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Research on Corporate Indebtedness Determinants: A Case Study of Visegrad Group Countries

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Abstract: Debt financing is arguably the most important source of external financing for enterprises and has become popular in recent years. Corporate debt is related to the monitoring of corporate indebtedness, which is a necessary part of evaluating the overall financial performance of an enterprise and will occur if an enterprise does not have enough equity. However, rising indebtedness can be a difficult financial situation for enterprises in the form of default and an inability to meet their emerging liabilities. The main aim of this paper is to perform a debt analysis of enterprises operating in the Visegrad Group countries and subsequently examine whether firm size and legal form have a statistically significant impact on selected indebtedness indicators. Firstly, it was necessary to perform a debt analysis using 10 debt ratios. Subsequently, the nonparametric Kruskal–Wallis test was used to perform a more detailed analysis focused on examining statistically significant differences in individual indebtedness ratios based on firm size and legal form. Bonferroni corrections were applied to detect where stochastic dominance occurred. The Kruskal–Wallis test results reveal statistically significant differences in debt ratios in Visegrad Group countries, confirming the impact of firm size and legal form on calculated debt ratios. Recognizing the impact of several determinants on corporate debt is critical because these firm-specific features may be interpreted as proxies for default probability or the volatility of corporate assets, which may simplify the decision-making processes of creditors and stakeholders.

Keywords: indebtedness; indebtedness indicators; firm size; legal form; analysis of variance; Visegrad Group countries

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1. Introduction

Enterprises nowadays are required to analyze their business activities [1] and assess their performance more than ever before [2]. Firms take care of their financial health, know their strengths and weaknesses, can take efficient actions, and thus flexibly adapt to changing conditions. However, only those enterprises that know how to react quickly enough to changes in their environment can survive, be successful, and increase their performance [3,4]. To determine the strengths and weaknesses of a firm and choose the best financial management approach, it is essential to evaluate its corporate business performance and financial health. Based on the prosperity of the enterprise, i.e., its functioning, it is possible to predict whether the business entity will be able to continue its business in the future [5]. One of the most widely used methods focused on assessing business activity and predicting bankruptcy is the analysis of financial ratio indicators. Unfavorable trends, such as declining liquidity, declining profitability, or rising costs, are signals of a loss of financial stability [6]. Therefore, a business entity must analyze its financial and economic activities to identify those that are adversely affected by internal and external factors. On the contrary, the term financial instability is used to indicate the susceptibility of the financial aspect of an enterprise to large-scale financial crises [7].

Indebtedness is one of the essential aspects that might impact corporate performance. Every enterprise operating in the market maintains an appropriate capital structure to enhance performance [8] and reduce its financial costs. A firm must monitor its capital structure, which testifies to the appropriate and effective combination of equity and debt financing. According to Durana et al. [9], every firm operating in the market must make the correct decision in choosing the appropriate capital structure, which is required for its specified corporate goals. In general, debt financing is a form of external financing used by enterprises [10]. Debt financing has increased significantly in recent years, indicating the economic expansion of enterprises, and the issue of indebtedness is related to this financial source. In general, merely using equity to finance corporate assets reduces a firm's total profitability. On the contrary, external financing of all corporate assets is related to difficulties in obtaining them [11]. Debt analysis is concerned with identifying the appropriate combination of equity and debt. It is not possible to state which financial source is suitable for an enterprise to finance its specific business activities. Many financial management professionals have dealt with this issue and developed several theories about capital structure difficulties. In recent years, the existence of a unique combination of equity and debt financing has been a frequent topic of discussion in the literature.

Monitoring the performance of a debt-financed firm must be controlled not only by start-ups but also by substantially more experienced enterprises. According to Gaspareniene [12], many firms prefer debt as start-up capital to start or maintain their specific business activities. A high proportion of debt increases the corporate indebtedness, thus creating uncertainty for both the enterprise's creditors and its owners. There are numerous reasons why a company would prefer to finance its business activities with debt rather than equity, and vice versa. Generally, the firm size, its legal form, the amount of profit, the industry in which the enterprise operates, as well as the macroeconomic environment, the regulatory framework of the firm, and the credit policy all have a significant impact on the choice of financing form.

The main aim of this paper is to implement 10 crucial indebtedness indicators and appropriate quantitative methods to analyze the indebtedness of enterprises operating in the Visegrad Group countries in the period of 2016–2021; however, the monitored period was not divided into periods before and after the COVID-19 pandemic, but the object of monitoring was the situation in the preceding 6-year horizon and to examine whether there are statistically significant differences in the level of corporate debt due to a firm's size and its legal form. Monitoring statistically significant differences is realized using the Kruskal–Wallis test, in which the null hypothesis tests whether the medians of each group of enterprises are the same, i.e., whether there are statistically significant differences between the calculated debt ratios relating to the firm size and legal form, which are the most important firm-specific features in terms of corporate indebtedness, as proved in previously published studies worldwide (e.g., [13–19]). The originality of the study is the demonstration of the corporate indebtedness on a sample of 12,816 enterprises from all economic sectors, which makes the research pioneering in the Central European environment in terms of the dataset robustness and the number of indicators analyzed. The paper is divided into the following sections: The theoretical background contains a literature review, which covers the most relevant and up-to-date research in the field. The methodology section determines the sample of analyzed firms as well as the methodological research steps required for debt analysis implementation, with a focus on the existence of statistically significant differences in debt indicators due to firm size and legal form. The results and discussion section presents the results obtained by the previous calculation of selected debt indicators and their subsequent statistical verification. These findings are discussed and argued in the context of other international studies. The conclusion section underlines the most significant research outputs, along with their limitations and further research challenges.

2. Literature Review

The constant competition and rivalry between market enterprises have increased dramatically in recent decades. Many firms fail this rivalry, and the only ones that succeed are those that are effectively managed [20,21]. Freeman et al. [22] state that the current development in advanced economies indicates that the success of business management is connected precisely with increasing firms' performance. Corporate performance is a phenomenon that determines the results of a firm [23], thereby influencing the position of the enterprise in the market [24]. On the most general level, the performance of a firm can be described as the essence of the existence of the enterprise in the market environment, the success of the company, and its ability to survive in the future [25,26]. Zhou et al. [27] understand performance as the ability of a firm to evaluate the investments made in its business activities to the greatest extent possible. According to Valaskova et al. [28], corporate performance is a measure of the use of a firm's competitive advantage. Although business performance is a commonly used concept, its exact definition is debatable. Approaches to performance measurement are constantly evolving. Because financial results primarily offer a retroactive perspective [29] and reveal less about a firm's prospects [30], many authors point out that evaluating a firm based only on profit or sales is not sufficient [31]. The traditional accounting point of view has begun to be abandoned, and accounting is no longer considered the only basis for performance measurement [32]. Performance indicators answer the question of what measures need to be taken to increase corporate performance [33]. Even though there are many other performance indicators, financial indicators are the ones most frequently used to monitor and assess corporate performance.

A firm needs to know information about its performance [34] because it directly determines the firm's financial health. The financial health of an enterprise is a fundamental attribute of its successful functioning [35], which is determined through financial analysis [36], which deals with different methods and offers various procedures for determining the financial health of the firm [37]. Financial ratios are the primary tool for determining financial health [38] and include debt indicators [39]. According to Kucera et al. [40], debt ratios measure the ratio of internal and external sources of financing in an enterprise. This information is crucial for a firm because it expresses how much of its business activities are financed by its own resources and how much by foreign ones [41]. Numerous authors [42–44] have defined corporate indebtedness as a state where the enterprise acquires debt for financing overall business activities. As a result, in addition to determining the total amount of required capital, one of the fundamental problems of corporate financial management is determining the appropriate composition of sources of financing for a firm's activity [45]. The essence of debt analysis is the search for the optimal relationship between equity and debt financing. According to Pacheco and Tavares [46], finding the appropriate equity-to-debt ratio and, concurrently, figuring out how much total debt financing is required to support business activities can be problematic. Generally, the golden rule recommends that the ratio of equity to debt should be 1:1 [47]. On the contrary, other authors [48–50] support the theory that it would be more advantageous for a firm if it had a higher share of foreign resources. Indebtedness does not always have to be a negative factor for a company [51], as it can lead to growth not only in profitability [52] but also in the market value of the firm [53]. However, indebtedness is associated with a greater possibility of financial difficulties [54], debts [55], obtaining a loan from a bank [56], and poor currency on the market [57], which can cause customers and suppliers to mistrust the company. The higher the corporate indebtedness, the higher the risk in business [58]. The terminology of financial risk refers to businesses, financial markets, and individuals and represents the danger or possibility that shareholders, investors, or other interested parties will lose money [59]. Only a few enterprises operating in the market are entirely self-sufficient. On the contrary, many companies finance their business activities with foreign sources of financing. Mauer et al. [60] point out that if an enterprise achieves a long-term loss, a negative equity situation may arise. Debt indicators are used to examine the level of corporate indebtedness [61], debt coverage [62], and total corporate debt [63]. The total

indebtedness ratio, which indicates the amount of debt held by a firm and measures how much of its assets are covered by debt [64], is one of the most significant debt indicators [65]. The higher this indicator is, the higher the financial risk associated with the company [66]. In general, firms utilize this indicator as a tool for expansion and choosing sustainable types of borrowing. According to Serrasqueiro and Caetano [67], 30% of the monitored indicator is considered low indebtedness, while a value higher than 70% is characterized as risky indebtedness for the company.

The optimal setting of the capital structure is a rather complex problem that requires great attention in financial decision-making. The ratio between equity and debt financing depends primarily on the industry in which the enterprise operates [68], the structure of the assets of the company [69], the interest rate of banks [70], and many other factors. As long as the interest rate is lower than the profit of the enterprise itself, using debt often increases the profitability of equity capital [71]. Debt-related actions can be classified as financial leverage. The higher the financial leverage indicator, the more the firm is financed with debt [72]. The financial leverage indicator is based on the idea that using debt to fund business activities enhances the relative profitability of equity [73], while also assuming that debt financing is less expensive than equity financing [74]. At the same time, however, the use of foreign capital also increases the riskiness of a firm.

Corporate indebtedness is influenced by various determinants that affect the composition of corporate capital in different ways [75], e.g., prioritizing the financing of business activities primarily through debt. Many authors claim in their studies that one of the most important determinants that significantly affects the level of corporate debt is the firm's size. Smaller firms have a lower proportion of foreign resources than large enterprises, which is also reflected in their lower level of indebtedness [76]. Many authors [77,78] point to the legal form of the company as a crucial determinant influencing its decision on the choice of financing form. Even Cole [79] highlights significant differences in the indebtedness of enterprises due to the influence of their chosen legal form. The level and volatility of corporate profits [80], the costs of financial difficulties [81], the effect of inflation [82], the effort to maintain ownership control over the company [83], dividend policy [84], requirements for the financial flexibility of the company [85], and the method and intensity of taxation [86] significantly affect corporate indebtedness. According to Lei et al. [87], the financial market situation has a significant impact on the financial decision-making of a business entity. Moon and Phillips [88] also mention the affiliation of an enterprise to the industry as one of the factors affecting the level of corporate indebtedness.

However, the existing literature has not been able to reach a consensus on the main determinants of capital structure due to internal differences between countries, industries, and individual specifics of the firms themselves. The interaction of several factors affects how each capital component is represented in a capital structure. In the international literature, there are definitions of several factors that influence corporate capital structures. Although there are several theoretical models, there is no comprehensive method for creating an appropriate capital structure. There is no solution in the form of a general algorithm into which it would be sufficient to insert values and thus calculate the actual optimal capital structure of an enterprise. The ability of a financial manager to appropriately identify the factors that determine indebtedness in the context of corporate features, which have a significant impact on how much indebtedness is perceived generally, is one of the many skills and knowledge resources that are necessary for a solution to be successful.

3. Materials and Methods

The main aim of this research paper is to implement 10 crucial indebtedness indicators and appropriate quantitative methods to analyze the indebtedness of enterprises operating in the Visegrad Group countries in the period of 2016–2021, and to examine whether there are any statistically significant differences in corporate debt due to firm size and legal form.

Applying financial parameters from the ORBIS database, which is regarded as a source of business and financial data on more than 400 million private and public firms operating

globally, was necessary for a comprehensive debt analysis. The database, which formed the basis for the debt analysis, contains financial data on 100,057 enterprises operating in Visegrad Group countries for the monitored period of 2016–2021. The data from the database had to be appropriately adjusted because not all firms were suitable for the calculation of the debt indicators. Enterprises that did not provide all the required input data for the debt analysis throughout the monitored period were eliminated. Outlying values were removed from the dataset to reduce the informativeness of the obtained results of the calculated debt analysis. The final dataset contains financial data about 12,816 enterprises (6048 Slovak enterprises, 1626 Czech enterprises, 3851 Polish enterprises, and 1291 Hungarian enterprises), whose elementary identification data, such as firm size, legal form, ownership structure, firm age, and economic sector, are summarized in Table 1. However, we focused on purposive sampling when building the dataset of enterprises, which is the intentional selection of information based on its ability to elucidate a specific theme, concept, or phenomenon. Each economy has some specific features, different legislative restrictions, and thus building the dataset with the same number of enterprises should cause some imperfections in the calculations.

The final data contain the final dataset necessary for the debt analysis of enterprises operating in the Visegrad Group countries. According to the conditions set out in the ORBIS database to determine the firm size characteristics, a very large enterprise is defined as one that meets at least one of the following conditions: operating revenue $\geq$EUR 100 million, total assets $\geq$EUR 200 million, and employees $\geq$1000. A large enterprise is regarded as one with an operating revenue $\geq$EUR 10 million, total assets $\geq$EUR 20 million, and employees $\geq$150. A medium-sized enterprise is one that meets at least one of the following criteria: operating revenue $\geq$EUR 1 million, total assets $\geq$EUR 2 million, and employees $\geq$15. Enterprises that do not fulfill these criteria are considered small enterprises. The final dataset contains the most enterprises operating in the medium-sized enterprise category. On the contrary, with the exception of Hungary, where small enterprises are underrepresented, very large enterprises are the category that is least represented.

The ORBIS database determines the following legal form categories. Partnerships, private limited companies, public limited companies, and other legal forms are the four ownership structures used by enterprises operating in the Visegrad Group countries. A private limited company has been legally incorporated into supplementary legal identities. The shareholders of this legal form have limited liability for any debts incurred by the enterprise [89]. Within the Visegrad Group countries, enterprises with the legal form of a private limited company comprise the most numerous category. A public limited company, which is often confused with a private limited company, differs in the possible sale of the shares of the enterprise to the general public. The firm may benefit from this approach in terms of fund raising [90]. Partnerships are another legal form formed by a few individuals involved not just in the ownership and decision-making of the business but also in its earnings. Each individual may contribute a distinct specialization to the firm to increase the ability of the enterprise to operate in the market [91]. The least represented category comprised enterprises operating under other legal forms, which include, for example, branches or solo traders.

The ORBIS database also provides information about the number of years on the market. It is evident that enterprises operating the longest in the market have the least share (more than 50 years). In Slovakia, firms that have been active on the market for 10–20 years dominate, while in the Czech Republic, Poland, and Hungary, companies operating on the market for 20–30 years can be considered the most represented group. These enterprises are sufficiently stable and will provide the research with ideal data because they predominate and have been in the market for more than 10 years.

