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# Sustainable Growth Rate Analysis in Eastern European Companies

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Abstract: As a prerequisite for long-term strategic and financial planning, sustainable growth is a future-oriented concept that was based on the company's long-term survival with value creation. The primary aim of this paper is to determine the indicators that have an influence on sustainable company growth rate during the five-year period of 2016 to 2020. Panel regression analysis was used in order to thoroughly analyze the sustainable growth variables. Our analysis was based on a sample of 675 observations of companies operating in the Eastern European market. The obtained results showed that liquidity and leverage have a negative impact on sustainable growth, while profitability has a positive impact on sustainable growth. The impact of these variables was statistically significant. The obtained results may serve as an effective company tool to improve the target sustainable growth rate. They provide support for the company's management to improve its business and ensure healthy growth without major financial difficulties, as well as to promote a sustainable business that will increase the market value of the company. Moreover, all internal and external stakeholders will be provided with insight into the reality of growth plans and opportunities for future sustainable growth, which creates a basis for measuring a company's business prosperity and predicting its long-term performance.

Keywords: sustainable growth rate; Eastern European companies; sustainable business



Citation: Vuković, B.; Tica, T.; Jakšić, D. Sustainable Growth Rate Analysis in Eastern European Companies. Sustainability 2022, 14, 10731. https://doi.org/10.3390/su141710731

Academic Editor: Ermanno C. Tortia

Received: 16 June 2022 Accepted: 25 August 2022 Published: 29 August 2022

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# 1. Introduction

The goal of every company's business is to maximize shareholder wealth, which is manifested in profit maximization, sustainable growth, and development. Unlike profit, which is an expression of a company's short-term performance, a sustainable growth rate is a basis for predicting a company's long-term performance. The sustainable growth rate is the maximum company's growth rate or the maximum rate of increase in sales without additional financial effort. In other words, it is the rate at which the company can grow while using its internal revenue without borrowing from outside sources. It relies on the company's achievable level of earnings and available resources, determining the performance that companies should achieve and financial and operational policies and strategies that ensure healthy growth. Though a commonly sustainable growth rate is acknowledged and used to identify organizations and industries across time, the anatomy of sustainable growth rate demands rigorous analysis. There are two basic approaches to a company's sustainable growth rate. Higgins' concept of sustainable growth rate is based on the fact that a company can grow without problems in cash flow [1]. High growth opportunities without adequate resources, as well as sufficient resources without adequate capacity to seize growth opportunities, result in the inability of a company to grow. Van Horn's model of sustainable growth is based on the maximum sales growth that can be achieved in accordance with the operation purpose, the type of borrowing, and the ratio of dividend payments [2]. Memon et al. consider that the Van Horn model is a quantitative description of the rate of sustainable growth that represents the sales income variance, and, based on this model, the company can realize whether their sales prediction is realistic [3]. Sustainability **2022**, 14, 10731 2 of 21

More profitable companies with enough cash funding and adequate investments in fixed assets will have a higher rate of sustainable growth according to Higgins' model compared to Van Horn's model. On the other hand, more indebted large companies will have a higher rate of sustainable growth according to Van Horn's model compared to Higgins' model [4].

The paper used the basic Higgins model in which the sustainable growth rate represents the growth rate that is achieved with a given return on equity level along with a constant capital structure and without the issuance of additional ordinary shares. According to the basic assumption of the simple growth model, the value of the capital at the opening balance was used, relying on previous research about the usage of this model [1–3,5–13]. The equation of the simple growth model represents a simple expression of the assessment of average dividend growth rates over a longer period of time [14]. Further, Lockwood and Prombutr pointed out that the sustainable growth rate calculated as the product of return on equity and earnings retention rate is a forward-looking approach that is of particular importance to investors in forming expectations [15]. It has a special role in evaluating the company's growth strategy and the resources that enable it. Fonseka et al. believe that use of the Higgins model is suitable in circumstances where management wants to increase the company's growth in a slightly liberal way [4]. Al-Nasser and Al-Jubouri found that a sustainable growth rate and retention rate indicate factors of business operations efficiency and that there is a significant positive relationship between them [16]. In that way, Altahtamouni et al. showed that return on equity and retention rate, as components of the basic Higgins model, have a statistically significant impact on the sustainable growth rate, proving that return on equity has a greater impact on sustainable growth rate than retained earnings [17]. Further, Higgins used the DuPont model to predict the level of return on equity and developed and explained in more detail the PRAT model, observing growth as a function of profit margin (P), retention rate (R), asset turnover (A), and financial leverage (T) [18]. This development of the initial model provides the possibility that, foreseeing sustainable growth over a longer period, one can rely on changes in the four observed factors that influence growth. The key importance of applying Higgins' sustainable growth rate model is to provide managers with the opportunity to determine the optimal level of growth of the company by weighting its financial goals and operational performances and to provide an opportunity for regulators to enhance the sustainable growth of a particular industry through the policy direction process [8]. Evaluation of the sustainable growth rate through specific company performance measurements provides a significant information base for internal and external stakeholders in achieving the goals of sustainable growth over a long time.

A growth rate of a company that is too high will lead to higher costs and debts, financial losses, declining market share, and financial stress and bankruptcy [19]. Financing the company's rapid growth requires the issuance of new shares, the growth of the use of debt financing, dividend policy changes, selling funds for growth finance, the growth of production efficiency, or the efficiency of funds usage [8]. Slower growth than expected means that resources cannot be used efficiently, which leads to a crisis in the company's survival and the loss of competitive position. Slow-growing companies are exposed to shareholder pressure and the establishment of an adequate surplus cash management policy [11]. Growth under sustainable growth or moderate sales growth creates more value for shareholders than a sales growth rate that is above a sustainable growth rate [20]. The rate of sustainable growth stands out as a measure of the company's financial capabilities. The amount of equity in a business is a limiting factor of growth, so the company has more potential for growth with a larger equity amount. Sustainable growth is the highest realistic estimate of a company's earnings growth in circumstances where the company is not changing its capital structure [21]. It also relies on external sources, such as debt financing, and internal sources, such as retained earnings. The financial aspect of sustainable company growth starts from the fact that the actual company growth should be in line with its resources [22]. The comparison of sustainable and actual growth rates from the aspect of sales provides the managers and investors with insight into all possible problems in

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cash flow changes. In circumstances where the actual growth rate is below the sustainable growth rate, the company has enough capital for investments and requires growth in liquid assets and reduction in indebtedness. The difference between sustainable growth rates and actual growth rates indicates the volume of available cash based on which further growth and cash management policies are determined [6].

Improvement in a sustainable way is reflected in establishing a balance between the growing competing human needs and the desire to ensure the protection of the natural environment in which we live [23]. Sustainable company development is aimed at improving the financial and property company position with care for employees and local communities, and preservation of the environment. The implementation of company sustainable development goals is conditioned by macroeconomic conditions, business volume, type and company size, and developed management awareness [24]. This paper aims to develop a model that will indicate the determinants of the policy of sustainable growth of companies in the Eastern European market.

