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A Systematic Review of Literature and Comprehensive Bibliometric Analysis of Capital Structure Issue

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Abstract: Economists have been dealing with the issue of using sources of financing in business activities for more than half a century. The search for a suitable combination of equity and debt financing has led to a number of studies and later theories that deal with the issue of capital structure optimization. The authors often focus in their publications on whether the capital structure of the enterprise can be optimized or whether the business activities and the fulfilment of its main objectives are conditioned by the management of financial resources. For this reason, the issue of capital structure is constantly highly topical. The main goal of this research paper is to clarify the basic concepts associated with the question about the capital structure of enterprise. The analysis was preceded by a detailed study of the publications by identifying the most crucial research papers, countries, and authors in the Web of Science database. The term capital structure was a search keyword focused on scientific research papers published in the Web of Science database during 2010-2021. The final search result with all available information was exported and subsequently used to create the bibliometric map itself in the VOS Viewer program. The results of the bibliometric analysis show that the keywords capital structure and determinants are the two most related words using the analysis of citations of common occurrence, and the most crucial international co-author relations arose between the USA and China.

Keywords: capital structure; determinants; literature review; bibliometric map; clusters.

Introduction

The issue of capital structure is an essential part of every business entity operating in the market. The capital structure is the structure of resources that an enterprise uses to finance its asset structure. The capital structure significantly affects the future financial prosperity of the enterprise, while the correct composition of corporate capital leads to its financial stability and profitability. However, an incorrect capital structure can jeopardize the entire existence of a business entity (Belas et al., 2018). The optimal capital structure represents as much capital as the enterprise needs. The capital structure usually deals with the internal composition, which is influenced, for example, by the sector in which the enterprise operates. Differences in the capital composition result not only from the property structure of the enterprise, the attitude of the management to risk, and the relationship of management to foreign capital, but also from external influences, which are related to the economic and political situation of the country where a particular enterprise operates (Tousek et al., 2021).

The main aim of this research paper is to clarify the basic concepts associated with the issue of capital structure of enterprises. The analysis was preceded by a detailed study of the publications by identifying the most crucial research papers, countries, and authors in the Web of Science database. Using the VOS Viewer were analyzed all available keywords necessary for a bibliometric map in the field of capital structure. Although the issue of capital structure has been a part of research carried out for many years, a significant gap can be observed in the bibliometric analysis focused on the researched issue. The

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implications of disseminating and using bibliometric methods in different contexts are currently being discussed. Increased emphasis is placed not only on quantitative data, but also on qualitative aspects, such as the implications of bibliometric analysis concerning research evaluation.

The keywords included in the bibliometric map highlight the most popular subjects, and few publications on capital structure can be found in the scientific database. Given the importance of the issue of capital structure, the aim of this paper is also to point out the main gaps and findings in the scientific literature related to capital structure. In addition to the above, an analysis of the common occurrence of cooperation was carried out not only between the authors, but also between the countries. It is clear from the results that the keywords capital structure and determinants are the two most interrelated words using the analysis of citations of common occurrence, and the most crucial international co-author relations arose between the USA and China.

The presented article is divided into the following parts: the first part is focused on literature review, which contains the most relevant and current sources of the issues addressed. A brief description of the sample of the most important articles and the methodological steps of bibliometric analysis are part of the second part. The following section is devoted to the obtained results, which are constantly being discussed worldwide. The fourth part summarizes the results in the context of other relevant studies of the researched issues.

Literature review

Capital management has become an integral part of the management of any large enterprise. The capital structure fundamentally determines the overall prosperity and sound development of corporate finances (Tripathy et al., 2021). On one hand, the correct setting of the capital structure is an essential element for the future financial freedom and riskiness. On the other hand, it can affect not only the interest rate for discounting future financial flows, but also the maximization of the firm value (Mujkic, 2021). According to Kruk (2021), the capital structure can be defined by the fundamental issue of financial management, while its basic tasks can include determining the required amount of capital. When expressing the right side of the balance sheet, it is possible to encounter two concepts in the literature: financial structure and capital structure. Some authors define capital and financial structure as synonyms, while others differ significantly between the two key terms. The authors, who point out the differences between these concepts, define financial structure as the share of individual sources of financing in the total financial resources of the enterprise, and the term capital structure is used primarily in connection with long-term financing sources (Karas & Reznakova, 2021). The capital structure is, therefore, part of the financial structure. Sivak and Mikocziova (2002) have a different opinion because they identify these two research concepts examined to be synonymous.

