

IOSUD – „DUNĂREA DE JOS” UNIVERSITY OF GALAȚI
Doctoral School of Fundamental Sciences and Engineering



PhD Thesis Summary

Institutional health in the context of sustainable development

PhD student,

Burlacu Oana Steliana

Scientific coordinator,

Prof.univ.dr.ec.habil. Turek-Rahoveanu Maria-Magdalena

Series I 9: Engineering and management in agriculture and rural development No. 8

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Author,
PhD. Student, Burlacu Oana Steliana

INTRODUCTION

The PhD thesis entitled “Institutional health in the context of sustainable development” approaches a complex and current topic, based on two main elements in close interdependence: sustainable resources that can generate development and society that is the factor of action but at the same time consumer being the beneficiary of development.

Sustainable development has become an extremely attractive topic, both in scientific research and in everyday life.

Current organizations are trying to include sustainability in a comprehensive business-sense strategy.

Sustainability allows an organization to attract employees, shareholders and customers who are invested in sustainability goals and share these values. Therefore, the impact of sustainability can be positive for both a company's image and revenue.

Most are able to respect the environmental, health, safety and sustainability (EHS & S) regulations, but with the data currently in place, factory managers and directors are challenged to go beyond compliance and start actively managing sustainability as top-level strategy and then optimize that strategy across the company.

Each society can be described as being made up of four dimensions, the economic, the social, the environmental and the institutional. Each of them is a complex, dynamic entity, which self-organizes and evolves, making the coupled system one of extraordinary complexity.

For this system to be sustainable, each of the four subsystems must maintain its capacity to survive and evolve, while the interconnections of the subsystems must allow for permanent co-evolution.

Referring to sustainable development in a rural environment which, as in the rest of the cases, begins, first of all, with the goodwill of the people, the observance of the rules, and then there are the opportunities that everyone must take into account.

We can say that there are many benefits for sustainability, both in the short and long term. We cannot maintain the Earth's ecosystems and we cannot continue to function as we do without more sustainable choices. If harmful processes are maintained without any change, it is likely that we will run out of fossil fuels, a large number of animal species will disappear, and the atmosphere will be irreparably affected. Clean air and non-toxic atmospheric conditions, increased resources that can be counted on, as well as water quality and cleanliness, are all benefits of sustainability.

Climate change and sustainable development are also linked by their interactions in industries, human settlements and society. Many of the forces that shape carbon emissions - such as economic growth, technological change, demographic change, lifestyles and governance structures - underpin the various avenues of development, partly explaining why industrialized countries account for the largest share of carbon emissions.

We can say that sustainable development is a challenge for society, not just an environmental one - improvements in education and healthcare are therefore needed to achieve higher incomes and better environmental decisions.

As a case study we chose a car wiring company from southeastern Romania, where the object of activity is according to CAEN CODE 2931 Manufacture of electrical and electronic equipment for vehicles and motor vehicles / section C. Within this company predominates the number rural employees.

The company from Brăila started its activity in 2015, and during these years the results are obvious. In addition to a stable job, well-being, the fact that people have managed to create better

comfort and conditions in the space where they live, health insurance, additional benefits and the motivations of each month that employees receive they can consider that they have an advantage living in rural areas because they can deal with animal husbandry and agriculture, thus resulting in additional income and at the same time being promoted a healthy lifestyle.

Responsible consumption and production, as well as the importance of doing more with fewer resources, are also important for adopting a circular economy and reducing demand.

The decarbonization of the energy industry, through clean energy resources and renewable processes, will be necessary to provide clean and accessible energy to all.

There should be clean food and water for all, while protecting the biosphere and oceans, which will require efficient and sustainable food systems, achievable by increasing agricultural productivity and reducing meat consumption.

Smart cities: settlement patterns should be transformed for the good of the people and the environment, which can be done through 'smart' infrastructure and internet connectivity

A digital revolution in science, technology and innovation would be needed to support sustainable development, as it is hoped that the world will use the development of information technology to facilitate sustainability.

With the climate crisis, there is a current movement towards sustainability as a more attractive priority for businesses as people begin to lead more sustainable lives. It is likely that, in the future, the positive impact on the climate throughout the value chain, the improved impact on the environment, people and the atmosphere and the productive contribution on society will be expectations for businesses. Companies will be responsible for all aspects of the industry, and any damage to the environment or harmful emissions should be limited or eliminated from production processes.