In order to develop a model that indicates the factors of sustainable company growth, the answers to the following two questions will be sought:

- 1. What are the internal company determinants that have an effect on the sustainable growth policy of companies in Eastern European countries?
- 2. What is the kind of relationship between the internal company determinants and sustainable growth policy of Eastern European companies?

The process of transition has brought many challenges for the countries of Eastern Europe and conditioned the need to introduce changes in their systems that move from totalitarian political regimes, socialism, and planned economies to democracy, capitalism, and market economies. The countries of Eastern Europe have faced several key economic changes, such as the market economy transition, the financial crises of 1997 and 2008, the accession to the European Union in 2004, and the Eurozone after 2010 [25]. Pro-market changes in Eastern European economies are reflected in privatization, restructuring of companies, price and currency liberalization, trade liberalization, reforms, and development of the banking and financial market [26]. The economy of Eastern European companies is characterized by significant market size and attractive geographical location. The Eastern European markets are becoming interesting for investment due to the low cost of labor, the possibility of creating new markets, and strengthening the competitive position through foreign production. On the other hand, among the key shortcomings stand out unstable and inconsistent legal regulations, the great influence of the state on the economic environment of companies, and low productivity levels [27]. Investments in Eastern European countries have a positive impact on their economic growth and development, influence productivity growth, and raise the quality of products and services. Marer pointed out that the growth strategy of Eastern Europe should be based on greater integration into the global economy, which implies that the Eastern region with scarce sources of capital and cheap labor is integrated with the region characterized by abundant capital and expensive labor [28]. Thus, large net flows of capital from the West to the East could lead to productivity growth of companies in Eastern European countries. Western Europe transnational companies make a profit based on cheaper sources of the Eastern European companies, achieving better market status and international competitiveness [29]. Eastern European countries are suitable for multinational companies given that they are characterized by institutional and physical frameworks suitable for large manufacturing industries. Considering that Eastern European countries' economies in transition have attractive long-term prospects for growth, it is interesting to research how companies in this area achieve growth and meet the basic assumptions of sustainable growth in the long-term.

The motives for this paper lie also in the insufficient volume of previous research and empirical studies on the policy of sustainable company growth rate. Researching this issue, we conclude that there is no research on the policy and determinants of sustainable company growth rate in a sample of Eastern European companies. Rare previous research we have come across has been limited to the conditions in which companies operate, their

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growth opportunities, and the concept of sustainability. Conditions in which companies operate in Central and Eastern Europe are under constant influence of global competition, financialization, deregulation, urbanization, and new technology [30]. Since Eastern European companies have small domestic markets, through internationalization and globalization, these companies are provided with more growth opportunities [31]. Raszkowski and Bartniczak emphasize that achieving a high level of sustainable development is a long-term and complex process that requires relevant financial investments, appropriate regulatory framework changes, and social mentality changes in the countries of Central and Eastern European (32). Cichowicz and Rollnik-Sadowska state that the Central and Eastern European countries that joined the European Union sought to ensure a high rate of economic growth with the principle of sustainability [33].

Developing a sustainable growth rate model should provide an opportunity for companies to analyze growth opportunities according to set financial goals. The findings contribute to a better understanding of sustainable growth rate analysis by exploring which indicators best explain sustainable company growth in Eastern European countries. By identifying the company's determined sustainable growth capabilities and indicators, companies should be able to determine future sustainable growth strategies and assess the compatibility of the growth ability and the growth strategy. This kind of sustainable growth rate analysis should also provide comprehensive insight into the company's growth levers. The results can also be used to determine potential growth problems of the observed companies, as well as in which segments of financial and operational policy there are inconsistencies in terms of growth management. Due to the obtained results, it is possible to determine the real growth potential of these companies and identify the desired company performance.

The results of the developed sustainable growth model should be useful for managers of companies to compare actual and sustainable growth rates and to determine how cash can be obtained for growth. Due to obtaining results about sustainable growth rate determinants, managers and investors should assess whether the company's growth plans are realistically feasible in the future, looking at their current position and policies. The sustainable growth rate model should serve investors who intend to enter into business ventures, and it affects their expectations about the continuity of the company's operations. The investors will reward companies with a significant sustainable development strategy by recognizing their higher market value [34]. Determining the factors that indicate the level of sustainable company growth can serve company managers when making decisions about business expansion or survival in the long-run. A manager's effectiveness is often assessed based on his ability to identify those determinants. The obtained results can be important to bankers to assess a company's creditworthiness and should indicate to companies how to determine the appropriate company growth rate according to the company's cost and level of indebtedness. They should also point out how important it is to strike a balance between profitability and growth.

The paper is structured in the following way: we start with the theoretical background and then progress to the research hypothesis. As a consequence of the implementation of the research methodology, empirical findings and a discussion are presented. Finally, the paper is summarized with concluding remarks and research implications.

## 2. Theoretical Background and Hypothesis Development

Sustainable growth is the ability to ensure survival in a competitive world and sustainable expansion and competitiveness in the market. The strategic question underlying the concept of sustainable growth is whether the company's plans can be financed with the existing financial resources. The rate of sustainable growth indicates the phase of the company's life cycle based on which the goals and sources of the company financing are determined, the dividend payment policy, and strategy regarding the competition [35]. The sustainable growth rate could be enhanced by increasing the profit margin and debt

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comparable with equities or by reducing the proportion of assets to sales and shared dividends [10].

The paper analyzed the impact of six independent variables (current ratio, return on total assets, debt to equity ratio, the size of the company, and asset efficiency), including one control variable (gross national income) on sustainable company growth rate in Eastern European countries. The development of the sustainable growth rate model should improve the business performance of the observed companies in the Eastern European market in terms of liquidity, profitability, leverage, size, and asset efficiency indicators.

Although the paper did not categorize observed companies according to a type of industry and include diverse industry specialization companies, research by Jović et al. shows that there are statistically significant differences in sustainable growth rates between, for example, the manufacturing and service sectors [9]. Similarly, research by Arora et al. showed that highly concentrated industries have a higher sustainable growth rate [1].