Some of the views of these authors may be debatable, but the capital structure of a business entity must be understood as the result of its long-term financial policy. According to Gregova et al. (2021) is associated with the issue of capital structure and the factors that affect it, the so-called determinants. According to Czerwonka and Jaworski (2021), the capital structure is largely influenced by the sector in which the enterprise operates. The composition of the capital structure is also affected by other factors, such as business risk (Jaworski & Czerwonka, 2021), corporate tax position, which is related to the possibility that a profitable enterprise can claim interest deductibility, which can reduce its tax liability (Durana et al., 2021), financial flexibility, which can be defined as the ability of the enterprise to raise capital, even under adverse developments in corporate finance (Panda et al., 2021), managerial conservatism and aggression, which include the ability of the enterprise financial management to use its position and

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knowledge to properly and effectively use foreign capital in a way that would increase the profit of the enterprise (Duong et al., 2021) and others.

There are several ways for an enterprise to obtain the necessary long-term funding to finance its business or further development. In addition to the ability of the enterprise to finance its needs from internal sources, it has several options or forms of financing from external sources (Gashi Ahmeti & Fetai, 2021). According to Bigio and d'Avernas (2021), many enterprises currently do not have sufficient equity, which lacks additional funds for their business development. One of the possible solutions and the most frequently used is additional foreign resources. Today, enterprises already have a wide range of options from which they can obtain foreign resources to finance their activities. Different forms of long-term financial resources accessible suggest that optimizing the capital structure is a complex problem today. Therefore, most of theories dealing with the composition of the capital structure are mainly focused on determining the optimal ratio between fixed-rate foreign capital and equity (Kucera et al., 2021).

Setting up an optimal capital structure is not easy for an enterprise. In addition, its balance is affected by today's ever-changing hypercompetitive environment. For this reason, a dispute arises between individual economist as to whether there is an optimal capital structure, what combination of equity and debt capital can achieve (Mouandat, 2021), and how companies make capital decisions (Spitsin et al., 2021). Vo (2021) states that the criterion function is to minimize the costs associated with acquiring and tying up foreign capital of a business entity. The theoretical and practical solution to the issue of optimal capital structure is mainly about whether it is possible to change the capital structure to affect the market value of the business entity. However, in financial theory, more approaches and models of capital structure optimization have gradually developed. The ultimate criterion of optimality is considered to be maximizing the market value of the enterprise. Determining the optimal indebtedness and the associated optimal financial structure is a challenging task from the financial management of the enterprise.

According to Gregory (2020), the decision to finance a business using equity, debt, or a combination of these depends on a number of factors. In the past, many studies on corporate finance have summarized the concepts of individual capital structures, and answer questions about the impact of equity and debt combination on a financial performance of the enterprise (Wang et al., 2021), the impact of corporate debt on its overall value (Diantimala et al., 2021), capital costs (Yagi & Takashima, 2012), and others. A number of theoretical and empirical studies have tried to answer all these questions. There are many models of capital structure. Suitable capital models have been under scrutiny for decades. Within the framework of financial theory, several theories and models of capital structure optimization have been developed, which are accepted to varying degrees not only in the academic and professional context, but also in practice.

Research methodology

Nowadays, the interest in bibliometric research is increasing thanks to information and communication technologies, which are necessary for processing large amounts of data and provide the mediums to visualize the results in bibliometric maps (Maniu et al., 2021). The knowledge gained from bibliometric research is gradually becoming part of decision-making processes, helping to identify new trends because the information obtained is helpful for scientists themselves in carrying out their research activities (Merigo et al., 2018).

Bibliometric analysis is a scientific discipline that deals with the quantitative aspects of the creation, dissemination, and use of recorded information. The subject of bibliometric research are publications, i.e., their representations in the form of bibliographic records, from which not only the title of the document, its authors, year of publication, but also the abstract, keywords, subject area, or list of bibliographic references can be ascertained

(Ahmad et al., 2018). Garfield (2006) was the first to describe a citation index for science. For the first time, it was considered to publish in the online collection of basic Web of Science databases, which according to Goksu (2021), is currently considered the best option due to its quality and the ability to filter individual searches using multiple bibliographic parameters. Although the Web of Science is no longer the only database that offers indexation of social science citations and publications, it is still the primary citation database that provides access to the world's leading scientific literature (Singh et al., 2021).