It is also expected that resources will be reused to accommodate global population growth in what is commonly referred to as the "circular economy". This change would allow one person's waste to be another person's resource, in a process that would greatly reduce waste and create a more efficient supply chain. [1]

PRESENTATION OF THE CHAPTERS OF THE PhD THESIS

The doctoral thesis entitled "Institutional health in the context of sustainable development" coordinated by prof. dr. habil. Turek Rahoveanu Maria Magdalena approaches one of the most important and current issues of space in Brăila County where we proposed an analysis of indicators and aspects to be taken into consideration that the company and the employer can develop sustainably.

In order to achieve the best results in the demersal of the present thesis from the research carried out, based on the study of the specialized literature in the field of sustainable development, the research axes are approached as follows:

- diagnosis of the activities of a multinational company developed in Braila County;
- quantifying the impact that the activities carried out within the company have on the sustainable development of the company;
- assessing the opportunities, benefits and potential for sustainable development of the community, but also of the employer
- promoting the concept of sustainable development by implementing an employee education system according to the activities carried out
- developing a model for analyzing and reporting on sustainability

In this regard, we used a case study from a wire harnesses company based in Romania, Brăila, to explore how the proper use of indicators can be a powerful tool in addressing business sustainability both at the corporate level, as well as at project level.

Performance has been given a fundamental role in an organization, and it not only requires measurements, but also needs to be managed.

Sustainable development is a very dynamic concept with many dimensions and interpretations, seen as a process of permanent change, closely linked to the local context, needs and zonal priorities and with well-defined objectives.

The number of Romanian companies that have started reporting information on sustainable development, in addition to financial data, is growing, and this is an advantage for all existing factors: company (employer), employees, society, environment, city, country.

Keywords: sustainable development, indicators, community, evolution, quality of life, economic growth, potential, performance, company, institutional health, objectives, employer, employees, environment.

CHAPTER 1. SUSTAINABLE DEVELOPMENT - A NEW PARADIGM OF RURAL SPACE.

From the first chapter “Sustainable development - a new paradigm of rural space, we understand that the term sustainable development is used in many areas and spheres of life and becomes a modern phenomenon that determines the direction of progress of each society. Sustainable development involves continuous economic development while respecting environmental principles and focuses on overcoming conflicts between the economy and ecology.

Also in the first chapter we see that sustainable development also exists at the level of the rural community, as long as people who already have activities in agriculture and animal husbandry can have a job in a corporate environment and can have an additional revenue from additional activities.

We analyzed the activity of the employees of a car wiring company, the object of activity being according to CAEN CODE 2931 Manufacture of electrical and electronic equipment for motor vehicles and motor vehicles / section C from south-eastern Romania.

This company was founded in 1941 in Japan and is one of the most important wiring groups in the world. The company is a profitable business partner, whose name is associated with quality and competence in the activity it represents and carries out, implementing and developing policies on environmental protection, health and product quality.

As a case study in this project, we chose Braila County in Romania, where we can say that most of the employees of the company in question come from rural areas, and agricultural activity carried out by people in rural areas consisting of raising birds, animals and growing vegetables, cereals what constitutes a significant additional income from:

- from the sale of birds, animals and products resulting from them: cheese, milk, meat, eggs, leather, wool, etc. .;
- sale of vegetables and cereals, but also of the products resulting from their processing;
- accessing subsidies;
- but also, to provide food for households.

Then we can talk about a circular economy, due to the fact that people in the villages who raise animals or grow vegetables, cereals, unwanted food becomes a source of food, thus closing the loop of the circular economy.

As for wood waste obtained from various activities (in construction, furniture, packaging, etc.), it is also a reusable part in the area of villages, households or if in Romanian villages the heating is still done by burning wood in stoves and not gas or electric.

The only problem remains plastics - even daily collection is important to change the mode of production and use. And for this it is necessary to invest in new technologies capable of protecting people, the environment and, at the same time, the competitiveness and performance of our industries.