Optimal liquidity is one of the main concepts of survival, sustainable growth, and development. It is the expression of management efficiency that eliminates the inability to meet short-term company liabilities. An indicator of current liquidity shows the volume of current assets used to cover short-term liabilities [36]. Higher liquidity leads to a higher sustainable growth rate, and the relationship between these variables is statistically significant, shown in the results of research by Memon et al. [3], Mamila [35], and Mumu et al. [37]. Analyzing the sustainable growth of companies listed on the Indonesia Stock Exchange in the time

between current liquidity and sustainable growth, which, in the case of companies listed on the Sri Kehati Index, is statistically significant. In the case of companies listed on the IDX30 Index, there is no statistical significance between current liquidity and sustainable growth rate [38]. Mukherjee and Sen also analyzed determinants of sustainable growth rate for 115 Indian companies for the time periods 2010–2011 and 2014–2015, showing that the higher the cash flow ratio as an expression of liquidity, the faster the sustainable growth rate of companies [39]. The negative impact of current liquidity on sustainable growth rate was found in the research of Rahim et al., but this impact is not statistically significant [40]. A statistically insignificant relationship between sustainable growth rate and current ratio was also confirmed by Amouzesh et al. [41] in analyzing the sustainable growth rate and performance of 162 companies listed on the Tehran Stock Exchange for the years 2006 to 2009, as well as Madbouly [42] by analyzing the sustainable growth rate and firm value of 43 Egyptian listed firms from 2015 to 2019. Similar results were obtained in research that identified the most important sustainable growth rate components by analyzing financial data of 69 manufacturing companies on Borsa İstanbul. The relationship between the deviation in the actual growth rate from the sustainable growth rate and the current ratio was not statistically significant [11]. Analyzing the company growth determinants of European companies in the sector of agriculture, forestry, and fisheries in the period from 2014 to 2019, Vukovic et al. showed that these companies have managed to provide the business cycle with sufficient elementary inputs by adjusting the time of settling short-term liabilities and collection of receivables [43]. Therefore, a more liquid business has a positive but statistically insignificant impact on growth.

Taking into account all previously outlined research, the following hypothesis was set:

**Hypothesis 1 (H1).** The current liquidity has a statistically significant positive impact on the sustainable growth of dividend payable companies in the Eastern European growth potential economies.

The company's sustainability is conditioned by the ability to make a profit. The company's growth represents a process of continuous improvement in profitability. A higher rate of return on assets is an indicator of better asset management. Too high a return on assets is a sign of under-capitalized assets, and the mismatch between return on assets and sustainable growth rates raises concerns for businesses. Analysis of return on assets as a determinant of sustainable company growth has application in models in which companies compared activities characterized by the same capitalization level [1].

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Analyzing the factors of sustainable growth rates of pharmaceutical companies listed on the stock exchange in Pakistan in the time period from 2007 to 2014, Memon et al. found that a higher rate of return on engaged assets as an indicator of profitability leads to a higher sustainable growth rate, so there is a statistically significant positive relationship between the return on asset and sustainable growth rate [3]. Haung and Zhang researched the key financial factors of sustainable growth of the 28 listed companies on GEM, which are in the growth phase, emphasizing that sustainable growth is primarily influenced by profitability as a basis for creating greater shareholders value [44]. Through higher profits, companies will better grow in the future and create preconditions for improving financially sustainable growth and ensuring sustainable development. Dakić and Mijić note that sales growth has an impact on profitability only on the assumption that cost reduction is taken into account, confirming a statistically significant positive relationship between profitability and sales growth in the food processing industry [45]. By maximizing profits and preserving the real value of invested funds, observed large European companies in the sector of agriculture, forestry, and fisheries achieve a positive impact on growth [43]. On the other hand, analyzing the sustainable growth of seven banks listed on BSE 30 in the time period from 2011 to 2017, Kumar concluded that return on assets has a statistically significant negative impact on the sustainable growth rate in most of the banks [12]. Sahin and Ergun also pointed out that there is a statistically significant negative relationship between the deviation of the sustainable growth rate from the actual growth rate and the profitability indicator, measured through return on assets and return on equity. Overgrowing manufacturing companies have a lower return on engaged funds and equity, while under-growing companies have more power to earn from available assets and equity [11]. However, Amouzesh et al. proved that profitability has a statistically significant positive impact on the deviation of the sustainable growth rate from the actual growth rate [41].

According to all presented empirical research, the next hypothesis was posed:

**Hypothesis 2 (H2).** The profitability measured by ROA has a statistically significant positive impact on the sustainable growth of dividend payable companies in the Eastern European growth potential economies.

Leverage can be a way to ensure sustainable company growth. Due to the high risk and uncertainty of listed companies, the ability to meet obligations as an expression of the financial condition and operational company capacity is a critical factor in the company's survival and development [44]. Analyzing the determinants of the sustainable growth rate of 226 publicly listed companies in Malaysia in the time period from 2005 to 2015, Rahim et al. concluded that financial leverage, as an expression of higher levels of indebtedness and risk, has a statistically significant positive impact on the sustainable growth rate [40]. Mukherjee and Sen also confirmed that the higher the leverage, the faster the sustainable growth rate of the company [39]. Research by Vukovic et al. went in the same direction, so they found a statistically significant positive relationship between leverage and company growth, stating that leverage is an increase in funding from other sources that ensure long-term sustainability only if companies manage to achieve a higher rate of return on total capital than the price for usage of other capital sources [43]. Companies will keep their debt level at a certain level in order to maintain company growth, which indicates that debt level planning is an important segment of the sustainable business strategy [40]. In the mentioned research, all observed companies had enough capital to provide optimal growth opportunities in the future [35]. The way the company is financed affects company growth, although this connection is not statistically significant [46,47]. This relationship was also confirmed by Sahin and Ergun, emphasizing that the leverage had a statistically insignificant impact on the deviation of the actual growth rate from the sustainable growth rate [11].

Bearing in mind all previous theoretical research and empirical studies, we set the following research hypothesis:

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**Hypothesis 3 (H3).** *The leverage has a statistically significant positive impact on the sustainable growth of dividend payable companies in the Eastern European growth potential economies.* 

In order to maximize profits, companies should strive to achieve an optimal size above which companies will no longer grow. The company size will determine market representation, agility to market conditions changes, and attractiveness in terms of investment. Usually, larger companies are the ones that have better access to the capital market, achieve a higher rate of return on committed funds, and have greater benefits from economies of scale, so they create more favorable conditions for growth. The statistically significant positive relationship between company size and sustainable growth rate was confirmed in research conducted by Rahim et al. [40]. On the other hand, Mamilla [35] and Madbouly [42] found that company size had a statistically significant negative relationship with sustainable growth rate. The negative impact is most often the result of high business risk. Mumu et al. confirm a statistically significant negative relationship between sustainable growth rate and company size, stating that the larger the company size, the greater the amount of funds necessary for active payment, which leads to a decline in sustainable growth rate [37]. Moreover, growing company size through total asset growth can have an impact on the effects of diseconomies of scale [48]. The company growth is based on the assumption of size growth over a period of time. Pointing to a statistically significant negative relationship between company size and sustainable growth, Vukovic et al. indicate that growth rate decreases with increasing company size [43]. There is a negative effect until the optimal size is reached, after which company size has a positive impact on company growth.

By summarizing all previous research, we set the following research hypothesis:

**Hypothesis 4 (H4).** The company size has a statistically significant positive impact on the sustainable growth of dividend payable companies in the Eastern European growth potential economies.

