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THE INFLUENCE OF SELECTED INDICATORS ON THE CHANGE IN THE VALUE OF THE ENTERPRISE'S ASSETS[*]

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Abstract. This article examines the newspaper and magazine publishing industry in the Slovak Republic. For business entities, it is important to ensure the growth of the enterprise value, to achieve the planned sales, the highest possible operational performance of the enterprise, to be better compared to the performance of other enterprises, to exist on the market for as long as possible and to increase the market share. The aim of the article is to investigate influence of the indicators of sales, EBITDA and age of the enterprise on the change in the value of the volume of the enterprise's assets. The assumption is that these three indicators affect the growth or decline in the value of the enterprise's assets. This assumption is investigated separately for each indicator through hypothesis testing. The results of the hypotheses are interpreted and commented. Subsequently, multiple linear regression analysis is used to investigate the joint influence of the indicators. This method analyzes the interrelationships of all variables. We compared the results of these two types of linear regression analyses. The result of the research is the finding that two different analytical procedures, simple linear regression analysis and multiple linear regression analysis, confirmed basically the same influence of the indicators. The influence of the sales and EBITDA indicators is positive in relation to the growth of the enterprise's assets, but the indicator of the age of the enterprise has the opposite effect.

Keywords: newspaper and magazine publishing industry; Slovak Republic; assets of the enterprise; sales revenue; EBITDA; age of the enterprise; valuation

1. Introduction

The transformation of the political and economic system in the Slovak Republic since 1989 has enabled the emergence of free media. The centrally controlled economy was transformed into a market economy and as a consequence the state monopoly on the ownership of the mass communist media fell. In the newspaper and magazine publishing industry, the demand for new formats of media has increased and new independent editorial offices have been established. The newspaper and magazine publishing industry is being demonopolised. The liberalisation of the market has allowed the birth of new periodicals, newspapers and magazines. Holina (1999) writes about the initial boom, which was reflected in an increase in the number of copies sold. The number of daily newspaper and magazine titles published increased, and there was also a boom

in regional press. However, this situation has changed since around 2010. Štětka (2015) characterizes this period in the Slovak media market by three stages of the evolution of newspaper and magazine publishing industry ownership. Vizcarrondo (2013) describes similar developments in the media market (monopoly → market liberalisation → media oligarchisation) with a certain time lag in developed economies.

However, the competitive situation on the market, the rise of digital media and economic crises have gradually stimulated the acquisition activity of media owners. This activity has resulted in the establishment of big media houses. They currently owns a broad portfolio of titles in a variety of genres that include both print and digital media. It follows that media houses owned by oligarchs have a large market share in Slovakia. Media houses have sophisticated technological and distribution facilities. In addition to the big publishers, there are also a large number of smaller independent publishers in this market.

The competitive advantage of publishing houses over smaller publishing houses lies mainly in the possibility of allocating fixed costs among the individual entrepreneurially separate entities and balancing profits and losses across a portfolio of titles. Therefore, the economic results, measured for example by EBITDA, are also acceptable for these publishing houses. The newspaper and magazine publishing industry has the advantage of a skilled workforce and cooperation with a number of external collaborators (translators, graphic designers, editors, etc.). There is a tradition of reading periodical and non-periodical publications in the Slovak Republic. The specific advantage of publishing printed newspapers and magazines is that the market is not threatened by the import of this type of product from abroad.

2. Theoretical background

Market situation is assessed by many criterias: volume of sales, profit, market share, the number of enterprises, size of customers and vendors, conditions of entry, service differentiation. Behavior is indicated by the pricing policy, agreements, mergers, or business entities. Business activities are related to the industry results such as product or service quality, productivity, profit, distribution efficiency (Reschiwati, Syahdina & Handayani, 2020; Peleckis, 2022; Du, Wang & Li, 2022).

The size of the enterprise's assets is an indicator of the company's position on the market and also its market value. Large enterprises are valued more than smaller ones. This idea is based on the principle that the risk profile of a business changes depending on its size, which affects its overall value. Larger enterprises generally have a more diversified portfolio of products, customers and suppliers, which reduces business risk. Small and medium enterprises are the ones that make the economy stable.

The manifestation of the sustainability of the business are the growth of the volume of the enterprise's assets and its stabilization, the required performance of the enterprise and its expression by the EBITDA indicator, the period of continuous existence of the enterprise expressed in the number of years from its inception to the current period. Age of a enterprise is the number of years of operation, i.e. the number of completed years of activity of the enterprise. The age of a enterprise is an important criterion for examining enterprises. It differentiates the economic performance of young and old enterprises. In this way, it examines the impact of the life span on the enterprise (Maggina & Tsaklanganos, 2012). Age and size are very important factors to consider. Successful internationalization is influenced by capabilities and resources. Capabilities and resources are elements that are closely connected to age, with young firms having limited access to resources and fewer capabilities than older firms. Age or size of these firms leads them to have higher international market performance (Adarov & Stehrer, 2019).