Table 1. Firm-specific features of the sample.

COUNTRY	SK	CZ	PL	HU
FIRM SIZE				
Small enterprise	35.35%	9.84%	11.94%	4.18%
Medium-sized enterprise	54.20%	48.52%	54.53%	48.26%
Large enterprise	8.83%	31.86%	27.14%	38.03%
Very large enterprise	1.62%	9.78%	6.39%	9.53%
LEGAL FORM AND OWNERSHIP STRUCTURE				
Private limited companies	87.53%	64.15%	66.89%	97.29%
Public limited companies	8.50%	29.95%	12.57%	0.54%
Partnerships	3.90%	5.41%	19.27%	2.09%
Other legal form	0.07%	0.49%	1.27%	0.08%
FIRM AGE				
<10	6.33%	2.77%	5.76%	2.56%
10–20	49.97%	27.12%	31.32%	22.08%
20–30	35.83%	47.11%	38.17%	42.68%
30–40	5.87%	19.50%	16.83%	29.12%
40–50	1.36%	2.64%	1.97%	0.70%
50–60	0.23%	0.55%	0.70%	0.62%
>60	0.41%	0.31%	5.25%	2.25%
ECONOMIC SECTOR (NACE CLASSIFICATION)				
A. Agriculture, forestry, and fishing	8.52%	10.95%	3.30%	6.51%
B. Mining and quarrying	0.26%	0.37%	0.57%	0.46%
C. Manufacturing	21.35%	34.87%	30.59%	33.85%
D. Electricity, gas, steam, and air conditioning supply	1.62%	2.58%	2.86%	1.01%
E. Water supply; sewerage, waste management, etc.	1.12%	1.85%	5.66%	1.55%
F. Construction	9.16%	7.75%	6.83%	4.18%
G. Wholesale and retail trade, repair of motor vehicles/motorcycles	26.55%	20.73%	27.68%	28.35%
H. Transportation and storage	8.93%	5.72%	5.22%	7.75%
I. Accommodation and food service activities	2.05%	0.37%	1.56%	1.32%
J. Information and communication	2.33%	2.64%	2.41%	2.79%
K. Financial and insurance activities	0.15%	0.06%	0.68%	0.70%
L. Real estate activities	4.79%	3.51%	4.44%	4.03%
M. Professional, scientific, and service activities	6.70%	4.92%	2.70%	3.02%
N. Administrative and support service activities	3.94%	1.48%	1.79%	2.79%
O. Public administration and defense; compulsory social security	0.03%	0.00%	0.10%	0.08%
P. Education	0.13%	0.25%	0.47%	0.08%
Q. Human health and social work activities	1.42%	1.35%	2.52%	0.46%
R. Arts, entertainment, and recreation	0.51%	0.25%	0.39%	0.62%
S. Other service activities	0.43%	0.37%	0.23%	0.46%
Total	100%	100%	100%	100%

Source: own elaboration.

Economic activities in the European Union are categorized according to the statistical classification of economic activities in the European Community, abbreviated as the NACE classification. In economic statistics, NACE is a four-digit classification that provides the basis for collecting and presenting a comprehensive range of statistical data by economic activity. In Slovakia, most enterprises operate in the category G—Wholesale and retail trade; repair of motor vehicles and motorcycles. This category took first place because the Slovak Republic is known for its automobile manufacturing. Vehicles' subsequent sale and the provision of service regarding them are closely related to the production of cars. When the other countries of the Visegrad Group became independent, they immediately established themselves as world leaders in the manufacturing industry, and category C—Manufacturing can be considered an important economic sector. Today, manufacturing

is still paramount in these countries. On the contrary, the fewest enterprises in the sample operate in category O—Public administration and defense; compulsory social security.

Financial data (in thousands of euros) was the basis for the calculation of debt indicators, and Table 2 summarizes their descriptive statistics, such as average, median, standard deviation, minimum, maximum, and coefficient of variation. Then, the descriptive statistics were calculated also for the analyzed debt ratios (See Appendix A (Table A1)).

Table 2. Descriptive statistics of the input data of analyzed indebtedness ratios (6-year average values).

Slovakia						
	avg.*	**med.***	**std. dev.***	**min.***	**max.***	**CV**
TOAS	6129.746	1210.142	57,011.987	213.984	3642,422.167	9.301
SHFD	2366.946	378.857	25,916.224	−19,016.362	1672,280.000	10.949
NCLI	1345.800	123.966	24,524.139	−7.768	1761,986.667	18.223
CULI	2181.142	504.095	11,287.856	−1.857	4739,759.978	5.175
EBIT	281.158	60.455	2533.427	−10,576.746	109,545.167	9.011
EAT	187.210	35.358	1922.727	−12,091.127	85,627.500	10.270
DEPR	332.524	69.501	2374.216	−646.840	104,690.800	7.140
INTE	35.164	8.697	161.885	−0.147	4909.221	4.604
Czech Republic						
	avg.*	**med.***	**std. dev.***	**min.***	**max.***	**CV**
TOAS	54,198.223	5135.853	759,814.853	225.441	29,558,304.549	14.019
SHFD	23,949.339	2577.397	258,671.160	−760.939	9103,585.449	10.801
NCLI	12,247.723	476.811	247,499.895	−39.226	9776,086.027	20.208
CULI	17,715.833	1344.139	268,870.449	5.762	10,678.633.074	15.177
EBIT	2878.458	304.979	23,992.221	−7006.405	748,223.756	8.335
EAT	2149.851	215.809	16,363.877	−9223.372	471,897.990	7.612
DEPR	2652.034	239.580	38,793.916	−460.980	1510,900.849	14.628
INTE	407.696	27.279	6661.265	−65.484	258,412.724	16.339
Poland						
	avg.*	**med.***	**std. dev.***	**min.***	**max.***	**CV**
TOAS	52,958.004	3978.320	547,171.953	222.773	17,579,560.910	10.332
SHFD	25,905.117	1770.963	297,996.581	−2071.823	10,327,818.630	11.503
NCLI	11,441.559	434.297	125,559.655	0.000	4321,778.872	10.974
CULI	15,138.325	1285.880	128,725.460	3.082	4578,111.404	8.503
EBIT	3582.865	262.775	43,858.707	−38,664.627	1824,420.907	12.241
EAT	2375.954	191.630	29,728.460	−38,049.552	1374,400.283	12.512
DEPR	2777.178	145.436	33,560.171	0.370	1224,737.435	12.084
INTE	387.295	26.815	3706.194	0.346	9223.372	9.569
Hungary						
	avg.*	**med.***	**std. dev.***	**min.***	**max.***	**CV**
TOAS	42,920.582	7092.801	440,821.116	237.772	14,914,156.420	10.271
SHFD	19,173.080	3045.824	209,067.473	−291.472	7020,953.808	10.904
NCLI	8002.876	644.849	107,841.423	0.000	3679,378.276	13.475
CULI	15,231.793	2410.578	126,839.520	29.245	4213,824.340	8.327
EBIT	2944.493	412.433	30,684.805	−6183.597	1001,354.873	10.421
EAT	2513.098	343.619	25,094.547	−9043.023	804,419.511	9.986
DEPR	2611.767	257.375	36,882.179	0.951	1254,015.175	14.122
INTE	269.273	28.724	3466.578	0.350	108,262.333	12.874

Note: TOAS—Total Assets, OCAS—Other Current Assets, DEBT—Debtors, NCLI—Non-Current Liabilities, CULI—Current Liabilities, EBIT—Earnings before Interest and Taxes, SHFD—Shareholders Funds, INTE—Interest Paid; * values are given in thousands of euros. Source: own elaboration.

A comprehensive analysis focused on the indebtedness of enterprises operating in the Visegrad Group countries in the monitored period was carried out using 10 debt indicators. Table 3 summarizes the formulas needed for the following calculation.

Several methodological steps were used to perform the financial analysis concerning the indebtedness of enterprises and to verify the determined hypotheses: whether there are statistically significant differences between the calculated debt ratios relating to the firm size/legal form of enterprises. Then, some research questions arose: (i) Which debt ratios are significantly different when considering individual levels of firm size? (ii) Which debt ratios are significantly different when considering specific types of legal forms?

Firstly, it was necessary to calculate the individual monitored debt indicators separately for enterprises operating in the Visegrad Group countries in the monitored time horizon set from 2016 to 2021. The debt indicators were chosen following other relevant international studies focusing on the same research issue [92–96].

Table 3. Summarized formulas of indebtedness indicators.

Ratio	Algorithm
Total indebtedness ratio (TI)	Current and non-current liabilities to total assets
Self-financing ratio (SF)	Shareholder funds to total assets
Current indebtedness ratio (CI)	Current liabilities to total assets
Non-current indebtedness ratio (NCI)	Non-current liabilities to total assets
Debt-to-equity ratio (DE)	Current and non-current liabilities to shareholders funds
Interest coverage ratio (IC)	Earnings before interest and taxes to interests paid
Interest burden ratio (IB)	Interests paid to earnings before interest and taxes
Debt-to-cash flow ratio (DCF)	Current and non-current liabilities to cash-flow
Equity leverage ratio (EL)	Total assets to shareholders funds
Financial independence ratio (FI)	Shareholder funds to current and non-current liabilities

Source: Valaskova et al. [96].

Next, normality tests were used to determine if a dataset was well-modelled by a normal distribution. A statistical test of normality is helpful because it can be difficult to determine whether any deviation from linearity is systematic or is only the result of sample variation [97]. The null hypothesis is that the sample comes from a normal distribution, and the alternative is that the sample is from a non-normal distribution. The original sample-size restriction for the Shapiro and Wilk [98] test was 50. Using either skewness, kurtosis, or both to detect departures from normality, this test was the first to be able to identify them. Due to its strong power characteristics, it has become the preferred test [99]. The Shapiro–Wilk test is a test of the composite hypothesis that the data are independent, identically distributed, and normal given a sample $X_1,\ X_2,\ \ldots, X_n$ of n real-valued observations, i.e., $N\left(\mu, \sigma^2\right)$ for some unknown real μ and some $\sigma > 0$. Kurtosis and sample skewness are both one-dimensional variables. Whereas, if the data $X_1, X_2, \ldots,\ X_n$ are arranged in order, it is unlikely to lose any information to get the order statistics $X_{(1)} \leq X_{(2)} \leq \cdots \leq X_{(n)}$ [100]. To determine if the order statistics of X_j are well associated with expected standard normative order statistics, it is necessary to take into account the expectations of Z_j and the correlation of $X_{(1)},\ X_{(2)}, \ldots,\ X_{(n)}$. Whereas a correlation substantially less than 1 would indicate non-normality, a correlation close to 1 would indicate a significant fit to normality. If a constant is added to all the X_j, it is then added to their order statistics, as well as to $\overline{X}$, leaving $X_{(j)} - \overline{X}$ and s_x unchanged [101]. The ratios $\frac{\left(X_{(j)} - \overline{X}\right)}{s_x}$ and the correlation will remain unchanged if all X_j are multiplied by a positive constant. Therefore, the correlation will have the same distribution regardless of the location μ or scale σ of the X_j if the X_j are independent, identically distributed, and normal. There are several symmetry properties in the $Z_{(j)}$ and their expectations m_j. The Shapiro–Francia statistic [102] is a test statistic for normality that employs the squared correlation of $X_{(j)}$ with m_j, whereas the more well-known Shapiro–Wilk statistic uses both

the means and covariances of the normal order statistics $Z_{(j)}$. Given an ordered random sample, the original Shapiro–Wilk test statistic is defined by

$$W = \frac{\sum_{j=1}^{n} a_j X_{(j)}{}^2}{\sum_{j=1}^{n} \left(X_j - \overline{X}\right)^2} \tag{1}$$

as in the paper of Shapiro and Wilk [98]. The value of W lies between zero and one. A value of one indicates that the data are normally distributed, but small values of W lead to the rejection of normality [99]. There are also many other commonly used normality tests, such as the Anderson–Darling test [103], Cramer–von Mises test [104], and Kolmogorov–Smirnov test [105,106]. While the Anderson–Darling and Cramer–von Mises tests are based on a weighted integral of the squared difference, the Kolmogorov–Smirnov test statistic is the maximum absolute difference between the cumulative distribution function and normal cumulative distribution function. The normality test p-values are frequently included in the statistical software output, and a small p-value is interpreted as evidence that the sample is not from a normal distribution. Generally, because many statistical methods (such as t-tests and analysis of variance) assume that variables are normally distributed, this test of a parametric hypothesis is related to nonparametric statistics. If they are not, nonparametric methods might be needed.

To determine if there are statistically significant differences between two or more groups of an independent variable, the Kruskal–Wallis test, a rank-based nonparametric test, was used. The Kruskal–Wallis test is named after Kruskal and Wallis, who jointly developed it in 1952 [107]. When the assumptions for one-way ANOVA are not fulfilled, the nonparametric Kruskal–Wallis test is used. In ANOVA, a normal distribution of each group with approximately equal variance in the scores is assumed. The Kruskal–Wallis test is a nonparametric method for comparing k independent samples [108] and is used as a test of equality of medians or even means [109]. If a random sample of size N comes from a large population consisting of $k \geq 2$ disjoint groups or categories, which are adequately represented in the sample, it is necessary compare the k groups of sizes $n_1, n_2, \ldots, n_k$ with $\sum_{i=1}^{k} n_i = N$, in accordance with a continuous response variable Y [110]. The Kruskal–Wallis test is performed by ranking all the observations individually and comparing the sum of the ranks for each group when the precise category assignment is specified. If r_j is the rank of Y in the entire sample, and $Z_{ij} = 1$ is specified as an indicator variable, the Kruskal-Wallis test statistic is

$$H = \frac{12}{N(N+1)} \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(N+1) \tag{2}$$

where $n_i = \sum_{j=1}^{N} Z_{ij}$ and $R_i = \sum_{j=1}^{N} Z_{ij} r_j$ [95]. The Kruskal-Wallis test statistic for the total number of observations throughout all samples approximately follows a chi-square distribution and has $k-1$ degrees of freedom, where n_i should be greater than 5 [96]. In general, a small p-value assumes that some among the k samples' medians are different, if $H \geq \chi^2_{\alpha}$, where χ^2_{α}, with $k-1$ degrees of freedom is the tabled value derived from the chi-square table for a given α. However, the Kruskal–Wallis test result shows if there are differences among the medians of some of the k groups, but it does not show which groups are different from other groups.

The Bonferroni adjustment can be used to identify the groups that differ from each other. Due to its simplicity, the Bonferroni method is the most popular method for adjusting for multiplicity. The method originally put forth by Neyman and Pearson [111] to aid decisions in studies involving repetitive sampling provided the basis for the Bonferroni adjustment, named after the Italian statistician Carlo Bonferroni. However, the method is often applied in research papers to adjust probability values when performing many statistical tests in any context, and this application is primarily associated with Dunn [112]. It has grown in popularity and is frequently applied in various experimental contexts, such

as contrasting disparate groups at baseline, evaluating the relationship between variables, and assessing several endpoints in clinical trials [113]. The Bonferroni correction was developed to solve the problem that as the number of tests increases, so does the likelihood of a type I error, assuming the existence of a significant difference when one is not extant. Generally, the error rate is

$$\alpha' = \frac{1 - (1 - \alpha)}{T} \tag{3}$$

where α is the critical value and T is the total number of tests conducted. As an approximation to the previous calculation, the $\frac{\alpha}{T}$ adjusted significance level is applied in practice [114]. As a result, to maintain a level across all tests at 0.05, the Bonferroni adjustment is applied to the probability values related to each individual test.

