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FACTORS AFFECTING SUSTAINABLE GROWTH RATE AND ITS IMPACT ON FINANCIAL PERFORMANCE OF KOSOVO MANUFACTURING COMPANIES[5]

The paper aims to identify the factors affecting the sustainable growth rate of companies over eleven years from 2011 to 2021. The research used panel regression analysis and examined a sample of 92 manufacturing companies operating in the market of Kosovo. This study used a pooled OLS regression model to investigate the variables affecting sustainable growth rate (SGR). According to the research, SGR has a negative significant impact on profitability (ROA), liquidity (LIQ), and equity ratio (TETA). However, there was a positively statistically significant relationship between SGR, asset efficiency (STA), capital structure (TDTE), and sales growth (SG). These findings provide insight into the important factors influencing the study environment's sustainable growth rate. The findings, according to the study, can be used by management to build and implement long-term growth strategies. Businesses can improve their operations, and align them with the objective of sustainable growth by considering the impact of the identified variables. It also provides for a more accurate evaluation of the company's financial success and long-term performance. The study's findings have practical implications for a wide range of stakeholders, including corporate executives, investors, financial institutions, and researchers. All of these groups can use the knowledge provided to make better decisions and support sustainable development rates.
Keywords: Manufacturing Companies; Sustainable Growth Rate; Financial Performance; Kosovo
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1. Introduction

The fastest rate at which a business may grow and boost earnings without needing to look for extra finance through strategies like issuing more shares or taking on more debt is known as the "sustainable growth rate of the company". The company's strategic decisions are guided by this rate, which shows the equilibrium between financial prudence and expansion. If a company's growth rate falls below what is considered sustainable, it is possible that it could stagnate, lose its competitive advantage, and, in the worst-case scenario, go bankrupt. If a company's development rate exceeds its capacity for sustainable expansion, it may face financial difficulties, a lack of liquidity, and, finally, insolvency. A company can finance rapid expansion through a variety of internal and external sources. While external alternatives might have to deal with mounting debt or recapitalization through the issuance of new shares, internal alternatives might concentrate on improving production effectiveness, total asset turnover ratios, and all of its component aspects.

To maximize growth rates without increasing the company's debt or issuing more shares, it is essential to have a sustainable growth rate (SGR), which is regarded to have a significant impact on how well a company succeeds. Businesses utilize SGR as a crucial statistic to evaluate their profitability. The highest platform or benchmark required for a corporation to raise its profits without utilizing less money, according to Higgins (1977), is sustainable growth. Factors include the earnings retention rate and return on equity. To create a single indicator of a firm's financial performance measurement for each production firm, profit margin and business efficiency can be integrated with financial factors like capital structure and retention ratio. SGR must be evaluated using particular performance indicators for enterprises. The elements influencing a company's SGR can be identified to describe these metrics and assist stakeholders in making the right choices. The four factors that affect SGR are the dividend policy, finance policy, asset turnover ratio, and profitability ratio, according to Hartono and Utami (2016). Precise performance metrics can be produced by identifying the factors that influence a firm's SGR, which will help stakeholders, management teams, and customers make the best decisions for the company.

Several variables that slow the rate at which company resources are recovered may have an impact on Kosovo's economy, particularly the industrial sector. As a result, good resource management is necessary, with working capital serving as the most critical resource. While Kosovo's retail industry contributes to GDP, manufacturing companies only accounted for 14.3% of the country's total number of firms in 2019 while employing 16.3% of all workers, according to data from the Kosovo Agency of Statistics. According to data from 2022, the manufacturing sector, which employed 17.02% of all people, accounted for 13.2% of the economic sectors' turnover structures. These figures demonstrate that, although receiving insufficient attention, the manufacturing sector is critical to a country's economy, and that working capital management and business profitability are especially vital in this area. This essay will analyze the pace of sustained expansion of the production sector in Kosovo. Along with the research findings of numerous worldwide writers, the methodology for calculating the sustainable growth rate is offered from a theoretical standpoint of identifying the research subject.