Assets are items of value that an enterprise owns or leases for the purpose of operation. Assets are purchased or created to add value to the enterprise or to benefit its operations. The importance of assets is that they generate revenue, assist in the running of the business and increase the value of the business. Thus, an asset is a resource with economic value that is anticipated to provide future benefits (generates cash flows, reduces costs, helps increase productivity, efficiency, company earnings, etc.). The effect of firm size, as measured by the amount of enterprise assets, on the value of the enterprise has been examined by Reschiwati, Syahdina and Handayani (2020). They confirm that the size of the enterprise depends on the value of the assets. Relationship between

investment in intangibles assets and firm size and the age of the enterprise have examined Seo and Kim (2013). OECD (2011) identifies intaglibles assets as a source of growth and business sustainability. According to Maggin and Tsaklanganos (2012), in large enterprises the growth of assets is higher, this is also related to the market position of the enterprise. Thus, it also has an impact on the market share (Maggin & Tsaklanganos, 2012). An extensive study on the impact of assets on enterprise performance growth and development was conducted by Adarov and Stehrer (2019) The role of asset management is researched by Maletic et al. (2020), and they argue that good asset management improves the sustainability of the enterprise through effective management of expenditures and activities in order to achieve both short- and long-term planned impacts, including sustainability of operations, and to generate benefits in terms of sustainability of the enterprise's performance.

Sales revenues is the amount of money that the enterprise obtained through the sale of products, goods and services in the monitored accounting period and is the main financial source of the enterprise. They provide cash flow, express the level of profitability of the enterprise and its position on the market. They are decisive financial resources that serve to pay the costs and taxes of the enterprise, to pay dividends and to develop the enterprice. The physical volume of production and services structure of sales, product prices, collection method and payment period, and other factors are decisive for the amount of sales. Sales revenue is one of the most important indicators of its economic performance and is a basic source of income generation. Growth in sales revenue provides funds for investments, market expansion, and business process improvement. Thus, sales revenue is the main source of income for the enterprise. Their proper management, growth and maximization are key factors for financial stability, prosperity and sustainable growth of the enterprise. Sustainable growth ensures that the enterprice has enough resources for long-term development and maintaining competitiveness within the market (Hrynyuk et al., 2021; Avi, 2022).

The enterprise's total financial performance is measured by EBITDA. Indicator EBITDA stands for earnings before interest, taxes, depreciation and amortisation. It is valuable in that it provides insight into whether a business can successfully generate income and how that income changes over time. EBITDA provides information about the value of the enterprise and creates insight into the enterprise's sustainable growth opportunities. It measures the overall financial performance of the enterprise. It focuses on the financial outcome of operating decisions by eliminating the impact of non-operating management decisions, in relation to interest, taxes, depreciation and amortization. Lin et all (2022) write that EBITDA can evaluate the cash flow aspect of a enterprise, it can be used to assess the renewal capabilities of asset equipment and operational performance. EBITDA has mostly been used in the evaluation and credit of the business value and financial situation of an enterprise.

This work also confirms the importance of EBITDA for entrepreneurs' decision making on business sustainability. They also demonstrate its impact on the development of the business and thus its ability to expand its market share. To predict the actual profit of the fashion industry, because of its great importance for the valuation of economic sectors, Rubio, Gutiérrez-Rodríguez and Forero (2021) used EBITDA. By modelling EBITDA, it was possible to study the future behaviour of the industry, which facilitated decision-making regarding growth and value maximization. The use of EBITDA and its modifications in different economic sectors can be found in Mao, Gan and Zhao (2019); Enodien et all (2021); Agrawa l(2021); Szewieczek, Dratwińska-Kania and Ferens (2021).

The age of a enterprise is related to the life cycle of the enterprise. The passage of time is expected to affect the growth of sales volume, the growth of market share, the change in asset size and profitability. If these economic indicators are developing as owners expect, and the enterprise is successful in the market, it has the potential to develop and achieve a sustainable business. They also demonstrate the influence of the age of the enterprise on its development and thus its ability to stay on the market. Theoretically, the longer a enterprise is established on the market, the stronger the trust of customers and investors. It is assumed that the longer a enterprise has been established, the more profits it has than younger enterprises. As the age of a enterprise grows, enterprise tend to become more experienced and efficient. This has the effect of making them more competitive and successful. The older the enterprise is, the more experience they gain for better operation and management, which can have a positive impact on the value of the enterprise (Lambey et all, 2021).