In general, bibliometric analysis is performed in the following methodological steps. In the first step, it is necessary to define the essential criteria, keywords, and time period of the search. Subsequently, a relevant database is selected, which is key to creating input data and modifying the search criteria. Next, it is necessary to export the obtained search results needed for the final step, which is the creation and analysis of the bibliometric map (Hlawiczka et al., 2021).

The term capital structure was a search keyword focused on scientific research papers published in the Web of Science database from 2010 to 2021. The starting year for the bibliometric analysis was 2010, when the number of publications in the Web of Science scientific database tripled compared to 2005, while the year confirms the ever-growing interest in the researched issue of capital structure. Subsequently, research papers published in the scientific database were identified, and the search of the Web of Science database resulted in 7,998 documents. These results have been adjusted according to the criteria established for this research paper, i.e., the reference period 2010-2021. The final search result contained all available information contained 5,974 documents and was exported in "txt" format, which was used to create the bibliometric map in VOS Viewer.

Based on publications, bibliographic references, and citations, it was possible to examine historical developments in the field of capital structure of business entities operating in the market, identifying the most common problems highlighted in the international context related to capital structure, then reveal hidden relationships between authors and debt analysis, and visualize mutual ties.

Research results

The issue of capital structure first appeared in the scientific database in 1942. Scientific publications on the researched topic began to grow in the database in 2005, when the publications initially exceeded 100. In 2010, the number of published scientific papers in the database tripled, and this year was chosen as the starting point for the purposes of this research paper. Figure 1 shows the growth of publications in the literature related to the construct of capital structure. It is clear from the figure that the number of publications in the database stagnated slightly until 2014, but after this year, there was a year-on-year increase in published documents. The year 2021 brought the highest number of research papers in the database, while 709 documents were published on capital structure.

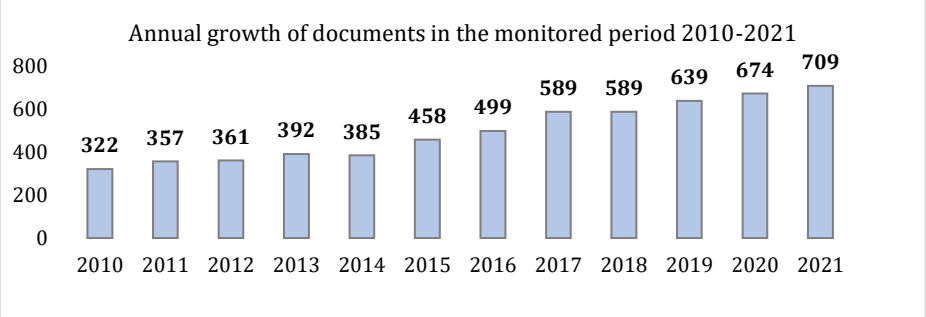

Figure 1. Annual growth of documents in given period 2010-2021
Source: own processing based on data in the scientific database Web of Science

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In the monitored time horizon of 2010-2021, several documents were published in the Web of Science scientific database, and the individual types of which are summarized in Table 1. Scientific articles consisting of scientific studies and completely articles published in scientific journals represent the most significant part (up to 82.81%) of all documents in 2010-2021. Proceedings Papers, i.e., the contributions in the proceedings of realized scientific conferences, of which there were 736, represented 12.32% of all documents related to the issue of capital structure. The followings are Book Chapters including a monograph or publication written on a specific topic within a major division in a book. Book Reviews, Corrections containing bug fixes found in published documents, and Data Papers including a scholarly publication describing a particular dataset or collection of datasets, are the least frequent types of documents, which were merged into one category of others consisting of 29 publications, representing 0.49% of all documents related to the capital structure issue and named Others.

Table 1. Types of documents in given period 2010-2021

Document type	Frequency	Percent
Article	4,947	82.81
Proceedings Paper	736	12.32
Book Chapters	138	2.31
Review Article	93	1.56
Editorial Materials	31	0.52
Others	29	0.49

Source: own processing based on data in the scientific database Web of Science

Monitoring of the most frequently used keywords in scientific publications related to the issue of capital structure with a minimum occurrence in five publications generated a total of 1401 items in the bibliometric map, which are divided into 14 clusters. A bibliometric map of all keywords related to the issue is included in Figure 2.