4. Results and Discussion

Indebtedness indicators monitor the extent of use of owned and foreign resources. In general, the share of equity and debt financing primarily affects the financial stability of a firm. While a high proportion of equity makes the company stable and independent, with a low share the firm is, on the contrary, unstable. However, more debt may not necessarily be a negative characteristic for a firm; it can enhance overall profitability and, in turn, the firm's market value. At the same time, it raises the danger of financial instability. In a consolidated market environment, equity is more expensive compared to debt. The connection between the indebtedness and liquidity of a firm is also crucial because as debt levels rise, so does the amount that has to be repaid. The firm must generate sufficient profit to be able to continue to finance its operation and development, as well as to repay its debts, including interest.

Generally, several debt indicators can be used to assess corporate indebtedness, but the following ratios have been selected to meet the objective of this paper: total indebtedness ratio, self-financing ratio, current indebtedness ratio, non-current indebtedness ratio, debt-to-equity ratio, interest coverage ratio, interest burden ratio, debt-to-cash flow ratio, equity leverage ratio, and financial independence ratio. Table 4 summarizes the average value of various indicators for enterprises operating in individual countries of the Visegrad Group over the monitored time horizon of 6 years.

Table 4. 6-year average values of indebtedness indicators for enterprises operating in the Visegrad Group countries.

Ratio	SK	CZ	PL	HU
Total indebtedness ratio	0.623	0.496	0.516	0.533
Self-financing ratio	0.367	0.504	0.474	0.466
Current indebtedness ratio	0.469	0.649	0.371	0.403
Non-current indebtedness ratio	0.154	0.159	0.145	0.130
Debt-to-equity ratio	2.546	1.318	1.432	1.460
Interest coverage ratio	14.351	24.659	21.103	27.159
Interest burden ratio	0.126	0.107	0.109	0.087
Debt-to-cash flow ratio	7.331	5.930	6.226	6.201
Equity leverage ratio	3.853	2.402	2.618	2.602
Financial independence ratio	0.829	1.436	1.247	1.114

Source: own elaboration.

The *total indebtedness ratio* is fundamental in determining the financial risk of an enterprise and is one of the groups of debt or leverage ratios included in financial ratio analysis. Generally, a certain level of indebtedness is necessary for a firm, while according to Ayaz et al. [115], it is more than required for them to guard the upper limit of the share of debts in the total capital. The indicator in the case of enterprises operating in Slovakia, reached an average value of 0.623, which means that EUR 0.632 of total debt correspond to EUR 1 of total assets. In the context of firms operating in Slovakia, many authors have dealt with the monitoring of total indebtedness [116,117]. Virglerova et al. [118] state

that the growth of the total indebtedness indicator is associated with an increased risk of corporate insolvency. In the conditions of the Czech Republic, the average value of the total indebtedness ratio in the monitored period was 49.6%. According to Topyan [119], a ratio less than 0.5 shows that equity covers a significant percentage of an asset of the enterprise, which provides more flexibility for them. In Poland, the average total indebtedness reached 51.6%, which means that every EUR 1 of total assets of Polish enterprises is covered by EUR 0.516 of total liabilities. However, the level of total indebtedness depends primarily on the industry in which the firm operates because some sectors can use more debt financing than others. The total indebtedness ratio in Hungarian conditions indicates that EUR 1 of total assets is covered by EUR 0.533 of total liabilities. In general, a high risk level combined with a high debt ratio expresses that the enterprise has taken on a significant amount of risk. According to Domokos et al. [120], a firm is considered highly leveraged in Hungary if its debt ratio is over 50%. A high total indebtedness ratio may indicate that the enterprise will have difficulty borrowing money or that it will only be able to borrow money at a higher interest rate compared to a business with a lower ratio [121]. A complementary indicator can be considered the *self-financing ratio*, whose value, according to Mazanec and Bartosova [122], should not fall below the level of 20–30%. If the value of this indicator decreases over time, it indicates that the economic situation of the firm is becoming increasingly tense [123]. In Slovakia, the average value of this indicator reached 36.7%, which can be considered a generally optimal value from the authors' point of view. Under Czech Republic conditions, the self-financing ratio reached an average of 51.6%. Czech enterprises primarily use equity financing to finance their business activities. In the conditions of Poland, the indicator reached an average value of 47.4%, and in Hungary, it reached 46.6%. This ratio generally depicts the proportion of total assets created through the issuance of equity shares compared to debt. Because the total indebtedness ratio and the self-financing ratio are mutually complementary indicators, it is true that if the total indebtedness of the firm decreases, the coefficient of self-financing will increase, and vice versa [124]. The *current indebtedness ratio* and *non-current indebtedness ratio*, whose calculation and evaluation have already been discussed by many authors, should be used to monitor the capital structure if the firm is significantly dependent on debt. During the monitored period, Slovak enterprises were financed with 46.9% short-term debt and 15.4% long-term debt. If the ratio of short-term debt to total assets is particularly high, it may indicate that the enterprise has a liquidity problem [125,126], which lowers its debt rating [127]. In the other countries of the Visegrad Group, firms in the monitored period preferred to finance their business activities primarily through short-term debt, the average level of which was more than double the value of long-term debt. Dangl and Zechner [128] point to the fact that individual business entities operating in the market prefer to finance their activities through short-term debt primarily due to the time frame for its repayment and the interest to be paid for its use. According to Batrancea [129], the *debt-to-equity ratio* may be used to monitor the level to which the firm is indebted. In Slovakia, the debt-to-equity ratio reached a value of 2.546 on average. A debt-to-equity ratio of one is typically seen as relatively safe, whereas values of two or more may be considered risky [130]. It is clear from the calculated results that the average value of the indicator is slightly above the optimal value in the conditions of Slovak enterprise. In general, the debt-to-equity ratio is a measurement of the ability of the enterprise to pay down its debt. In the Czech Republic, EUR 1 of shareholder funds is covered by EUR 1.318 of corporate debt. According to Boshnak [131], a suitable debt-to-equity ratio is around 1 to 1.5, while it is true that the higher the value of corporate debt, the higher the value of the monitored ratio will be. Ghardallou [132] states that in most industries, a value between 0.5 and 1.5 is considered optimal, which kept the firms operating in Poland in the monitored period in the optimal range. Nukala and Rao [133] claim that a value between 0 and 2.5 is ideal, whereas a value higher than that is unfavorable. Under Hungarian conditions, EUR 1 of shareholder funds corresponds to EUR 1.460 of corporate debt. However, because some sectors use more debt financing than others, the appropriate debt-to-equity ratio may differ

by industry. One of the most crucial debt indicators is the *interest coverage ratio* because it reflects how often a firm can cover interest on its debt after paying all expenditures related to its operations [134]. A value of 5 is considered optimal, but, significantly, the value does not fall below 3 [135]. According to Kordsachia [136], a ratio greater than one shows that an enterprise can pay its debts with its earnings. Moreover, a value of 1.5 could be considered sufficient. Firms need to generate more than enough earnings to cover interest payments to survive future, maybe unanticipated, financial difficulties [137]. The indicator reached an average value of 14.351 in Slovakia. In general, the higher the ratio, the lower the chances of default [138], although this may differ significantly depending on the industry in which the firm operates. The ability to pay the interest on debt in the Czech Republic is greater than 24 times in an accounting year because the ratio reached an average value of 24.659 in the monitored period. In Poland, the indicator reached an average value of 21.103, and in Hungary, the value was 27.159, so the ability to pay the interest on debt is more than 27 times greater in an accounting year. The inverted indicator of the interest coverage ratio is the *interest burden ratio*. According to Guariglia et al. [139], the long-term value of the monitored indicator must be lower than 100%, while enterprises operating in Slovakia reach an average value of 12.6%, thus being in the optimal range. According to Sedlacek and Nemec [140], the optimal range is level 1, but in the conditions of the Czech Republic, this indicator reached an average value of 0.107, which means that EUR 1 of EBIT corresponds to EUR 0.107 of interest paid. A high value of the ratio generally indicates that a firm does not use its debt correctly, but in Poland, enterprises reach an average value of 10.9%, which puts them in the recommended range. Even in the conditions of Hungary, the average value of the monitored indicator reached 8.7%. The *debt-to-cash flow ratio* expresses how many years the enterprise would need to pay off its debts [141], and a value between 3 and 4 is considered optimal [142]. From the calculated values, it is clear that it would take Slovak enterprises an average of 7.331 years to pay off their debt if they used all of their generated cash flow to repay it. It would take around six years for business entities operating in the other countries of the Visegrad Group to repay their debt. Monitoring the *equity leverage ratio* is essential for every business entity. When business activities are financed by debt at a level of 75%, a value of 4 is considered optimal [143]. In the case of Slovak firms, the average value of the monitored indicator is 3.853, mainly due to the lower share of equity of the majority of monitored enterprises. It is also clear from the results that EUR 1 of shareholder funds is covered by EUR 2.402 of the total assets of Czech enterprises. Because Polish companies use a combination of equity and debt to finance their business activities, it is also necessary to monitor the equity leverage ratio for these companies, the average value of which is 2.618. According to Tousek et al. [144], the indicator points to the part of assets covered by equity, which is the inverted value of the self-financing coefficient. The higher this indicator is, the higher the share of foreign sources in total financing is [145]. In Hungary, the results indicate that EUR 1 of shareholder funds of a firm is covered by EUR 2.602 of its total assets. Generally, a firm with more equity can be considered stable and independent, which creates a precondition for greater financial independence [146]. Firms must additionally monitor the *financial independence ratio*. This indicator measures the degree of organizational independence concerning third-party resources and monitors the adequacy of corporate indebtedness [147]. From the calculated results, it is clear that per EUR 1 of a firm's total debt, there is EUR 0.829 in Slovakia and EUR 1.439 in Czech shareholder funds. In the case of Polish and Hungarian enterprises, the average value of the calculated indicator was close to 1.2. In general, monitoring this indicator is necessary not only for creditors but also for the shareholders of a firm due to its ability to settle corporate liabilities [148].

The main objective of a more detailed debt analysis of enterprises operating in the Visegrad Group countries was to determine if there were statistically significant differences in the individual indebtedness ratios depending on the firm sizes (small, medium-sized, large, and very large enterprises) and legal forms (private limited enterprise, public limited

enterprise, partnerships, and other legal forms) or whether the individual values of the indicators differ significantly.

Firstly, the normality of the dataset had to be confirmed using the Kolmogorov–Smirnov and Shapiro–Wilk tests, even though the results of the tests rejected the assumption that the data had a normal distribution. The Kruskal–Wallis test was used to determine whether there were statistically significant differences between the calculated ratios relating to firm size and legal form because it does not require a normal distribution of the dataset, unlike an analogous one-way ANOVA, and it is also unstable to outliers. Table 5 summarizes the results of the Kruskal–Wallis test, which examined statistically significant differences in debt ratios concerning firm size. Based on the results, there are statistically significant differences between all indicators of indebtedness in Slovakia, except for the total indebtedness ratio. In the conditions of the Czech Republic and Poland, it can be pointed out that there are differences between all monitored debt ratios. In Hungary, there are statistically significant differences between all indicators of indebtedness except for the non-current indebtedness ratio.

Table 5. The output of the Kruskal–Wallis test concerning firm size.

Slovakia					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	3.045	32.193	21.923	10.726	13.247
Asymp. Sig.	0.385	0.000	0.000	0.013	0.004
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	196.135	29.614	35.95	48.511	17.882
Asymp. Sig.	0.000	0.000	0.000	0.000	0.000
Czech Republic					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	21.548	22.380	100.659	90.198	26.805
Asymp. Sig.	0.000	0.000	0.000	0.000	0.000
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	59.178	15.894	33.975	21.839	33.532
Asymp. Sig.	0.000	0.001	0.000	0.000	0.000
Poland					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal-Wallis H	26.426	42.640	123.447	84.901	32.291
Asymp. Sig.	0.000	0.000	0.000	0.000	0.000
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	95.564	26.722	30.880	51.366	39.911
Asymp. Sig.	0.000	0.000	0.000	0.000	0.000
Hungary					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	39.496	79.267	34.200	1.528	70.722
Asymp. Sig.	0.000	0.000	0.000	0.676	0.000
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	25.359	8.901	13.716	92.063	66.627
Asymp. Sig.	0.000	0.031	0.003	0.000	0.000

Source: own elaboration.

Due to the statistically significant differences between several indebtedness ratios, a post hoc analysis was conducted as the next step. The post hoc analysis results identified which individual debt ratios concerning the firm sizes are the most statistically significant.

The results of the pairwise comparison of size are summarized in the following tables (Tables 6–9). In Slovakia, there are statistically significant differences between small and medium-sized enterprises, specifically between all nine variables that were carefully analyzed, and between small and large enterprises. In the conditions of the Czech Republic, it is possible to point out the existence of statistically significant differences mainly between medium-sized and very large enterprises and also between small and very large enterprises, and in Poland, there are differences mainly between small and medium-sized enterprises, between small and large enterprises, and between small and very large enterprises. According to the pairwise comparison results, there are statistically significant differences in Hungary primarily observed between medium-sized and very large enterprises, medium-sized and large enterprises, and small and very large enterprises.

Table 6. The output of the pairwise comparison of the size of the Slovak enterprises.

Slovakia		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
SF	Large–Small	380.623	84.470	4.506	0.000	0.000
	Large–Very large	−658.415	191.881	−3.431	0.001	0.004
CI	Medium-sized–Small	191.056	48.539	3.936	0.000	0.000
	Small–Medium sized	−215.985	48.539	−4.450	0.000	0.000
NCI	Medium-sized–Small	133.474	48.539	2.750	0.006	0.036
DE	Small–Medium-sized	−148.468	48.539	−3.059	0.002	0.013
IB	Large–Small	304.612	84.470	3.606	0.000	0.002
	Medium sized–Small	230.391	48.539	4.747	0.000	0.000
IC	Small–Medium-sized	−634.840	48.539	−13.079	0.000	0.000
	Small–Large	−685.989	84.470	−8.121	0.000	0.000
	Small–Very large	−989.044	180.375	−5.483	0.000	0.000
DCF	Small–Medium-sized	−200.577	48.539	−4.132	0.000	0.000
	Small–Large	−426.944	84.470	−5.054	0.000	0.000
	Small–Very large	−503.983	180.375	−2.794	0.005	0.031
	Medium-sized–Large	−226.367	81.481	−2.778	0.005	0.033
EL	Very large–Medium-sized	517.448	178.995	2.891	0.004	0.023
	Very large–Large	701.457	191.881	3.656	0.000	0.002
	Small–Medium-sized	−262.341	48.539	−5.405	0.000	0.000
	Small–Large	−446.350	84.470	−5.284	0.000	0.000
FI	Large–Small	270.096	84.470	3.198	0.001	0.008
	Medium-sized–Small	164.912	48.539	3.398	0.001	0.004

Source: own elaboration.