Jantyik, Balogh and Török (2021) in their research found that, in contrast, other company-specific feature, the age of the enterprise does not affect the likelihood of survival. Among the characteristics of the industry, the level of growth, concentration, and intensity of entry play a significant role in the survival chances of small-scale breweries. They have foundfound a negative and convex relationship between firm age and profitability measured by return on assets, return on equity or gross profit margin. It means that younger businesses experience a decline in their profitability from the beginning, but they may become profitable again at an old age. Also confirm the conclusion that older enterprises have higher profits and value. Badulescu et all (2018) state that Santos, investigating a consistent sample of Portuguese SMEs, stated that" the involvement of SMEs in the external community is directly related with the size of the enterprise and its operational age". They also found a significant impact between age of the enterprise and Corporate Social Responsibility. The age of the enterprise does not only play a role in economic indicators, but also has an impact on the social commitment of enterprises. The studyof Rubio, Gutiérrez-Rodríguez and Forero (2021) analysed the moderating effects of the firm age and the industry condition on the relationship between entrepreneurial performance affected by the entrepreneurial experience. Firm age plays an important role in the process of promoting entrepreneurial performance. Firm age is an important consideration for the growth of entrepreneurial enterprises because different stages of business growth affect entrepreneurial performance over time. Lincényi and Fabuš (2017) state that the market trends of the daily press prove the saturation of the newspaper market in Slovakia, determined by the unfavorable deterioration of the economic conditions of publishing activity (price of paper, value added tax, mandatory fees, etc.), lower purchasing power of readers and new social habits populations occurring in connection with the development of digital technologies. They explain that the decreasing interest of people in print media will also be related to the decreasing volumes of advertising in the sector.

3. Research objective and methodology

The research topic is the newspaper and magazine publishing industry in the Slovak Republic. The aim of this article is to investigate the impact of selected economic indicators in the newspaper and magazine publishing industry in the Slovak Republic. We characterize the newspaper and magazine publishing industry as a competitive business environment in the Slovak Republic.

In our work we investigate the research problem, the relationship between selected economic indicators: Assets of the enterprise, Sales revenue, EBITDA and Age of the enterprise. We then formulate the research questions and establish assumptions, define hypotheses and test them with an adequate statistical test. We are interpreting and commenting the results. The observation period are the years 2015 and 2022.

Economic indicators, variables, that influence each other are:
- the volume of the enterprise's Assets – dependent variable, amount of the enterprise's assets
- the value of Sales revenue – independent variable,
- the value of the EBITDA indicator – independent variable, and
- the Age of the enterprise – independent variable.

In this article, we analyze the interrelationships of indicators (variables):
- Assets expresses the value of assets in Euros. Assets are all the factors of production that an enterprise acquires as its property, in the run of its business, and uses to achieve its objectives,
- Sales revenue is the sum of revenue from the sale of goods and own products and services in Euros,
- EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization) expresses the value of the indicator in Euros. EBITDA is used to evaluate the operating performance of a enterprise. The operating performance of an enterprise can be characterised as its ability to valorise the resources invested in its activities, to produce profit, to increase the value of the enterprise, and at the same time it is the ability to ensure the sustainability of the business activity,
- Age measures the difference between the year under study and the year of establishment of the enterprise. The data represent the absolute numerical value of the age of enterprises.

The names of the variables in the text will be written with a capital initial letter: Assets, Sales revenue, EBITDA and Age.

The object of observation are concrete publishers of newspapers and magazines. We surveyed the core group of 154 enterprises. These enterprises declare business in the newspaper and magazine publishing industry, they are classified according to NACE (Nomenclature of Economic Activities), the European statistical classification of economic activities). We verified each single enterprise through an individual check from public sources.

We found that 129 enterprises have real sales from the business. Next, we investigated the number of years in business. We determined the condition that the enterprises must be active on the market since 2015. Therefore, we excluded another 22 enterprises due to the short period (age) of business. After this revision, the research sample consists of 107 enterprises. We identify these enterprises as a representative statistical sample. We made 856 observations in total.

We had authorized access to the economic data of these enterprises through the FinStat database (FinStat. Financial information on Slovak companies, 2023) and publicly available data from the Register of Financial Statements, Ministry of Finance of the Slovak Republic (2023). The sample included publishers who publish annual financial statements according to Slovak Accounting Standards, Act no. 431/2002 Coll. on Accounting. This is in accordance with the Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of enterprises (Council of Europe, 2019; Official Journal of the European Union, 2004).