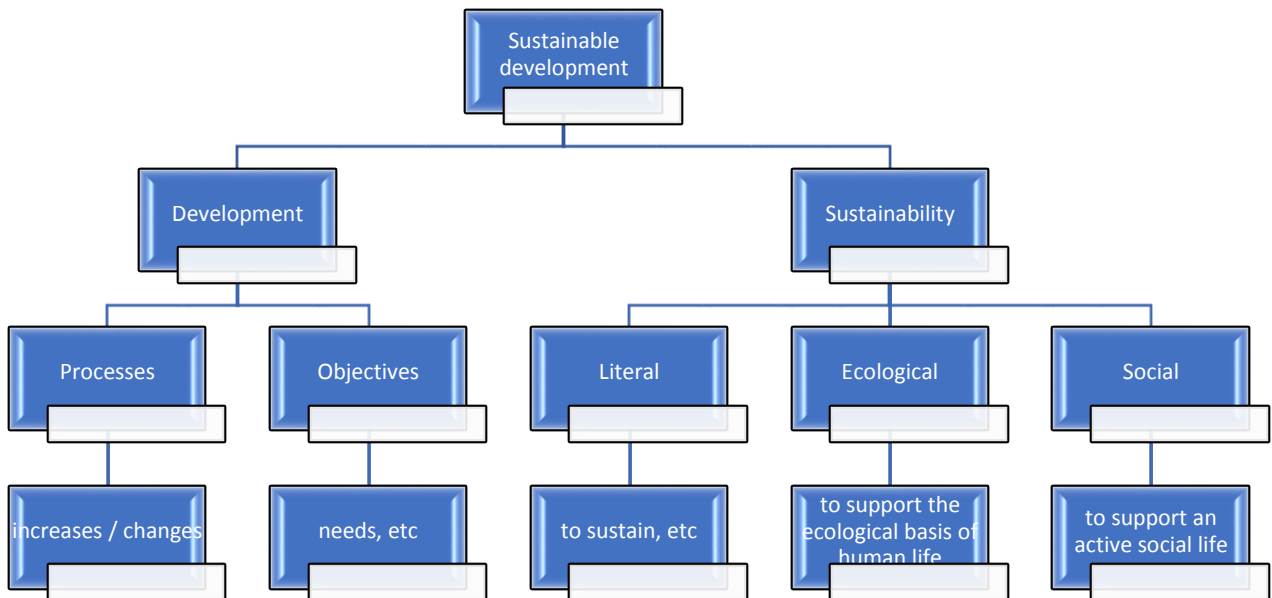
Thus, society is moving towards a circular economy model, which is essential to address the climate crisis and overexploitation of resources.

In recent years, "Sustainable Development" (SD) has emerged as the ultimate key to development. A wide range of non-governmental and governmental organizations have embraced it as the new paradigm of development.

A review of the literature that has emerged around the concept of SD indicates, however, a lack of coherence in its interpretation.

Figure 1.1

Semantic evolutions of the term SD



Source: processing after, 2020

More importantly, while the general nature of the concept gives it political power, its current wording by the SD thinking principle contains significant weaknesses that include an

incomplete perception of the problems of poverty and environmental degradation and confusion about the role of economic growth and the concepts of sustainability and participation.

How these weaknesses can lead to inadequacies and contradictions in the policy-making process is demonstrated in the context of international trade, agriculture and forestry. It is suggested that if sustainable development will have a fundamental political impact, then political ambiguity will be abandoned in favor of clarity and intellectual rigor.

Therefore, in this chapter we aim to come up with a description of what "sustainable development" means based on the literature, to understand where this concept started, how important it is for the society we live in and what are the objectives to be achieved.

CHAPTER 2. KEY LIMITS AND CHALLENGES IN ASSESSING SUSTAINABILITY AT COMPANY LEVEL.

In the second chapter entitled "Limits and key challenges in assessing sustainability at the company level" of the doctoral thesis "Institutional health in the context of sustainable development" we aimed to present, through a review of the literature, a synthesis of problems and the key challenges facing companies in the industry to develop a balanced and sustainable framework in an area or region:

- Section 1 shows the current state of the reporting methods on the sustainability of the rural environment and beyond;
- Section 2 presents the current methods in assessing sustainability at the level of a multinational company in Braila County, Romania;
- Section 3 illustrates a sustainability scoring benchmarking that combines SBSC methods and GRI standards with grading-assessment techniques;
- Section 4 shows the applicability of this field of sustainable development through a quantitative research undertaken based on the analysis of a multinational company, from Romania and publishes sustainability reports, and then describes the final conclusions of the chapter.