The following is how the paper is organized: Following an introduction to the topic of the research in the first section, the second section investigates the effects of financial performance on the sustainable growth rate of Kosovo SMEs and provides a literature review that gathers relevant studies. The third section contains information regarding the study's data collection and analysis methods. The fourth section of the article, which focuses on empirical data, investigates the impact of financial performance on the sustainable growth rate of SMEs operating in Kosovo in depth. The fifth section explains the conclusions and their economic significance in greater detail, as well as how the initial ideas were evaluated. The sixth section, Conclusion, summarizes the study's goals, goes into further detail about its findings and contributions to the field of science, offers applications, and makes suggestions.

2. Literature Review

The concept of sustainable growth rate (SGR) has its reference to Babcock (1970), who provided a simple explanation of the behaviour of various elements of sustainable growth rate later on, Higgins (1977) expanded this idea. He demonstrated how many companies' financial plans might not be in line with their expansion objectives. He recommended utilizing the Sustainable Growth Rate (SGR), which is the maximum rate of sales growth that a business can achieve while maintaining a stable set of financial guidelines. According to him, the Sustainable Growth Rate, is the highest rate at which a company's sales can expand without exhausting its financial resources. According to him, the fastest a company can increase revenue without exhausting its financial resources is considered to have an SGR in a business environment. Given that it integrates the operating (profit margin and asset efficiency) and financial (capital structure and retention ratio) aspects of a company into one indicator, it is viewed as being valuable.

Martin and Johnson (1981) further developed Higgins' study of sustainable growth by categorizing the behaviour of assets and liabilities in an inflationary environment. Platt, Platt, and Chen (1995) created a formula that indicates the maximum growth that may be attained if companies do not take out loans from the market in order to maintain a target capital structure, building on Higgins' research on the sustainable growth rate for businesses in financial crisis. In these conditions, their suggestion is to calculate the sustainable growth rate by simply multiplying the profit margin by the return on assets.

While updating it slightly, Ashta (2008) maintained the validity of Higgins' SGR model. The study concludes that SGR needs to be assessed with the same leverage ratio. Only by dividing total assets (opening) by equity can one determine SGR (opening). Paying attention to the mathematical part of the model, we need to modify the alteration mentioned above. Specifically, we need to change the ratio of total asset turnover to sales divided by total asset opening instead of total asset ending as Higgins had projected. The sale of an asset becomes more natural as it is devoured by the opening of a current asset, and a new inducement of an asset yields profit in the form of future gains, it was also discovered. The growth rate will stabilize with the utilization of sales, regardless of the ratio of financial leverage and asset openness in asset turnover (Ryabova and Samodelkina, 2018; Steblyanskaya et al., 2019; Ponce et al., 2021).

A company's SGR must be evaluated using certain performance metrics. To aid stakeholders in making the best decisions, these measurements can be explained by identifying the variables that have an impact on the firm's SGR. Profitability, asset efficiency, and financial constraints must all be considered in this situation because they are key elements that may affect the company's ability to grow sustainably.

The effect of financial performance on SGR has been examined by several authors. Lim and Rokhim (2021) found that profitability, as measured by return on assets, return on equity, and earnings per share are strongly and favourably correlated with SGR, except for profits per share. As a result, businesses with greater success would have higher SGR. Similarly, over the past ten years, research on the relationship between ROE components and the sustainable growth rate (SGR) has developed (Wahyuni and Dino, 2016; Manaf et al., 2018; Alberto et al., 2019; Nastiti et al., 2019). According to several studies, the SGR and ROE components are significantly positively correlated (Hafid 2016; Rahim 2017; Mukherjee and Sen, 2018).

The ratio of capital structure and return on capital as a measure of profitability was analyzed by (Amouzesh et al., 2011; Ali et al., 2017; Chandra et al., 2019) indicating that capital structure does not affect the equity returns of companies. (Yang et al., 2010; Dzikevičius and Šaranda, 2011; Lyroudi, 2018) analyzed the ratio of asset turnover and return on equity, finding that asset turnover does not have any significant impact on equity growth. According to other studies, financial leverage has little effect on ROE, but asset turnover and profit margin do (Raza and Farooq 2017; Warrad and Nassar 2017). Vintila and Duca (2012), on the other hand, concentrated on the effect of financial leverage on ROE and came to the conclusion that an increase in financial leverage increased a firm's profitability as measured by ROE.