We characterize the current market of newspaper and magazine publishing by quantifying the level of concentration of the examined sample of enterprises using the Herfindahl-Hirschman index (HHI) (The United States Department of Justice, 2015). We applied this calculation only for the year 2022. In the research sample, the HHI index has a value of 1,037.58. According to the US Department of Justice and the Federal Trade Commission's guidelines on horizontal mergers we can characterize this market as a non-concentrated market. However, it should be noted that the market share of the first two companies is 49.49% and the first four companies up to 60.59%. Based on this, we can characterize the market as an oligopoly.

The data were analysed using the statistical software Jamovi (the jamovi project was founded to develop a free and open statistical platform) and Microsoft Excel Data Analysis. Statistical evaluation of data, values and comments were processed according to Hanák (2015). We will investigate the causal relationship between the variables by linear regression analysis and we will quantify these relationships in an exact way.

4 Results and discussion

4.1 Variables, test for normal distribution and correlation

We first characterize the variables (Assets, Sales revenue, EBITDA and Age) using selected descriptive statistics. The research sample is n = 856 observations in total. The results are in Table 1 below.

Table 1. Selected indicators of descriptive statistics

Variables	Assets	Sales	EBITDA	Age
N	856,00	856,00	856,00	856,00
Mean	1 604 875,15	1 112 986,82	124 624,77	15,60
Median	87 310,50	110 016,00	6 655,00	15,00
Standard deviation	7 294 487,55	3 961 527,63	622 776,00	6,81

Source: own processing, Jamovi

The next step was using Shapiro-Wilk test for normality of data distribution. We report the results of the test in Table 2.

Table 2. Shapiro -Wilk test for normality data distribution

Variable	statistic	p
Assets	0.21195	< 0.000
Sales	0.27986	< 0.000
EBITDA	0.24357	< 0.000
Age	0.98355	0.000

Source: own processing, Jamovi

All tests for the normality of data distribution came out statistically significant, therefore all variables (Assets, Sales, EBITDA, Age) are not normally distributed.

We used correlation to examine the interdependencies between variables. By post-power correlation, we can calculate a measure of linear interdependence between two variables, which means that the values of one variable tend to co-occur with the values of the other variable (see Table 3).

Table 3. Correlation matrix by Kendall's Tau-B

Varibles		Assets	Sales	EBITDA
Sales	Kendall's Tau B	0.61741***	—	—
	p-value	< 0.000	—	—
EBITDA	Kendall's Tau B	0.42693***	0.40764***	—
	p-value	<0.000	<0.000	—
Age	Kendall's Tau B	0.02107	0.02268	-0.07616**
	p-value	0.365	0.329	0.0011

Note. * p < .05, ** p < .01, *** p < .001
Source: own processing, Jamovi

Assets correlation value by Sales variable. The impact of Sales volume on the value of Assets is strong to very strong. Kendall's Tau-B (0.61741) show high positive values.

Correlation value of Assets according to the EBITDA variable. The impact of the EBITDA volume on the value of Assets is great. The values of Kendall's Tau-B (0.42693) express that the correlation between the variables is positive and strong.

Assets correlation value by Age variable. The values of Kendall's Tau-B (0.02107) are very low, the correlation practically does not exist.

Another significant positive correlation is between the indicators Sales and EBITDA, Kendall's Tau-B (0.40764) is a strong association.

The Age variable shows a very weak negative correlation with other indicators, or the values show that the correlation practically does not exist.

4.2. Testing of hypotheses

4.2.1. First research question
Using linear regression analysis we examine the causal relationship between the two variables and to quantify this relationship. We will test the interrelationships between the dependent variable amount of the enterprise's Assets and the independent variables value of Sales revenue, EBITDA a Age of the enterprise. We test these relationships using a linear regression model by defining the research questions and hypotheses.

The first research question: „Does the value of Sales revenue affect the amount of the enterprise's Assets?". We set the assumption „Value of Sales revenue has an impact on the amount of the enterprise's Assets". We formulated the hypothesis (H):

Hypothesis (H0) „Value of Sales revenue does not affect the amount of the enterprise's Assets."
Hypothesis (H1) „Value of Sales revenue has an impact on the amount of the enterprise's Assets."