Table 7. The output of the pairwise comparison of the size of the Czech enterprises.

Czech Republic		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
TI	Medium-sized–Very large	−181.380	40.816	−4.444	0.000	0.000
	Small–Very large	−168.531	52.578	−3.205	0.001	0.008
	Large–Very large	−121.803	42.569	−2.861	0.004	0.025
SF	Very large–Large	134.364	42.569	3.156	0.002	0.010
	Very large–Small	185.993	52.578	3.538	0.000	0.002
	Very large–Medium-sized	186.053	40.816	4.558	0.000	0.000
CI	Small–Medium-sized	−184.817	40.710	−4.540	0.000	0.000
	Small–Large	−330.014	42.467	−7.771	0.000	0.000
	Small–Very large	−440.356	52.578	−8.375	0.000	0.000
	Medium-sized–Large	−145.197	26.552	−5.468	0.000	0.000
	Medium-sized–Very large	−255.539	40.816	−6.261	0.000	0.000
NCI	Very large–Medium-sized	168.611	40.814	4.131	0.000	0.000
	Very large–Small	363.521	52.575	6.914	0.000	0.000
	Large–Medium-sized	158.383	26.551	5.965	0.000	0.000
	Large–Small	353.293	42.465	8.320	0.000	0.000
	Medium-sized–Small	194.910	40.708	4.788	0.000	0.000

Table 7. *Cont.*

Czech Republic		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
DE	Medium-sized–Very large	−206.646	40.816	−5.063	0.000	0.000
	Small–Very large	−181.015	52.578	−3.443	0.001	0.003
	Large–Very large	−146.822	42.569	−3.449	0.001	0.003
IC	Small–Medium-sized	−213.020	40.710	−5.233	0.000	0.000
	Small–Large	−301.607	42.467	−7.102	0.000	0.000
	Small–Very large	−333.575	52.578	−6.344	0.000	0.000
	Medium-sized–Large	−88.587	26.552	−3.336	0.001	0.005
	Medium-sized–Very large	−120.555	40.816	−2.954	0.003	0.019
IB	Large—Small	168.778	42.467	3.974	0.000	0.000
	Medium-sized–Small	123.140	40.710	3.025	0.002	0.015
DCF	Medium-sized–Large	−88.229	26.552	−3.323	0.001	0.005
	Medium-sized–Very large	−220.072	40.816	−5.392	0.000	0.000
	Large–Very large	−131.843	42.569	−3.097	0.002	0.012
EL	Medium-sized–Very large	−176.582	40.816	−4.326	0.000	0.000
	Small–Very large	−170.579	52.578	−3.244	0.001	0.007
FI	Very large–Large	156.170	42.569	3.669	0.000	0.001
	Very large–Medium-sized	224.457	40.816	5.499	0.000	0.000
	Very large–Small	229.355	52.578	4.362	0.000	0.000

Source: own elaboration.

Table 8. The output of the pairwise comparison of the size of the Polish enterprises.

Poland		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
SF	Large–Medium-sized	187.986	42.090	4.466	0.000	0.000
	Large–Small	466.533	78.791	5.921	0.000	0.000
	Very large–Small	377.537	87.820	4.299	0.000	0.000
	Medium sized–Small	278.547	74.925	3.718	0.000	0.001
CI	Small–Medium-sized	−774.780	74.925	−10.341	0.000	0.000
	Small–Large	−813.945	78.791	−10.330	0.000	0.000
	Small–Very large	−887.250	87.820	−10.103	0.000	0.000
NCI	Large–Very large	−202.655	62.211	−3.258	0.001	0.007
	Large–Small	709.289	78.791	9.002	0.000	0.000
	Medium-sized–Small	614.549	74.925	8.202	0.000	0.000
	Very large–Small	506.634	87.820	5.769	0.000	0.000
DE	Small–Medium-sized	−338.875	74.925	−4.523	0.000	0.000
	Small–Large	−381.018	78.791	−4.836	0.000	0.000
	Small–Very large	−486.492	87.820	−5.540	0.000	0.000
IC	Small–Very large	−516.392	87.820	−5.880	0.000	0.000
	Small–Medium-sized	−599.348	74.925	−7.999	0.000	0.000
	Small–Large	−759.163	78.791	−9.635	0.000	0.000
	Very large–Large	242.771	62.211	3.902	0.000	0.001
IB	Medium-sized–Large	−159.815	42.090	−3.797	0.000	0.001
	Large–Small	398.580	78.791	5.059	0.000	0.000
	Medium-sized–Small	295.062	74.925	3.938	0.000	0.000
	Very large–Small	261.376	87.820	2.976	0.003	0.018
DCF	Medium-sized–Very large	−302.844	57.236	−5.291	0.000	0.000
	Large–Very large	−195.178	62.211	−3.137	0.002	0.010
EL	Small–Medium-sized	−313.757	74.925	−4.188	0.000	0.000
	Small–Very large	−409.193	87.820	−4.659	0.000	0.000
	Small–Large	−517.773	78.791	−6.571	0.000	0.000
FI	Medium-sized–Large	−204.016	42.090	−4.847	0.000	0.000
	Very large–Medium-sized	194.739	57.236	3.402	0.001	0.004
	Very large–Small	505.741	87.820	5.750	0.000	0.000
	Large–Small	419.180	78.791	5.320	0.000	0.000
	Medium-sized–Small	311.003	74.925	4.151	0.000	0.000

Source: own elaboration.

Table 9. The output of the pairwise comparison of the size of the Hungarian enterprises.

Hungary		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
TI	Medium-sized–Very large	−230.764	36.785	−6.273	0.000	0.000
	Small–Very large	−204.945	60.861	−3.367	0.001	0.005
	Large–Very large	−187.201	37.592	−4.980	0.000	0.000
SF	Very large–Small	215.433	60.861	3.540	0.000	0.002
	Very large–Medium-sized	251.213	36.785	6.829	0.000	0.000
	Large–Medium-sized	163.109	22.499	7.250	0.000	0.000
CI	Small–Very large	−227.644	60.861	−3.740	0.000	0.001
	Medium-sized–Very large	−207.025	36.785	−5.628	0.000	0.000
	Large–Very large	−150.931	37.592	−4.015	0.000	0.000
DE	Medium-sized–Large	−119.862	22.499	−5.327	0.000	0.000
	Medium-sized–Very large	−281.997	36.785	−7.666	0.000	0.000
	Small–Very large	−242.579	60.861	−3.986	0.000	0.000
	Large–Very large	−162.135	37.592	−4.313	0.000	0.000
IC	Small–Very large	−200.214	60.861	−3.290	0.001	0.006
	Small–Large	−208.826	53.452	−3.907	0.000	0.001
	Medium-sized–Large	−84.102	22.499	−3.738	0.000	0.001
IB	Large–Medium-sized	63.364	22.499	2.816	0.005	0.029
DCF	Medium-sized–Large	−61.512	22.499	−2.734	0.006	0.038
	Medium-sized–Very large	−113.399	36.785	−3.083	0.002	0.012
EL	Medium-sized–Large	−183.600	22.499	−8.160	0.000	0.000
	Medium-sized–Very large	−254.783	36.785	−6.926	0.000	0.000
	Small–Large	−146.328	53.452	−2.738	0.006	0.037
	Small–Very large	−217.511	60.861	−3.574	0.000	0.002
FI	Very large–Large	160.979	37.592	4.282	0.000	0.000
	Very large–Small	269.032	60.861	4.420	0.000	0.000
	Very large–Medium-sized	273.455	36.785	7.434	0.000	0.000

Source: own elaboration.

Firm size plays a significant role in securing loans. The higher the size of the enterprise, the easier it is to secure a loan, and vice versa. There is no consensus on the dependence between firm size and corporate debt in theory or among the authors of empirical studies. According to Rajan and Zingales [149], corporate debt is more beneficial in larger firms than in smaller ones because it diversifies risk across more sources and reduces susceptibility to financial distress. Hasanuddin et al. [150] state that debt is cheaper in larger companies and confirm this with a positive correlation. Jaworski and Czerwonka [151] also confirm the positive relationship between firm size and indebtedness in all monitored years. Both quantile regression analysis and descriptive statistical analysis were used to interpret the data in the study by Quintella and Coelho [152]. Their results indicate that some quantiles are significantly affected by characteristics such as firm size and asset structure to determine how enterprises adopt unique capital structures. The findings also show a positive correlation between firm size and overall debt level for the 25th quantile of the sample. On the contrary, the theory of hierarchical order holds that the bigger the company, the bigger the profits, so debt is not so necessary, and the result is a negative relationship between these variables [153]. Firm size clearly determines corporate financial structure in Slovakia as well. Small enterprises have a limited opportunity to obtain a bank loan or additional funds through the issue of shares or bonds [154]. Small businesses generally raise less debt or raise debt at a higher cost than large enterprises, which may be reflected in their lack of interest in external financing. The reason for the lower indebtedness of small businesses can be their striving for higher liquidity in times of financial difficulty [155]. Several authors [156–158] state in their research that there is a positive relationship between the size of a firm and its level of indebtedness in the form of long-term liabilities, bank loans, and other external financing. They argue that the larger the firm, the more inclined it is to finance its activities through debt financing. On the contrary, there is a negative relationship between short-term liabilities and firm size. The larger the company, the lower

the share of short-term liabilities in its total assets [159]. Large enterprises borrow more debt due to better debt diversification and a lower risk of corporate bankruptcy [160].

Banking institutions consider such businesses to be less risky, and therefore their access to credit is generally better. Belas et al. [161] conducted a similar study in the Czech Republic, and their research results pointed to the fact that securing the appropriate capital structure is one of the fundamental assumptions for each successful business activity of a firm in both market and transitive economies. The larger the firm, as measured by the number of employees, the greater the inclination to choose debt financing. According to the findings, predicting the capital structure of medium-sized enterprises in the Czech Republic is challenging because preferences for domestic and foreign capital are spread evenly. In the conditions of the Czech Republic, Dvoulety and Blazkova [162] dealt with this issue and focused on the relationship between firm size and indebtedness. The primary objective of their research was to determine the factors influencing the corporate debt and productivity of Czech firms, with a primary focus on firm size, firm age, legal form, and sectoral affiliation of the company itself. According to Kajurova and Linnert [163] and Syrova and Spicka [164], large enterprises are more likely to fund their business activities using debt financing.

Financial leverage appears to be positively related to firm size under Polish conditions. This fact appears to be consistent with theoretical predictions that large firms are more diversified, less prone to bankruptcies, face fewer problems with asymmetric information, and therefore find it easier to finance debt. This observation makes more sense in banking-oriented economies, as banks find it easy and convenient to lend to larger firms with substantial asset bases. Trade-off theory suggests that large, mature firms with good market reputations, diverse portfolios, and little chance of failing will have reduced agency costs and benefit from leverage. Many authors in Poland have examined whether there is a relationship between a firm's size and its debt level. Vintila et al. [165], as well as Mirota and Nehrebecka [166], identified a strong positive relationship between firm size and capital structure. According to the findings of their research, small and medium-sized enterprises often have a lower debt ratio than large firms, which is related to corporate indebtedness. Koralun-Bereznicka and Ciolek [167] discussed the determinants influencing the debt financing of enterprises in Poland. The main question of their study was whether the use of debt financing depends on the industry in which an enterprise operates and its firm size. Because there is a positive link between the variables studied, the leverage effect is influenced not only by firm size but also by industry classification. The findings suggest that the size of an enterprise has a notable influence on its level of indebtedness. The positive relationship between the size of an enterprise and the degree of its indebtedness in the conditions of companies operating in Poland was pointed out by Jaworski et al. [168], Jedrzejczak-Gas [169], Kedzior [170], and many others.

Even in Hungary, many international studies indicate that leverage is related to firm size. Due to tax-deductible interest payments, debt financing is substantially less expensive and is therefore preferred, especially for large enterprises. Generally, a company must generate sufficient cash flows to pay interest payments on debt financing. Indeed, in this context, large enterprises are diversifying their sources of financing more. Although firm size can affect the probability of failure, small and medium-sized enterprises are more likely to fail than large ones. Size may also be a proxy for enterprise asset volatility because small businesses are more likely to be growing enterprises in rapidly developing and hence intrinsically volatile industries. Larger firms are likely to have less information asymmetry and have greater access to debt markets with lower borrowing costs. Fenyves et al. [171] explored the search for a statistically significant relationship between firm size and level of debt in Hungary. The authors concluded that the overall association may be primarily influenced by the type of debt. When debt is divided into short-term and long-term debt, the authors found a positive link between firm size and short-term debt but a negative relationship between firm size and long-term debt. Ulbert et al. [172] and Hernadi and Ormos [173] also agree with these results in Hungarian conditions.

Table 10 summarizes the Kruskal–Wallis test results for statistically significant differences in debt ratios related to the legal form of the enterprise. The null hypothesis of the same median values is rejected for nine debt indicators in Slovakia and the Czech Republic, eight debt ratios in Poland, and only five debt indicators in Hungary.

Table 10. The output of the Kruskal–Wallis test concerning the legal form.

Slovakia					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	82.649	114.763	71.715	11.406	122.473
Asymp. Sig.	0.000	0.000	0.000	0.010	0.000
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	94.630	2.578	22.172	117.077	109.817
Asymp. Sig.	0.000	0.461	0.000	0.000	0.000
Czech Republic					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	34.425	32.889	57.353	10.214	49.510
Asymp. Sig.	0.000	0.000	0.000	0.017	0.000
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal-Wallis H	17.160	12.977	2.813	36.590	37.986
Asymp. Sig.	0.001	0.005	0.421	0.000	0.000
Poland					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	6.551	11.487	17.943	30.247	10.976
Asymp. Sig.	0.088	0.009	0.000	0.000	0.012
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	110.854	26.115	85.099	12.416	8.987
Asymp. Sig.	0.000	0.000	0.000	0.006	0.059
Hungary					
	TI	**SF**	**CI**	**NCI**	**DE**
Kruskal–Wallis H	9.081	9.055	9.386	4.978	12.197
Asymp. Sig.	0.058	0.029	0.025	0.173	0.007
	IC	**IB**	**DCF**	**EL**	**FI**
Kruskal–Wallis H	7.557	3.006	3.881	9.800	11.128
Asymp. Sig.	0.056	0.391	0.275	0.020	0.011

Source: own elaboration.

In the next step, a post hoc analysis was performed, and its results revealed which debt ratios had the most statistically significant differences based on the legal form of the enterprise. The following tables (Tables 11–14) summarize the results of the pairwise comparison of the legal forms of the enterprises. In Slovakia, the Czech Republic, and Poland, there are statistically significant differences primarily between public limited companies and partnerships, private limited companies and partnerships, and public limited companies and private limited companies. It is clear from the results of the pairwise comparison that there are statistically significant differences in Hungary, especially between private limited companies and partnerships.

Table 11. The output of the pairwise comparison of the legal forms of the Slovak enterprises.

