Conference Paper

Sustainable Growth: Grow and Broke Empirical Study on Manufacturing Sector Companies Listed on the Indonesia Stock Exchange

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Abstract

Sales growth is one of the indicators of firm's performance. However, high sales growth does not guarantee high stakeholder value. This is shown by the relationship of sales growth (AGR) and sustainable growth (SGR), as well as balance growth (BGR). This study is conducted using a 466 sample of manufacturing companies listed on the Indonesia Stock Exchange from 2012 to 2016. Paired sample test and compared mean one-way ANOVA are used to see the difference in Net Profit Margin, Assets Turnover, Dividend Payout Ratio, Price Earnings Ratio, and Debt to Equity Ratio of AGR, BGR, and SGR sample group are classified based on low, medium, and high rank. The results show that (1) high sales growth cannot be used to explain high Net Profit Margin and Assets Turnover; (2) companies with high BGR also have high DPR and PER. However, it is believed that high BGR should lead to lower DER. Nonetheless, this study found that companies with high SGR have higher debt in their financing, indicating 'Growth and Broke' has occurred.

Keywords: actual growth, balance growth, sustainable growth, 'Grow and Broke'

1. Introduction

Growth is a concept that is widely used in various philosophies of science and has various meanings as the process of improvement. In economics, the term growth is associated with the process of development, expansion and acceleration (Akalpler, 2018; Chen, 2018), while, in business terms, growth is interpreted as an increase in economic or business capacity in terms of producing/selling products or services (Pradhan, 2017; Ribeiro, 2017; Saripalli, 2017). Therefore, growth is used in business enterprises as an indicator of success, such as the rate of economic growth or revenue growth rate. Furthermore, many literatures develop growth taxonomy for various interests in different time frames, such as short-run and long-run growth, actual growth, slow and rapid growth, internal growth and external growth, or sustainable or unsustainable growth (Woo, 2017). Some of these indicators are used for management decision-making, especially those related to managerial interests in financial planning, debt holders and shareholders and governments. Therefore, managing growth by distinguishing that actual growth is different from sustainable growth is important for companies to place balanced growth as a detection of the company's position in terms of cash balance.

There is no universal definition of corporate sustainability (Roca and Searcy, 2011) Grayson, 2011) defined corporate sustainability as a company's ability to reach the needs of stakeholders, either directly or indirectly, without disrupting its ability to satisfy its needs in the future (Dyllick and Hockerts, 2002). Growth rates can be classified by some researchers into rapid growth and slow growth. Some researchers show the size of the company's growth in different ways, for example, assets growth that reflects the expansion of companies that have some meaning (Constantinou, 2017). Some researchers use several indicators to measure growth performance of companies, such as sales growth or firm growth (Kang, Loboand Wolfe 2015; Nason and Wiklund, 2015; Abuhommous, 2017; Di Cintio, 2017; Debnath, 2017; Mathew, 2017; Oliveira, 2017; Topcuand Çoban, 2017).

Higgins (1977) introduces the term 'sustainable growth rate' as a consistency of the company's growth targets with financial policies (e.g., capital structure targets and dividend policies to be maintained) and will not sell new equity, stating "if the sales growth is greater than the expected target then the company will make a series of policies, otherwise if sales growth is smaller than the expected, the company will increase dividend payments, reduce debt or increase liquid assets." This suggests that growth indicators are increasingly specific to contributing to the development of a financial management literacy that can be used in corporate decision-making. An important decision for a company is a decision that affects shareholder value.

2. Literature Review

2.1. Actual growth, sustainable growth and balance growth

Higgins has published a series of papers about how to manage the growth of a company (Higgins 1977; 1981; 2008). The term 'Growth and Broke' is very interesting, a philosophy that has a very deep meaning: growing becomes messy, indicating that growth must be managed. In financial perspectives, it means that sales growth does not always result in sustainability, as Higgins has clearly explained. He later introduced the term growth of the company by differentiating actual growth, sustainable growth and balance growth.