Results of linear regression analysis, relationship between amount of the enterprise's Assets and value of sSles revenue. Commentary (Table 4):

Table 4. Model 1 Fit Measures

Model	R	R²	Adjusted R²	Overall Model Test			
				F	df1	df2	p
1	0.8692	0.7555	0.7552	2 639	1	854	<0.001

Model Coefficients - Sales							
			95% Confidence Interval				
Predictor	Estimate	SE	Lower	Upper	t	p	SE
Intercept	-176 438.81	128 133.79	-427 932.86	75 055.24	-1.377	0.169	
Sales	1.600	0.03116	1.539	1.662	51.370	<0.001	0.8692

Note SE – Standard Estimate
Source: own processing, Jamovi

The value of Multiple R = 0.8692 expresses that there is a high strength of interdependence between the variables Assets of the enterprise and Sales revenue. The R Square indicator has a high value of 0.7555. This means that Sales influence 75.55% of the change in the value of Assets. The other factors have 24.45% influence. The level of description of the interrelationship between variables indicates F = 2 639 and Sig. < 0.001. These values are lower than the accepted level of statistical significance of $p \leq 0.05$. The model can describe the correlation between variables.

The relationship between the variables is described by the regression equation, takes the form: Y = -176 438.81 + 1.6000 * Sales.

The confidence intervals for assets are (-427 932.86; 75 055.24). Within our interval, the parameter, we are looking for has a value greater than zero. The relationship between the variables exists, the strength of the correlation between the variables is great. Value of Sales of the enterprise has an influence on the amount of Assets.

We accept the alternative hypothesis H1 „Value of Sales revenue has an impact on the amount of the enterprise's Assets". This means that a enterprise that generates a higher Sales revenue by volume also has a higher Assets amount. It is also true that as the size of assets increases, so does the volume of sales. This can also cause growth in market share. The sales volume creates adequate resources to ensure the sustainability of the enterprise and business.

The creation of a competitive market environment in Slovakia in the industry of publishing newspapers and magazines created new business opportunities for the emerging Slovak capital-forming class. This class of entrepreneurs has both economic and political influence. It is made up of individuals or groups of businessmen who can be described as oligarchs. They have business activities not only in the Slovak Republic, but also in some countries in Europe and Asia, etc., where they are active in various economic sectors including the media. In the Slovak Republic they created media houses. There are currently four such businesses. These companies currently publish four titles from six opinion-forming daily newspapers and eighty magazine titles of various genres. As the media houses are part of the business activities of the aforementioned business groups, they dispose of a high value of Assets. Assets represent the various forms of property of an enterprise, they are used for its development and for the business itself. In 2022 (2021), these four media houses owned up to 73,42%

(75,43%) of the total assets of the surveyed sample. The situation regarding the share of sales revenue of these four media houses in 2022 (2021) is 60.59% (62.52%).

4.2.2 Second research question

The second research question is: „Does the EBITDA value affect the amount of the enterprise's Assets?" We set the assumption „The value of EBITDA has an impact on the amount of the enterprise's Assets". We formulated a hypothesis (H):

Hypothesis (H0) „The level of EBITDA does not affect of the amount of the enterprise's Assets."
Hypothesis (H1) „Amount of the enterprise's assets grow with the growth of the EBITDA indicator value. The enterprise with higher EBITDA also has a higher amount of of the enterprise's Assets."

Results of linear regression analysis, relationship between amount of the enterprise's assets and value of the EBITDA indicator. Commentary (Table 5):

Table 5. Model 2 Fit Measures

Model	R	R²	Adjusted R²	F	df1	df2	p
				Overall Model Test			
2	0.8468	0.7170	0.7167	2 164	1	854	< 0.000

Model Coefficients - EBITDA

Predictor	Estimate	SE	Lower	Upper	t	p	SE
			95% Confidence Interval				
Intercept	368 824.576	135 337.2165	103 192.038	634 457.12	2.725	0.007	
EBITDA	9.918	0.2132	9.500	10.34	46.519	< 0.000	0.8468

Source: own processing, Jamovi

The Multiple R = 0,8468 expresses that there is a high strength of interdependence between the Asset and EBITDA variables of the entreprise. The R Square indicator has a high value of 0.7170. This means that the EBITDA variable influence 71.70 % of the change in the amount of Assets. The other factors have 28.30 influence. The level of description of the interrelationship between variables indicates F = 2 164 a Sig. < 0.000. The model can describe the correlation between variables.

The relationship between the variables is described by the regression equation,this takes the form: Y = 368 824.576 + 9.918 * EBITDA.

The confidence intervals for Assets is (103 192.038; 634 457.12). Within our interval, the parameter we are looking for has a value greater than zero. The relationship between the variables exists, the strength of the correlation between the variables is great. The value of EBITDA of the enterprise has an influence on the amount of Assets.