Some additional authors examine the effect of business size on the SGR. Researchers (Xu and Wang, 2018; Wang et al., 2019) discovered a strong and positive association between the SGR and the size of the company, but (Huang et al., 2019; Mamilla, 2019) reported opposite results regarding the effect of companies size on SGR. They discovered that firm size is highly detrimental and hypothesized that the larger the value, the less likely it is for a corporation to experience sustained growth. On the other hand, Pouraghajan et al. (2012) discovered a high direct association between firm growth potential with ROE and the ratio of tangible assets to equity, company size, and total assets turnover. Almaqtari et al. (2019) also observed a strong correlation between the asset management ratio and ROE.

Regarding leverage ratio and SGR association, some studies have discovered that debt leverage significantly increases the firm's SGR (Rahim, 2017; Pratama 2019; Mumu et al., 2019). The debt leverage has a favourable impact on the growth of the firm since it causes the sustainable growth rate of the company to climb when financial leverage rises and to fall as it falls (Srinivasa, 2011). The company's financial leverage rises as its debt ratio rises. As a result, more resources will be made accessible, accelerating the company's rate of sustainable growth. Asset management efficiency and SGR relationships are being investigated (Rahim 2017; Subbaredy and Reddy 2017; Mukherjee and Sen 2018). The authors determined that the most efficient asset management had a beneficial impact on SGR. Furthermore, Anderson et al. (2010) establish evidence of a substantial connection between

sales growth and SGR by assessing the SGR of privately held retail firms based on the growth cycle stages. The relationship between trade credit finance and sustainable growth at the business level is examined by Huang et al. (2019). They discovered that trade credit financing had a considerable and positive impact on a firm's total capacity for sustainable growth, particularly for those with stronger internal control systems.

To summarize, the research suggests that financial success affects a company's sustainable growth, but there are still differing opinions on the best variables to use as a proxy for financial performance and sustainable growth. This study explores the hypothesis of a linear link between financial performance and the sustainable growth rate of manufacturing enterprises in Kosovo, which is consistent with prior empirical studies on the subject.

Following consideration of the previously mentioned study, the following hypothesis was developed:

Hypothesis 1: Profitability as measured by ROA has a statistically significant positive impact on manufacturing companies' sustainable growth rate.

Hypothesis 2: Liquidity has a statistically significant positive impact on manufacturing firms' sustainable growth rate.

Hypothesis 3: Asset efficiency has a statistically significant beneficial impact on manufacturing firms' sustainable growth rate.

Hypothesis 4: The equity ratio has a statistically significant negative impact on the sustainable growth rate of manufacturing companies.

Hypothesis 5: Capital structure has a statistically significant negative impact on manufacturing companies' sustainable growth rate.

Hypothesis 6: The company's sales growth has a statistically significant positive impact on the sustainable growth rate of manufacturing companies.

3. Research Methodology and Model Specification

The definitions of dependent and independent variables are defined in Section 3. Ninety-two industrial firms in Kosovo from 2011 to 2021 make up the sample. The sample consisted of active private production enterprises that were large, medium, and small in size. The percentage of large businesses is lower in Kosovo's production sector, where the bulk of organizations are medium-sized and smaller. Particularly among the secondary data sources included in the study are audited financial statements. Since the sample includes data from several companies that reoccur over time, panel regression analysis was applied. The Kosovo Financial Reporting Council, company websites, and other sources are some of the data sources. We have identified a number of crucial elements in our research that affect the sustainable growth rate, based on past investigations. These factors are profitability, liquidity, asset efficiency, equity ratio, capital structure, and firm growth. Firm size and taxes are control variables. Some factors' effects were examined as well before we selected our study's independent variables, but they had little bearing. The factors included in the model are also

the ones that have the biggest potential impact on SGR, as determined by a thorough analysis of numerous similar studies. With the help of SPSS and multiple regression analysis, we have compiled and examined these determinants.

- We have utilized descriptive statistics to describe the variables, which include measurements such as the minimum, maximum, mean, and standard deviation values of both the independent variables and the dependent variables.