1. The first cluster (red), containing 344 items, includes keywords access to finance, capital, capital structure, capital structure theory, corporate performance, cost of equity, financial analysis, financial risk, profitability, venture capital, and so on.
2. The second cluster (green), containing 234 items, includes keywords such as agency costs, bankruptcy, capital allocation, capital structure policy, default prediction, default probability, default risk, discriminant analysis, equity prices, equity volatility, financial distress, optimal capital structure, value premium and so on.
3. The third cluster (blue) consists of 142 items containing keywords such as asymmetry, bankruptcy risk, capital cost, cash flow, debt cost, coverage, discretionary accruals, earnings management, financial leverage, firm leverage, investment efficiency, and operating leverage, and systematic risk, and so on.
4. The fourth cluster (yellowish green) contains 130 items, including agency problem, capital investment, capital market, credit rating, debt capacity, econometric evaluation, external financing, information asymmetry, market value, operating performance, optimal leverage, payment, stock market, and so on.
5. The fifth cluster (purple) consisted of 103 items, including agency cost theory, capital requirements, cost efficiency, debt finance, equity finance, financial dependence, firm efficiency, insolvency risk, market performance, revenue diversification, small and medium-sized enterprise, and so on.
6. The sixth cluster (turquoise) includes 101 items and contains keywords such as business risk, capital structure determinants, corporate leverage, debt issues, financial structure, financing decisions, firm size, pecking order theory, regression model, structure decisions, structure determinants, and trade-off theory, and so on.
7. The seventh cluster (orange) containing 98 items included keywords such as agency theory, board independence, consequences, corporate finances, financial decisions, financial expertise, firm, literature review, managerial discretion, ownership structure, property right, shareholder, and so on.

8. The eighth cluster (brown) contains 75 items, and includes keywords such as capital structure choice, cash flow volatility, corruption, debt policy, dividend payout, internal debt, political risk, propensity score, tax avoidance, taxation, and so on.
9. The ninth cluster (pink) consists of 55 items containing keywords such as debt contracts, derivatives, empirical examination, financial distress risk, financial policy, firm risk, risk management, security issuance, stock options portfolio, and so on.
10. The tenth cluster (light pink) consists of 43 items containing the keywords agency conflicts, analysis, asset tangibility, debt financing, firm age, leasing, listed companies, return on equity, tax rate, variables, and so on.
11. The eleventh cluster (light green), containing 42 items, includes keywords such as asset liquidity, behavioral finance, capital structure puzzle, cash flow sensitivity, firm profitability, growth opportunity, investment decision, liabilities, liquidity risk, overconfidence, short-term debt, Tobin's Q, and so on.
12. The twelfth cluster (light blue), consisting of 17 items, contains keywords such as bond market access, business cycle, credit rating, liquidity constraints, market access, sales, secured debt, and so on.
13. The thirteenth cluster (light yellow), containing 16 items, includes keywords such as bank loans, business groups, debt capital, debt specialization, debt structure, global financial crisis, maturity, private debt, public debt, and so on.
14. The last cluster (light purple) is created by a single item, the keyword low leverage.

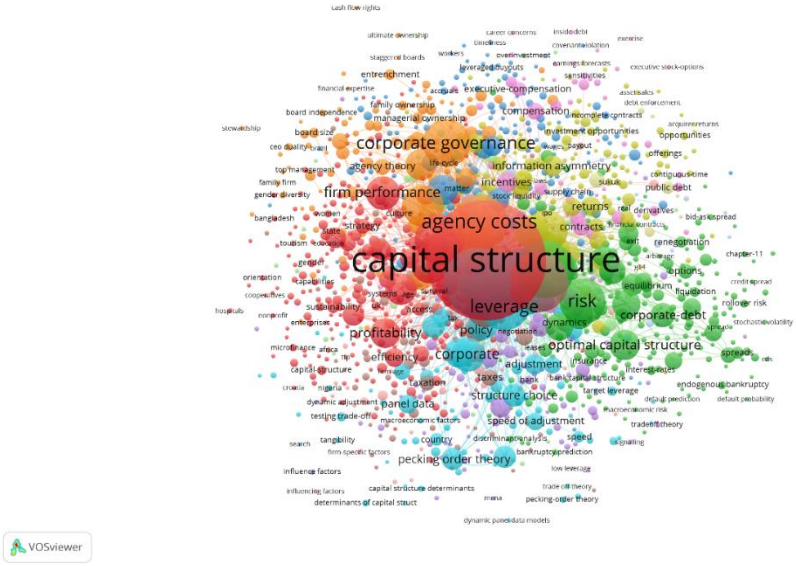

Figure 2. Network visualization of all keywords related to the issue of capital structure
Source: own processing