We accept the alternative hypothesis H1 "Amount of the enterprise's assets grow with the growth of the EBITDA indicator value. The enterprise with higher EBITDA also has a higher amount of of the enterprise's Assets". This means that a enterprise that generates a higher EBITDA by volume also has a higher Assets volume. As the amount of EBITDA grows, the value of Assets grows". That is, an enterprise that generates a higher EBITDA volume also has a higher enterprise's Assets.

EBITDA is a key indicator of a enterprise's performance, profitability, value growth and ability to repay debt. The main advantage of EBITDA is that it is a relatively accurate indicator for year-on-year comparisons of a company's operating performance, or for potential comparisons with other companies in the same sector. The four top enterprises shared 77,30 (80.26%) of the total EBITDA generated in 2022 (2021).

4.2.3 Third research question

Third research question: "Does the Age of the enterprise affect the value of the Assets of the enterprise?". We set the assumption "The Age of the enterprise, the period of its existence, has an impact on the value of the Assets of the enterprise". We formulated a hypothesis (H):

Hypothesis (H0) „The Age of the enterprise does not impact the value of the enterprise's Assets.“
Hypothesis (H1) „The Age of the enterprise has an impact on the value of the enterprise's Assets.“

Results of linear regression analysis, relationship between Assets (dependent) and Age of enterprise (variable). Commentary (Table 6):

Table 6. Model 3 Fit Measures

Model	R	R²	Adjusted R²	Overall Model Test			
				F	df1	df2	p
3	0.1435	0.0203	0.0194	17.9428	1	854	0.000

Model Coefficients - Age

Predictor	Estimate	SE	95% Confidence Interval		t	p	SE
			Lower	Upper			
Intercept	4 002 537.519	617 533.271	2 790 476.75	5 214 598.29	6.4815	0.000	
Age	-153 668.687	36 277.712	-224 872.6096	-4.2359	-4.2359	0.000	-0.1435

Source: own processing, Jamovi

Multiple R value = 0.1435. This value is also a very low value. This means that there is only a very weak correlation between the variables Assets and Age of the enterprise. The R Square indicator also has a very low value of 0.0203. This means that Age affects 2.03% of the change in the enterprise's Assets. The other factors have a 97.97% influence. The level of correlation between variables is F = 17.9428 a Sig. = 0.000. These values are also lower than the accepted level of statistical significance. The model is able to describe the correlation between these variables.

The relationship between the variables is described by the regression equation, this has the form: Y = 4 002 537.519 + (-153 668.687) * Age. The value of p is in this case lower than the statistical limit of confidence required to accept the alternative hypothesis H1.

The confidence interval for Age is (-224 872.6069; -4.2359). There is no zero within our interval, that is, the parameter we are looking for is less than zero, the value is negative. It is confirmed that there is a very weak relationship between the variables. The effect of the Age variable is therefore practically non-existent. Length of time in business does not affect the value of Assets.

It is confirmed that there is no relationship between the variables. Therefore, the effect of the variable Age is none. The length of time in the entrepreneurship in the newspaper industry has no effect on the value of enterprise's Assets. We confirm the hypothesis H0 "The age of the enterprise does not impact the value of the enterprise's Assets.“

We consider the age of the company to be an important variable. During the life cycle of the company, we assume the sustainability of the company on the market. We found that the age of the business does not affect the value of Assets. Significant acquisitions took place between 2017 and 2020. Media houses Mafra Slovakia and News and Media Holding acquired a portfolio of titles from Bauer Media SK and Ringier Axel Springer Slovakia. Several smaller publishers also sold their titles to this media house. Thus, the age of the company is not necessarily related to the size of the Assets. The value of Assets was influenced by the financial possibilities of media houses and acquisitions.

After 1989, the state monopoly practically ended in the Slovak Republic. The national economy was demonopolised and a competitive market environment for the independent newspapers and magazines publishing was created. For this reason, the age of the oldest media is no more than 33 years. Only since 1990 can we speak of a competitive environment in the newspaper and magazine publishing industry. Even within the genres of newspapers and magazines there was no competition. Newspapers and magazines have changed their previous mission.

The editorial offices were practically transformed into business entities. There was a demand for new, then mainly print media. New titles began to appear, a plurality of genres emerged, and the publishing of newspapers and magazines became an interesting business activity. The four most important media companies (News and Media Holding, Petit Press, MAFRA Slovakia, FPD Media) are 9, 23, 11 and 10 years old. These media companies are owned by influential financial groups that started their business activities after 1990. The financial groups bought some existing newspaper and magazine titles and concentrated them in new media houses.