Slovakia		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
TI	Partnerships–Public limited enterprise	958.377	137.294	6.980	0.000	0.000
	Partnerships–Private limited enterprise	1044.826	116.164	8.994	0.000	0.000
SF	Private limited enterprise–Public limited enterprise	−283.215	80.667	−3.511	0.000	0.003
	Private limited enterprise–Partnerships	−1185.354	116.164	−10.204	0.000	0.000
	Public limited enterprise–Partnerships	−902.139	137.294	−6.571	0.000	0.000
CI	Partnerships–Public limited enterprise	722.228	137.294	5.260	0.000	0.000
	Partnerships–Private limited enterprise	835.460	116.164	8.053	0.000	0.000
	Public limited enterprise–Private limited enterprise	213.232	80.667	2.643	0.008	0.049
NCI	Private limited enterprise–Public limited enterprise	−256.454	80.667	−3.179	0.001	0.009
DE	Partnerships–Public limited enterprise	993.051	137.294	7.233	0.000	0.000
	Partnerships–Private limited enterprise	1241.726	116.164	10.689	0.000	0.000
	Public limited enterprise–Private limited enterprise	248.676	80.667	3.083	0.002	0.012
IC	Partnerships–Public limited enterprise	764.503	137.294	5.568	0.000	0.000
	Partnerships–Private limited enterprise	1046.338	116.164	9.007	0.000	0.000
	Public limited enterprise–Private limited enterprise	281.836	80.667	3.494	0.000	0.003
DCF	Partnerships–Public limited enterprise	524.743	137.294	3.822	0.000	0.001
	Private limited enterprise–Public limited enterprise	−304.541	80.667	−3.775	0.000	0.001
EL	Partnerships–Public limited enterprise	837.856	137.294	6.103	0.000	0.000
	Partnerships–Private limited enterprise	1172.942	116.164	10.097	0.000	0.000
	Public limited enterprise–Private limited enterprise	335.086	80.667	4.154	0.000	0.000
FI	Private limited enterprise–Partnerships	−1191.009	116.164	−10.253	0.000	0.000
	Public limited enterprise–Partnerships	−999.755	137.294	−7.282	0.000	0.000

Source: own elaboration.

Table 12. The output of the pairwise comparison of the legal forms of the Czech enterprises.

Czech Republic		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
TI	Partnerships–Public limited enterprise	185.160	54.387	3.405	0.001	0.004
	Partnerships–Private limited enterprise	267.789	52.121	5.138	0.000	0.000
	Public limited enterprise–Private limited enterprise	82.629	25.769	3.207	0.001	0.008
SF	Public limited enterprise–Private limited enterprise	−77.127	25.769	−2.993	0.003	0.017
	Private limited enterprise–Partnerships	−274.692	52.121	−5.270	0.000	0.000
	Public limited enterprise–Partnerships	−197.565	54.387	−3.633	0.000	0.002
CI	Partnerships–Public limited enterprise	312.590	54.387	5.748	0.000	0.000
	Partnerships–Private limited enterprise	384.884	52.121	7.384	0.000	0.000
	Public limited enterprise–Private limited enterprise	72.293	25.769	2.805	0.005	0.030
NCI	Public limited enterprise–Partnerships	−148.818	54.384	−2.736	0.006	0.037
DE	Partnerships–Public limited enterprise	230.138	54.387	4.232	0.000	0.000
	Partnerships–Private limited enterprise	329.929	52.121	6.330	0.000	0.000
	Public limited enterprise–Private limited enterprise	99.790	25.769	3.872	0.000	0.001
IC	Partnerships–Private limited enterprise	178.049	52.121	3.416	0.001	0.004
IB	Private limited enterprise–Partnerships	−177.761	52.121	−3.411	0.001	0.004
	Public limited enterprise–Partnerships	−148.664	54.387	−2.733	0.006	0.038
EL	Partnerships–Public limited enterprise	194.954	54.387	3.585	0.000	0.002
	Partnerships–Private limited enterprise	282.972	52.121	5.429	0.000	0.000
	Public limited enterprise–Private limited enterprise	88.018	25.769	3.416	0.001	0.004
FI	Private limited enterprise–Public limited enterprise	−86.637	25.769	−3.362	0.001	0.005
	Private limited enterprise–Partnerships	−288.157	52.121	−5.529	0.000	0.000
	Public limited enterprise–Partnerships	−201.520	54.387	−3.705	0.000	0.001

Source: own elaboration.

Table 13. The output of the pairwise comparison of the legal forms of the Polish enterprises.

Poland		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
SF	Partnerships–Public limited enterprise	212.770	64.962	3.275	0.001	0.006
CI	Public limited enterprise–Partnerships	−262.277	64.962	−4.037	0.000	0.000
	Private limited enterprise–Partnerships	−127.429	46.324	−2.751	0.006	0.036
NCI	Other legal forms–Public limited enterprise	442.483	166.679	2.655	0.008	0.048
	Partnerships–Private limited enterprise	149.412	46.324	3.225	0.001	0.008
	Partnerships–Public limited enterprise	342.271	67.962	5.269	0.000	0.000
	Public limited enterprise–Private limited enterprise	−192.859	55.081	−3.501	0.000	0.003
DE	Public limited enterprise–Partnerships	−187.190	64.962	−2.882	0.004	0.024
IC	Public limited enterprise–Other legal forms	−515.783	166.679	−3.094	0.002	0.012
	Public limited enterprise–Partnerships	−573.092	64.962	−8.822	0.000	0.000
	Private limited enterprise–Partnerships	−434.912	46.324	−9.389	0.000	0.000
IB	Partnerships–Public limited enterprise	205.623	64.962	3.165	0.002	0.009
	Partnerships–Private limited enterprise	230.198	46.324	4.969	0.000	0.000
DCF	Other legal forms–Public limited enterprise	478.972	166.679	2.874	0.004	0.024
	Other legal forms–Private limited enterprise	522.073	160.337	3.256	0.001	0.007
	Partnerships–Public limited enterprise	362.954	64.962	5.587	0.000	0.000
	Partnerships–Private limited enterprise	406.055	46.324	8.766	0.000	0.000
EL	Public limited enterprise–Partnerships	−224.053	64.962	−3.449	0.001	0.003

Source: own elaboration.

Table 14. The output of the pairwise comparison of the legal forms of the Hungarian enterprises.

Hungary		Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
SF	Private limited enterprise–Partnerships	−197.011	72.517	−2.717	0.007	0.040
CI	Partnerships–Private limited enterprise	198.964	72.517	2.744	0.006	0.036
DE	Partnerships–Private limited enterprise	228.495	72.517	3.151	0.002	0.010
EL	Partnerships–Private limited enterprise	211.934	72.517	2.923	0.003	0.021
FI	Private limited enterprise–Partnerships	−205.831	72.517	−2.838	0.005	0.027

Source: own elaboration.

The choice of the legal form of an enterprise has a significant impact not only on performance but also on access to debt financing. Because the legal form is clearly observable from a suffix within the business name in many countries, this provides outside lenders with a low-cost instrument for distinguishing low-quality from high-quality borrowers when screening costs are appropriately high [174]. The most common form of business entity is the private limited company, which is privately owned. Private companies may have shareholders and issue stock, but their shares do not trade on public markets and are not issued through an initial public offering [175]. The high costs of conducting an initial public offering are one of the reasons why many smaller firms remain private. However, public companies are also required to provide more information and must release financial statements and other files on a regular basis [176]. The company's finances are distinct from the owners' and are taxed separately. All earnings belong to the enterprise, which also pays taxes on them, distributes some as dividends to shareholders, and keeps the remainder as working capital [177]. According to Khan et al. [178], the shares of private companies are less liquid, and determining their values is more challenging. In addition, a public limited company can obtain equity loan financing from existing and potential investors, making it easier for the firm to access debt financing than for a private limited company. According to Rashid [179], the main advantage of establishing a public limited company is that it provides the opportunity to raise capital by issuing public shares. It is more likely to have better access to money to invest in the firm when compared to a private limited company [180]. The modern corporate landscape is dominated by the corporate

legal structure that arises from the legal fragmentation of firms into multiple business entities [181]. Debt financing is likely the most significant external source of funding for enterprises. The ability to obtain debt financing has also been related to higher earnings and employment, as well as a longer survival time [182]. Furthermore, unlike equity financing, it does not require giving up ownership control [183] and can be less expensive after tax [184]. According to Valaskova et al. [96], the legal form of an enterprise significantly influences decisions concerning the debt financing of its activities and may be regarded as another critical determinant of indebtedness. In Slovakia, starting a business is simple if the appropriate legal form of firm is chosen, and one of the most common business structures is the private limited company [185]. According to Lukacka [186], credit conditions and access to financing for private limited companies in Slovakia have improved in recent years, as evidenced not only by an increase in the volume of existing and new bank loans but also by a decrease in the average interest rate. Financial instruments developed to support firms throughout the COVID-19 pandemic also played a crucial role in keeping the number of non-performing loans low. According to published data, the volume of unpaid business loans has been increasing since 2013. According to Kristofik and Slampiakova [187], private limited companies and public limited companies operating in Slovakia primarily choose debt financing. On the contrary, companies with the legal form of a partnership or other legal forms have capital structures composed primarily of equity financing.

In the Czech Republic, the private limited company, which may be started by either a natural person or a legal person, is the most frequent type of entrepreneurship. Generally, the private limited company form is primarily used by small and medium-sized enterprises. In the case of the Czech Republic, Divila [188] points out that a private limited company can incur a number of debts, including those incurred as a result of entering into a contract. In most cases, members of a private limited company cannot be legally held liable for a breach of contract. On the contrary, a public limited company may raise funds by selling public shares, making it easier to raise capital than in the case of a private limited corporation [189]. The preference of debt financing over equity financing is typical for private limited companies, and this research paper result is in accordance with many other authors [190]. Even in the Czech Republic, when checking the credit reliability of a firm, potential providers are primarily interested in compliance with the basic financing rules. In principle, the firm is not required to follow the specific financing rules, but the credit providers must have faith in the firm's ability to pay corporate debts. A lower level of indebtedness and timely financing improve the assessment of credit reliability and give the company a chance to obtain very favorable loans [191]. On the contrary, a lower level of indebtedness, primarily associated with equity financing, is also largely preferred in partnerships.

The problem of ownership structure and its impact on the financial condition of enterprises has also been studied in Poland, where the most common type of legal form is a private limited company. Capital increases, shareholder loans, and transfer pricing laws are the most commonly used methods of inter-company financing for business activities [192]. Almost every firm, including private limited companies, requires additional financial support at some point. Private limited company loans may be considered by businesses for several reasons, from short-term cash flow concerns to funding significant growth. In their study, Miszczynska and Miszczynski [193] focused on comparing the financial performance of public hospitals according to ownership and size. According to their findings, many public hospitals are in debt, and their ownership structure does not affect their financial condition. The study did not, however, support a significant relationship between the ownership or size of the hospitals and their financial performance. Kubiak [194], Allen et al. [195], and many others have also discussed the relationship between ownership structure and financial performance in Poland.

Even scientific research papers published in Hungary do not point to the legal form as a significant determinant of the indebtedness of firms operating in the market [196,197], which may be mainly due to the fact that there are no very significant statistical differences

between the legal forms of enterprises; this statement is also in line with our paper. The authors pointed to differences among the five examined debt indicators, especially between private limited companies and partnerships. Similar to the other Visegrad Group countries, debt financing is significantly preferred in private limited companies, whereas partnerships primarily use equity financing to fund their business activities.

Finally, the results achieved in this study can be summarized as follows: while it is obvious from the results of the research paper that there are statistically significant differences between all monitored debt ratios with regard to firm size, with the exception of the total indebtedness ratio in Slovakia and Poland and the non-current indebtedness ratio in the conditions of Hungary, financial leverage appears to be positively related to firm size. In general, a firm's legal form has a considerable influence not only on corporate performance but also on its ability to obtain debt financing. Statistically significant differences can be observed between all the monitored indebtedness indicators, except for the interest burden ratio in Slovakia and the debt-to-cash flow ratio in the Czech Republic. In Poland, a statistically significant difference does not exist between the total indebtedness ratio and the financial independence ratio, and in Hungary, the exceptions to the existence of statistical differences are primarily the total indebtedness ratio, the non-current indebtedness ratio, the interest coverage ratio, the interest burden ratio, and the debt-to-cash flow ratio.

5. Conclusions

Every firm must be aware of its financial situation in order to compete in the market. Financial analysis is used to determine financial performance, and its main objective is to examine not only the strengths and weaknesses of an enterprise but also the level of its financial health. The analysis uses ratios, which provide more detailed information about the financial health of an enterprise and are used to determine the level of indebtedness or the reason for its financial difficulties. The primary use of corporate debt to finance a firm's business operations is the focus of a comprehensive debt analysis. In the real economy, it is not possible for large companies to finance all of their assets with equity or only with debt. The main objective of debt analysis is to determine the ideal combination of equity and debt financing. However, for the overall assessment of the capital structure, the most important thing is to choose an adequate ratio between owned sources of financing and foreign sources of financing, which is a fundamental condition for the high-quality development of a firm and its healthy financial development. There have been several studies conducted on debt financing preferences; however, the results are often contradictory. Debt financing is an attractive alternative for enterprises to finance their activities, but there is a risk of potential distress if the balance sheet is weaker. Furthermore, managers should carefully consider the level of corporate debt, as increased leverage might affect earnings, which mostly reflect actual corporate performance.

It has been proven that corporate debt is influenced by several determinants that affect the composition of the corporate capital structure in various ways. This paper used analysis of variance to examine the impacts of the firm size and legal form of enterprises operating in the Visegrad Group countries on the debt ratio itself in the period 2016–2021 and to determine if there were statistically significant differences in the individual indebtedness ratios depending on the firm sizes (small, medium-sized, large, and very large enterprises) and legal forms (private limited enterprise, public limited enterprise, partnerships, and other legal forms) or if the individual values of the indicators differed significantly. The Kruskal–Wallis test confirmed the effect of firm size on debt ratios, even though there are statistically significant differences in the calculated indebtedness indicators concerning the size of the enterprises operating in the Visegrad Group countries. Due to the statistically significant differences between several indebtedness ratios, post hoc analysis results identified that the most statistically significant differences in individual debt ratios exist between small and medium-sized enterprises, small and large enterprises, and medium-sized and very large enterprises. One of the most significant factors affecting

capital structure is firm size. It should be emphasized, therefore, that there is no theory that would contribute to predicting the effect of a company's size on its leverage. The Kruskal–Wallis test also revealed statistically significant differences in debt ratio values related to the legal forms of the firms operating in Visegrad Group countries, and a post hoc analysis pointed to the differences, especially those between public limited companies and partnerships, private limited companies and partnerships, and public limited companies and private limited companies. Many authors argue in their studies that firm size and legal form are the most important determinants of corporate debt, and this paper confirmed those findings. Thus, the main practical implication of the study is the finding, that also in the Visegrad Group, a cultural and political alliance of four Central European countries, the firm size and legal form of enterprises do play a significant role in terms of corporate indebtedness level, which is an important measure in conditions of debt financing. A significant level of corporate indebtedness not only jeopardizes a firm's financial stability but also affects the performance of the enterprise itself, which is the most important theoretical conclusion of the study. Despite the contribution of this paper to the existing literature, the following limitation needs to be emphasized. The scope of the paper (i.e., the focus only on the cultural and political alliances of four Central European countries) limits the extent of the generalizability of the findings. Future research should examine this phenomenon in more alliance countries (using panel data analysis) or over a longer time horizon than the one set for this research to determine whether there will be differences in the findings and allow for greater generalization and applicability.

