

ECONOMIC PERFORMANCE OF THE ENTERPRISES: A BIBLIOMETRIC ANALYSIS AT THE LEVEL OF EUROPE AND THE USA FOR THE LAST 5 YEARS

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Abstract: *Performance can be seen as a concept that, after six decades of studies and approaches, is still seeking clarification. Over time, the performance has been viewed from several perspectives such as: the equivalent of organizational effectiveness, adaptability, sensitivity, and productivity, up to concepts from the economic-financial sphere such as: increasing added value, profitability, productivity, indebtedness, and solvency. If we look at performance as a term, we notice that it presents a certain imprecision and is rarely defined. In DEX "performance" is represented as "the outcome (especially good) obtained by someone in a sports competition", "special achievement in a field of activity", or "the best result obtained by a technical system..." (DEX, 1998). The meaning of word performance comes from the English language from the verb "to perform" which according to the translation made by google translate means to do something regularly, to fulfil an obligation, to execute a contract, to perform in the activity you carry out, to achieve the work. If we look at the word "performance" not from the perspective of the verb but of the subject, this approach leads us to the goal and the way in which an organization achieves its proposed objectives, a fact that can be viewed from the point of view of effectiveness and productivity.*

The indicators that are presented can be used to measure the economic-financial performance of the entities from a relative perspective and some of their limits have been identified in absolute size. An important trend that manifests itself in the field of measuring the economic-financial results of companies is represented by the increasing importance of intangible assets and intellectual capital, which must be reflected with the help of specific indicators. With the development of new technologies in the information field, many of the

work tools of the industrial era have become outdated. The economic entities can no longer obtain long-term competitive advantages only through the rapid assimilation of new technologies or through very good management of financial resources. The ability of an economic entity to mobilize and exploit its intangible assets has become much more important than investments in fixed assets. The difficulties in the financial evaluation of some elements of the business activity such as the ability to organize production, the knowledge and skills of employees, their motivation, flexibility, customer loyalty, available databases, care for the environment, etc., have not allowed that these assets to be recognized as such in the companies' balance sheets, although they are essential in the present and future competitive environment for the success of economic entities.

Keywords: *performance; economic performance; enterprises; bibliometric research; quantitative research; VOSviewer*

J.E.L. classification: *L 25, O 12, P 17, P47*

1. Introduction

Different definitions of economic performance are presented in the specialized literature. The performance approach in the economy is in many cases related to the activity of the enterprise. Thus, the enterprise of the future can be appreciated as a structured ensemble of functions, objectives and people, resulting in the efficient production of goods and services, its fundamental feature is that it is based on knowledge embedded in people and not only that. Thus, in a consulting agency the central element is represented by people, in their quality of support of specialized knowledge, while in a classic production company, knowledge is found not only in people, but also in technologies and systems technical, organizational, business environments, etc.

Once the creation of the European Union and the integration of the economies of the countries in the community block, the notion of European enterprise appeared, which designates all enterprises whose activity or sales market exceeds the borders of the national economy of which they are a part. So it appeared the tendency of companies to give up their national identity in exchange for a European identity.

The term performance has a high degree of complexity, in general, the specialized literature analyzes the company's performance in terms of the ability to produce profit, but for a correct approach to the content of the performance, all sides of the economic activity must be taken into account.

The concept of "sustainable development" or "sustainability" has and continues to be widely recognized and discussed. This concept appears designed to remove the conflict of the debate over environmental quality versus economic growth, which

was evident in the 1960s and 1970s, during the surge in the environmental movement (Burlaud, et al., 2011).

The performance during the '90s was defined according to the level of achievement of the objectives. Bourguignon rates performance as the achievement of organizational objectives. Other authors affirm that performance is not itself bad or good. The same performance can be appreciated as a good performance, if the objective is modest, or a bad performance, if the objective is ambitious (Badulescu, et al., 2021).