- To assess the strength of the relationships between the dependent and independent variables, we have used the Pearson correlation test. This test helps determine the extent of the linear association between two variables.

- To check for multicollinearity among the independent variables, we employed the variance inflation factor (VIF). The VIF examines whether there is a high correlation between independent variables, which can affect the reliability of regression results.

- For analyzing the critical components that contribute more to evaluate sustainable growth rate analysis, we have conducted a linear regression analysis. This analysis helps identify the relative importance of each independent variable in explaining the variation in the dependent variable.

The Sustainable Growth Rate (SGR) of production companies in Kosovo serves as the dependent variable in this context. According to the following studies (Mukherjee & Sankar, 2017, Sahin & Ergün B., 2018, Sunardi et al., 2021):

$$SGR = ROE * \left(\frac{b}{1}\right) - (ROE \; x \; b)$$

where:
b = The retained earning rate in year t
ROE= Return on equity (net income/owner's equity) in year t.

The association between the SGR and the firm's performance accounting indicators of Kosovo production companies is investigated using the following multiple regression model, which will be as follows:

$$SGR_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 LIQ_{it} + \beta_3 STA_{it} + \beta_4 TETA_{it} + \beta_5 TDTE_{it} + \beta_6 SG_{it} + \beta_7 SZ_{it} + \beta_8 Tax_{it} + \varepsilon \qquad (1)$$

Table 1. Operationalization of all variables

Variables	Symbols	Proxy
Dependent variable		
Sustainable growth	SGR	Return on equity / The rate of earnings retention
Independent variables		
Profitability	ROA	Net Profit / Total Assets
Current Liquidity	LIQ	Current assets / Current liabilities
Asset Efficiency	STA	Sales / Total Assets
Equity Ratio	TETA	Total Equity / Total Assets
Capital Structure	TDTE	Total Debt / Total Equity
Sales Growth	SG	$(Sales_t - Sales_{t-1}) / Sales_{t-1}$
Control Variables		
Firm Size	SIZE	Natural logarithm of total assets
Tax Rate	Tax	Profit Tax / Pre-Tax Profit

4. Empirical Results

4.1. Descriptive statistics

For characteristics of manufacturing enterprises in Kosovo from 2011 to 2021, Table 2 offers descriptive statistics and a normality assessment. For variables such as the sustainable growth rate (SGR), profitability (ROA), liquidity (LIQ), asset efficiency (STA), equity ratio (TETA), capital structure (TDTE), firm growth (FGr), Size (SZ), and Taxes (TAX), the mean, standard deviation, minimum, and maximum values are presented. Notably, the businesses had an average SGR of -0.102, ROA of 0.091, LIQ ranging from 0.100 to 14.600, and STA ranging from 0.057 to 5.330. The average values for TETA and TDTE were 2.826, and 3.945, respectively. The standard deviations for Size and Taxes, respectively, were 1.158 and 2.598, respectively, while the SG varied from – 0.727 to 6.312.

Table 2. Summary statistics of the variables

Variable Typology	N	Minimum	Maximum	Mean	Std. Deviation
SGR	1,012	-8.700	0.300	-0.102	0.810
ROA	1,012	-0.437	1.672	0.091	0.176
LIQ	1,012	0.100	14.600	1.280	1.390
STA	1,012	0.057	5.330	1.001	0.765
TETA	1,012	1.018	59.028	2.826	4.198
TDTE	1,012	.0187	152.451	3.945	12.663
SG	1,012	-0.727	6.312	0.111	0.394
SZ	1,012	6.900	12.200	9.760	1.158
TAX	1,012	-4.000	50.400	0.474	2.598

Source: Authors' calculations.

Depending on several variables, including industry benchmarks, corporate objectives, and particular settings, one can judge whether the figures in Table 2 are good or poor. Without additional context and comparison to pertinent criteria, it is challenging to label the data as good or negative. Based on these numbers, it would be necessary to do more analysis and comparison to assess the performance of Kosovo's manufacturing firms.