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Appendix A

Table A1. Descriptive statistics of analyzed indebtedness ratios (6-year average values).

	Slovakia					
	Avg.	**Med.**	**Std. Dev.**	**Min.**	**Max.**	**CV**
Total indebtedness ratio	0.623	0.629	0.226	0.044	1.499	0.363
Self-financing ratio	0.367	0.345	0.194	−0.383	1.077	0.529
Current indebtedness ratio	0.469	0.452	0.230	−0.010	1.393	0.490
Non-current indebtedness ratio	0.154	0.109	0.149	−0.009	0.666	0.968
Debt-to-equity ratio	2.546	1.882	2.226	−5.006	10.394	0.874
Interest coverage ratio	14.351	8.263	18.488	−48.445	81.009	1.288
Interest burden ratio	0.126	0.105	0.140	−0.404	0.641	1.111
Debt-to-cash flow ratio	7.331	5.935	6.003	−12.016	27.067	0.819
Equity leverage ratio	3.853	3.083	2.514	−4.187	12.062	0.652
Financial independence ratio	0.829	0.616	0.677	−0.921	3.329	0.817

Table A1. *Cont.*

	Czech Republic					
	avg.	**med.**	**std. dev.**	**min.**	**max.**	**CV**
Total indebtedness ratio	0.496	0.493	0.208	0.057	1.379	0.419
Self-financing ratio	0.504	0.502	0.220	−0.309	1.479	0.437
Current indebtedness ratio	0.649	0.313	0.215	0.002	1.296	0.331
Non-current indebtedness ratio	0.159	0.118	0.147	−0.022	0.681	0.925
Debt-to-equity ratio	1.318	0.992	1.024	−1.760	4.929	0.777
Interest coverage ratio	24.659	12.897	30.603	−73.830	137.345	1.241
Interest burden ratio	0.107	0.082	0.112	−0.281	0.484	1.047
Debt-to-cash flow ratio	5.930	4.925	4.840	−10.445	22.619	0.816
Equity leverage ratio	2.402	2.040	1.150	−1.045	6.251	0.479
Financial independence ratio	1.436	1.127	1.064	−0.214	5.043	0.741
	Poland					
	avg.	**med.**	**std. dev.**	**min.**	**max.**	**CV**
Total indebtedness ratio	0.516	0.512	0.189	0.046	1.134	0.366
Self-financing ratio	0.474	0.465	0.185	−0.137	1.116	0.390
Current indebtedness ratio	0.371	0.351	0.189	0.001	1.109	0.509
Non-current indebtedness ratio	0.145	0.113	0.121	0.000	0.584	0.834
Debt-to-equity ratio	1.432	1.115	1.031	−2.021	5.143	0.720
Interest coverage ratio	21.103	12.649	24.098	−56.478	101.948	1.142
Interest burden ratio	0.109	0.088	0.102	−0.282	0.486	0.936
Debt-to-cash flow ratio	6.226	5.141	5.139	−10.946	23.118	0.825
Equity leverage ratio	2.618	2.222	1.277	−2.089	7.566	0.488
Financial independence ratio	1.247	0.990	0.880	−0.132	4.516	0.706
	Hungary					
	avg.	**med.**	**std. dev.**	**min.**	**max.**	**CV**
Total indebtedness ratio	0.533	0.521	0.188	0.088	1.344	0.353
Self-financing ratio	0.466	0.459	0.170	−0.041	1.074	0.365
Current indebtedness ratio	0.403	0.372	0.187	0.023	1.270	0.464
Non-current indebtedness ratio	0.130	0.098	0.114	0.000	0.502	0.877
Debt-to-equity ratio	1.460	1.190	0.955	−0.476	4.960	0.654
Interest coverage ratio	27.159	16.919	28.785	−50.024	118.550	1.060
Interest burden ratio	0.087	0.071	0.089	−0.233	0.385	1.023
Debt-to-cash flow ratio	6.201	5.255	4.421	−8.816	20.728	0.713
Equity leverage ratio	2.602	2.273	1.122	0.523	6.464	0.431
Financial independence ratio	1.114	0.947	0.662	0.029	3.082	0.594

Source: own elaboration.

References

1. Durana, P.; Blazek, R.; Machova, V.; Krasnan, M. The use of Beneish M-scores to reveal creative accounting: Evidence from Slovakia. *Equilib. Q. J. Econ. Econ. Policy* **2022**, *17*, 481–510. [CrossRef]
2. Matuszewska-Pierzynka, A. Relationship between corporate sustainability performance and corporate financial performance: Evidence from US companies. *Equilib. Q. J. Econ. Econ. Policy* **2021**, *16*, 885–906. [CrossRef]
3. Durana, P.; Michalkova, L.; Privara, A.; Marousek, J.; Tumpach, M. Does the life cycle affect earnings management and bankruptcy. *Oecon. Copernic.* **2021**, *12*, 425–461. [CrossRef]
4. Kliestik, T.; Sedlackova, A.N.; Bugaj, M.; Novak, A. Stability of profits and earnings management in the transport sector of Visegrad countries. *Oecon. Copernic.* **2022**, *13*, 475–509. [CrossRef]
5. Kljucnikov, A.; Civelek, M.; Krajcik, V.; Novak, P.; Cervinka, M. Financial performance and bankruptcy concerns of SMEs in their export decision. *Oecon. Copernic.* **2022**, *13*, 867–890. [CrossRef]
6. Valaskova, K.; Androniceanu, A.M.; Zvarikova, K.; Olah, J. Bonds Between Earnings Management and Corporate Financial Stability in the Context of the Competitive Ability of Enterprises. *J. Compet.* **2021**, *13*, 167–184. [CrossRef]
7. Rowland, Z.; Kasych, A.; Suler, P. Prediction of financial distress: Case of mining enterprises in Czech Republic. *Ekon-Manaz. Spektrum* **2021**, *15*, 1–14. [CrossRef]
8. Kovacova, M.; Krajcik, V.; Michalkova, L.; Blazek, R. Valuing the interest tax shield in the Central European economies. Panel data approach. *J. Compet.* **2022**, *14*, 41–59. [CrossRef]

9. Durana, P.; Ginevicius, R.; Urbanski, M.; Podhorska, I.; Tumpach, M. Parallels and differences in earnings management of the Visegrad Four and the Baltics. *J. Compet.* **2021**, *13*, 39–55. [CrossRef]
10. Mouandat, S.R. Is Foreign Debt Management in Gabon Efficient? *Manag. Dyn. Knowl. Econ.* **2022**, *10*, 82–94.
11. Sun, C.; Zhang, Z.; Vochozka, M.; Voznakova, I. Enterprise digital transformation and debt financing cost in China? A-share listed companies. *Oecon. Copernic.* **2022**, *13*, 783–829. [CrossRef]
12. Gaspareniene, L.; Kliestik, T.; Sivickiene, R.; Remeikiene, R.; Endrijaitis, M. Impact of foreign direct investment on tax revenue: The case of the European Union. *J. Compet.* **2022**, *14*, 43–60. [CrossRef]
13. Valaskova, K.; Adamko, P.; Michalikova, K.F. Quo Vadis, earnings management? Analysis of manipulation determinants in Central European environment. *Oecon. Copernic.* **2022**, *12*, 631–669. [CrossRef]
14. Botrić, V.; Božić, L.; Broz, T. Explaining firm-level total factor productivity in post-transition: Manufacturing vs. services sector. *J. Int. Stud.* **2017**, *10*, 77–90. [CrossRef]
15. Iwasaki, I.; Kocenda, E.; Shida, Y. Distressed acquisitions: Evidence from European emerging markets. *J. Comp. Econ.* **2021**, *49*, 962–990. [CrossRef]
16. Kinds, A.; Le Floc'h, P.; Speelman, S.; Guayader, O. Challenging the artisanal vs. industrial dichotomy in French Atlantic fisheries: An organizational typology of multi-vessel fishing firms. *Mar. Policy* **2021**, *134*, 104753. [CrossRef]
17. Sirec, K.; Mocnik, D. Indicators of high potential firms' rapid growth: Empirical evidence for Slovenia. *Transform. Bus. Econ.* **2014**, *13*, 448–461.
18. Stockr, M.; Winner, H. Capital Structure and Corporate Taxation: Empirical Evidence from European Panel Data. *Jahrb. Natl. Okon. Stat.* **2013**, *233*, 188–205.
19. Oertel, S.; Walgenbach, P. The effect of partner exits on survival chances of SMEs. *J. Organ. Chang. Manag.* **2012**, *25*, 462–482. [CrossRef]
20. Ren, S. Optimization of enterprise financial management and decision-making systems based on big data. *J. Math.* **2022**, *2022*, 1708506. [CrossRef]
21. Cristea, G.; Dinu, E. Leveraging Intellectual Capital Management in Virtual Teams: What the COVID-19 Pandemic Taught Us. *Manag. Dyn. Knowl. Econ.* **2022**, *10*, 106–123.
22. Freeman, R.E.; Dmytriyev, S.D.; Phillips, R.A. Stakeholder theory and the resource-based view of the firm. *J. Manag.* **2021**, *47*, 1757–1770. [CrossRef]
23. Nagy, M.; Lazaroiu, G. Computer vision algorithms, remote sensing data fusion techniques, and mapping and navigation tools in the Industry 4.0-based Slovak automotive sector. *Mathematics* **2022**, *10*, 3543. [CrossRef]
24. Santos-Vijande, M.L.; Lopez-Sanchez, J.A.; Loredo, E.; Rudd, J.; Lopez-Mielgo, N. Role of innovation and architectural marketing capabilities in channelling entrepreneurship into performance. *J. Innov. Knowl.* **2022**, *7*, 100174. [CrossRef]
25. Dana, L.P.; Rounaghi, M.M.; Enayati, G.; Researcher, M.I. Increasing productivity and sustainability of corporate performance by using management control systems and intellectual capital accounting approach. *Green Financ.* **2021**, *3*, 1–14. [CrossRef]
26. Bhagat, S.; Bolton, B. Corporate governance and firm performance: The sequel. *J. Corp. Finance* **2019**, *58*, 142–168. [CrossRef]
27. Zhou, M.; Li, K.; Chen, Z. Corporate governance quality and financial leverage: Evidence from China. *Int. Rev. Financ. Anal.* **2021**, *73*, 101742. [CrossRef]
28. Valaskova, K.; Nagy, M.; Zabojnik, S.; Lazaroiu, G. Industry 4.0 wireless networks and cyber-physical smart manufacturing systems as accelerators of value-added growth in Slovak exports. *Mathematics* **2022**, *10*, 2452. [CrossRef]
29. Dakhli, A. The impact of corporate social responsibility on firm financial performance. Does audit quality matter. *J. Appl. Account. Res.* **2021**, *23*, 950–976. [CrossRef]
30. Xu, S.; Guo, L. Financialization and corporate performance in China. Promotion or inhibition. *Abacus J. Account. Fin. Bus. Stud.* 2021. [CrossRef]
31. Zimon, G.; Appolloni, A.; Tarighi, H.; Shahmohammadi, S.; Daneshpou, E. Earnings management, related party transactions and corporate performance: The moderating role of internal control. *Risks* **2021**, *9*, 146. [CrossRef]
32. Asiaei, K.; Bontis, N.; Barani, O.; Jusoh, R. Corporate social responsibility and sustainability performance measurement systems Implications for organizational performance. *J. Manag. Control.* **2021**, *32*, 85–126. [CrossRef]
33. Veltri, S.; Mazzotta, R.; Rubino, F.E. Board diversity and corporate social performance: Does the family firm status matter. *Corp. Soc. Responsib. Environ.* **2021**, *28*, 1664–1679. [CrossRef]
34. Nagy, M.; Valaskova, K.; Durana, P. The Effect of CSR Policy on Earnings Management Behavior: Evidence from Visegrad Publicly Listed Enterprises. *Risks* **2022**, *10*, 203. [CrossRef]
35. Hedija, V.; Nemec, D. Gender diversity in leadership and firm performance: Evidence from the Czech Republic. *J. Bus. Econ. Manag.* **2021**, *22*, 156–180. [CrossRef]
36. Stasova, L.H. Evaluation of the financial health of food retail outlets in a market environment. A case study from the slovak republic. *E+M Ekon. Manag.* **2022**, *25*, 122–141. [CrossRef]
37. Vavrek, R.; Becica, J.; Papcunova, V.; Gundova, P.; Mitrikova, J. Number of financial indicators as a factor of multi-criteria analysis via the TOPSIS technique: A municipal case study. *Algorithms* **2021**, *14*, 64. [CrossRef]
38. Stefko, R.; Horvathova, J.; Mokrisova, M. The application of graphic methods and the DEA in predicting the risk of bankruptcy. *J. Risk Financ. Manag.* **2021**, *14*, 220. [CrossRef]
39. Pavlicko, M.; Durica, M.; Mazanec, J. Ensemble Model of the Financial Distress Prediction in Visegrad Group Countries. *Mathematics* **2021**, *9*, 1886. [CrossRef]
40. Kucera, J.; Vochozka, M.; Rowland, Z. The ideal debt ratio of an agricultural enterprise. *Sustainability* **2021**, *13*, 4613. [CrossRef]