Several keywords were published in the Web of Science in scientific publications that dealt with the issue of capital structure. Table 2 summarizes the most frequently used keywords in research papers during the period 2010-2021, but the minimum occurrence was set at level 300 due to a large number of keywords.

Table 2. The most frequently used keywords with the minimum occurrence of three hundred times in the monitored period 2010-2021

Keyword	Number of occurrences	Keyword	Number of occurrences
capital structure	4111	information	512
determinants	1354	ownership	505
debt	1022	decision	504
investment	941	finance	454
agency costs	872	firm	417
firms	730	impact	390
performance	712	corporate	333
corporate governance	666	market	329

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leverage	653	firm performance	328
risk	606	growth	301

Source: own processing

In general, items in a bibliometric map are represented not only by an inscription, but also by a circle. The size of the circle depends on the item weight. The higher the item weight, the larger the inscription and the circle. The individual lines between the two keywords indicate the strength of the link between them. From the resulting bibliometric map, which is part of Figure 3, it is clear that the most closely linked keywords are capital structure and determinants and capital structure and debt.

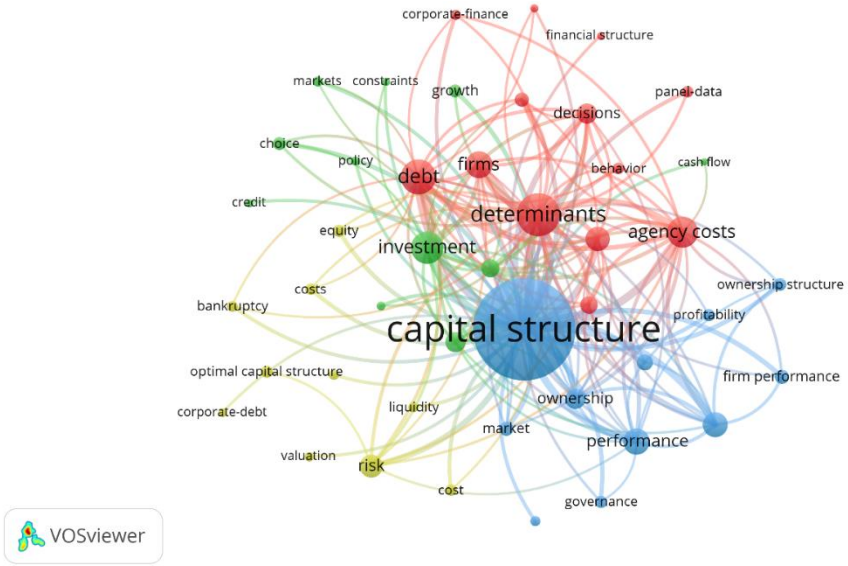

Figure 3. The most frequently used keywords with minimum occurrence of three hundred times in given period 2010-2021

Source: own processing

The capital structure issue is considered attractive worldwide, as evidenced by the analysis of published documents by region of the world (Table 3). The table shows that most articles on capital structure issues were published in the countries of the Americas, with more than half of all research articles published in this part of the world. Approximately 16% of scientific publications were published in the Western European and Asian region. The smallest number of papers (less than 10%) were published in the Central and Eastern European region, the Eastern Mediterranean and the African region.

Table 3. The number of documents by region of the world in given period 2010-2021

Region	Frequency	Percent
Countries of the Americas	3428	57,38
Western European region	965	16,15
Asian region	948	15,87
Central and Eastern European region	398	6,66
Eastern Mediterranean region	130	2,18
African region	105	1,76

Source: own processing

The following created bibliometric map represents a network visualization between 60 countries of international co-authorship. Within the given view, the individual items of the bibliometric map are again represented by an inscription and a circle, while it is true that the more crucial a country is from the point of view of international co-authorship, the larger its label and circle. The individual lines between the two countries indicate the existence of co-authorship between the monitored countries. The created bibliometric map contains 6 clusters and is part of Figure 4.