The Balanced Scoreboard (BSC) has recently been considered an appropriate tool for assessing and designing corporate sustainability objectives. On the one hand, in theory, the literature provides a balanced sustainable regulatory framework (SBSC) to indicate "What needs to be measured?" or "What needs to be done?" for companies to improve their sustainability performance. On the other hand, empirically, the literature allows the analysis of the barriers and challenges that companies face in their effort for a sustainable evolution.

This chapter aims to contribute to the implementation of this SBSC scoreboard in Romania using GRI indicators (2017) and a comparative assessment to measure the sustainability performance of companies.

This perspective includes 41 sustainability indicators from the GRI guidelines that are measured in non-financial terms. Similarly, the internal perspective includes 21 sustainability indicators, and the learning and growth perspective includes 6 sustainability indicators from the GRI guidelines measured in non-financial terms.

Table 2.1

Classification of GRI indicators from the BSC perspective	
BSC	Number of indicators GRI
Financial perspective	11
Initiatives of customers (companies) in terms of sustainability	41
The perspective of internal processes	21
The long-term learning perspective	6
Total	79

Source: processing after [2]

Current scoring-benchmarking techniques seem to focus only on identifying the completeness of sustainability reports and not on measuring corporate sustainability performance [3]. This could be overcome by developing a new composite index, following the general guidelines of the Pacific Sustainability Index (PSI, 2010).

The proposed composite index consists of two independent accountability indicators and performance indicators. The proposed index is further extended, in relation to the PSI index, by incorporating an additional aspect (economic - together with the existing environmental, social and human rights aspects) and by simplifying the complicated system of scoring performance indicators.

We examined the dependence between the ownership of the enterprise and the implementation of the Balanced Scorecard method and from our analysis it resulted that the implementation of the Balanced Scorecard method does not depend on the proportion of domestic and foreign owners of a business.

A separate group of companies that know the method, but do not implement it, are seven businesses that are considering the implementation of the Balanced Scorecard method in the near future, two companies with past experience with the method implementation and eighteen companies that know the method but have no interest for its implementation (Table 2.2).

Table 2.2

Reasons of companies that have no interest in implementing the method

Results	Number of answers	Percentage
Business applies and relies on intuitive management	3	4.62
Are used other tools	11	16.92
Missing budget	0	0.00
Difficulties in achieving BSC	2	3.08
Missing time	4	6.15
Misunderstanding of the method	15	23.08
We do not perform strategic management; the business is managed according to the current market situation	9	13.85
Other reasons	21	32.3
Total	65	100.00

Source: our processing according to questionnaires applied to companies, 2020

The group of companies with the most common reasons for disinterest in implementing the Balanced Scorecard method belongs to those who do not know the method, using other strategic management tools, not performing strategic management (strategic planning), and "other" reasons: business size small businesses, the scope of activity (the branch in which a business operates, the unnecessary use of new methods and ways of managing the business); some companies have stated that they use BSC largely as a tool for measuring performance.

CHAPTER 3. THE EVOLUTION OF SUSTAINABLE DEVELOPMENT IN THE SOUTH EAST REGION IN THE PERIOD 2005-2017.

Chapter 3 aims at a quantitative assessment of development indicators and the results of economic, social and environmental activities by comparison between regions for sustainable development over the last 13 years.

Even if we are in the century of industrialization and at first sight we would say that agriculture would no longer have a very important place in the development of society, the number of people engaged in agriculture has decreased, we find that things are different and the importance of rural and its development is gaining momentum.

Sustainable development in rural areas considers the following aspects:

- maintaining and stabilizing the population in rural communities;
- eradicating poverty through funding, but especially through employment;
- maintaining a good economy favorable to the inhabitants;
- disposition of medical offices, pharmacies, schools, kindergartens, recreational spaces, etc.
- equal opportunities for all inhabitants of the rural area;
- improving the quality of life by conserving and protecting the environment in rural areas.

Agenda 21 of the Rio de Janeiro Conference, in 1992, helps rural communities with a way of planning and achieving development, while providing a clear overview of the stage of development they are in, which is target- the target but also how it should achieve all these aspirations.

For the rural communities in Brăila county, we can say that most of these targets have been reached and 90% of the population have a stable job in agriculture within the community where they are located, but also various institutions in the county, additionally agriculture becoming a source of additional income for people who own a plot of land.

The fundamental objective of any economic region would be, the permanent improvement of the quality of life and the permanent care for the next generations through an economic, social and environmental development. At European level, economic development will meet the challenges of maintaining sustainable communities, managing available resources and valuing innovation at all levels.