41. Horobet, A.; Curea, S.C.; Smedoiu Popoviciu, A.; Botoroga, C.A.; Belascu, L.; Dumitrescu, D.G. Solvency risk and corporate performance A case study on European retailers. *J. Risk Financ. Manag.* **2021**, *14*, 536. [CrossRef]
42. Svatosova, V. Importance of Financial Strategy in E-commerce. *Ekon. Cas.* **2020**, *36*, 278–305.
43. Horvat, T.; Travner, U.; Skoko, H.; Bobek, V. The influence of profit, revenues and debt on audit prices in large companies Insights from Slovenia. *Econ. Res.-Ekon. Istraz.* **2022**, *35*, 778–798. [CrossRef]
44. Kumar, M. A Panel Data Analysis for Exploring the New Determinants of Growth in Small and Medium Sized Enterprises in India. *Int. J. Asian Bus. Inf.* **2017**, *8*, 1–23. [CrossRef]
45. Mendes, P.C.D.; Oliveira, E.B. Relationship between Overall Debt, Taxation and the Basel Index in Major Financial Institutions in Brazil. *Cont. Gestao Gover.* **2016**, *19*, 64–82.
46. Pacheco, L.; Tavares, F. Capital structure determinants of hospitality sector SMEs. *Tour. Econ.* **2017**, *23*, 113–132. [CrossRef]
47. Gompers, P.; Kaplan, S.N.; Mukharlyamov, V. What do private equity firms say they do. *J. Financ. Econ.* **2016**, *121*, 449–476. [CrossRef]
48. Belkhir, M.; Maghyereh, A.; Awartani, B. Institutions and corporate capital structure in the MENA region. *Emerg. Mark. Rev.* **2016**, *26*, 99–129. [CrossRef]
49. Lara, J.M.G.; Osma, B.G.; Penalva, F. Accounting conservatism and firm investment efficiency. *J. Account. Econ.* **2016**, *61*, 221–238. [CrossRef]
50. Mu, C.; Wang, A.; Yang, J. Optimal capital structure with moral hazard. *Int. Rev. Econ. Financ.* **2017**, *48*, 326–338. [CrossRef]
51. Meraj, M. The Relationship between Competition and Borrowers Indebtedness: Empirical Evidence from South Asia. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 39–50.
52. Jencova, S.; Petruska, I.; Lukacova, M. Relationship between ROA and total indebtedness by threshold regression model. *Montenegrin J. Econ.* **2021**, *17*, 37–46. [CrossRef]
53. Oprean, C.; Dobrota, G. Correlations between indebtness grade and the value of companies in metallurgical industry of Romania. *Metalurgija* **2015**, *54*, 563–566.
54. Boyle, M. The Debt Relief Notice: Its Effectiveness in Improving the Financial Well-Being of Over-Indebted Individuals and Its Impact on Social Mobility. *Soc. Policy Soc.* **2022**, 1–17. [CrossRef]
55. Baines, J.; Hager, S.B. The great debt divergence and its implications for the COVID-19 crisis: Mapping corporate leverage as power. *New Political Econ.* **2021**, *26*, 885–901. [CrossRef]
56. Sierpinska-Sawicz, A.; Bak, P. Costs of corporate bond issue in coal mining companies. *Contemp. Econ.* **2016**, *10*, 99–112. [CrossRef]
57. Sgambati, S. The art of leverage A study of bank power, money-making and debt finance. *Rev. Int. Polit. Econ.* **2019**, *26*, 287–312. [CrossRef]
58. Uzea, N.; Poon, K.; Sparling, D.; Weersink, A. Farm support payments and risk balancing. Implications for financial riskiness of Canadian farms. *Can. J. Agric. Econ.* **2014**, *62*, 595–618. [CrossRef]
59. Dimitrova, M.; Treapat, L.M.; Tulaykova, I. Value at Risk as a tool for economic-managerial decision-making in the process of trading in the financial market. *Ekon. Manaz. Spektrum* **2021**, *15*, 13–26. [CrossRef]
60. Mauer, D.C.; Villatoro, N.; Zhang, Y. Brand equity and corporate debt structure. *J. Bus. Financ. Account.* **2022**, *49*, 1077–1112. [CrossRef]
61. Rant, V.; Marinc, M.; Porenta, J. Debt and convergence: Evidence from the EU member states. *Financ. Res. Lett.* **2021**, *39*, 101617. [CrossRef]
62. Singh, A. The effect of hotel brand affiliation on commercial mortgage loan underwriting in the lodging sector. *Int. J. Hosp. Manag.* **2022**, *102*, 103150. [CrossRef]
63. Issa, S.; Gevorkyan, A.V. Optimal corporate leverage and speculative cycles. An empirical estimation. *Struct. Chang. Econ. Dyn.* **2022**, *62*, 478–491. [CrossRef]
64. Climent-Serrano, S. Effects of economic variables on NPLs depending on the economic cycle. *Empir. Econ.* **2019**, *56*, 325–340. [CrossRef]
65. Johnson, C.L.; Yushkov, A. On the determinants of regional government debt in Russia. *Eurasian Geogr. Econ.* 2022. [CrossRef]
66. Patel, P.C.; Dahlin, P. Does voluntary auditing help ventures? Evidence from Sweden. *Appl. Econ.* **2021**, *53*, 4835–4856. [CrossRef]
67. Serrasqueiro, Z.; Caetano, A. Trade-Off Theory versus Pecking Order Theory. Capital structure decisions in a peripheral region of Portugal. *J. Bus. Econ. Manag.* **2015**, *16*, 445–466. [CrossRef]
68. Nguyen, T.N.L.; Nguyen, V.C. The determinants of profitability in listed enterprises: A study from Vietnamese stock exchange. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 47–58. [CrossRef]
69. Dakua, S. Effect of determinants on financial leverage in Indian steel industry: A study on capital structure. *Int. J. Financ. Econ.* **2019**, *24*, 427–436. [CrossRef]
70. Royer, J.; McKee, G. Optimal capital structure in agricultural cooperatives and implications for equity retirement. *Agric. Financ. Rev.* **2020**, *81*, 277–291. [CrossRef]
71. Klobucar, D.; Orsag, S. Analysis of using a financial leverage in company Hrvatske sume, Ltd. *Sumar. List* **2019**, *143*, 353–360.
72. Ricca, L.T.; Juca, M.N.; Hadad, E. Tax benefit and bankruptcy cost of debt. *Q. Rev. Econ. Financ.* **2021**, *81*, 82–92. [CrossRef]
73. Dinh, H.T.; Pham, C.D. The effect of capital structure on financial performance of Vietnamese listing pharmaceutical enterprises. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 329–340. [CrossRef]
74. Guedhami, O.; Pittman, J. The importance of IRS monitoring to debt pricing in private firms. *J. Financ. Econ.* **2008**, *90*, 38–58. [CrossRef]
75. Jaworski, J.; Czerwonka, L. Which Determinants Matter for Working Capital Management in Energy Industry? The Case of European Union Economy. *Energies* **2022**, *15*, 3030. [CrossRef]
76. Pereira, J.; Braga, V.; Correia, A.; Salamzadeh, A. Unboxing organisational complexity. How does it affect business performance during the COVID-19 pandemic. *J. Entrep. Public Policy.* **2021**, *10*, 424–444. [CrossRef]
77. Lin, W.L.; Yip, N.; Sambasivan, M.; Ho, J.A. Corporate Debt Policy of Malaysian SMEs: Empirical Evidence from FirmDynamic Panel Data. *Int. J. Econ. Manag.* **2018**, *12*, 491–508.

78. Prelic, S.; Kocbek, M. Permissibility of Financial Assistance of Subsidiary for Obligations of Parent Company. *Zborn. Prav. Fakult. Sveucilista U Rijeci* **2018**, *39*, 1533–1557.
79. Cole, R.A. What do we know about the capital structure of privately held US firms? Evidence from the surveys of small business finance. *Financ. Manag.* **2013**, *42*, 777–813. [CrossRef]
80. Khan, K.I.; Qadeer, F.; Mata, M.N.; Chavaglia Neto, J.; Sabir, Q.U.A.; Martins, J.N.; Filipe, J.A. Core predictors of debt specialization: A new insight to optimal capital structure. *Mathematics* **2021**, *9*, 975. [CrossRef]
81. Garcia, C.J.; Herrero, B. Female directors, capital structure, and financial distress. *J. Bus. Res.* **2021**, *136*, 592–601. [CrossRef]
82. Vega-Gutierrez, P.L.; Lopez-Iturriaga, F.J.; Rodriguez-Sanz, J.A. Labour market conditions and the corporate financing decision: A European analysis. *Res. Int. Bus. Financ.* **2021**, *58*, 101431. [CrossRef]
83. Mubeen, R.; Han, D.; Abbas, J.; Raza, S.; Bodian, W. Examining the relationship between product market competition and Chinese firms performance. The mediating impact of capital structure and moderating influence of firm size. *Front. Psychol.* **2021**, *12*, 709678. [CrossRef] [PubMed]
84. Khatib, S.F.; Nour, A.N.I. The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 943–952.
85. Giambona, E.; Golec, J.; Lopez-de-Silanes, F. Do firms purposefully change capital structure? Evidence from an investment-opportunity shock to drug firms. *J. Fin. Quant. Anal.* **2021**, *56*, 915–944. [CrossRef]
86. Jacob, M. Real effects of corporate taxation: A review. *Eur. Account. Rev.* **2022**, *31*, 269–296. [CrossRef]
87. Lei, X.T.; Xu, Q.Y.; Jin, C.Z. Nature of property right and the motives for holding cash: Empirical evidence from Chinese listed companies. *Manag. Decis. Econ.* **2022**, *43*, 1482–1500. [CrossRef]
88. Moon, S.K.; Phillips, G.M. Outsourcing through purchase contracts and firm capital structure. *Manag. Sci.* **2021**, *67*, 363–387. [CrossRef]
89. Baumohl, E.; Kocenda, E. How firms survive in European emerging markets: A survey. *East. Eur. Econ.* **2022**, *60*, 393–417. [CrossRef]
90. Donnelly, R.; Mulcahy, M. Board structure, ownership, and voluntary disclosure in Ireland. *Corp. Gov.* **2008**, *16*, 416–429. [CrossRef]
91. Guinnane, T.W. Creating a new legal form. The GmbH. *Bus. Hist. Rev.* **2021**, *95*, 3–32. [CrossRef]
92. Lalithchandra, B.N.; Rajendhiran, N. Liquidity Ratio: An Important Financial Metrics. *Turk. J. Comp. Math. Educ.* **2021**, *12*, 1113–1114.
93. Santosuosso, P. Do efficiency ratios help investors to explore firm performances? Evidence from Italian listed firms. *Int. Bus. Rev.* **2014**, *7*, 111. [CrossRef]
94. Granda, N.B.B. Financial Analysis: Substantial Factor For Decision Making in a Business Sector Company. *Rev. Univ. Y. Soc.* **2020**, *3*, 129–134.
95. Dahiyat, A.A.; Weshah, S.R.; Aldahiyat, M. Liquidity and Solvency Management and its Impact on Financial Performance: Empirical Evidence from Jordan. *J. Asian Financ. Econ. Bus.* **2021**, *5*, 135–141.
96. Valaskova, K.; Kliestik, T.; Gajdosikova, D. Distinctive determinants of financial indebtedness: Evidence from Slovak and Czech enterprises. *Equilib. Q. J. Econ. Econ. Policy* **2021**, *16*, 639–659. [CrossRef]
97. Ghasemi, A.; Zahediasl, S. Normality tests for statistical analysis. A guide for non-statisticians. *Int. J. Endocrinol. Metab.* **2012**, *10*, 486–489. [CrossRef] [PubMed]
98. Shapiro, S.; Wilk, M.B.J.B. An analysis of variance test for normality. *Biometrika* **1965**, *52*, 591–611. [CrossRef]
99. Yap, B.W.; Sim, C.H. Comparisons of various types of normality tests. *J. Stat. Comput. Simul.* **2011**, *81*, 2141–2155. [CrossRef]
100. Alpu, O.; Yuksek, D. Comparison of some multivariate normality tests: A simulation study. *Int. J. Adv. Res. Basic Appl. Sci.* **2016**, *3*, 73–85. [CrossRef]
101. Demir, S. Comparison of Normality Tests in Terms of Sample Sizes under Different Skewness and Kurtosis Coefficients. *Int. J. Assess. Tool. Educ.* **2022**, *9*, 397–409. [CrossRef]
102. Shapiro, S.S.; Francia, R.S. An approximate analysis of variance test for normality. *J. Am. Stat. Assoc.* **1972**, *67*, 215–216. [CrossRef]
103. Anderson, T.W.; Darling, D.A. A test of goodness of fit. *J. Am. Stat. Assoc.* **1954**, *49*, 765–769. [CrossRef]
104. Cramer, H. On the composition of elementary errors. *Scand. Actuar. J.* **1928**, *1928*, 141–180. [CrossRef]
105. Kolmogorov, A.N. Sulla Determinazione Empirica di Una Legge di Distribuzione. *Giornale dell'Istituto Italiano Degli Attuari* **1933**, *4*, 83–91.
106. Smirnov, N.V. Sui la distribution de w2. *Comptes Rendus* **1936**, *202*, 449–452.
107. Kruskal, W.H.; Wallis, W.A. Use of ranks in one-criterion variance analysis. *J. Am. Stat. Assoc.* **1952**, *47*, 583–621. [CrossRef]
108. Van Hecke, T. Power study of anova versus Kruskal-Wallis test. *J. Stat. Manag. Syst.* **2012**, *15*, 241–247.
109. Hettmansperger, T.P.; Mottonen, J.; Oja, H. Affine invariant multivariate rank tests for several samples. *Stat. Sin.* **1998**, *8*, 785–800.
110. Fan, C.; Zhang, D.; Zhang, C.H. On sample size of the Kruskal–Wallis test with application to a mouse peritoneal cavity study. *Biometrics* **2011**, *67*, 213–224. [CrossRef]
111. Neyman, J.; Pearson, E.S. On the use and interpretation of certain test criteria for purposes of statistical inference: Part I. *Biometrika* **1928**, *20*, 175–240.
112. Dunn, O.J. Multiple comparisons among means. *J. Am. Stat. Assoc.* **1961**, *56*, 52–64. [CrossRef]
113. Dinno, A. Nonparametric pairwise multiple comparisons in independent groups using Dunn's test. *Stata J.* **2015**, *15*, 292–300. [CrossRef]
114. Streiner, D.L.; Norman, G.R. Correction for multiple testing. Is there a resolution. *Chest* **2011**, *140*, 16–18. [CrossRef] [PubMed]
115. Ayaz, M.; Zabri, S.M.; Ahmad, K. An empirical investigation on the impact of capital structure on firm performance. Evidence from Malaysia. *Manag. Financ.* **2021**, *47*, 1107–1127. [CrossRef]
116. Tsuruta, D. Variance of Firm Performance and Leverage of Small Businesses. *J. Small Bus. Manag.* **2017**, *55*, 404–429. [CrossRef]
117. Schonfeld, J. Financial situation of pre-packed insolvencies. *J. Bus. Econ. Manag.* **2020**, *21*, 1111–1127. [CrossRef]