4.3. Multiple linear regression analysis

We used multiple linear regression analysis to specify the dependence between Assets and predictors. The relationship is represented by the formula: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i$. The dependent variable (Intercept) is Assets β_0, the predictors are X_1= Sales β_1, X_2 = EBITDA β_2, X_3 = Age β_3 and εi represents the random error. The interrelationship of the variables is depicted as follows model (Table 7):

Table 7. Multiple linear regression

				Overall Model Test			
Model	R	R²	Adjusted R²	F	df1	df2	p
4	0.8954	0.8018	0.8011	1149.0609	3	852	< .000

Model Coefficients – Assets							
			95% Confidence Interval				
Predictor	Estimate	SE	Lower	Upper	t	p	SE
Intercept	809 002.7033	283 844.21	251 886.85	1366118.56	2.8502	0.004	
Sales	1.0024	0.05281	0.8988	1.1061	18.9809	< 0.000	0.5444
EBITDA	4.4421	0.3380	3.7788	5.1055	13.1436	< 0.000	0.3793
Age	-55 976.7264	16 523.69	-88 408.63	-23 544.82	-3.3877	0.001	-0.05225

Source: own processing, Jamovi

The accepted level of statistical significance $p \leq 0.05$ is met for both dependent and independent variables. The multiple regression equation has the resulting form:

$$Y = 809\ 002.7033 + 1.0024 \cdot Sales + 4.4421 \cdot EBITDA - 55\ 976.7264 \cdot Age + 283\ 844.2090$$

The correlation coefficient = 0.8954 is statistically significant and indicates a strong correlation. Adjusted R² interprets 80.11% of the variance of the dependent variable Assets is caused by the change of variable variables, F statistic 1149.0609, p <0 .000. The significance of the model is confirmed and indicates a statistically significant relationship between the independent variables and the dependent variable.

The value of the Sales coefficient is 1.0024, which means that an increase in sales by one unit will only slightly affect the growth of Assets. The value of the EBITDA coefficient is 4.4421, it is a positive value and indicates a positive relationship. This means that the higher the value of EBITDA, the higher the volume of Assets. The value of the Age coefficient is negative and has a value of -55 976.7264. The relationship between the variables is negative. This means that as the Age of the company grows, the value of its Assets decreases.

The overall normality test, applied to the variables of the multiple linear regression analysis, was measured by the Shapiro-Wilk test. The Shapiro-Wilk test has a statistical value of 0.3536 and p <0 .000. These results detect

that the data is not normally distributed. Durbin–Watson test for Autocorrelation shows a value of 0.6102, which means positive autocorrelation, DW statistic is 0.7796 and $p < 0.000$. Collinearity Statistics for variables:

- Sales: the VIF (variance inflation factor) value is 3.5365, that is, moderately correlated, there is a correlation with another variable, and the T (Tolerance) value (reciprocal of the variance inflation factor is known as the tolerance) is 0.2828, which means low tolerance and high multicollinearity.
- EBITDA: the VIF value is 3.5794, moderately correlated, there is a correlation with another variable and the T value is 0.2794, which means low tolerance and high multicollinearity.
- Age: the VIF value is 1.0229, i.e. uncorrelated, the variance of the standard error is 2.29%, on the contrary, T 0.9776 shows high tolerance and low multicollinearity.

The results of multiple regression analysis show that the influence of individual indicators has different quality. The first variable, Sales, shows a very low value. It means that with an increase in sales by 1 euro, Assets will increase by 1.0024 euro. A value of 1,000 euros would provide a realistic picture, which would bring an increase in sales by 2.10 euros, assuming that the value of EBITDA and Age remain constant. The model further describes the impact of EBITDA. This indicator has a value of 4.4421. In this case, an increase in the EBITDA indicator by 1 euro will bring an increase in the value of Assets by 4.44 euros, at 1,000 euros, the value of Assets will increase by 4 442.10 euros. Again, it is assumed that the value of Sales and Age remain constant. The Age of enterprise indicator has a negative impact on the value of Assets. The coefficient is negative, -55 976.7264, and means that if the age changes by 1 year, the value of Assets will decrease by this amount. Logically, we could attribute this decrease in the value of Assets to the impact of depreciation and amortization. Value of the dependent variable Assets is 809 002.7033 and value of the random error is 283 844.2090. It should also be pointed out that these three indicators affect up to 80.18% of the change in the Assets value.