The owners of the company expect that the company is capable of ensuring sustainable development and increasing the asset volume in the process of business running [49]. Asset management is a key determinant of achieving strategic goals and managing funding sources to ensure continued growth. Operational capacity, which represents the efficiency of the company's funds usage, is an important factor in the company's sustainable growth capacity. Increasing the efficiency of funds usage affects the faster flow of funds in order to provide the necessary financial resources to improve the company's sustainable growth capacity [44]. The asset turnover ratio shows the efficiency of the company's resources usage in generating revenue. The efficiency of total asset turnover can indicate the pricing strategy that guides companies, and the policy of profit margins [48]. This indicator has a statistically significant positive impact on the rate of sustainable growth, which means that the efficient use of funds to generate sales will result in a higher rate of sustainable sales growth [40]. On the other hand, the results of research conducted by Mamilla et al. showed that there is a statistically significant negative relationship between asset efficiency and sustainable growth rate [35]. Capital-intensive industries that have lower asset turnover rates have lower sustainable growth rates [1]. Inefficient use of available resources can lead to lower targeted sales growth than sustainable sales growth [7]. Mukherjee and Sen found that the asset management indicator had a statistically insignificant impact on sustainable growth rate [39].

Considering all presented research and especially research conducted by Mumu et al. [37], Pratama [50], and Madbouly [42], the following research hypothesis was set:

**Hypothesis 5 (H5).** Asset efficiency has a statistically significant positive impact on the sustainable growth of dividend payable companies in the Eastern European growth potential economies.

Considering that the sample includes companies from Eastern European countries, a control variable known as gross national income is included in the model as a measure of the economic development of each country in the sample. In this paper, the current

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division of economies by the World Bank into four income groupings has been accepted: low, lower-middle, upper-middle, and high.

## 3. Methodology

The source of financial data is financial reports obtained from the TP Catalyst database [51]. Due to the COVID-19 pandemic, at the time of the research, the latest available data were from 2020. Considering the aim of this paper, the sample primarily consisted of 949,789 companies from Eastern Europe, including the following countries: Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Montenegro, North Macedonia, Poland, Romania, Russian Federation, Serbia, Slovakia, and Slovenia. Secondly, the availability of dividend payable data in financial statements for the period 2016–2020 was set as a search criterion, reducing the sample to 135 companies and forming 675 observations. The sample included very large, large, and medium-sized active private and public companies. The final arrangement of companies by Eastern European countries has been shown in the Table 1.

Table 1. Overview of number of companies per country.

Country	Number of Companies
Bosnia and Herzegovina	6
Bulgaria	8
Croatia	11
Czech Republic	2
Estonia	1
Hungary	2
Latvia	1
Lithuania	3
Montenegro	2
North Macedonia	13
Poland	5
Romania	20
Russian Federation	36
Serbia	23
Slovak Republic	1
Slovenia	1
Total	135

Source: author's illustration.

Since the sample consists of data from several companies, repeating in different periods, panel regression analysis was implemented.

The concept of sustainability implies the ability to endure continuously in various aspects of life, bearing in mind that, in Eastern European countries, the challenge of sustainability becomes more complex with market liberalization and technological development [52]. The Table 2 presents the performance of Eastern European countries against the goals of sustainable development.

Analyzing the performance of Eastern European countries from the perspective of sustainable development goals, we conclude that Estonia achieves the best performance, with an index value of 73.7 out of 100. It is in high 8th place out of a total of 34 analyzed European countries. On the other hand, in last place is Bulgaria, with an index value of 57.6, which is in 33rd place. In general, the Eastern European countries achieve a lower average value of this index (68) than the average of the European Union (71.4), although they have achieved significant growth in the last decade. Based on the current state, it will take 17 years for the Eastern Europe countries to reach the results achieved by Northern Europe, which has the highest average index score of 80.6 [53].

Considering that one of the sustainable development goals is the promotion of sustainable economic growth, full employment, and decent work, as well as a high economic productivity level and the efficiency of resource usage, the following table presents the

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value of achieved real GDP of observed countries, as well as the share of investments in the real GDP of observed countries by years.

Table 2. Performance of Eastern European countries against the goals of sustainable development.

Country	SDG Index Score	SDG Index Rank
Bulgaria	57.6	33/34
Croatia	68	24/34
Czech Republic	72.6	11/34
Estonia	73.7	8/34
Hungary	68.5	21/34
Latvia	69.3	19/34
Lithuania	66.1	25/34
North Macedonia	59.9	30/34
Poland	71.0	15/34
Romania	61.6	29/34
Serbia	59.3	31/34
Slovakia	70.0	18/34
Slovenia	73.5	9/34

Source: authors' illustration adapted from The Europe Sustainable Development Report according to Sustainable Development Solutions Network and the Institute for European Environmental Policy [53].

Analyzing the value of GDP per capita, we conclude that, in the first year of the observed period, the highest value was achieved by Slovenia, while the lowest value was recorded in Serbia. It is noticeable that the value of Slovenia's GDP shows constant growth until 2019. Regardless of the slight GDP value drop in 2020, Slovenia retains first place in terms of the value of realized GDP per capita among the observed countries in 2020, and, although the value of GDP per capita of Serbia records a constant growth in dynamics with a minor fall in 2020, Serbia still has the lowest value of achieved GDP per capita among the observed countries. It is noticeable that most of the observed countries maintain a constant growth in value until 2020, when value of the gross domestic product at market prices slightly falls.

Investments stimulate economic growth, especially sustainable investments that contribute to more innovative and productive economic development. Judging by the data presented in Table 3, the lowest investment share of GDP in 2016 is achieved by Serbia at 17.06%, while the highest share of investments in the value of realized GDP is recorded by the Czech Republic at 24.94%. However, the largest increase in the share of investments in the value of realized GDP in dynamics is achieved by Estonia, so it takes first place in 2020 at 30.68%. On the other hand, due to the slowest growth in dynamics and decline in the value of realized GDP in 2020, the country with the lowest investment share in the value of realized GDP in 2020 is Poland at 16.60%. Labaye et al. consider that Eastern European countries should rely on a growth model that implies reduced consumption based on the use of foreign capital, and the growth in investments and savings will create a sustainable basis for growth in line with the growth in foreign direct investments [54].

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Table 3. Gross domestic product at market prices and the investment share of GDP of Eastern European countries in the time period from 2016 to 2020.