2.1.1. Actual growth

Company growth is closely related to planning or forecasting in the future. From a financial management perspective, the central issue in financial planning activities comes from sales, which imply how companies can maximize sales with limited resources. The main resource of the company is the financial resources derived from debt or capital itself to generate sales growth. Therefore, an important indicator of financial performance is sales-based, which is predicted through sales growth. Sales growth is used as the basis for the preparation of pro-forma projections financial statements (Ross, 2012; Higgins, 2008). Expectations on sales growth as a basis for determining external and internal funding are estimated through retention ratios. Problems arising from sales are generally related to the prediction conditions, whether seasonality, uncertainty, sensitivity, following a particular trend or having life cycle product patterns, etc. (Grablowitz, Rudeloff and Voss, 2002), which, in turn, will affect cash flow. Therefore, cash needs to be adjusted based on the pattern of the sales when planning for cash budget. For large companies, cash planning becomes important and as to how financial planning can be ensured and consistent with the commitment of managers and shareholders. In this article, the actual growth of sales is concerned because it indicates that growth can affect cash flow and funding problems from slow growth and rapid growth, which, in turn, have an impact on company value. Actual growth can be measured from sales growth with the following formula:

$$\text{Actual Growth} = \frac{\text{Sales}_{t1} - \text{Sales}_{t-1}}{\text{Sales}_{t-1}} \text{ (Home and Wachowicz, 2005)}$$

2.1.2. Sustainable growth

Sustainable growth is the maximum percentage of sales growth that can be achieved based on operational targets, debt and dividend distribution rates (Van Horne, 2002). Sustainable Growth is a growth that requires capital by self-financing in conditions of unchanged leverage (Constantin, 2015; Higgins, 1977). According to Ross, Westerfield and Jaffe (2012), sustainable growth rate can be determined by setting a set of profit rate variables, dividend distribution rate and ROA without increasing equity. Meanwhile, Churchill and Mullins (2001) state that sustainable growth rate is the company's sustainable growth rate from sales without any additional funding. The sustainable growth rate is the maximum percentage of asset sales or profit growth when the financial and operational parameters are in line with the agreed management objectives and market expectations. Sustainable growth is the maximum sustainable growth rate without increasing financial leverage (Campbell, 2004). Cash flow based on sustainable growth is the level at which a company maintains its sales by maintaining a constant cash flow. Sustainable growth is the percentage of annual sales growth in terms of an agreement with a defined funding policy (Higgins, 1977). Sustainable growth is the maximum level of sales growth without receiving capital from investors and any long-term debt (Ross, Westerfield and Jordan, 2012; Snyman, 1999). The sustainable growth model shows how the measurement of operational and financial performance, such as ROA, Dividend Pay Out, Profit Margin, Turnover Assets and Financial Leverage interact (Olson and Pagano, 2005). Higgins (2008) introduced how growth is viewed from a defined financial dimension with the Sustainable Growth Rate, defined as the maximum level of sales that can be increased without undermining financial resources. It is, therefore, important to understand the need to limit growth to maintain financial strength. This indicates that, for a company that grows at a rate that exceeds the sustainable growth of the company, it would be better to increase profit margins, or turnover ratio assets to determine funding decisions, which are represented by retention or financial leverage. Sustainable growth can be formulated as:

$$g = \text{retention} \times \text{ROE (Higgins, 1992).}$$

If actual growth is bigger than sustainable growth

Higgins (2008) argues that excessive growth impacts on financial problems and poses a challenge for firms to increase debt capacity. It is, therefore, important to anticipate the disparity between actual and sustainable growth, which is a challenge for financial management. For this, management needs to know at which limit the growth positions on the balance of growth. Higgins (2008) explains that, in conditions where the company has a very high growth, where actual growth exceeds sustainable growth, the first step is to determine how long the situation will take place. Under sustainable growth conditions smaller than actual growth, then there is 'no value for shareholders'.

If actual growth is smaller than sustainable growth

If the company has very small growth or sustainable growth greater than actual growth, management has a dilemma in excess cash flow. In this case, the company can reduce leverage for a lower balance growth, but the cash must overflow. As Higgins (2008) explains, this problem needs to be determined as to whether it is a temporary or long-term problem; if the problem is short run, the company can accumulate resources to anticipate future growth. However, if the problem is long term, then it indicates the lack of growth in an industry; therefore, the company must create new growth or create new investments to diversify, increase dividends or buy back shares.

If the rate of growth declines in the near future or the company reaches the maturity stage, the problem arises as to how a transition can be solved through debt. In the future, the actual growth will be lower than sustainable growth, so, for a long-term sustainable growth strategy, a combination can be performed, such as issuing new shares, increasing debt, reducing dividend payout, reducing marginal costs, outsourcing some or all production, increasing prices or merging in the event of a cash cow. To way to eliminate low growth is by buying growth, by maintaining the ability of managers and concerns on key employees to respond to excess cash flow by diversifying into other businesses or investing in businesses that have growth in the industrial environment.