We bring to the fore a synthetic analysis of how a GDP / inhabitant increase on the one hand, could negatively affect the quality of the environment, human health and social relations at regional level, and on the other how it can influence the growth of other indicators such as infrastructure. tourism, transport and education.

Chapter 3 consists of three subchapters as follows:

- "Interactions and effects of sustainable development indicators." - from which we understand that the monitoring of the progress of sustainable development at territorial level is done with the use of the set of indicators of sustainable development (IDD). In the period 2005-2017 we aim to present the main challenges and progress in implementing the objectives of the sustainable strategy, this report provides a quantitative assessment of the path followed by the EU, as evidenced by the evolution of EU FDI.

- Assessment of "sustainable growth" - Assessment of progress towards the SDGs for Romania and the EU27 Member States is carried out by monitoring a set of 100 indicators selected as relevant in accordance with the quality criteria of the European Statistics Code of Practice [4].

- Making correlations between indicators and their analysis - The purpose of this study is to analyze the behavior of entrepreneurs in business to maximize results, consciously applying basic scientific knowledge and global progress in governance, assuming that they have a sustainable behavior.

- Finally, the partial conclusions in this chapter are presented.

CHAPTER 4. RESEARCH ON THE OPPORTUNITIES AND BENEFITS OF A NON-FINANCIAL REPORT IN COMPANIES IN ROMANIA. CASE STUDY IN A MULTINATIONAL COMPANY.

In this chapter we come with an assessment of the changes that have taken place in the last ten years in the context of globalization, which make their mark on business developments, in terms of their longevity, but also the economic, social and environmental effects that flow from here both microeconomic as well as macroeconomic.

Through the manifestation of business management and marketing in the sense of their sustainability, there are several changes that can be tracked and analyzed in their annual non-financial reports. In our case study we will examine non-financial reports from business practice, what are their reasons, importance and benefits by stakeholders, followed by an analysis of the results of discussions through interviews with representatives of a multinational company with CAEN CODE 2931.

Financial reporting on the business performance of companies was introduced a few decades ago, after which it developed through various stages, such as voluntary reporting, mandatory reporting and highly standardized reporting.

Financial reporting reflects the financial aspects of business activities. It includes basic financial statements: balance sheet, profit and loss account, cash flow statement, changes in equity and notes to the financial statements. Statements shall also complement each other, reflect monetary values and relate to a specific period, most often annual or half-yearly.

Modern business economics is facing increasingly clear requirements for non-financial reporting, which includes reporting on the social and environmental aspects of business, means sustainable business practices or sustainability.

Any company with more than 500 employees and a total balance sheet of more than EUR 20 million or a net turnover of more than EUR 40 million is required to publish a non-financial statement in the annual report. Investor interest in corporate non-financial information is growing. Since 2011, assets under investment strategies incorporating non-financial information have accounted for more than € 10.5 trillion globally, of which almost two thirds are managed by European investors. [5]

Success firms disclose information about social responsibility for two main reasons:

- comply with societal expectations and thus ensure continuous access to resources such as capital, customer support and so on
- provide additional information to enable capital market participants to more accurately assess firms' financial perspectives and risk profiles, which could lead to higher stock prices and higher firms' values.

Sustainability reporting has significant internal and external benefits. Internal benefits include the following:

- increased understanding of risks and opportunities
- highlighting the link between financial and non-financial performance influencing long-term management strategy and policy and business plans
- Simplifying processes, reducing costs and improving efficiency
- Benchmarking and evaluating sustainability performance in terms of laws, rules, codes, performance standards and voluntary initiatives
- Avoiding involvement in environmental, social and governance advertising failures
- Comparing performance internally and between organizations and sectors

External benefits include the following:

- Mitigating or reversing the negative impact on the environment, social and governance
- Improving reputation and loyalty to your own brand
- Enabling external stakeholders to understand the true value of the organization and tangible and intangible assets
- Demonstrate how the organization influences and is influenced by expectations about sustainable development

With an activity of 44 factories on 4 continents and approximately 250,000 employees, the Group of Companies code caen 2931 publishes the non-financial report since fiscal year 2002 to

reveal information about corporate activities aimed at achieving a sustainable institution and to create a good image to employees and collaborators.

