptation of the system of indicators for measuring sustainable value, in the rhythm of the dynamics of risks and global challenges, legislative frameworks and regulations in terms of sustainability and sustainable development.

Moreover, the research considered a principal components analysis and a multifactorial regression analysis, at the level of the 50 component companies of the STOXX 50 index, as a result the small number of companies included in the research may represent another limitation of the present thesis doctorate.

## Description of the content of the doctoral thesis

The doctoral thesis consists of two parts, entitled "Current concerns related to sustainability in the context of the circular economy" and "Conceptual, methodological and instrumental contributions to the research of corporate sustainable value", each having four chapters, in which I addressed the specific objectives of the research, finally presenting the conclusions and personal

The introductory part of the doctoral thesis presents in a synthetic form the actuality and importance of the approach to the topic, the motivation that was the basis of its research in this thesis, the framing of the topic addressed in the context of multi, inter and transdisciplinary research, specifying the current state of knowledge and the bibliography representative, establishing the purpose and objectives of the research, identifying the research methodology, presenting the results obtained and

specifying the limits of the research.

The first chapter of the doctoral thesis, entitled "Considerations regarding the transition towards sustainability" starts from a conceptual delimitation of sustainability and sustainable development, according to the study of relevant specialized research, followed by an analysis of current concerns in the field, from the perspective of the microeconomic approach and macroeconomics on the creation of sustainable value. In this sense, the various dimensions that sustainability has known over time, together with the change of economic theories, are exposed. This first chapter presents some general aspects about the new economic model - the circular economy - as a component of sustainable development, this model being perhaps the most appropriate to the current trends of ensuring and maintaining the sustainability of economic processes. At the same time, chapter I also includes a brief presentation of the global strategy regarding the 2030 Agenda and the fulfillment of the specific objectives provided for by it, through the perspective of the "wedding cake" model developed by Rockström and Sukhdev (2016).

Chapter II "The role of the financial system in the context of sustainability" is developed as a specialization in the field of sustainability, analyzing aspects related to the management of sustainable finances from the perspective of ensuring sustainable value at the company level. In this sense, the role of the financial system in the context of sustainability is analyzed, through the lens of sustainable finance frameworks and models, but also of capital market instruments.

The third chapter "Orientation of companies towards sustainability: voluntary or mandatory?" presents the limits of financial reporting, demonstrating the need for non-financial reporting, with a brief presentation of several tools often used among practitioners. Among the types of sustainability reporting we mention: the GRI framework, ESG reporting, Cyrculitics.

Chapter IV entitled "The influence of the orientation towards sustainability on corporate performance" starts from the presentation of the general aspects regarding performance at the company level and addresses the issue of the impact of sustainability practices on corporate performance, meaning both financial, but also environmental and social performance. The knowledge of these aspects determined the need to study the variables that influence the sustainability-performance relationship, which facilitated the continuation of the thesis in the direction of developing a mathematical model for evaluating corporate performance, built on the basis of a system of indicators for measuring sustainable value.

In the context of an economy oriented towards sustainability and circularity, the fundamental objective of more and more companies is to create and maximize sustainable value. To achieve this objective, chapter V "Classical approaches to the analysis of economic value at the corporate level" aims to understand the term value starting from the general aspects, the conceptual and theoretical delimitations developed over time, but also the presentation of the classical approaches and methods of evaluating a company.

While the existing specialized literature focuses on economic value of a monetary nature, Chapter VI "Integrating Entropic and Evolutionary Perspectives in the Analysis of Economic Value" approaches value from an entropic and evolutionary perspective in an original way, allowing us to admit that variations are inevitable, accidental and that natural selection leads to the maintenance and reproduction of various species of value among companies. In this sense, sustainable corporate value is a subspecies of economic value and refers to the entropy reduction capacity of the firm.

Considering these arguments, chapter VII entitled "Elaboration of a framework for the analysis of corporate sustainable value" continues in the direction of defining the concept of corporate sustainable value, from a logical perspective, based on the identification of logical attributes called sufficiency predicates.

The last chapter VIII "Corporate sustainable value evaluation proposal" seeks to establish a system of indicators for measuring sustainable value at company level, respecting both the triple bottom line approach and the Balanced Scorecard (BSC) approach, placing users (customers, employees, shareholders, investors, etc.) at the heart of everything a company does. The chapter thus approaches, in the first part, the proposal of a set of financial and non-financial indicators for measuring value, according to the results and own considerations, derived from the research carried out up to that point. Then, in order to establish the most significant and relevant indicators, the chapter continues with the selection of only those that incorporated the greatest amount of common variability, grouped in the form of a set of orthogonal factors, further used in the development of a mathematical model of measurement and evaluation of sustainable corporate value. Aiming at this objective, the principal component analysis (PCA) method was applied, using the SPSS software. The chapter concludes with an analysis of the impact of corporate sustainable value on performance through a multifactorial linear regression.