4.2. Correlation analysis

The findings of the SGR correlation with all the variables and all p-value correlations are reasonably low, as shown by the Pearson correlation results in Table 3. This indicates that there are no claims of multicollinearity issues as a correlation value greater than 1.00 and less than -1.00, indicates the presence of a multicollinearity issue between the variables. The results of the correlation analysis, which is based on the relationship between the dependent and independent variables, are shown in Table 3. This point demonstrates the interdependence of all explanatory variables. To put it another way, this is an attempt to avoid the issues related to multicollinearity. As expected, all correlations between the independent variables are less than 1.00. As a result, there appear to be suspicious instances of multicollinearity influencing the research variables. The variance inflation factor (VIF) of the predictor variable should not be larger than 5 to rule out multicollinearity, even if Assfaw

(2020) accepts a VIF of greater than 10. The reciprocal of the VIF in our investigation is more than 0.20. These figures indicated the lack of multicollinearity.

Table 3. Pearson correlation matrix

Variable	SGR	ROA	LIQ	STA	TETA	TDTE	SG	SZ	TAX	Tolerance	VIF
SGR	1										
ROA	-.136** .004	1								0.459	2.178
LIQ	.031 .520	-.126** .008	1							0.873	1.145
STA	.021 .653	.202** .000	-.151** .002	1						0.831	1.204
TETA	-.350** .000	-.010 .829	.004 .926	-.042 .384	1					0.581	1.722
TDTE	-.522** .000	-.053 .269	-.077 .105	-.074 .120	.291** .000	1				0.622	1.607
SG	-.013 .779	.617** .000	-.056 .241	-.073 .125	.026 .582	-.048 .320	1			0.201	4.974
SZ	.024 .621	-.135** .005	-.009 .852	-.189** .000	-.122* .010	.156** .001	-.083 .081	1		0.925	1.081
TAX	-.042 .376	.410** .000	-.077 .106	-.049 .309	-.038 .422	-.022 .648	.886** .000	-.057 .236	1	0.214	4.675

**.Correlation is significant at the 0.01 level (2-tailed).
Source: Author elaboration.

The correlation between a firm's sustainable growth and six independent variables and two control variables shows that the sustainable growth rate (SGR) is significantly adversely connected with profitability (ROA), equity ratio (TETA), and capital structure (TDTE) at a 1 percent level. Return on Assets (ROA) is significantly adversely connected with LIQ and SIZE but positively correlated with STA, SG, and TAX. Liquidity (LIQ) and STA have substantial negative correlations, while asset efficiency (STA) has significant positive correlations with SIZE at the 1% level. size (SZ) and asset efficiency (STA) are inversely correlated at 1%. At the 1% level, equity ratio (TETA) and capital structure (TDTE) have a positive correlation; however, at the 5% level, SIZE has a negative correlation. Capital structure (TDTE), at the 1% level, has a positive correlation with SIZE, while SG has a positive correlation with TAX.

4.3. Regression results

The regression model employed in the current investigation is summarized in Table (4) below. It reveals an R Square value of 0.177, indicating that the model's independent variables explain 17.7% of the variation in the dependent variable. The study's independent factors explain 82.3% of the variation in the dependent variable.

Table 4. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	Durbin-Watson	F	Sig.
1	0.421[a]	0.177	0.162	0.742	1.541	11.582	0.000

a. Predictors: (Constant), SG, TETA, SZ, STA, LIQ, TDTE, ROA, TAX
Dependent Variable; SGR

Table (5) below illustrates that there is a considerable effect of SGR and independent variables, as seen by the F-count value of 11.582 and the outcome with a significant value of 0.000 at 1% or 0.01. This demonstrates that combining SGR can aid in enhancing the company's potential to create corporate profits in Kosovo production businesses.

Table 5. Regression analysis

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 const	−0.719	0.332	−2.161	0.031**
ROA	−1.467	0.296	−4.943	0.000***
LIQ	−0.047	0.027	−1.738	0.083*
STA	0.121	0.050	2.396	0.017**
TETA	0.907	0.182	4.964	0.000***
TDTE	−0.011	0.005	−1.985	0.047**
SG	0.952	0.253	3.755	0.000***
SZ	0.020	0.031	0.650	0.515
TAX	−0.100	0.032	−3.107	0.002***

Notes: ***p < 0.01; **p < 0.05; *p < 0.10
Source: Own compilation.