Between March and September 2019, we conducted a survey among the representatives of the departments responsible for non-financial reporting within the group of companies CAEN CODE 2931, on which occasion they were invited to provide answers to the questionnaire on current reporting practices. The questionnaire was addressed to the factories in Romania, but also to the managers inside the factories in Europe (4 locations) and Africa (3 locations).

In Romania, we are talking about 4 locations where equipment is produced for the automotive industry and for which 8000 people are employed.

Therefore, we are discussing a total of 11 factories of the same brand, located in different countries and cities, which have different projects that present different non-financial reports - these representing the target audience in our research.

In summary, the research aims at:

- Target audience: The group of companies presenting a non-financial report
- Quantitative research: 11 factories in the automotive industry of the same brand, placed in different countries and cities: 4 factories in Romania, 7 factories in Europe / Africa
- Qualitative research: discussions with people involved in the non-financial reporting of the factories mentioned above.

Objectives of the activities of the Group of Companies CAEN CODE 2931

Increasing the company's efficiency and providing the highest value to our customers around the world through continuous effort and implementation of new concepts
In accomplish corporate policy, the activities of the CAEN CODE 2931 group are based on the following principles: increasing the company's efficiency and providing the highest value to our customers around the world through continuous effort and the implementation of new concepts.
It contributes to a prosperous future society through business focused on the environment and security
Caring for people by creating a corporate culture that prioritizes individual and team work, while empowering people's dreams

Source: own processing, 2020

As a global company, CEN CODE 2931 Corporation recognizes its responsibility to contribute to economic prosperity in the countries in which it operates. For this reason, the

mission is not only to have a sustained profitable growth for the company, but also to make specific contributions to economic development and quality of life in specific locations.

In the last section we discussed the limits and challenges of non-financial reporting, followed by several of our own conclusions and contributions.

CHAPTER 5. RESEARCH ON INSTITUTIONAL HEALTH ASSESSMENT IN A MULTINATIONAL COMPANY. INTERACTIONS AND EFFECTS AT LOCAL COMMUNITY LEVEL.

Chapter 5 “Research on institutional health assessment in a multinational company. Interactions and effects at the level of the local rural community” examines the health of a company (CAEN code 29) through the evaluation of its behavior, community philanthropy, financial performance, social inclusion and financial stability, focusing on annual data in the period 2005-2019. The results suggest that the health of a company evaluated together with age and size, have a positive impact on the three factors.

The purpose of the analysis is to explore the issue of sustainable development at regional level, namely the South East Region, by providing a model for evaluating the activity of companies in industry, agriculture and services doubled by the interest shown by employees, in developing educational level, specialization. The relations between the main indicators of the balance sheets from the last 14 years are studied as a source of evaluation, but also the typology of philanthropic activities in which the company operates.

This study uses annual statistical data over 14 years, from 2005 to 2019. As most SMEs in Romania do not report their social responsibility activities separately, the data used are those collected from the annual public balance sheets. The following models are developed based on the literature, using social responsibility as an independent variable and the leverage, income, age and size of companies as control variables, with FP, IS and FS as dependent variables.