The end of the doctoral thesis presents the conclusions and results obtained as a result of the research, which corroborate or reject the pre-established hypotheses, being substantiated proposals for capitalizing on the findings, which are the subject of the study carried out. Considering the complexity of the topic addressed, the future directions of research in the studied field were outlined.

The **original contributions** captured in this doctoral thesis are briefly presented in the following:

Crt. No.	Description of contributions	Chapter/ Page	Arguments regarding the relevance of the contribution	The nature of the contribution
1	Comparative analysis and conceptual delimitation of sustainability and sustainable development	Chapter 1, pp. 17-22	Identifying the need for an incursion into the stage of knowledge and presenting the characteristics, similarities, differences and valences of sustainability and sustainable development.	theoretical - conceptual
2	Incursion in the stage of knowing regarding the value concept	Chapter 5, pp. 87-90	Making some conceptual delimitations and presenting the general aspects regarding the value and valuation models of a company, in relation to the main theories developed over time.	theoretical - conceptual
3	Conceptualization of the "sustainable finance framework"	Chapter 2, pp. 49	Identifying the need for a common and universally applicable language in the field of sustainable finance.	theoretical - conceptual

4	Integrating entropic and evolutionary perspectives in economic value analysis	Chapter 6, pp. 95-100	Identifying the lack of studies regarding the understanding of economic value in the context of the current economic rationality of transition towards sustainability.	theoretical - conceptual
5	Conceptualizing "corporate sustainable value"	Chapter 7, pp. 112-113	Identifying the need for a common and universally applicable language; identifying difficulties in conceptualizing and analyzing sustainable value.	theoretical - conceptual
6	Identification of the main economic branches regarding the value	Chapter 5, pp. 88-90	Taking into consideration that the spectrum of approaches regarding value is wide, we believe that in redefining the concept of economic value, several main theoretical branches must be taken into account.	empirical
7	Exploring the aspects regarding sustainable finance, respectively the empirical verification of the hypothesis according to which sustainable finance represents the engine of the transition towards sustainability	Chapter 2, pp. 39-40	The desire to expose the importance of the role of the financial system in the transition to sustainability.	empirical

8	Exploring the relationships between the determinants of corporate sustainable value and financial performance	Chapter 8, pp. 134-140	Identifying the lack of studies testing the impact of sustainable value on corporate performance.	empirical
9	Development of a model of interaction of microeconomics and macroeconomics on the creation of sustainable value	Chapter 7, pp. 107-112	The problem of creating sustainable corporate value requires the interaction of economic systems (firms and the state) and an integrated approach targeting civil society (users), based on actions and practices that simultaneously fulfill all responsibilities: economic, legal, ethical and philanthropic, but also the role of "awareness".	methodological - instrumental

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10	Development of a mechanism for the operation of the process of sustaining the value of the company	Chapter 6, pp. 100-105	We proposed a mechanism to describe the process of firm value sustainability, to be followed by firms aiming to create / capture sustainable value, based on seven phases and four states: towards sustainability, maintaining sustainability, losing sustainability and returning to sustainability.	methodological - instrumental
11	Development of a mathematical model for measuring corporate sustainable value	Chapter 8, pp. 131-132	Mandatory reporting of information on sustainability issues will take place in the coming years. In addition, there is a lack of an evaluation tool for a company's potential, in the context of the transition to sustainability. Based on these considerations, the need to measure and monitor corporate sustainable value results.	methodological - instrumental

Future research directions identified as a result of the scientific approach carried out, consider the following aspects:

 the continuation of research efforts regarding the identification of tools designed to respond to the need for reporting and comparative analysis of corporate sustainable value. Such an objective can be achieved by developing new mathematical models that will combine different indicators for evaluating financial and non-financial information in a single index, harmonizing the way a company's activity is reported;

- the analysis of the implications of a sustainable value on the company's performance through a panel data analysis, which takes into account a longer time series, resulting in a more relevant and comprehensive analysis;
- it would be of interest to analyze how companies on the national / international
  market are aware of the importance of monitoring and reporting a corporate
  sustainable value and the degree of openness regarding the application of the
  proposed method of measuring the corporate sustainable value, as a tool for
  evaluating the potential of a companies;
- continuous contributions are needed to identify the causal variables that influence the indicators considered in the corporate sustainable value measurement model, considering the economic environment characterized by rapid changes.

In conclusion, under the conditions of the new economy based on the transition to sustainability, the challenge for organizations is to adapt their processes and strategies in order to survive and develop. Performance analysis by creating and measuring corporate sustainable value can be considered a new niche approach to private finance in this context marked by profound changes. In this sense, we believe that the future concerns of researchers will focus on the foundation of new methods of complex measurement and monitoring of economic value at the level of companies (which, as we have demonstrated, is a much broader concept than price), in the conditions of the sustainable economy.

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