Variable	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Serbia	Slovakia	Slovenia
Real GDP per capita in 2016 (EUR)	5910	16,670	13,620	11,500	11,110	12,070	11,240	7670	4820	14,550	18,550
Investment share of GDP in 2016 (%)	18.57	24.94	24.43	19.49	19.31	19.86	17.98	22.95	17.06	21.10	17.38
Real GDP per capita in 2017 (EUR)	6120	17,490	14,410	12,030	11,590	12,760	11,790	8280	4950	14,960	19,440
Investment share of GDP in 2017 (%)	18.52	24.92	25.92	22.14	20.60	20.11	17.53	22.41	17.74	21.16	18.32
Real GDP per capita in 2018 (EUR)	6330	17,990	14,970	12,690	12,140	13,400	12,420	8700	5200	15,510	20,240
Investment share of GDP in 2018 (%)		26.31	24.69	24.73	22.12	20.94	18.22	21.05	20.04	21.01	19.26
Real GDP per capita in 2019 (EUR)	6330	18,460	15,510	13,270	12,530	14,050	13,020	9120	5460	15,890	20,720
Investment share of GDP in 2019 (%)		27.07	25.43	27.08	23.17	21.45	18.30	22.61	22.46	21.58	19.62
Real GDP per capita in 2020 (EUR)	6380	17,400	15,010	12,710	12,130	14,030	12,750	8820	5440	15,180	19,720
Investment share of GDP in 2020 (%)		26.17	30.68	26.63	24.46	21.05	16.60	23.84	21.45	19.63	18.89

Source: author's illustration according to Eurostat [55].

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In order to develop a model that indicates the factors of sustainable company progression, sustainable growth rate was considered as a dependent variable, whereas liquidity, profitability, leverage, firm size, and asset efficiency were selected as independent variables, as well as gross national income as a control variable. Table 4 specifies the mentioned variables in detail based mostly on research conducted by Fonseka et al. [4], Mamilla et al. [35], Mumu et al. [37], Hartono and Utami [38], Rahim et al. [40], Madbouly [42], and Alayemi and Akintoye [46].

Table 4. Overview of variable types, names, and formulations.

Variable Name	Formulation		
Sustainable growth rate	ROE × (1-Dividend Payout Ratio)		
Liquidity	Current assets/Current liabilities		
Profitability	ROA		
Leverage	Debt/Equity		
Firm size	Ln Total assets		
Asset Efficiency	Sales/Total assets		
Gross National Income	GNI classification group by World Bank		

Source: author's illustration.

## 4. Empirical Results and Discussion

Before presenting the obtained statistical results, we would like to point out the ease of doing business score that indicates the position of the economy in relation to the best regulatory practice in observed Eastern European companies measured by the World Bank.

Judging by the results presented in Table 5, the four observed countries of Eastern Europe, North Macedonia, Lithuania, Estonia, and Latvia, entered the first 20 world leading countries out of a total of 190 ranked countries. They entered the top 20 companies, including the United States, United Kingdom, China, and Korea. Therefore, these Eastern European countries have the best economic positions according to the best regulatory practice, regardless of the fact that they are small open economies. It is interesting that all four countries achieved improvement in results, i.e., improvement in the business environment between 2016/2017 and 2017/2018. Latvia achieved the highest value of improvement in the overall business environment of 0.33, while Estonia achieved the lowest value of 0.01. In last, 89th place among the observed countries, is Bosnia and Herzegovina, whose EODB score is 63.82 out of 100 and achieved a positive change of 0.27 in the time period between 2016/2017 and 2017/2018. Therefore, Bosnia and Herzegovina has the lowest score of the observed countries from the aspect of ease of doing business. Observing the EODB score change, it is noticeable that the majority of observed countries achieve an improvement in the overall business environment. The highest growth in EODB score change is achieved by the Russian Federation with 0.61. On the other hand, only Poland and Romania had a deterioration in the overall business environment, with negative changes of -0.36 and -0.53, respectively, in the time period between 2016/2017 and 2017/2018.

Table 6 generally presents the variables in the form of median, mean, minimum, maximum, and standard deviation. Due to the slighter influence of extreme values, average values will be interpreted using the median. The median value of the sustainable growth rate is 6.45%, indicating that Eastern European companies from the sample are, on average, prosperous, as well as that they successfully manage the policy of growth and advancement. The minimum value is -191%, while the maximum value is 147.61%, which denotes the existence of extreme situations in the sample. On the one hand, some companies are far from achieving sustainable growth rates using retained earnings, while, on the other hand, some companies manage to achieve a three-digit growth rate using their sources after dividend payments. The median current ratio is 1.72. Given that the median value falls below the reference value of 2, it could be concluded that more than half of the companies from the sample fail to settle short-term liabilities with short-term assets. Thus, regardless of the existence of highly liquid companies in the sample, concerns

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regarding maintaining liquidity are presented. In terms of profitability, the median is 4.23%, which is less than satisfying 10%. Similar to liquidity, if these variables prove to be significant in further analysis, companies should make an effort to improve them in order to achieve sustainable growth. Considering leverage, the median value of the capital structure is 59.63%, indicating that the companies mostly rely on their resources rather than on borrowed sources, which is a fact that should be taken into account when interpreting the final results. Shortened, on average, Eastern European companies, per Euro of equity, owe 60 cents to third parties. Considering the traditional manner of financing, the reference value of the leverage indicator is 0.5, which is below the median. In this regard, it could be concluded that companies willingly rely on borrowed sources rather than on retained earnings. The median value of the asset efficiency indicator is 73.61%. Such a high percentage states the ability of the company's assets to generate a high return in the form of sales revenue on the market.

**Table 5.** The ease of doing business score in Eastern European companies.

Rank	Country	EODB Score	EODB Score Change
59	Bulgaria	71.24	+0.11
58	Croatia	71.40	+0.34
35	Czech Republic	76.10	+0.05
16	Estonia	80.50	+0.01
53	Hungary	72.28	+0.34
19	Latvia	79.59	+0.33
14	Lithuania	80.83	+0.29
50	Montenegro	72.73	+0.20
10	North Macedonia	81.55	+0.32
33	Poland	76.95	-0.36
52	Romania	72.30	-0.53
89	Bosnia and Herzegovina	63.82	+0.27
48	Serbia	73.49	+0.17
42	Slovakia	75.17	+0.29
31	Russian Federation	77.37	+0.61
40	Slovenia	75.61	+0.02

Source: author's illustration adapted from Doing Business 2019: Training for Reform, according to World Bank [56].

**Table 6.** Overview of description statistics.

Variable	Number of Observations	Median	Mean	Minimum	Maximum	Standard Deviation
Sustainable growth rate	675	0.0645	0.0908	-1.9147	1.4761	0.2049
Liquidity	675	1.7240	2.66061	0.0360	27.6790	2.7642
Profitability	675	0.0423	0.0625	-0.4990	0.7524	0.0922
Leverage	675	0.5963	1.0726	0.2744	29.9626	2.0820
Firm size	675	11.1668	11.3039	7.6701	16.7303	1.6730
Asset Efficiency	675	0.7361	0.8882	0.0000	7.0172	0.74418
Gross National Income	675	3.0000	3.2059	3.0000	4.0000	0.4047

Source: author's calculation.