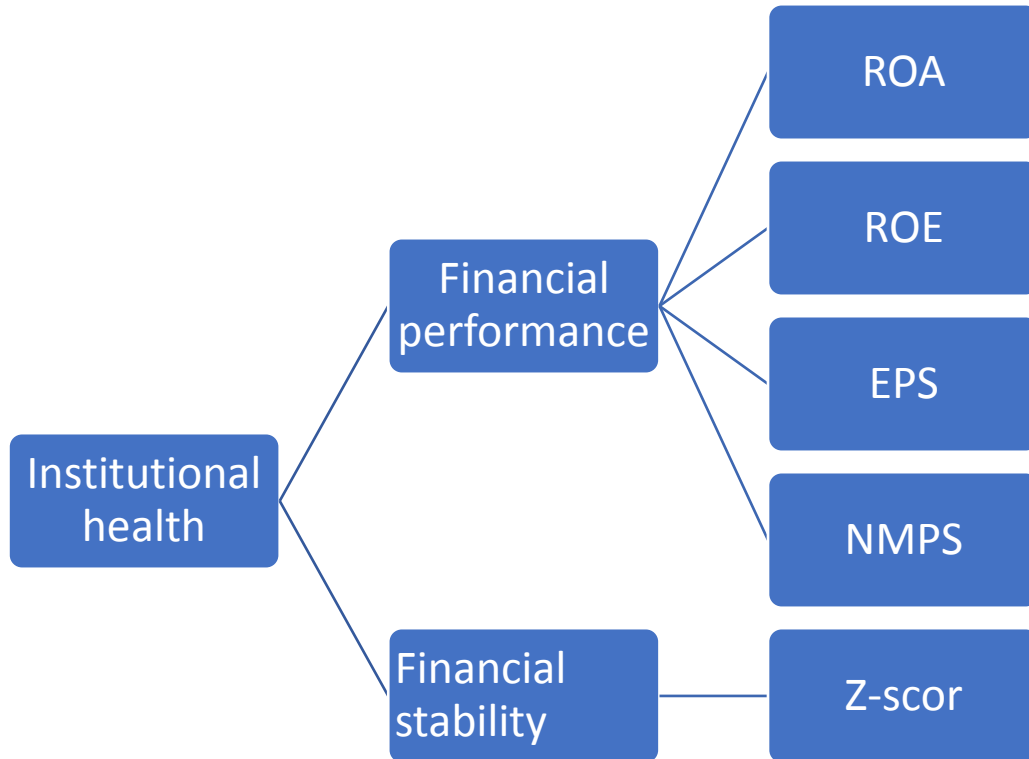
To examine the relationship between dependent and independent variables, the data are analyzed by analyzing the usual regression of the smallest squares. For the analysis of the available data, we used the Minitab software, together with the Python programming language and the Spyder integrated development environment. Today, Python is one of the most popular programming languages because it is free to use and extremely productive, compared to other programming languages such as C++ or Java.

The research analysis specifically used the functions used to minimize objective functions for nonlinear curve fitting problems. Due to the nature of the data, most of the situations of matching the curves were related to the case where polynomial terms were added in the linear regression, respectively square predictors.

We usually choose the order of the model based on the number of bends observed in our data graph. Each increase in the exponent produces another bend in the curved line. However, we could not identify any situation that would require the term cube or more.

Figure 5.1

Variables used in the evaluation of institutional health at the level of a Romanian company



Source: own processing based on the specialized literature

In the above model ROA, ROE, EPS and NPMS are used to measure financial performance, as ROA is used as a proxy variable of [110] and ROA, ROE and EPS are used to measure FP [88]; [111]; [60]; [91]; [89] uses NPMS to measure PF. The model uses financial stability as a dependent variable, which is calculated using the Z score.

The MATLAB polyfit program was also used as a method of research and data analysis, according to the data polynomial, where:

- P = polyphyte (X, Y, N) finds the coefficients of a polynomial P (X) and
- the degree N that best matches the Y data in the sense of the least squares.
- P is a line vector of length N + 1 that contains the polynomial coefficients in descending powers, $P(1) * X^N + P(2) * X^{(N-1)} + \dots + P(N) * X + P(N + 1)$.

[P, S] = polyphyte (X, Y, N) returns the polynomial coefficients P and a structure S for use with POLYVAL to have error estimates for predictions. S contain fields for the triangular factor (R) from a QR decomposition of X's Vandermonde matrix, degrees of freedom (df) and residual norm (norm). If Y data are random, an estimate of the covariance matrix of P is $(Rinv * Rinv') * normr^2 / df$, where Rinv is the inverse of R.

[P, S, MU] = polyphyte (X, Y, N) finds the coefficients of a polynomial in $XHAT = (X - MU(1)) / MU(2)$ where $MU(1) = MEAN(X)$ and $MU(2) = STD(X)$.

This center and scalar transformation improves the numerical properties of the polynomial and the matching algorithm.

Warning messages result if $N \geq \text{length}(X)$, if X has repeated or near-repeated points, or if X may need centering and scaling.

Evaluate the polynomial.

$Y = \text{polyval}(P, X)$ returns something to a polynomial P evaluated at X .

P is a vector of length $N + 1$ whose elements are the coefficients of the polynomial in descending powers.

$$Y = P(1) * X^N + P(2) * X^{(N-1)} + \dots + P(N) * X + P(N + 1)$$

If X is a matrix or a vector, the polynomial is evaluated at all points in X . See `POLYVALM` for evaluation in the matrix sense.

$[Y, \text{DELTA}] = \text{polyval}(P, X, S)$ uses the optional output structure S created by `POLYFIT` to generate `DELTA` prediction error estimates. `DELTA` is an estimate of the standard deviation of the error in predicting a future observation at X of $P(X)$.