If we look at it from an economic development viewpoint, the conventional economic growth-driving practices, which are dependent on low-cost resources and factor inputs, are notably weakened (Yu, et al., 2020). As public interest has grown in recent years in terms of transparency and disclosure policies and the assessment of the influence of environmental, social and governance information has led to new configurations of reporting and performance measurement.

In terms, the performance, can be defined considering the productivity and effectiveness of the entity, theoretically an enterprise is performing if it is at the same time productive and effective (Niculescu, 2003). Productivity can be accepted as the ratio between the results obtained and the means employed, also effectiveness can be determined as the ratio between the results obtained and the expected ones; thus we can say that the economic performance is related to the two terms. Seen in depth, the performance should not be analyzed only from the perspective of the two terms because effectiveness can express the performance when the ratio is overunit, but productivity and efficiency cannot represent the performance. If we look at a productive enterprise, we cannot assume that the productivity that characterizes the production activity of the economic entity represents the performance, because efficiency is the value expression of productivity, so we can affirm that this also influences the enterprise's performance only tangentially.

The performance viewed from the perspective of P. Lorino leads to the idea that it can be defined by an increase in value, so he affirms that the performance for the enterprise represents what contributes to the improvement of the value-cost couple, and not only what contributes to the decrease of the cost or value increase (Lorino, 2000).

Armando Calabrese recommended the consistency of judgments when performing the analysis, multi-stakeholder engagement (i.e. different stakeholders' views trade-off), multidimensionality for each sustainability dimension (i.e. economic, environmental and social dimension) by considering both their impacts on the company and influence on stakeholders' decisions and evaluations, the completeness of report content, as well as avoiding subjectivisms (Fleacă et al., 1999).

The purpose of the research in this article is to determine the interest in the area of scientific research on the economic performance at the European and US level, the funding of the articles, the membership of the authors of scientific articles and the level of citation of scientific papers and correlation of citations within the selection of articles. For the analysis of the research articles, the appropriate method was considered the statistical-bibliometric analysis, which presents an objective point of view regarding the number of researches carried out in the framework of the economic performance and the bibliographic links between these researches, so is been made an analysis regarding the cooperation between researchers using different research tools.

2. Literature review

The enterprise creates an internal economic added value, which generates, after decreasing all production factors including the cost of equity capital, a positive net value, but also an external value greater than the accounting value of the assets, which can be defined as the market value of the enterprise influenced by the external factors and not by the internal decisions of the economic entity. So we can conclude that the client has a primary role in ensuring and developing the performance, which involves taking into account criteria such as market shares or customer loyalty. Thus, the company's performance depends on its ability to create value for its customers and for its owners (shareholders), employees, and the environment. (Jianu, 2007). So, we can define performance as a state of competitiveness of the economic entity that leads to: the fulfillment of the proposed strategic objectives, to a sustainable market presence and to generate potential future positive results. A performance enterprise is one that generates value for shareholders; which is oriented towards satisfying the needs of customers taking into account their wishes and which has a friendly and sustainable business model with the environment. In the conditions of globalization and the increasingly competitive entities in the market, the economic-financial performances of enterprises generate special importance for the world economy. From the perspective of economic activity, the performance is based on the efficiency of allocating and using resources with as little impact on the environment as possible. If we look at the economic entity, the performance represents a ratio that generates the maximum result between the amount of resources used and the impact on the environment in a defined period of time, or a report that must be minimized, between the resources used, the impact on the environment and the results obtained by an economic entity in the same period of time.

In order to be able to measure the economic performance, a whole system of indicators is needed considering the complex character of the concept. An economic entity can become efficient and effective only if it manages to find a balance between internal and external sources of development. The enterprise is performing when, at the same time, it is efficient and effective, the combination of these two variables highlighting the level of performance of the company. (Niculescu et al., 1999) Since effectiveness measures the degree of fulfillment of external expectations, and efficiency reflects the degree of fulfillment of the expectations of the company's internal environment, the calculation relationship of its performance is the product of the two variables. (Andrei, 2000). We can say that an economic entity registers an optimal performance when it succeeds with the resources it has at its disposal to satisfy at the maximum level both the requirements of the external environment and those of the internal environment.