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The initial estimate of the relationships between the variables will be obtained from the results of the linear correlation using the Pearson's matrix shown in Table 7. Preliminarily, the correlation coefficients indicate the existence of a positive and statistically significant relationship between sustainable growth rate and all determinants included in the model, such as liquidity, profitability, firm size, and asset efficiency, while there is a negative and statistically significant relationship between sustainable growth rate and leverage. Gross national income is excepted from the significant relationship with sustainable growth rate. In terms of direction, the presented outcomes are currently in line with the previously set research hypotheses in this paper. As far as strength is concerned, the strong relation between sustainable growth rate and profitability is particularly noteworthy, shown by the correlation coefficient of 0.7459. However, the relationship between other variables and sustainable growth rate, such as current ratio, leverage, firm size, asset efficiency, and gross national income, could be considered weak regarding the matrix results 0.0807, -0.1765, 0.1435, 0.1267, and -0.565, respectively. Results indicating a strong relationship rather suggest the possibility of reverse causality, which indicates that the dependent variable could influence the independent variables in the particular model. Firstly, the expected reverse impact is also in the direction of a sustainable growth rate towards the determinant of profitability. Due to methodological limitations of the use of cross-section data and a fixed effect model, empirical implications regarding reverse causality would not be presented in this paper [57–59]. According to the authors' best knowledge, there has been no extensive research in the previous literature conducted on the topic of the impact of sustainable growth rate primarily on ROA. Far less research has been completed on the subject of the effect of sustainable growth rate on liquidity, capital structure, firm size, and asset efficiency. Regardless, it is relevant to highlight a few major studies that relate to this matter. Lim and Rokhim examined the factors affecting the profitability of a pharmaceutical company in Indonesia [60]. The study results envisage a positive and significant impact of sustainable growth rate on ROA, as well as on other profitability determinants, such as return on equity (ROE) and earnings per share (ERS). Amouzesh also identified a positive and significant impact between sustainable growth rate and profitability by analyzing a sample of 54 firms listed in the Iran financial market [41]. Additionally, that relationship is also confirmed by the study conducted by Liow examining 336 public real estate companies in an international context [61]. Moreover, reverse causality could further be considered from a logical point of view. ROE growth and amount of retained earnings as components of sustainable growth rate will inevitably lead to higher profitability and continuous performance. From another point of view, a sustainable growth rate implies the use of internal resources and the existing capital structure in order to achieve growth. Every stable growth could improve profitability and be a prerequisite for overall success and corporate goal achievement.

Table 7. Correlation matrix results.

	Sustainable Growth Rate	Current Ratio	ROA	Leverage	Firm Size	Asset Efficiency	Gross National Income
Sustainable growth rate	1						
Current Ratio	0.0807 *	1					
ROA	0.745 9 **	0.2110 **	1				
Leverage	-0.1765 **	-0.1923 **	-0.1475 **	1			
Firm size	0.1435 **	-0.1420 **	0.0929 *	0.1812 **	1		
Asset Efficiency	0.1267 **	-0.0948 *	0.0909 *	0.0909 *	-0.3143 **	1	
Gross National Income	-0.0565	-0.0640	-0.0732	0.2180 **	0.3241 **	-0.1233 **	1

<sup>\*\*</sup> level of significance 1%; \* level of significance 5%. Source: author's calculation.

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> Before initiating panel regression analysis, the adequacy of the model type was tested. The Hausman test was used to indicate eligibility of the fixed effects model and random effects model in panel regression analysis. Since the p value is 0.0037, the null hypothesis that assumes the use of the random effects model is rejected. Relying on research conducted by Arora et al. [1] and Listiani and Supramono [13], the impact of independent variables on sustainable growth rate will be evaluated using a fixed effect model. In the next step of the analysis, the existence of individual and time effects was tested by using the F-test for fixed specification. The results of the F-test are shown in Table 8.

Table 8. Time and individual fixed effect test results.

F Test	Test Statistics Value	p Value
Time effect	F(10,530) = 111.37	0.0000
Individual effect	F(6,534) = 185.71	0.0000

Source: author's calculation.

According to the p value = 0.0000, the model to be evaluated would be with a fixed specification, including the presence of time and individual effects. The model could be presented through the following equation:

$$SGR_{it} = \beta_{it} + \beta_1 LIQ + \beta_2 ROA + \beta_3 LEV + \beta_4 SIZE + \beta_5 AF + \beta_6 GNI + u_{it}$$

where i represents company code (i = 1,2,3..., n), t represents each year (t = 1,2,3,4,5,6),  $\beta_i$  independent variable coefficients, SGR represents sustainable growth rate, LIQ represents liquidity, ROA represents profitability, LEV represents leverage, SIZE represents the firm size, AF represents asset efficiency, GNI represents gross national income, and u represents the residual error.

After selecting the model, it is necessary to examine the basic assumptions for the application of panel regression analysis. One of the fundamental predispositions is related to the presence of multicollinearity. In Table 7, there are no absolute correlation coefficients stronger than 0.8, indicating a low probability of the presence of multicollinearity. The absence of multicollinearity has been confirmed by variance impact factors of variables (VIF) presented in Table 9. Considering that neither does the value of the VIF coefficient exceed the reference value of 10 nor the TOL coefficient fall below the value of 0.1, it could be confirmed that the independent variables are not highly correlated with each other.

Table 9. Results of variance impact factors of variables (VIF).

VIF	1/VIF
1.13	0.8868
1.13	0.8846
1.14	0.8739
1.35	0.7432
1.20	0.8330
1.16	0.8609
1.18	
	1.13 1.13 1.14 1.35 1.20 1.16

Source: author's calculation.

Table 10 displays testing additional assumptions related to the presence of autocorrelation and heteroskedasticity. The presence of autocorrelation was tested using the Wooldridge test. The Wooldridge test resulted in the p value < 0.05, so the basic applications of panel regression analysis are disturbed. To test the existence of heteroskedasticity, a Breusch-Pagan/Cook-Weisberg test was applied, and, based on the results, the null hypothesis of homoscedasticity is rejected and the alternative hypothesis of heteroskedasSustainability **2022**, 14, 10731 15 of 21

ticity is accepted at the 1% significance level. Hence, due to the non-fulfillment of the basic postulates, it proves necessary to transform the model.

Table 10. Autocorrelation and heteroskedasticity test results.

Test	Test Statistics Value	p Value
Wooldridge test	F(1,134) = 8.583	0.0040
Breusch-Pagan/Cook-Weisberg test	chi2(1) = 71.610	0.0000

Source: author's calculation.

In order to overcome the aforementioned violation of the basic assumptions of the model, an alternative specification of the model with error-corrected standard errors has been applied. As far as the results of the Hausman test, they imply that the evaluation of the model with fixed effects is more adequate compared to the model with random effects; the transformation was performed accordingly. The following table displays the transformed model.