If the coefficients in P are estimates of the smallest squares calculated by `POLYFIT` and the errors in the data entered in `POLYFIT` are independent, normal, with constant variance, then $Y \pm \text{DELTA}$ will contain at least 50% of future observations at X .

$Y = \text{polyval}(P, X, [], \text{MU})$ or $[Y, \text{DELTA}] = \text{polyval}(P, X, S, \text{MU})$ uses $\text{XHAT} = (X - \text{MU}(1)) / \text{MU}(2)$ instead of X . `MU` centering and scaling parameters are operational outputs calculated by `POLYFIT`.

Table 5.1.

Description and measurement of variables

	Name of variable	Indicators	Measurement formula
<i>Dependent variable</i>			
1	Financial performance	Return on assets (ROA)	$ROA = \text{Net revenue} / \text{Total assets}$
		Return on equity (ROE)	$ROE = \text{Net revenue} / \text{total equity}$
2	Social inclusion	Unemployment rate in the South East	Territorial statistical data
		Population economies in the South East Region	Territorial statistical data
3	Financial stability	Z-Scor	$((ROA + \text{equity}) / \text{Active}) / \text{standard deviation (ROA)}$
<i>Independent variable</i>			
4	Corporate philanthropy	Evidence of the actual amount spent on RSC activities	Donations registered in the company CAEN code 2931
5	Lever	Lever	$= \text{Total duties} / \text{Total assets}$
6	Tangibility	Tangibility	$= \text{Non-current assets} / \text{Total assets}$
7	Age	Number of years of operation	14
8	Dimension	Evidence of total assets	$\text{Log}_{10} \text{total assets}$

Source: own processing based on the specialized literature

This study also uses corporate donations and actual spending on CSR activities as variables for measuring CSR. Four control variables are also used, including firm size, age, tangibility and leverage, where size is measured as the logarithm of total assets, tangibility is measured by the ratio of non-current assets to total assets [6] and the effect of leverage is measured as total debt divided by total assets. The size, age, tangibility and leverage of a company affect FP, FS and IS [7].

In conclusion, the case study follows developments at European level and discusses the possibility of attracting new funding, namely "Financing for the future" which will improve the knowledge of companies with best practices, methodologies and practical advice on:

- Using sustainability values to measure business performance and improve internal processes (impact measurement).
- How the role of finance directors can contribute to the successful integration of sustainability into the company's financial decision-making process.

How to streamline the value of sustainable investment to stakeholders, taking into account the contributions of international organizations such as the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI).

FINAL CONCLUSIONS

The end of the paper consists of a set of conclusions which gives us an overview of what sustainable development means for a rural / urban community, what is its impact on that community and not only, what is the evolution of socio-economic indicators.

In other words, the basis of this thesis is the idea that the sustainable development of an institution and society involves: knowledge, improvement of existing and specific problems and the evolution from where they are generated, complex, long-term activities, beneficial to people and the environment with sustainable effects. .

This study aimed to provide a model for assessing the health of a company for sustainable development in the South East region of Romania. The examination of the health of the related company CAEN CODE 2931, was done by assessing the impact of social or philanthropic responsibility on financial performance and social inclusion in the automotive industry sector in Romania with an activity of over 10 years.

Our findings suggest that there is a significant positive relationship between company philanthropy and financial performance, and corporate social inclusion, indicating that activities create a positive perception in the minds of potential customers, which helps attract them, ultimately leading to an increase in the profits and turnover of the institutions. This is evidenced by the results that show that the units in the automotive industry where the study was done, spend more on philanthropic activities build a strong relationship with their customers, which helps reduce financial risk and increase financial stability.

Moreover, the results suggest a positive link between social inclusion initiatives and social responsibility, which implies that as companies increase their investment in such actions, there is an increase in the number of factories and the number of employees. In other words, in order to have a greater financial stability, it is necessary to better serve the community and implicitly a larger number of clients.

This study suggests that an industry company should emphasize philanthropic activities to increase its profitability and market performance. The other companies but also the authorities should support and stimulate them in this direction. Investors should examine philanthropic relationships before investing in stocks to ensure the betterment of society, as well as higher returns. The government should encourage companies to engage in philanthropic activities to achieve higher levels of social inclusion, especially in disadvantaged communities. Regulators should regularly monitor the stability of companies and provide different types of rewards and certificates, for example, a healthy company (economically, socially and environmentally responsible).

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