We can say that a high performance is generated and registered at the microeconomic level, this being the result of the enterprises activity and the competitive advantages of the economic entities reflects the competitive advantages of the nation. Nations succeed in those industries where they have advantages that are valuable to other nations and where their innovations and improvements meet international needs. (Porter, 1995).

At the microeconomic level, we can identify several classic indicators such as: turnover, gross profit, operating result, customer and supplier turnover, economic rate of return and financial rate of return. Along with the new studies and research carried out on the economic performance, the following indicators were identified and analyzed: Return on assets (ROA), Economic Value Added (EVA), Market Value Addet (MVA) and Internal Revenue Service (IRS).

At the macroeconomic level, from the perspective of the objectives, we can say that they represent goals or aspirations that can be expressed from an economic point of view, as the well-being of the population, or as an economic and social progress. These can materialize in different levels of macroeconomic dimensions and can express: "economic growth" identified by GDP growth rates, "full utilization of labor", a low unemployment rate, "price stability", result of inflation control through the consumer goods price index, "achieving the external balance", as a result of the external payments balance.

If the requirements of the current population are satisfied without destabilization and the capability fulfills the needs of forthcoming generations, this is considered sustainable growth. A sustainable economy depends on the mobility and externalities of resource use (Li et al., 2021).

The national economic environment, although gradually improved, he did not represent the necessary framework for enterprises to properly capitalize their productive potential. It was marked by legislative-financial instability, bureaucracy and corruption, insufficient transparency in micro and macroeconomic decisions, heavy system and unjustified barriers to the entry and exit of companies on the markets, etc. This state of the national economic environment was not favorable to the existence of a competitive advantage, which, at present, is determined by the degree of competitiveness of the companies, by the evolution of technical progress and less by the existence of natural resources. (Iancu, 2000).

The gross domestic product (GDP) is the macroeconomic indicator used to analyze the performance of the economy at a given moment, but also to make international comparisons and to know the evolution of economic growth.

From a statistical point of view, the analysis of the economic performances is carried out by using GDP or VN indicators. But in order to be able to carry out an analysis from which results can be obtained to reflect the economic performance achieved at the level of an economy, comparisons between the values of several indicators are necessary, so we can say that scientific research can be done between the GDP of some countries with equivalent economic dimensions. In order to ensure comparability of the data, it is necessary to report the GDP or VN to the population of the country that is being analyzed, the goal being that of having a unitary criterion of the economic dimension.

The goal of using these indicators in the framework of economic performance research is to ensure a relative assessment of the standard of living of the population of a country with the aim of ensuring the analysis of an international hierarchy.

The objective of studying performance from a dynamic perspective is to identify the growth rate of economic activity and of the obtained results. In such situations, the annual GDP growth rate or growth indices are calculated by studying the evolution over time, or in size relation to the values obtained at the level of other countries for the same period of time. GDP dynamics viewed as an indicator by which economic performance can be measured is of great interest from the perspective of the evolution of resources and uses by categories.

3. Research methodology

As society evolved and developed, access to research activity became permissible for a growing number of researchers from increasingly varied field and different geographical areas, modern science became an attractive field. So, science can be seen as a process that generates new information, but also a new point of research,

having a consecutive and collective character: a scientific research work has at its starting point certain ideas taken from previous works and appears as a result of their development or reinterpretation (Mansour et al, 2022).

The scientific research of this article was carried out by means of a bibliometric analysis, which used resources such as databases (Web of Science) and scientific processing and analysis procedures.