Balance growth is a model of equation that reflects the combination of sales growth and return to assets that emphasize on self-financing by maintaining a constant debt to equity ratio; this combination has implications for surplus areas or cash deficits. Companies with sales growth positions on the left of the line of 'balance growth' show cash deficit, while a company having sales growth below the right line indicates a cash surplus area. Balance growth is formulated as follows:

$$g = R \times T \times ROA,$$

where g = balance growth; R = retention ratio; T = Asset to Equity Ratio; ROA = Return On Assets

Among several empirical studies on sustainable growth, Amouzes (2011) found a significant relationship between SGR and financial performance using variables such as ROA, PBV and Current Acid Ratio. Chen and Gupta (2011) used a sustainable growth dynamic model by optimizing growth rate and payout ratio. Lockwood and Larry (2010) examined the relationship of sustainable growth and stock return in the long run and found that companies with high sustainable growth tend to have risk, low book to market ratio and low return. Olson and Pagano (2005) conducted a merger and acquisition study and found that the sustainable growth variable of acquirer and merger companies was no different. Pandit and Tejani (2011) concluded there is a consistent relationship between profit margin, turnover, leverage and retained earning assets to manage sales growth at SGR level. Nasim and Fetti (2015) showed that there is an effect of profit margin, turnover assets and leverage on SGR. Platt, Platt and Chen (1995), assuming that sustainable growth rate is a growth rate of sales without selling securities and maintaining capital structure, showed how company sales grow without increasing debt and using debt, enabling the company to set target sales growth and determine profitability improvement on each component of product or customer, while Ghosh (2003) found macro factors impacted unsustainability growth. This is in line with other studies showing that financial indicators related to financial regulators to test sustainability performance (Olaf 2017) found that a bi-directional relationship between financial performance indicators (total assets, net profit, ROA and ROE) with sustainability performance, in line with the Dam and Scholtens research (2015). Other authors used a Granger test to test bi-directional between financial performance with sustained performance (Waddock and Graves, 1997; Fischer and Sawczyn, 2013) and Zahid (2016) examined corporate sustainability using economic, environmental and social dimensions. In addition, sustainable growth is a systemic condition that can be influenced by external factors, (Higgins 1981; 2008), in that external conditions have an impact on nominal value differences and real values that can be explained by the Fischer effect. The growth of value-oriented companies places more emphasis on sustainable growth rate (Chen, Gupta and Lee, 2013). Sustainable shareholder value has diverse explanations in an academic context. However, the main idea of all sustainable definitions is that there are interactions of three major systems, environmental, social and economic. The best way to be sustainable is to implement a strategic plan in accordance with the company's objectives, so it can be concluded that sustainable shareholder value is the application of corporate strategy and policy (Lee, et al. 2017).

The purpose of this study is to further explain the Higgins (2008) model of sustainable growth by examining whether there is a difference between sustainability growth, actual growth and balance growth and how is the relationship between sustainable growth with the Dividend Pay Out Ratio, Price Earnings Ratio, Debt to Equity Ratio and Asset Turnover ratio. The empirical research is conducted on manufacturing companies listed on the Indonesia Stock Exchange in 2012–2016.

3. Method

The study was conducted on 124 companies engaged in the manufacturing sector listed on the Jakarta Stock Exchange from 2012 to 2016, with the total of 620 sample data. The data were then selected based on the assumptions: positive net profit margin and retention rate; therefore, 466 data were then selected. The analytical technique is descriptive to describe the data and slack profiles that occur between Actual Growth (AGR), Sustainable Growth (SGR) and Balance Growth (BGR), where each variable is grouped ordinarily through rank order with three categories, low, moderate and high, and the relationship tested between these variables using chi-square test to determine if there is intersection in each group. Furthermore, the samples are then compared using paired samples *t*-test and one way ANOVA. In the one way ANOVA method, some variables, such as Net Profit Margin (NPM), Debt to Equity Ratio (DER), Asset Turnover Ratio (ATO), Dividend Pay Out Ratio (DPR) and Price Earnings Ratio (PER), are compared. This is done to see how AGR, SGR and BGR affect those variables.