The presented results in Table 11 showed that the liquidity (-0.0043) has a statistically significant negative impact on the sustainable growth rate of dividend payable companies from Eastern Europe, which rejects Hypothesis H1. Eastern European companies, through an adequate liquidity management policy, should establish an optimal level of liquidity because it is obvious that the excess liquid assets over short-term liabilities slow business results and growth. Observed high-growth Eastern European companies do not have high liquid assets volume. Since increasing liquidity does not increase the growth potential of the company, surplus liquid funds of Eastern European companies could be invested for other purposes to further contribute to sustainability and long-term growth. As long as the surplus of available funds of those companies is not aimed at achieving the short-term goals for which the funds are intended, sustainable growth would be negatively affected. Bearing in mind that the concept of liquidity affects financial costs, short-term decisions and actions of Eastern European companies should be imperative for achieving strategic objectives and improving the general economic condition. Dobromirov points out that there is a medium corruption impact on Eastern European financial market performances, which indicates that there is a medium liquidity level of the Eastern European markets in 2019 [62]. Based on that, Eastern European companies should use cash as efficiently as possible in order to control the liquidity risk and should consider the existence of liquidity constraints. The liquidity timing of the Eastern European markets should be given special attention bearing in mind that stocks can be illiquid or become expensive to sell at a time when it suits investors [63]. The resulting direction of the impact of liquidity on the sustainable growth rate is in line with Rahim et al. [40] and Pratama [50].

Unlike liquidity, profitability (1.7197) has a positive impact on the sustainable growth rate, whereby this influence is also considered statistically significant, which means that Hypothesis H2 is confirmed. By increasing the rate of sustainable growth, Eastern European companies are realizing their goals in terms of profit maximization. The assumption of sustainable growth of Eastern European companies is the achieved profitability that may arise as a consequence of low prices for input and more favorable borrowing conditions. The profitability of Eastern European companies represents a basic prerequisite for expansion, development, and, ultimately, growth. Moreover, profitability creates added value to shareholders' possibilities for investment in operating assets of Eastern European companies. Such actions are the basis in whose absence it is practically impossible to consider sustainability. Profitability and sustainability together lead to a sustainable competitive advantage of Eastern European companies in the long-term. If they plan their funds efficiently and manage their capital properly, profitable Eastern European companies will operate successfully, with high sustainable growth rates. A higher sustainable growth rate affects the greater ability of Eastern European companies to provide internal funds to support business growth. The fact that profitability and sustainability of growth are directly related was also found in research conducted by Hartono and Utami, who claim that a

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higher degree of fertilization of available funds leads to a higher sustainable growth rate for both groups of observed Indonesian companies [38]. Additionally, Madbouly [42], Mukherjee and Sen [47], and Alayemi and Akintoye [46] confirm that, under the assumption of unchanged other conditions, if profitability enhances, it will lead to increased sustainable growth. Manullang and Hutabarat pointed out that an increase in the sustainable growth rate significantly affects the company's ability to generate earnings, indicating that there is also a significant impact between sustainable growth and liquidity on the profitability of Indonesian mining companies in 2018 [64].

Sustainable Growth Rate	Coefficient	Standard Error	t	P >   t	[95% Conf	. Interval]
Liquidity	-0.0043	0.0021	-2.07	0.041	-0.0083	-0.0002
Profitability	1.7197	0.1639	10.49	0.000	1.3955	2.0438
Leverage	-0.0757	0.1404	-5.40	0.000	-0.1035	-0.0480
Firm size	0.0317	0.0662	0.48	0.633	-0.0994	0.1627
Asset Efficiency	-0.0216	0.0277	-0.78	0.436	-0.0763	0.0331
Gross National Income	-0.0093	0.0125	-0.74	0.459	-0.0340	0.0154
Constant	-0.2332	0.7393	-0.32	0.753	-1.695	1.2290
F(6,134) = 38.01; $Prob > F = 0.0000$ ; $R-sq$ : within=0.6760; between= 0.3103; overall = 0.3894						

Source: author's calculation.

Further, the results show that leverage (-0.0757) has a negative and statistically significant impact on the sustainability of growth, rejecting Hypothesis H3. If we recall the descriptive statistics, the Eastern European companies in the sample are prone to borrowed funds and debt. Accordingly, the leveraged manner of financing depends on the trends of the financial market, leaving those companies less flexible in settling obligations and at greater risk. The results of the model evaluation show that the mentioned financing structure has a negative impact on sustainable growth rates. Based on this, observed Eastern European companies with attractive growth opportunities, as well as those that want to obtain cash to ensure continuity in financing their business operations, should turn to finance from their sources. These results are in line with the research of Wu and Yeung, who emphasize that low-growth companies prefer to borrow, while high-growth companies prefer to use less debt financing [65]. Therefore, Eastern European companies could more confidently achieve a higher rate of sustainable growth if they prioritize their resources, primarily for greater predictability, as an important component of strategic planning, as well as more often due to lower capital costs. Rapid debt-financed growth of those companies affects the decline in sustainable growth rates, so they need to invest rationally and borrow in a way that will improve the capacity of production and efficiency, as well as ensure financial stability and a certain degree of sustainable business. It is obvious that debt financing of the observed Eastern European companies cannot provide sustainable growth and can lead in the long-run to financial losses, reflected in high costs, falling market value, and inefficient use of resources, which may jeopardize survival or, ultimately, result in bankruptcy. A statistically significant negative relationship between company indebtedness and sustainable growth rates was confirmed by the research of Mamilla [35] and Mumu et al. [37], who agree that higher company indebtedness leads to a lower sustainable growth rate.

Size measured by the natural logarithm of total assets has a positive but statistically insignificant impact (0.0317) on the sustainable growth rate. This means that Hypothesis H4 is partially rejected. The concept of sustainable growth is being chased by all companies, regardless of their size. The major advantages of large European companies are reflected primarily in the economy of scale that creates opportunities to gain an advantage over the competition, which could lead to continuous growth. The assumption is that large Eastern European companies are developing, expanding, and increasing sales according to market conditions and that investor confidence in their business is growing. They also

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have more operational resources at their disposal to ensure sustainable business. With a considerable amount of financial and management resources, they could easily expand to foreign markets, where they have access to new resources and opportunities compared to the domestic market. The size of the company is especially important in Eastern European countries since such countries face weaker legal institutions and a higher corruption level in the public sector, as well as more difficult business conditions compared to more developed countries. In such circumstances, larger companies manage better and have a larger volume of financial resources for financing both current needs and future growth [66]. Larger company size is associated with higher liquidity level in the stock trading direction in the Eastern European market [63]. Research conducted by Memon et al. [3] and Mukherjee and Sen [47] showed that there is no statistically significant relationship between these variables. An insignificant relationship was also confirmed via research conducted by Seens, who showed that, in most cases, large companies will grow at their sustainable rate of growth [67].