Conclusions

In our article, we examined the influence of selected factors (Sales revenue, EBITDA indicator and Age of the company) on the change in the size of the enterprise's Assets in the newspaper and magazine publishing industry. The newspaper and magazine publishing industry is part of the cultural and creative industries. This industry in the Slovak Republic has the character of an oligopoly, it is dominated by a few media houses. The publishing of newspapers and magazines is currently undergoing a change in the nature of a specific product, from printed to digital form. The digital form of newspapers and magazines enables greater interactivity between the customer and the product. This form of publishing is becoming a sign of sustainable entrepreneurship development.

Our decision to examine enterprise's assets as a dependent variable results from the fact that we did not discover such research in the search of available scientific sources. Therefore, we consider our research to be a novelty. This article brings new knowledge about the mutual influences of the above-mentioned factors. The practical value of the research is given by the results of our research, which will help managers in the newspaper and magazine publishing industry in making decisions about the growth of the value of the enterprise's assets, managing sales and estimating the effects of development and profitability measured by the EBITDA indicator in different phases of the enterprise's life cycle.

Enterprise's assets are items of value that a enterprise owns for the purposes of doing business. They are a means of creating value in business. Assets are important because they make it possible to generate income, i.e. generate money, increase the value of the enterprise and make it easier to run the business. The size of the enterprise's assets is an indicator of the enterprise's position on the market as well as its market value.

High value of the enterprise's assets generally indicates that the enterprise has accumulated significant resources over time, owning significant valuable resources such as cash, inventory, property, or investments. This may result, for example, from factors such as successful business operations, profitable business activities and sound financial management, etc. High value of the assets also indicate a enterprice's financial strength, can increase the enterprice's ability to generate revenue, support growth initiatives and the ability to withstand

financial challenges. It can provide a solid foundation for the operation of the enterprice and can have a positive impact on the overall financial health and stability of the business.

Sales revenue is an effect of the business activity of the enterprise and determines its position on the market. Sales revenue generate financial resources and profit. Correlation between Assets and Sales confirms that influence of Sales volume on the value of Assets is strong to very strong and at the same time variable indicates a high positive value. The relationship between the variables exists, the strength of the correlation between the variables is great. Value of Sales of the enterprise has an influence on the amount of Assets. With a change in the value of Sales revenue, the value of the enterprise's Assets changes in direct proportion. We assume that an increase (decrease) in Sales will cause an increase (decrease) in the value of the enterpris's Assets. The reason for the growth of Assets may be, for example, investments in new digital and information technologies. If the company does not invest in assets, the company becomes technologically obsolete and loses its competitive ability.

The influence of the value of the EBITDA indicator on the amount of assets is great. The correlation between the variables is positive and strong. The relationship between the variables exists, the strength of the relationship between the variables is great. The value of EBITDA of the enterprise has an influence on the amount of Assets. The bigger the Assets, the bigger the EBITDA. The reverse is also true, the greater the EBITDA, the greater the Assets of the enterprise. This is how the potential is created for the growth of the enterprise's wealth and its profitability. A high positive correlation is proof that enterprises in a given industry pay particular attention to their Asset utilization level. If enterprises decide to invest in specific Assets, the purpose is to create the greatest possible financial effect for the enterprises. Another significant positive correlation is between the indicators Sales and EBITDA, there is a strong association between these indicators. In the monitored industry, the value of the EBITDA indicator also increases with the growth of sales.

The value of the correlation of Assets according to the Age of the enterprise is very low, the correlation practically does not exist. It is confirmed that there is a very weak relationship between the variables. The influence of the variable Age is therefore practically zero. The length of time in business (Age of the enterprise) does not affect the value of the Assets. We can consider the age of the enterprise as a function of time and it is related to the fact that the enterprise is in different phases of the life cycle. During this life cycle, the Assets of the enterprise have various forms of productive resources that create the potential for the entrepreneurship, providing productive activity and inputs to the enterprise process. During their existence, enterprises strive to ensure revenue growth and use their assets rationally. In connection with the growth of the enterprise's Age, the purpose of enterprise is to establish itself on the market and grow the enterprise. The Age of the enterprise has a very weak negative correlation with other indicators, respectively, the values of statistical calculations confirm that the influence practically does not exist.

The limitation of our research is that the results and conclusions below are valid only for a specific country, period and sample of enterprises. While investigating the context of the interrelationship of selected economic indicators, we found that such research has not yet been conducted in the newspaper and magazine publishing industry. Therefore, we could not make a comparison with other countries in this industry. By studying scientific papers, we discovered similar researches, but they were related to other industries and situations. Other limitations of the research result from the availability of free scientific contributions and other public resources on the given topic, as well as from the designed research design, the nature of the research set of a specific business area and the research methods used. The results of the research are valid only for the examined group of enterprises.

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