4. Results and Discussion

4.1. The relationship between actual growth, sustainable growth and balance growth

The essence of sustainable growth is related to the retention ratio as self-financing to increase the company's sales growth. It is, therefore, important to give an insight to the companies that pay dividends and those that do not. Of 466 corporate samples, 41.9% distributed dividends and the other 58.2% did not. From the results of the study, it is show that 52.6% of the sample companies are in positive slack, which means that actual growth is greater than sustainable growth, and 47.4% indicates negative slack. As Higgins (2008) explains, there is the possibility of differences in the firm between actual growth with sustainable growth. The difference between actual growth and sustainable growth in this study is called 'slack AGR-SGR'. If there is positive slack, it means actual growth is greater than sustainable growth. Conversely, if there is negative slack, it means actual growth is smaller than sustainable growth. Positive slack indicates the condition of no shareholder value, while negative slack is an indication of excess cash that allows the company to increase dividend or buy stock return or new business investment. Furthermore, when actual growth is compared to balance growth, referred to in this study as 'slack AGR-BGR', if AGR is greater than BGR, it means cash deficit occurs, otherwise, if AGR is smaller than BGR, cash surplus occurs. The results are as shown in Table 1.

Average actual growth and sustainable growth if grouped based on interval range, then slow growth, moderate and high growth show a relationship between actual growth, sustainable growth and balance growth. The slices between the three groups can be seen in Table 2.

Table 1: Slack Value Between AGR, SGR, and BGR in sample companies.

Slack	Percentage Number of Companies	Percentage Number of Companies	Amount
slack $_{AGR-SGR}$	AGR < SGR = 221 Companies (47.4%)	AGR > SGR = 245 Companies (52.6%)	466
slack $_{AGR-BGR}$	AGR < BGR = 194 Companies (41.6%)	AGR > BGR = 272 Companies (58.4%)	466
slack $_{BGR-SGR}$	BGR < SGR = 391 Companies (83.9%)	BGR > SGR = 75 Companies (16.1%)	466
Source: Processed data from Indonesia Stock Exchange.			

Table 2: The combination of AGR, SGR, and BGR Sample.

Actual Growth	Sustainable Growth Rate (SGR)							
	Low Growth	%	Moderate Growth	%	High Growth	%	Total	Chi Square Test
Low Growth	63	40.65	54	34.39	41	26.62	158	
Moderate Growth	54	34.84	58	36.94	56	36.36	168	0.119
High Growth	*38*	24.52	45	28.66	57	37.01	140	
Total	155	33.26	157	33.69	154	33.05	466	
Actual Growth Rate	**Balance Growth (BGR)**							
Low Growth	103	38.01	50	28.57	5	25	158	
Moderate Growth	94	34.69	65	37.14	9	45	168	0.023
High Growth	74	27.31	60	34.29	6	30	140	
Total	271	58.15	175	37.55	20	4.29	466	
Source: Processed data from Indonesia Stock Exchange.								

It is also important to test whether there are significant differences between the sample groups AGR and SGR, between AGR and BGR and between BGR and SGR which have three paired samples. The test results, using compare mean and paired sample test descriptively showed average growth ranged from 3% to 6% with error mean standard between 0.2% and 0.7%. However, in AGR data there is a very high standard deviation of growth value; this is because most AGR data show negative growth, and, statistically, causing an AGR and SGR relationship cannot be concluded. To overcome this, the researcher grouped the samples that had negative growth, of which there were 152 samples, and positive growth, 314 samples. The sample is grouped into AGR with dummy variable 0 when AGR is negative and dummy variable = 1 when AGR is positive. The result of paired samples test shows that there are significant differences between AGR-SGR, BGR-SGR and AGT-BGR as well as for positive sample groups, indicating significant differences for each sample group.

Table 3 represents the difference in AG, SG, and BGR in two different groups: Companies with positive sales growth and companies with negative sales growth.

In sample groups with negative sales growth:

Table 3: Paired samples test with negative and positive Actual Growth Sales (AGR) samples.

	Negative Actual Growth (AGR)				Positive Actual Growth (AGR)			
Paired Differences	**Mean**	**SD**	**S.E**	**Sig**	**Mean**	**SD**	**S.E**	**Sig**
AGR – SGR	−15.45	11.09	0.89	0.000	7.15	11.87	0.67	0.000
BGR – SGR	−2.79	4.96	0.40	0.000	−2.73	3.98	0.22	0.000
AGR – BGR	−12.66	9.42	0.76	0.000	9.89	11.03	0.62	0.000
Source: Processed data from Indonesia Stock Exchange 2012–2016.								