As far as asset management is concerned, the results show that there is a negative and statistically insignificant impact of asset efficiency on sustainable growth rate, which requires Hypothesis H5 to be rejected. Remembering already presented descriptive statistics, the Eastern European companies belonging to the sample are efficient when considering the percentage of sales income generated using existing assets. By high utilization of assets, companies could achieve asset management efficiency and have a positive effect on financial performance, their market value growth, and sustainable development [68]. However, the results showed that asset efficiency is not a precondition for achieving a permanent growth rate and that Eastern European companies do not pay special attention to asset management efficiency in order to ensure sustainable growth. Alayemi and Akintoye also envisage that asset efficiency is a statistically insignificant variable [46], which is completely contradictory to the research conducted by Altahtamouni et al., who point out that asset turnover is the most influential indicator because sustainable growth is expanding with increasing efficiency in operating assets management, which affects generation of higher revenues [17]. Similarly, Nastiti et al. explained that asset utilization is a factor that provides the opportunity for a company to achieve sustainable growth. Therefore, the utilization of assets mediates the relationship between sustainable growth and working capital management [69].

Table 12 is an overview of the set hypotheses, including the decision on their acceptance or rejection.

Table 12. Hypothesis consideration.

Statement	Resulted Impact	Impact Decision	<b>Hypothesis Decision</b>
The current liquidity has a statistically significant positive impact on sustainable company growth.	Negative	Accepted at 5% level of significance	Not accepted
The profitability measured by ROA has a statistically significant positive impact on sustainable company growth.	Positive	Accepted at 1% level of significance	Accepted
The leverage has a statistically significant positive impact on sustainable company growth.	Negative	Accepted at 1% level of significance	Not accepted
The company size has a statistically significant positive impact on sustainable company growth.	Positive	Not accepted	Not accepted
Asset efficiency has a statistically significant positive impact on sustainable company growth.	Negative	Not accepted	Not accepted
	significant positive impact on sustainable company growth.  The profitability measured by ROA has a statistically significant positive impact on sustainable company growth.  The leverage has a statistically significant positive impact on sustainable company growth.  The company size has a statistically significant positive impact on sustainable company growth.  Asset efficiency has a statistically significant positive impact on	significant positive impact on sustainable company growth.  The profitability measured by ROA has a statistically significant positive impact on sustainable company growth.  The leverage has a statistically significant positive impact on sustainable company growth.  The company size has a statistically significant positive impact on sustainable company growth.  The company size has a statistically significant positive impact on sustainable company growth.  Asset efficiency has a statistically significant positive impact on sustainable company growth.  Negative	significant positive impact on sustainable company growth.  The profitability measured by ROA has a statistically significant positive impact on sustainable company growth.  The leverage has a statistically significant positive impact on sustainable company growth.  The leverage has a statistically significant positive impact on sustainable company growth.  The company size has a statistically significant positive impact on sustainable company growth.  Asset efficiency has a statistically significant positive impact on sustainable company growth.  Asset efficiency has a statistically significant positive impact on sustainable company growth.  Negative Not accepted Not accepted sustainable company growth.

Source: author's calculation.

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#### 5. Conclusions

The concept of sustainable growth should be a vital segment of every corporate strategic plan from small family companies to large multinationals. In other words, this is the rate at which the company could grow in the long-term and continuously with the established optimal ratio of borrowed and own funds. Furthermore, a sustainable growth rate is an estimate of expected development expressed as a percentage, with maintenance of existing liquidity, profitability, leverage, company size, and asset efficiency.

Considering the importance of this matter in financial and strategic management, the determinants of sustainable growth rate were examined in this paper. The research was conducted on a sample of companies that operated in Eastern European countries in the period from 2016 to 2020. The panel regression model was evaluated on a total of 675 observations. The results indicated that current liquidity has a statistically significant negative impact on sustainable company growth. This result is supported by the concept of not allowing a surplus of available funds, considering it as a missed opportunity either for investment or for achieving additional short-run goals. Likewise, those results imply that Eastern European companies ought to reduce pressure caused by short-term liabilities and try to transform them into long-term liabilities. Additionally, it was further confirmed that the profitability measured by ROA has a statistically significant positive impact on sustainable company growth. As expected, a higher return on assets creates the base for consistent, balanced, and stable trends and growth of the company over time. Moreover, leverage has a statistically significant negative impact on sustainable company growth. These results are in line with the pecking order theory, which states that companies prioritize internal sources of financing. Finally, the obtained results have shown that company size and asset efficiency are not statistically significant determinants of sustainable company growth. Although the companies in the sample are medium, large, and very large and have shown great efficiency in the use of assets, the results of the evaluated model show that this does not significantly contribute to sustainable growth. Bearing this in mind, it could be concluded that micro and small firms could also achieve sustainability regardless of size. In other words, irrespective of the economies of scale and flexibility, as the main advantages of large companies, micro and small firms could achieve constant and permanent growth.

The paper has several limitations, which could be interpreted as recommendations for further research. Firstly, it must be acknowledged that the sample included companies from Eastern Europe. Future research should explore the determinants of sustainable growth rates in individual economies within Eastern Europe. Considering that the current sample includes a diversity of companies in terms of their industry type, subsequent research should be concentrated on a specific industry. A comparison of the results of companies from several different industries should be made in order to examine whether the effects of independent variables in different industries and different business environments are the same. In addition to the activity type, companies can be selected by category (joint-stock companies, limited liability companies, etc.), by size (large, medium, small), or by another geographical region. In addition, a longer time series can be analyzed or a comparison of the sustainable growth rate before and after the pandemic can be made in order to take into account the effects of the pandemic caused by COVID-19. Due to the unavailability of data, this paper covers only the first year of the pandemic caused by a coronavirus, which was not enough to consider the impact of the pandemic crisis adequately. Accordingly, it proves necessary to examine whether the crisis caused by the pandemic influenced the change in growth sustainability factors. In addition, this research could be carried out at the level of Western and Northern Europe in order to examine whether and at what level the countries of Eastern Europe lag behind the rest of Europe from the aspect of sustainability growth.

In addition, the analysis could be expanded with more financial ratios or non-financial indicators, such as ownership structure, management style, customer satisfaction, market position, institutional and legal environment, etc. A large number of companies tend to improve non-financial performance considering the stakeholders' interests. Additional research might also be directed towards examining differences between internal and sustain-

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able growth rates or towards the effect of deviation of actual growth rate from sustainable growth rate. Therefore, in future research, the dependent variable could be the deviation of actual growth rate from sustainable growth rate. It also proves necessary to consider macroeconomic trends, market-specific, or country-specific factors as determinants of growth, such as FDI, inflation, and imports/exports. Any further research on this topic is welcome to complement the initial findings of this study.

As sustainability is a fundamental strategic issue, the results of this study would be of the greatest use to company executives, i.e., creators of growth and development strategy. In addition, the results should be considered by investors and shareholders, who will acquire a better understanding of the factors they need to consider in order to predict the potential for growth in the future. As well, the results serve managers so that, by combining the operational and financial company parameters, they can effectively assess financial performance and improve overall performance in a way that the company can grow sustainably.

**Author Contributions:** Conceptualization, B.V. and D.J.; methodology, T.T.; investigation, B.V.; resources, T.T.; data curation, T.T.; writing—original draft preparation, B.V., T.T. and D.J.; visualization, B.V. and T.T.; supervision, B.V. and D.J. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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