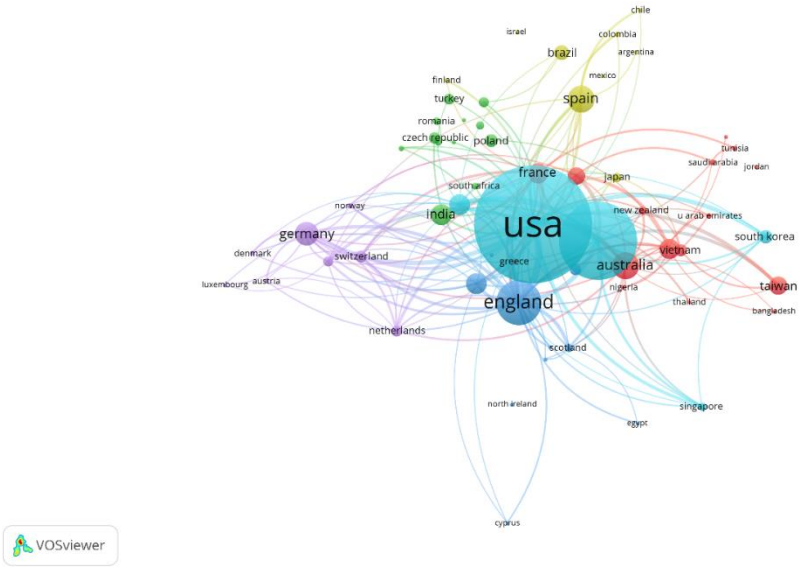

Figure 4. Network visualization of all countries, where the issue of capital structure is addressed in the given period 2010-2021
Source: own processing

It is clear from the bibliometric map that the issue of capital structure is highly topical and has taken over in many countries of the world but the most crucial international co-author relations in the creation of scientific publications arose between the USA and China (5.54%), the USA and England (4.08%), and the USA and Canada (3.55%). The countries most involved in the period under review are summarized in Table 4, and the table points out that the most publications on capital structure issues were published in the USA, accounting for about a quarter of all articles published in the scientific database. Also, the value of the ratio of citations to the number of all documents has the highest US. The value of total link strength (TLS) refers to the number of publications created in collaboration with another country. TLS reached the value of 838 in the USA, thus 838 cooperations were established with the given country. Many publications on the capital structure issue are dominated by China, India, and Malaysia from the Asian region, England, Spain, Germany, and Italy from the European region, Canada from the American region, and Australia is a crucial part.

Table 4. The most frequently dealing countries with capital structure issues in the given period 2010-2021

Country	Number of documents	Percent	C/D	TLS
USA	1530	25.61	23.44	838
China	949	15.89	7.35	477
England	502	8.40	15.55	509
Australia	282	4.72	11.52	223
Spain	276	4.62	8.99	139
Germany	238	3.98	15.38	196
India	207	3.47	5.71	48
Canada	206	3.45	18.64	217
Italy	205	3.43	11.42	143
Malaysia	201	3.36	6.32	117

Note: C/D Number of citations per document (calculated as the ratio of the number of citations of documents in the country to the number of all documents in the country), TLS Total Link Strength
Source: own processing

All documents published in the Web of Science scientific database reached 68,057 citations in 2010-2021, 11.39 per document, while the most cited document reached 824 citations. The three most-cited paper in the field of capital structure can be considered in the research paper "A review of tax research", in which the authors examined four main

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areas of the literature one of which is corporate decision-making, including investment, capital structure, and organizational form (Hanlon & Heitzman, 2010, p. 127), research paper "Stakeholder Theory: The State of the Art", in which the authors review the major uses and adaptations of stakeholder theory across a broad array of disciplines such as business ethics, corporate strategy, finance, accounting, management, and marketing (Parmar et al., 2010, pp. 403), a research paper "Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies", where the authors show that measurable managerial characteristics have significant explanatory power for corporate financing decisions (Malmendier et al., 2011, p. 1687).