118. Virglerova, Z.; Homolka, L.; Smrcka, L.; Lazanyi, K.; Kliestik, T. Key determinants of the quality of business environment of SMEs in the Czech Republic. *E+M Ekon. Manag.* **2017**, *20*, 87–101. [CrossRef]
119. Topyan, K. Levered-Beta and Cost of Capital Sensitivities: An Experimental Investigation in Capital Structure. *J. Risk Financ. Manag.* **2021**, *14*, 152. [CrossRef]
120. Domokos, L.; Pulay, G.; Peto, K.; Pongracz, E. The Role of the State Audit Office of Hungary in Stabilising Public Finances. *Public Financ. Q.* **2015**, *60*, 415–432.
121. Claeys, P.; Moreno, R.; Surinach, J. Debt, interest rates, and integration of financial markets. *Econ. Model.* **2012**, *29*, 48–59. [CrossRef]
122. Mazanec, J.; Bartosova, V. Prediction Model as Sustainability Tool for Assessing Financial Status of Non-Profit Organizations in the Slovak Republic. *Sustainability* **2021**, *13*, 9721. [CrossRef]
123. Basic, F.; Globan, T. Early bird catches the worm. Finding the most effective early warning indicators of recessions. *Econ. Res.-Ekon. Istraz.* **2022**. [CrossRef]
124. Zakaria, F.; Salawa, D. Hierarchical financing and reality of the financial structure of Moroccan listed companies. *J. Model. Manag.* **2020**. [CrossRef]
125. Chen, H.; Xu, Y.; Yang, J. Systematic risk, debt maturity, and the term structure of credit spreads. *J. Financ. Econ.* **2021**, *139*, 770–799. [CrossRef]
126. Musa, H.; Musova, Z.; Natorin, V.; Lazaroiu, G.; Boda, M.M. Comparison of factors influencing liquidity of European Islamic and conventional banks. *Oecon. Copernic.* **2021**, *12*, 375–398. [CrossRef]
127. Gul, F.A.; Goodwin, J. Short-term debt maturity structures, credit ratings, and the pricing of audit services. *Account. Rev.* **2010**, *85*, 877–909. [CrossRef]
128. Dangl, T.; Zechner, J. Debt maturity and the dynamics of leverage. *Rev. Financ. Stud.* **2021**, *34*, 5796–5840. [CrossRef]
129. Batrancea, L. The Influence of Liquidity and Solvency on Performance within the Healthcare Industry: Evidence from Publicly Listed Companies. *Mathematics* **2021**, *9*, 2231. [CrossRef]
130. Michalski, G.; Blendinger, G.; Rozsa, Z.; Cierniak-Emerych, A.; Svidronova, M.; Buleca, J.; Bulsara, H. Can we determine debt to equity levels in non-profit organisations? Answer based on Polish case. *Eng. Econ.* **2018**, *29*, 526–535.
131. Boshnak, H. The impact of capital structure on firm performance. Evidence from Saudi-listed firms. *Int. J. Discl. Gov.* **2022**. [CrossRef]
132. Ghardallou, W. Capital Structure Decisions and Corporate Performance: Does Firm's Profitability Matter. *J. Sci. Ind. Res.* **2022**, *81*, 859–865.
133. Nukala, V.B.; Prasada Rao, S.S. Role of debt-to-equity ratio in project investment valuation, assessing risk and return in capital markets. *Future Bus. J.* **2021**, *7*, 1–23. [CrossRef]
134. Raval, A.; Dave, A. The Empirical Study of Association of Capital Structure and Profitability of Telecommunication Firms. *Biosci. Biotechnol. Res. Commun.* **2021**, *14*, 190–193. [CrossRef]
135. Karas, M.; Reznakova, M. The stability of bankruptcy predictors in the construction and manufacturing industries at various times before bankruptcy. *E+M Ekon. Manag.* **2017**, *20*, 116–133. [CrossRef]
136. Kordsachia, O. A risk management perspective on CSR and the marginal cost of debt. Empirical evidence from Europe. *Rev. Manag. Sci.* **2021**, *15*, 1611–1643. [CrossRef]
137. Kaur, D.; Srivastava, S. Corporate debt restructuring and firm performance: A study of Indian firms. *Serb. J. Manag.* **2017**, *12*, 271–281. [CrossRef]
138. Noghondari, A.T.; Zeinali, H.; Beytollahi, A. The Effect of Company's Interest Coverage Ratio on the Structural and Reduced-Form Models in Predicting Credit Derivatives Price. *Iran. J. Manag. Stud.* **2022**, *15*, 169–188.
139. Guariglia, A.; Spaliara, M.E.; Tsoukas, S. To what extent does the interest burden affect firm survival? Evidence from a panel of UK firms during the recent financial crisis. *Oxf. Bull. Econ. Stat.* **2016**, *78*, 576–594. [CrossRef]
140. Sedlacek, J.; Nemec, D. Interest and tax burden on corporations in the Czech industrial and banking sector after 2008. *J. Econ. Perspect.* **2018**, *18*, 409–424.
141. Ramsay, B.A.; Sarlin, P. Ending over-lending: Assessing systemic risk with debt to cash flow. *Int. J. Financ. Econ.* **2016**, *21*, 36–57. [CrossRef]
142. Voon, J.P.; Lin, C.; Ma, Y.C. Managerial overconfidence and bank loan covenant usage. *Int. J. Financ. Econ.* **2020**, *27*, 4575–4598. [CrossRef]
143. Thaker, K.; Charles, V.; Pant, A.; Gherman, T. A DEA and random forest regression approach to studying bank efficiency and corporate governance. *J. Oper. Res. Soc.* **2022**, *73*, 1258–1277. [CrossRef]
144. Tousek, Z.; Hinke, J.; Malinska, B.; Prokop, M. The Performance Determinants of Trading Companies: A Stakeholder Perspective. *J. Compet.* **2021**, *13*, 152–170. [CrossRef]
145. Yadav, I.S.; Pahi, D.; Goyari, P. The size and growth of firms. New evidence on law of proportionate effect from Asia. *J. Asia Bus. Stud.* **2020**, *14*, 91–108. [CrossRef]
146. Dang, H.T. Determinants of liquidity of listed enterprises: Evidence from Vietnam. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 67–73. [CrossRef]
147. Kusuma, M.W.; Badrudin, R. Fiscal decentralization effect on economic growth in Bali. *Econ. J. Emerg. Mark.* **2016**, *8*, 136–147. [CrossRef]
148. Lentner, C.; Nagy, L.; Vasa, L.; Hegedus, S. Comparative analysis of the process for compliance with the European Charter of Local Self-Government in The Czech Republic, Hungary and Slovakia-with special emphasis on economic conditions and Hungarian atypical features. *Econ. Ann.-XXI* **2018**, *173*, 10–18. [CrossRef]
149. Rajan, R.G.; Zingales, L. What do we know about capital structure? Some evidence from international data. *J. Financ.* **1995**, *50*, 1421–1460. [CrossRef]
150. Hasanuddin, R.; Darman, D.; Taufan, M.Y.; Salim, A.; Muslim, M.; Putra, A.H.P.K. The Effect of Firm Size, Debt, Current Ratio, and Investment Opportunity Set on Earnings Quality: An Empirical Study in Indonesia. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 179–188.

151. Jaworski, J.; Czerwonka, L. Determinants of enterprises' capital structure in energy industry: Evidence from European Union. *Energies* **2021**, *14*, 1871. [CrossRef]
152. Quintella, O.M.; Coelho, C.U.F. A study about the determinant factors of the capital structure of Brazilian companies. A quantile regression analysis. *Rev. Ambient. Cont.* **2021**, *13*, 54–71.
153. Chen, J.J. Determinants of capital structure of Chinese-listed companies. *J. Bus. Res.* **2004**, *57*, 1341–1351. [CrossRef]
154. Kristofik, P.; Medzihorsky, J. Capital Structure Determinants of Wood-Processing Enterprises In Slovakia. *Acta Fac. Xylologiae* **2022**, *64*, 135–146.
155. Neykov, N.; Kristakova, S.; Antov, P.; Halalisan, A.F.; Hajduchova, I.; Sedliacikova, M.; Sloup, R.; Sisak, L. Capital Structure Determinants of Forest Enterprises: Empirical Study Based on Panel Data Analysis from the Czech Republic, Slovakia, and Bulgaria. *Forests* **2022**, *13*, 749. [CrossRef]
156. Tsolas, I.E. Efficiency and Determinants of Capital Structure in the Greek Pharmaceutical, Cosmetic and Detergent Industries. *J. Risk Financ. Manag.* **2021**, *14*, 579. [CrossRef]
157. Saif-Alyousfi, A.Y.; Md-Rus, R.; Taufil-Mohd, K.N.; Taib, H.M.; Shahar, H.K. Determinants of capital structure. Evidence from Malaysian firms. *Asia-Pac. J. Bus. Adm.* **2020**, *12*, 283–326. [CrossRef]
158. Ali, S.; Rangone, A.; Farooq, M. Corporate Taxation and Firm-Specific Determinants of Capital Structure: Evidence from the UK and US Multinational Firms. *J. Risk Financ. Manag.* **2022**, *15*, 55. [CrossRef]
159. Ayalew, Z.A. Capital structure and profitability: Panel data evidence of private banks in Ethiopia. *Cogent Econ. Financ.* **2021**, *9*, 1953736. [CrossRef]
160. Abinzano Guillen, M.I.; Gonzalez Urteaga, A.; Muga Caperos, L.F.; Sanchez Alegria, S. Performance of default-risk measures. The sample matters. *J. Bank. Financ.* **2020**, *120*, 105959. [CrossRef]
161. Belas, J.; Gavurova, B.; Toth, P. Impact of selected characteristics of SMES on the capital structure. *J. Bus. Econ. Manag.* **2018**, *19*, 592–608. [CrossRef]
162. Dvoulety, O.; Blazkova, I. Exploring firm-level and sectoral variation in total factor productivity (TFP). *Int. J. Entrepreneurial Behav. Res.* **2021**, *27*, 1526–1547. [CrossRef]
163. Kajurova, V.; Linnertova, D. Loose Monetary Policy and Corporate Investment of Manufacturing Firms in the Czech Republic. *J. Econ. Perspect.* **2018**, *18*, 371–385. [CrossRef]
164. Syrova, L.; Spicka, J. The Impact of Foreign Capital on the Level of ERM Implementation in Czech SMEs. *J. Risk Financ. Manag.* **2022**, *15*, 83. [CrossRef]
165. Vintila, G.; Gherghina, S.C.; Paunescu, R.A. Study of effective corporate tax rate and its influential factors: Empirical evidence from emerging European markets. *Emerg. Mark. Financ. Trade* **2018**, *54*, 571–590. [CrossRef]
166. Mirota, F.; Nehrebecka, N. Determinants of Cash Holdings in Listed Companies in Poland. *Gospod. Nar.* **2018**, *295*, 75–102. [CrossRef]
167. Koralun-Bereznicka, J.; Ciolek, D. Industry and size effect in profitability-capital structure relation. Empirical evidence from Poland. *Rom. J. Econ. Forecast.* **2018**, *21*, 93–107.
168. Jaworski, J.; Czerwonka, L.; Madra-Sawicka, M. Determinants of capital structure: Evidence from Polish food manufacturing industry. *Ger. J. Agric. Econ.* **2019**, *68*, 45–56.
169. Jedrzejczak-Gas, J. Determinants of the capital structure of TSL sector enterprises. *Management* **2018**, *22*, 1429–9321. [CrossRef]
170. Kedzior, M. Capital structure in EU selected countries–micro and macro determinants. *Argum. Oecon.* **2012**, *28*, 69–117.
171. Fenyves, V.; Peto, K.; Szenderak, J.; Harangi-Rakos, M. The capital structure of agricultural enterprises in the Visegrad countries. *Agric. Econ.* **2020**, *66*, 160–167. [CrossRef]
172. Ulbert, J.; Takacs, A.; Csapi, V. Golden ratio-based capital structure as a tool for boosting firm's financial performance and market acceptance. *Heliyon* **2022**, *8*, e09671. [CrossRef] [PubMed]
173. Hernadi, P.; Ormos, M. Capital structure and its choice in Central and Eastern Europe. *Acta Oecon.* **2012**, *62*, 229–263. [CrossRef]
174. Wasiuzzaman, S.; Nurdin, N. Debt financing decisions of SMEs in emerging markets. Empirical evidence from Malaysia. *Int. J. Bank Mark.* **2018**, *37*, 258–277. [CrossRef]
175. Gornall, W.; Strebulaev, I.A. Squaring Venture Capital Valuations with Reality. *J. Financ. Econ.* **2019**, *135*, 120–143. [CrossRef]
176. Siev, S. The Rich Get Richer and the Poor Get Poorer: Social Media and the Post-IPO Behavior of Investors in Biotechnology Firms: The Relationship with Twitter Volume. *J. Risk Financ. Manag.* **2021**, *14*, 456. [CrossRef]
177. Sokolinskiy, O.; Melamed, B.; Sopranzetti, B. Precautionary replenishment in financially-constrained inventory systems subject to credit rollover risk and supply disruption. *Ann. Oper. Res.* **2018**, *271*, 971–997. [CrossRef]
178. Khan, K.I.; Qadeer, F.; Mata, M.N.; Dantas, R.M.; Xavier Rita, J.; Martins, J.N. Debt Market Trends and Predictors of Specialization: An Analysis of Pakistani Corporate Sector. *J. Risk Financ. Manag.* **2021**, *14*, 224. [CrossRef]
179. Rashid, M.M. Ownership structure and firm performance. The mediating role of board characteristics. *Corp. Gov.* **2020**, *20*, 719–737. [CrossRef]
180. Tripathi, S.; Talukder, B.; Rangarajan, K. Do supply chain performance influence firm profitability? A predictive approach in the context of the Indian pharmaceutical industry. *IIM Kozhikode Soc. Manag. Rev.* **2021**. [CrossRef]
181. Sikochi, A. Corporate legal structure and bank loan spread. *J. Corp. Financ.* **2020**, *64*, 101656. [CrossRef]
182. Giaretta, E.; Chesini, G. The determinants of debt financing: The case of fintech start-ups. *J. Innov. Knowl.* **2021**, *6*, 268–279. [CrossRef]
183. Guluma, T.F. The impact of corporate governance measures on firm performance. The influences of managerial overconfidence. *Future Bus. J.* **2021**, *7*, 50. [CrossRef]

184. Franquesa, J.; Vera, D. Small business debt financing. The effect of lender structural complexity. *J. Small Bus. Enterp. Dev.* **2021**, *28*, 456–474. [CrossRef]
185. Stefko, R.; Jencova, S.; Vasanicova, P. The Slovak Spa Industry and Spa Companies: Financial and Economic Situation. *J. Tour. Serv.* **2020**, *11*, 28–43. [CrossRef]
186. Lukacka, P. Special Duties of Directors in Limited Liability Companies Under The Law Of The Slovak Republic. *Ad Alta J. Interdiscip. Res.* **2017**, *7*, 100–104.
187. Kristofik, P.; Slampiakova, L. Differences in Capital Structure of Publicly Traded Companies in Europe and USA. *Polit. Ekon.* **2021**, *69*, 322–339. [CrossRef]
188. Divila, E. Transformation Debt of Agricultural Enterprises in the Czech Republic. *Polit. Ekon.* **2004**, *52*, 637–656. [CrossRef]
189. Hanousek, J.; Kocenda, E.; Shamshur, A. Efficiency of European Firms. *Polit. Ekon.* **2014**, *62*, 303–322. [CrossRef]
190. Jansky, P.; Kokes, O. Profit-shifting from Czech multinational companies to European tax havens. *Appl. Econ. Lett.* **2016**, *23*, 1130–1133. [CrossRef]
191. Ruckova, P.; Heryan, T. The capital structure management in companies of selected business branches of building in conditions of the Czech Republic. *Prague Econ. Pap.* **2015**, *2015*, 699–714.
192. Plucinski, P. Debt and crisis: Socio-economic critique of neoliberal transformation in Poland. *Econ. Labour Relat. Rev.* **2020**, *31*, 211–229. [CrossRef]
193. Miszczynska, K.; Miszczynski, P. Debt, Ownership, and Size: The Case of Hospitals in Poland. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4596. [CrossRef]
194. Kubiak, J. Methods For Examining Information Asymmetry In Enterprises In The Case Of Capital Allocation. *Gospod. Nar.* **2011**, *4*, 45–67. [CrossRef]
195. Allen, F.; Jackowicz, K.; Kowalewski, O.; Kozlowski, L. Bank lending, crises, and changing ownership structure in Central and Eastern European countries. *J. Corp. Financ.* **2017**, *42*, 494–515. [CrossRef]
196. Earle, J.S.; Kucsera, C.; Telegdy, A. Ownership concentration and corporate performance on the Budapest stock exchange. Do too many cooks spoil the goulash. *Corp. Gov.* **2005**, *13*, 254–264. [CrossRef]
197. Brown, D.J.; Earle, J.S.; Telegdy, A. Where does privatization work? Understanding the heterogeneity in estimated firm performance effects. *J. Corp. Financ.* **2016**, *41*, 329–362. [CrossRef]

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