The provided information describes the results of a pooled OLS (Ordinary Least Squares) model analysis, where certain variables are used to explain the variation in the sustainable growth rate. The explanatory (independent) variables used in the analysis include return on assets, liquidity, asset efficiency, equity ratio, capital structure, and firms' growth. Two control factors (firm size and taxes) were also considered. A control variable is any variable that is held constant in a research endeavour. It is not a study variable of interest, but it is controlled because it may influence the outcomes.

Looking at the individual variables, the variable **Profitability (ROA)** has a statistically significant negative impact on the SGR. The regression coefficient of -1.467 indicates that a one-unit increase in ROA leads to a decrease of 1.467 units in the SGR. This relationship is significant at the 1% level, as indicated by the very low p-value (0.000) and the t-ratio of -4.943 reinforces the importance of this relationship. Therefore, based on the findings provided by the model, there is no support to prove the hypothesis (H1) that ROA has a statistically significant positive impact on SGR for manufacturing companies. This is supported by research conducted by Nugroho (2020) which concluded that profitability reports have a significant negative effect on sustainable growth rate. This implies that highly profitable corporations may face reduced long-term growth rates, possibly as a result of variables such as cautious financial practices or restricted investment prospects in the

industry. The findings of the studies conducted by authors Amouzesh (2011) and Hartono and Utami (2016) are contrary to our conclusions.

Regarding the impact of **liquidity (LIQ)** on the sustainable growth rate, the study shows that LIQ has a negative significant impact on SGR at a 10% level. The regression coefficient of -0.047 suggests that a one-unit increase in liquidity leads to a 0.047-unit decrease in SGR. However, the p-value of 0.083 and the t-ratio of -1.738 indicate that this relationship may be the result of chance. Based on these findings, there is insufficient support to prove the hypothesis (H2) that current liquidity has a statistically significant positive impact on SGR for manufacturing companies. This result supports the research done by (Amouzesh et al., 2011; Rahim, 2017; Esen and Ozsozgun, 2018) in which current liquidity does not affect the SGR but is not supported by (Hartono and Utami, 2016). Such a finding goes beyond the general economic rule according to which the higher the liquidity, the greater the possibilities for sustainable growth. The reason may lie in the purchase and sale with a payment term, which according to the accrual principle of accounting, is recognized as a current asset as well as a current liability, but that, on the other hand, businesses may have limited ability to pay due to the non-collection of accounts receivable, which may affect the level of creating sustainable growth for manufacturing businesses. Also, a negative association between liquidity and SGR may be discovered by a firm that is overly concerned with maintaining high levels of liquidity and may miss out on investment opportunities, resulting in a lower SGR. Allocating a large number of current assets to short-term investments may limit the company's ability to utilize these resources for growth-generating operations.

The variable STA, representing **asset efficiency**, does have a statistically significant impact on the SGR at a 5% level. The regression coefficient of 0.121 suggests that a one-unit increase in asset efficiency leads to a 0.121-unit increase in the SGR. However, the p-value of 0.017 and the t-ratio of 2.396 indicate that this relationship is significant. Therefore, based on these findings, there is evidence to support the hypothesis (H3) that asset efficiency has a statistically significant positive impact on the sustainable growth rate of manufacturing companies. This result supports the research from (Nuswandari, 2009; Rahim, 2017; Platt, Platt, & Chen, 1995) but does not support the research from Wirajaya (2013).