Discussion

The issue of capital structure is constantly growing and highly topical, as evidenced by the very occurrence of this keyword in professional publications published in the scientific database Web of Science in the period 2010-2021. In the monitored publications, the keyword capital structure is found in 4,111 articles, which means that approximately 70% of all publications related to capital structure issues contain this keyword. Ruckova and Skulanova (2021) state that the development of the capital structure depends on the conditions of individual enterprises, especially the assets' structure, ownership structure, profitability indicators and many other economic performance indicators. At the same time, it is the result of the operation of the external business environment, determined by the macroeconomic, legislative, and institutional framework conditions. Jimenez-Caballero and Molina (2017) also addressed a bibliometric analysis focused on financial research. The subject of their research paper was scientific publications published in the Scopus database during the period under review from 1995 to 2012.

In the findings, the authors pointed out that the area of corporate finance aroused the keenest interest, and the most researched terms were mainly financial management, value creation, capital structure, and investment decisions. Capital structure is one of the central themes, as de Oliveira et al. (2019), Padilla-Ospina et al. (2018), Motylska-Kuzma (2017), and many others. Yang et al. (2010) declare that enterprises should pay increased attention to whether they have sufficient capital and an adequate capital structure. Determining the optimal capital structure is the starting point for crucial financial decisions of the enterprise itself.

The keyword firm, in addition to its synonyms, firms and corporate, had 1,480 occurrences in the publications, which represent about a quarter of all research papers related to capital structure issues. The capital structure describes a mixture of long-term capital of an enterprise, which consists of a combination of equity and debt.

The keyword debt also appeared in the created bibliometric map. It appeared 1,022 times in scientific publications published in the Web of Science database between 2010 and 2021, ranking third in the total number of occurrences. Within the researched issue, the discussion on debt is less straightforward. The literature often compares an enterprise's debt to its obligations, although these two terms are not synonymous. The debt is an outstanding monetary obligation to other entities that the company must repay within a specific time horizon (Nylund et al., 2020). Enterprises use foreign capital to bridge the period without sufficient equity, as it is essentially cheaper than equity because interest rates can reduce the tax base. The use of foreign capital acts as financial leverage (Stefko et al., 2021), which can increase the return on equity of the enterprise.

The keyword leverage was also one of the most widely used in professional publications on the issue of capital structure, as it appeared 653 times in the research papers in question, placing it in 9th place. Decisions regarding the capital structure are significant for increasing the enterprise value. In general, every business entity in the market should develop a strategy of combining equity and debt that increases enterprise value (Ellili, 2020), affected by its performance.

The keyword performance as well as the synonym firm performance appeared 1040 times in the bibliometric map. Business performance is usually associated with the ability of the enterprise to increase the investment in its business activities (Prokop et al., 2021). However, this definition of performance leads to the erroneous view that only those enterprises that report a profit due to management can be considered efficient. This definition does not include the crucial fact that a business performance is assessed from several perspectives, which fundamentally determine the applied performance evaluation criteria (Tasaryova & Paksiova, 2021). The most important financial decision with a significant impact on a financial performance of the enterprise is choosing the right combination of equity and debt (Valaskova et al., 2021), i.e., to determine the proper capital structure. The capital structure of business entities is not only one of the basic but one of the most important tasks of financial management of business entities.

The bibliometric map concerning the researched issue also pointed to the keyword decision, which appeared in publications 504 times. The decision on the optimal capital structure becomes problematic for enterprises operating in the market. In theory, several model approaches have been developed to address this issue but are not uniform, while a unifying element could be the relationship between the optimal capital structure and maximizing the enterprise value. Although the possibilities of practical application of theoretical approaches and models of optimal financial and capital structure are to some extent limited, their knowledge is crucial because they can be a starting point for practical financial decisions of enterprises (Adu-Ameyaw et al., 2021). Kristofik and Slampiakova (2021) state that decisions in this area must consider many different and often contradictory factors, the importance and strength of which vary from one business entity to another, while changing over time. The keyword determinants in the monitored period 2010-2021 contained approximately a quarter of published scientific articles on the issue of capital structure, as up to 1,354 authors examined the determinants of capital structure in their works. In the results of the bibliometric analysis, this keyword was in second place in the number of total occurrences in published publications. Bibliometric analysis focused on capital structure issues was performed by Kumar et al. (2020), who channeled the research on 262 studies on the capital structure issue of small and medium-sized enterprises. In the research results, the authors pointed out not only the determinants of the capital structure as one of the essential keywords of this issue, but also trade credit, corporate governance, and bankruptcy are also the prominent research topics in this field.