Bibliometrics can be defined as a qualitative and quantitative analysis of research that is often used to assess the impact of an individual researcher, research groups, institutions, countries or journals. The bibliometric analysis of a specific journal is important as it provides insight that goes far beyond the scope of the journal (Krauskopf et al, 2018)

The first activity was to query the Web of Science database by the tag "economic performance", we limited the searches to Arts & Humanities Citation Index (A&HCI), Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI) and we put filters on the database: All open access, publication years 2019-2023, countries of origin from Europe and the USA, Research Areas (Business Economics, and Public Administration), Web of Science Categories (Economics, Management, Business, Business Finance, Development Studies, Regional Urban Planning, Agricultural Economics Policy).

After providing the result of 404 articles, we did a statistical analysis of the articles published over the 5 years, an analysis of the word density through the word cloud, to see the association of frequently used words with economic performance, by the name of the articles, the abstract, Author Keywords and Keywords Plus.

Another analysis was carried out using the WOSviewer software to see the density of phrases used in the 404 articles in the selection. We used filters Co-occurrence, Author Keywords, fractional counting, minimum 5 occurrences.

Further, the bibliometric analysis and the density analysis were addressed, which were carried out according to the country of publication, according to the year of publication, according to the number of articles per country, according to the funding organization, the number of articles per author, according to the affiliation and according to the number of citations of the scientific articles in the selection. The Hirsch Index (H Index) for this selection is 32.

In this part we establishing the methodology to be used, we considered appropriate to present the criteria we approached in creating bibliographic links and the situation of funding and publication density.

Also, in this part of the research, we made a statistical analysis of authors from Romania.

Through the WOSviewer software, we created a map of the density of citations between authors, using the data exported from the Web of Science database, and we selected the analysis type Bibliographic coupling and the analysis unit Authors and a minimum number of two documents per author.

4. Findings

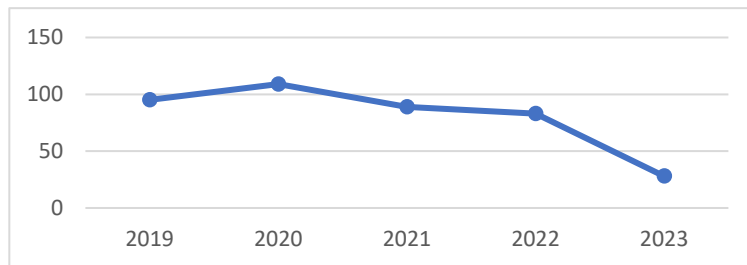
After searching the Web of Science database and using additional filters at the European and US level, a total of 404 articles were retrieved. The publication of the articles was as follows:

Table no. 1 Distribution of the 404 articles retrieved from the Web of Science query

Year	2023	2022	2021	2020	2019
Number of items	28	83	89	109	95

Source: Web of Science database (accessed on 21.04.2023)

Figure no. 1. Distribution of the 404 articles retrieved from the Web of Science query



Source: Web of Science database (accessed on 21.04.2023)

There was a slight decrease in the number of articles that met the filters imposed in the search. The year 2023 is falling because only 4 months have passed since the current year. The authors will make another such query at the beginning of next year to see if the downward trend in the number of articles continues.

After the word cloud analysis of 404 articles, the words with the highest frequency of use were: Perform, Economic, Firm, Social, Effect, Develop, Model, Growth, Impact and Sustain, the graphic representation is as follows:



Figure no. 2. Word cloud of the 404 articles retrieved from the Web of Science query
Source: WOS database (accessed on 21.04.2023) made via <https://wordart.com/>

The second analysis was that of the phrase density through the VOSviewer software. After applying the filters, we have the following results:

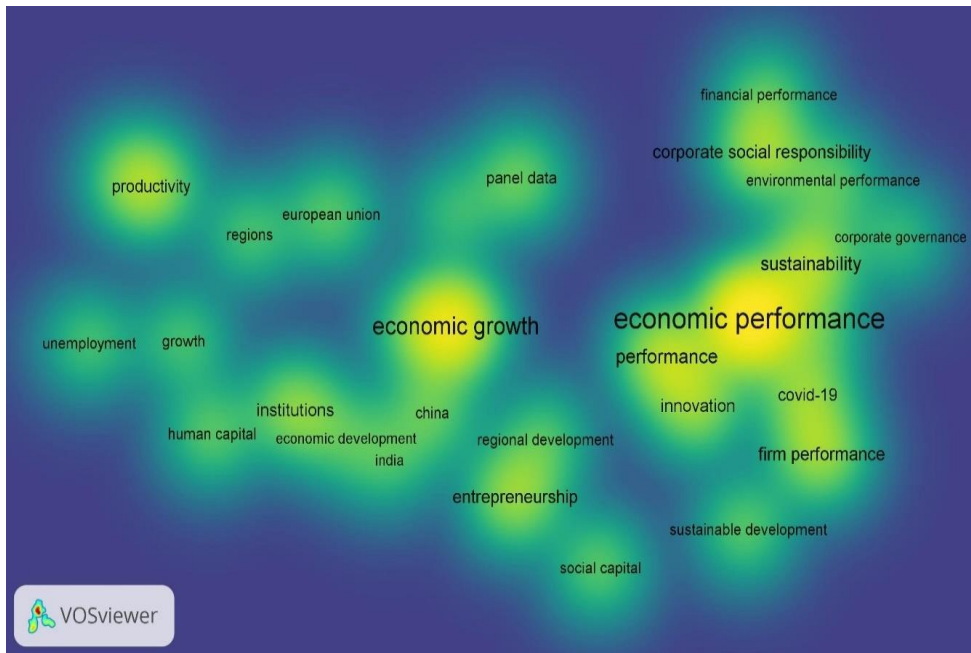


Figure no. 3. The phrase density of the 404 articles
Source: WOS database (accessed on 21.04.2023) made with the VOSviewer software

The frequency of the phrases is as follows:

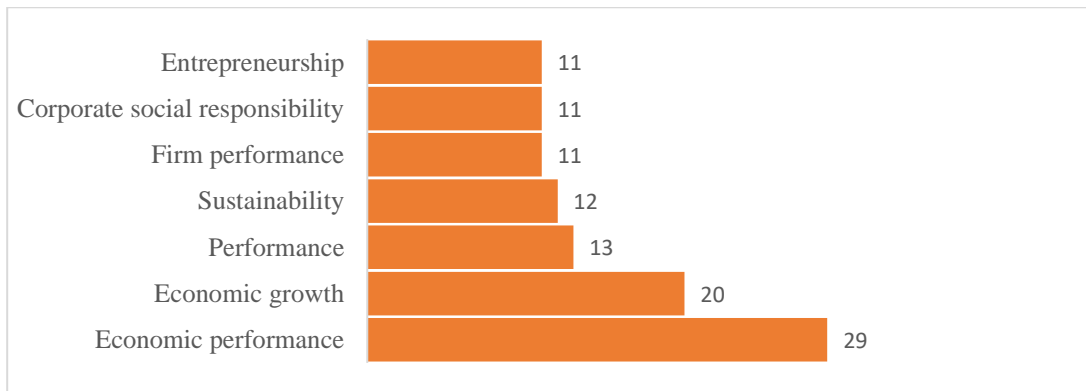


Figure no. 4 Frequency phrases

Source: Own conceptualization of WOS data with VOSviewer (accessed on 21.04.2023)

It can be seen from this words and phrases analysis that the selected articles are oriented more towards the sphere applied to the economic performance of enterprises.