The study reveals that the TETA variable, which represents the **equity ratio** or leverage factor, has a statistically significant positive impact on SGR. The regression coefficient of 0.907 suggests that a one-unit increase in the equity ratio leads to a 0.907-unit increase in SGR. The association is significant at the 1% level, as indicated by the very low p-value of 0.000 and the t-ratio of -4.964. In some circumstances, the equity ratio and SGR may have a positive connection. This suggests that a higher equity ratio, or a higher share of debt in a company's capital structure, is linked to a higher Sustainable Growth Rate. Companies with higher levels of debt may be able to use the extra funds to invest in new growth prospects, expand operations, or purchase new assets that contribute to revenue growth. Based on the information provided, the analysis does not support the hypothesis that "Capital ratio has a statistically significant negative impact on the sustainable growth rate of manufacturing companies". This result supports the research from (Mardiyati, Umi dan Ahmad, 2012; Haryanto, 2014; Utami, Muthia, & Thamrin, 2018; Esen and Ozsozgun, 2018), but it does not support the research from Wianta & Wibowo, 2017) saying that TETA has no significant effect to the SGR.

The variable TDTE, representing the **capital structure,** also has a statistically significant negative impact on the SGR. The regression coefficient of -0.011 suggests that a one-unit increase in the capital structure leads to a decrease of 0.011 units in the SGR. This relationship is significant at the 5% level, as indicated by the p-value of 0.047 and the t-ratio of -1.985. Based on the provided information, the analysis supports the hypothesis (H5) that capital structure has a statistically significant negative impact on the sustainable growth rate of manufacturing companies. The finding collaborates with Shehryar (2017) and Ngoc and Anh (2020). Still, it contradicts that of Suleiman and Ahmed (2016), Merugu, and Ravindar (2016), who confirmed no causal relation between capital structure and sustainable growth rate.

The study finds that the variable SG, representing companies' **sales growth**, has a positive statistically significant impact on the SGR. The regression coefficient of 0.952 suggests that a one-unit increase in company size leads to a 0.952-unit increase in the SGR. Also, the p-value of 0.000 and the t-ratio of 3.755 indicate that SG has a highly significant impact on SGR. Therefore, based on these findings, there is sufficient evidence to support the hypothesis that the company's sales growth has a statistically significant positive impact on the sustainable growth rate of manufacturing companies. This result is consistent with Kijewska (2016), which states that if growth exceeds the financial resources needed to maintain its SGR, the company does not need to seek additional financing either through retained earnings (internal financing) or through issuing new shares or borrowing (external financing), but not in line with Nugroho (2020).

5. Conclusions

The primary purpose of this research was to examine the factors influencing sustainable growth rates and their impact on the financial performance of Kosovo's manufacturing enterprises. This paper is considered a new contribution to the related literature since it addresses a highly significant topic that has not been well researched, particularly in the Kosovo market as a growing and emerging market. Using panel data, the OLS model was found to be the best model for examining the effect of the sustainable growth rate.

The empirical results show that there are statistically significant negative connections between the SGR and the firm's profitability, liquidity, and capital structure, implying that enterprises with lower profitability, liquidity, and capital structure have a higher sustainable growth rate. In addition, the SGR has a statistically significant positive link with asset efficiency, equity ratio, and sales company growth. The more the asset efficiency, equity ratio, and sales growth, the greater the firm's sustainable growth rate.

According to the research, Kosovo manufacturing firms should monitor and plan their levels of profitability, liquidity, and capital structure to manage their business and grow sustainably and achieve their long-term objectives. In light of these findings, it is advised that manufacturing firms, in particular, boost profitability and liquidity in order to raise SGR. Additionally, the study recommends that to attract potential investors and attract and enhance international investments, the financial regulatory authorities should compile a database of listed manufacturing businesses in Kosovo based on their rate of sustainable development,

so that they may decide whether or not to invest after having access, particularly to the financial data. Based on the study's findings, we further advise researchers to retest the study models by applying them to comparable markets, utilizing either the same or a different statistical methodology, comparing the outcomes, and highlighting any glaring variations between such marketplaces.

Regarding the limitations, the absence of a working database for the gathering of financial data posed a significant barrier to a detailed analysis of its possible boundaries. Because gathering them by hand from the Kosovar Council for Financial Reporting website has been labour-intensive and unproductive, the work hasn't been as appealing. Expanding the analysis's scope to include a wider range of financial and non-financial aspects is crucial for future research projects. A more thorough grasp of the topic can be provided by this enlarged viewpoint. More companies should be included in the study, and researchers should concentrate on growing the sample size. The robustness and reproducibility of the research findings are improved by a larger and more diverse sample.

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