The keyword corporate governance appeared in the results of our bibliometric analysis with 666 occurrences in scientific publications. In addition to theoretical approaches and models and their practical modifications, the financial manager should respect many determinants when deciding on the capital structure of an enterprise. The main task of the financial manager is to choose the forms of capital that are the cheapest and most flexible, while taking into account many factors. According to Dvoulety and Blazkova (2021), the size and stability of the realized profit are one of the most important determinants, while the higher and more stable the expected profits, the more the enterprise can afford to have a higher share of debt in the capital structure. Likewise, Michalkova et al. (2021) pointed out that corporate management affects taxable profit precisely through capital structure. Another essential determinant of the capital structure is the ownership structure, which according to Gurusamy (2021), influences decision-making, if it is concentrated around a group of owners with common ties.

The keyword ownership also appeared in the results of the bibliometric analysis, and this term appeared in the researched scientific publications 505 times. A change in capital structure can significantly change a group's influence on owners (Ashraf et al., 2021). The ownership structure has an undeniable effect on the capital structure, with the results of many studies confirming that this relationship is ambiguous. In most cases, however, the view is that the more concentrated the ownership structure of an enterprise, the greater the willingness and possible tolerance of more debt. The existence of a functioning capital market is essential for an enterprise if it is to diversify its capital structure. In the results of our bibliometric analysis, the keyword market was in eighteenth place with the number

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of occurrences 329 in published research papers related to the issue of capital structure. It is the development of capital market prices that can be considered a factor that influences the financing of corporate needs, either through the issuance of shares or through debt (Goldbach et al., 2021).

The keyword growth has appeared in the results of the analysis 301 times. According to Khoa and Thai (2021), growth opportunities can be considered a possible determinant of capital structure, which is surrounded by uncertainty not only regarding its effect on the firm leverage but how it should be measured optimally. Other determinants of capital structure can be considered firm characteristics such as firm size, assets structure, profitability, volatility, non-debt tax shields, liquidity (Zhu et al., 2021), risk (Dimitrova et al., 2021), cost of capital, stability and cash-flow level, enterprise property structure, dividend policy, rating, inflation rate, requirements of investors, industry affiliation, tax shield and others (Haron et al., 2021).

Conclusion

The issue of capital structure is one of the most discussed issues in the theory of corporate finance, to which modern theory of corporate finance has not yet found a convincing answer. Financial managers should know the theoretical approaches and their practical modifications to the creation of the enterprise capital structure and be able to apply them creatively to the conditions of their own enterprise. At the same time, the main aim in financial decision-making is to choose such a structure, to find such a combination of equity and debt, which is the most reliable for investors, and maximizes the enterprise value. In a market economy, the optimal capital structure is not only one of the crucial areas, but also one of the most complex tasks of financial management.

In deciding on the optimization of the capital structure, the financial manager should, in addition to theoretical approaches and models and their practical modifications, take into account and respect a number of other factors that result from the generalization of empirical capital structure research. The decision on the capital structure cannot be taken suddenly, but it must be part of the long-term financial strategy of the enterprise. Based on the results obtained from the created bibliometric maps, it can be argued that the indebtedness of business entities operating in the market is closely related to the keywords capital structure and determinants and capital structure and debt. The historical development in the given scientific discipline and the subsequent discovery of the links between the keywords was dealt with by a number of authors who mentioned these co-related keywords in their publications. It is obvious that the researched issue was the most widespread in the period under review in the USA because important international co-author relations were established in this country, between the USA and China, the USA and England, and the USA and Canada.

The paper examines and interprets the issue of capital structure in a stylized way using bibliometric analysis and explains the conceptual problems, consequences, and implications for financial management. The theoretical and practical contribution of the paper can be considered not only the most associated keywords and countries exploring the theory of capital structure, but especially the identification of a significant gap in published research by carrying out bibliometric analysis, which focused on capital structure challenges. The issue of capital structure has been the subject of research for decades, and publications are indeed not only accepted in practice to a varying extent, but also in the academic and professional spheres. Given the growing interest in this issue, it was crucial to identify the main gaps and findings in the scientific literature.

Despite the contribution of this paper to the extant literature, the following limitation needs to be highlighted. It would be interesting to examine the relationships between the various keywords related to the issue of the capital structure of enterprises in the longer term than the one which has been established for this research paper, thus allowing for

its greater generalization and applicability. Likewise, the use of only one scientific database can be seen not only as a limitation of the research, but also as a challenge for its subsequent direction.

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