Through bibliometric analysis and density analysis, the authors' origin from Europe was classified for the top 10 countries as follows:

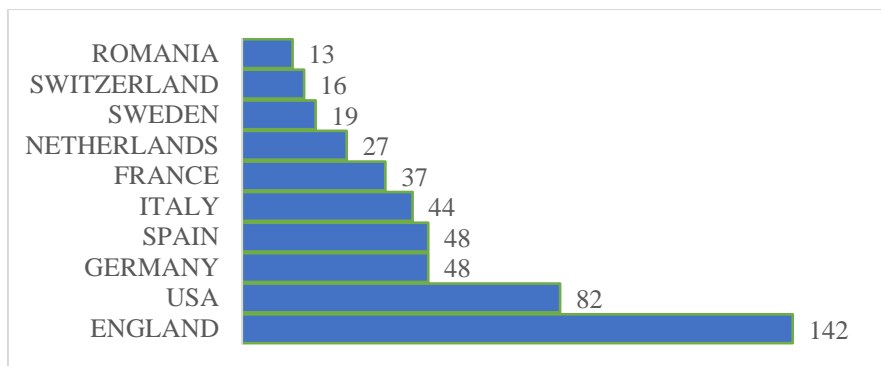


Figure no. 5 Origin of authors for the top 10 countries retrieved from the WOS query

Source: Own conceptualization of WOS data processing (accessed on 21.04.2023)

Funding for the writing of the articles, the first 5 sources for the 404 articles was:

Table no. 2 Top 5 funding sources from the Web of Science query

Funding Agencies	Publications
Uk Research Innovation	37
Economic Social Research	30
European Commission	17
Spanish Government	13
European Research Council	10

Source: Own conceptualization of WOS data processing (accessed on 21.04.2023)

It is noted that after the funding granted by the European Union through various programs (57 articles), UK Research Innovation follows with 37 funded articles and the Spanish Government with 19 funded articles.

We also analyzed the top 5 authors who have the most articles within the 404 articles included in our analysis and we have the following distribution:

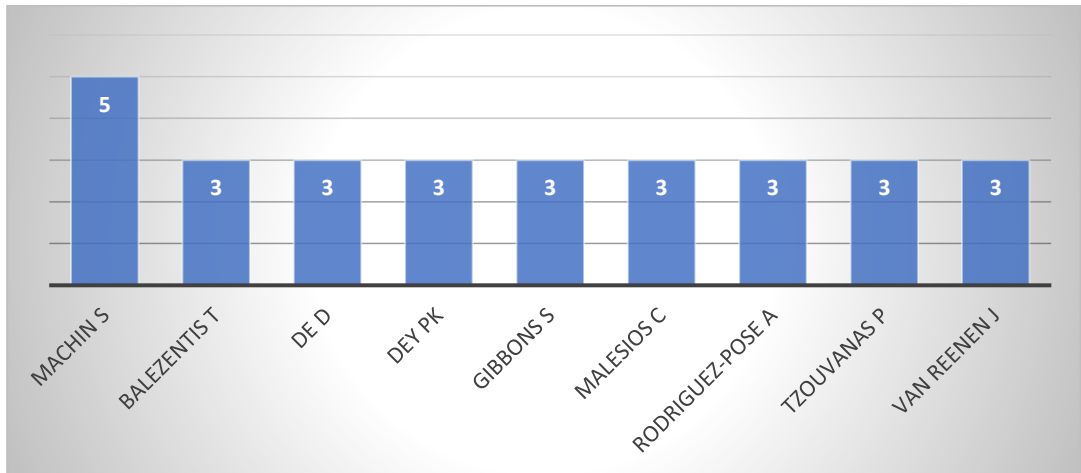


Figure no. 6 Authors with at least 3 articles retrieved from the Web of Science query
Source: Own conceptualization of WOS data processing (accessed on 21.04.2023)

By means of the VOSviewer software, we analyzed the links between the authors included in the selection of the 404 articles:

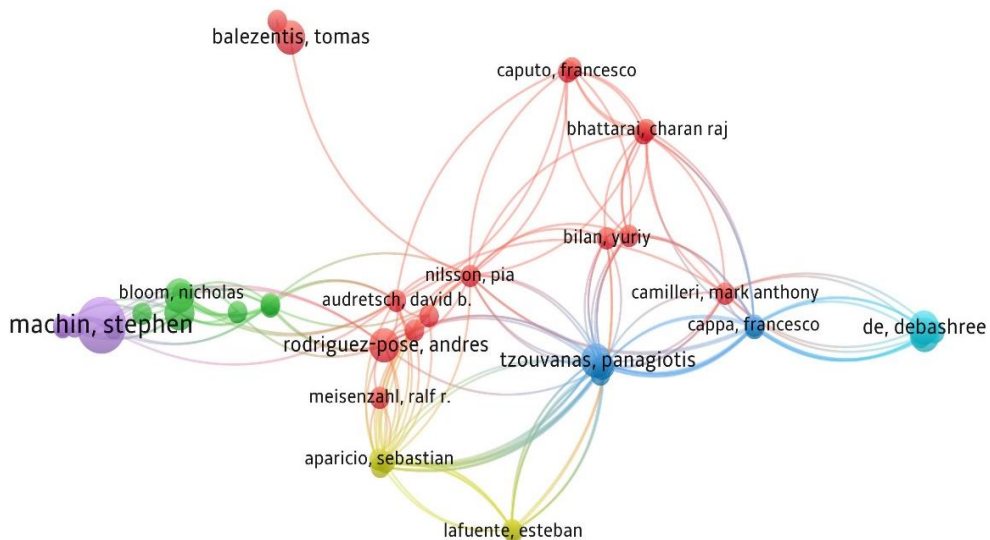


Figure no. 7. Circular references of the 404

Source: WOS database (accessed on 21.04.2023) made with the VOSviewer software

We observed that the authors with the most articles are also the most cited authors Machin Stephen, Balezentis Tomas, De Debashree, Rodriguez-pose Andres Tzouvanas Panagiotis, Aparicio Sebastian.

The 404 articles are cited 4,619 times with a Hirsch Index (H Index) of 32. The citations for the first 5 articles are as follows:

Table no.3 The first 5 articles in terms of number of citations obtained from the WOS query

No. crt	Article title	Publication year	Total citations	from which:				
				2019	2020	2021	2022	2023
Total			4.619	119	573	1274	1848	797
1	Regional inequality in Europe: evidence, theory and policy implications	2019	275	19	55	90	87	20
2	Strategic CSR: A Concept Building Meta-Analysis	2020	148	5	17	46	59	21
3	Circular economy to enhance sustainability of small and medium-sized enterprises	2020	104	0	10	17	58	19
4	Greenwashing in environmental, social and governance disclosures	2020	101	0	5	18	49	29
5	Critical dialogical accountability	2019	94	2	19	27	27	19

Source: Own concept, following the processing of data from WOS (accessed on 21.04.2023)

According to the criteria selected in Romania, there are 13 articles. The research area of these articles is Business Economics. The article's publication by calendar year was as follows:

Table no. 6 Articles published in Romania resulting from the Web of Science query

An articole	2022	2021	2020	2019
	5	3	2	3

Source: Own concept, following the processing of data from WOS (accessed on 21.04.2023)

The authors' university affiliation was as follows: Bucharest University of Economic Studies (7), 1 Decembrie 1918 Alba Iulia University (2), Babes Bolyai University from Cluj (1), Oradea University (1), Craiova University (1) and Wallachia University of Targoviste (1). All articles were written in English.

The articles were cited 75 times and had a Hirsh index of 5. Through the VOSviewer software, I analyzed the links between the authors included in the selection of the 13 articles.

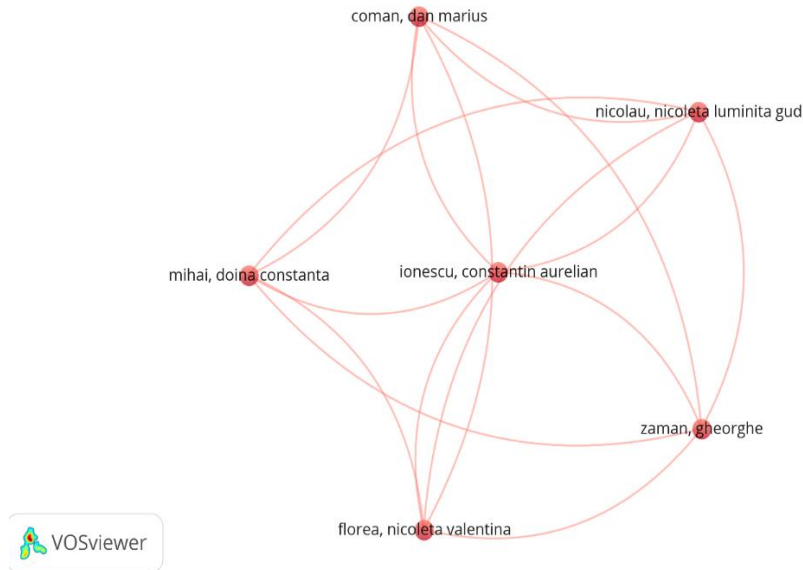


Figure no. 8. Circular references of the 13 articles from Romania
Source: WOS database (accessed on 21.04.2023) made with the VOSviewer software

5. Conclusions

We can appreciate that the evolution of the economic performance of the entities during the analyzed period of time can be appreciated with the help of the level of quantitative, qualitative and structural performances, these requiring a quantification in an appropriate way with the help of a complex system of calculated indicators, at microeconomic and macroeconomic level.

The indicators are, however, the concrete expression of some fundamental economic concepts that have various forms of manifestation. Also, they form a coherent system, which is why, for the assessment of economic performances, they were looked and analyzed in a correlated manner, a fact that generated a system of correlations, which were registered between certain coordinates to decide that the economy it is efficient and functional.

Following the analysis of the macroeconomic dynamics of the entities performance, in correlation with two major aspects: the legacy of a bad allocation of resources and institutional fragility, the conclusion is that the first one induces a strong tension in the system. So we can conclude that the two aspects are closely related to the

aversion to change and lead to the creation of systems that oppose deep restructuring, generating over time major imbalances that materialize in high inflation rates. In the absence of the strict imposition of financial discipline, the enterprises that have become inefficient should leave the circuit of the economy, because they do nothing but affect the economic performance of the environment in which they operate.

The performance at the enterprise level has a double priority: to register on the line of convergence regarding the economic resources used, at the same time ensuring a real competition for the allocated resources. The last one must be based on full transparency and the orientation of the final products towards the needs of the market. A functional system in this direction will be able to generate a learning process for both innovative enterprises and research entities, contributing to the formation of a research and innovation market.

Research and innovation entities in the technological field should ensure the updating of managerial capacities, in order to increase their ability to act in accordance with market opportunities.

In the case of private financing, it needs to develop specific skills to be able to act in the field of research and innovation, especially in terms of evaluating the chances of success of different innovation projects. Given that innovation not only offers higher productivity rates, but also that it has become a mandatory condition of long-term development, this skills upgrade is a necessary step towards the realization of an economy based on performance and competitiveness.

Based on the conclusions from the statistical and bibliometric research we can draw a series of conclusions that are defining for the research subject in mind. A first conclusion is related to the need to support research in the field of economic performance of enterprises, considering the continuous change of the economic environment at the European and world level.

The authors of the present paper commit to carrying out future research, in which to address the field of economic performance at the level of enterprises, which can have both practical and theoretical implications, to better identify the elements that influence their economic development, the approach of subjects of niche from the field of enterprises thus contributing to the improvement of knowledge and scientific literature in the field of the economic performance.

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