The difference between AGR and SGR is −15.45, indicating that the growth of AGR is lower by 15.45% than SGR. However, these differences between BGR and SGR are smaller than those in SGR and BGR, which is −2.8%. This means that company growth with the policy of maintaining internal fund structure (internal growth) has not been able to overcome the sustainable growth rate.

In sample groups with positive sales growth:

The difference between AGR and SGR is about 7.15%, indicating that the average of sales growth is bigger by 7.15% compared to SGR. This indicates that the sales growth does not have any implications on shareholders, which are reflected by SGR. Similarly, the negative value of BGR-SGR of −2.73% showing that the companies have not been able to increase SGR even though they have positive sales growth and are balancing the sources of funds and assets. Furthermore, the difference between AGR and BGR of +9.9% shows that the growth of AGR is bigger than BGR, which reflects the relation between sales growths, return to assets and retention ratio. This indicates that the companies have not been able to maintain internal source of funds along with the growth of sales.

Table 4: Analysis of Variance Test (multiple comparisons).

	MEAN DIFFERENCE (SIGNIFICANT)				
Variable Percentile Group	**NPM**	**ATO**	**PER**	**DPR**	**DER**
AGR_{LOW}-$AGR_{MODERATE}$	−1.45 (0.114)	−5.14 (0.435)			
AGR_{LOW}-AGR_{High}	−1.23(0.185)	−9.06 (0.174)			
$AGR_{MODERATE}$-AGR_{High}	0.22 (0.810)	−3.91 (0.552)			
BGR_{LOW}-$BGR_{MODERATE}$			−1.15 (.002)	−1.98 (0.645)	
BGR_{LOW}-BGR_{High}			−1.89 (.000)	−6.05 (0.163)	
$BGR_{MODERATE}$-BGR_{High}			−0.74 (.050)	−4.07 (0.345)	
SGR_{LOW}-$SGR_{MODERATE}$					0.241(0.115)
SGR_{LOW}-SGR_{High}					−0.153(0.317)
$SGR_{MODERATE}$-SGR_{High}					−0.395(0.010)
Source: Processed data from Indonesia Stock Exchange 2012–2016.					

Furthermore, it is shown that there is no difference in NPM and ATO in all AGR groups: AGR$_{-low}$, AGR$_{-moderate}$ and AGR$_{-high.}$ This indicates that NPM and ATO cannot explain the rate of growth. Moreover, in BGR groups, there is also no significant differences between DPR and PER. However, in PER, there are differences in each group, which shows that the higher the BGR, the higher the PER, indicating high company cash surplus and higher earnings per share. Nevertheless, the relationship between BGR and Dividend Payout Ratio cannot be explained. Lastly, SGR is associated with DER and it is found that the higher the SGR, the higher DER will be. This is different to Higgins (2008), which showed high SGR and indicates companies were using internal source of funds to fund their activities. In our findings, high sustainable growth indicates high use of debt, which can be seen by the difference in DER between high SGR group and moderate SGR group of 39.5%.

5. Conclusion

Net profit margin (NPM) and asset turnover (ATO) as one indicator of the company's operational efficiency can increase from sales growth (AGR), meaning that higher sales growth will result in higher net profit margin as well as assets turnover. It is found that there are differences in NPM in the sample group with low or high growth rate, meaning the higher the sales growth, the higher NPM will be. However, it is found that the lower the sales growth, the higher ATO will be, indicating there are internal problems within the company. If there is a growth or decline in sales in the long term, in general, the company will make a decision to balance the financial position, by debt or dividends, due to excess cash when the company has experienced the stage of maturity. This relationship is seen from the position of a company's balance growth (BGR), meaning BGR is related to the company's cash balance. If the company has cash surplus, in general, the company will increase the dividend (DPR) or price earnings ratio (PER). The higher the BGR, the higher PER and DPR will be. The findings indicate that there is a high DPR and PER in the sample group with high BGR, conversely, there is a low DPR and PER in the low BGR group. This is in line with the concept of balance growth.

In general, sustainable growth (SGR) is associated with financial leverage (debt to equity ratio). The results showed that high DER was in both group of companies with low SGR and also high SGR. This is an indication that the SGR relationship cannot deduce DER. The interesting thing is that high SGR also happens to companies with high DER, which should be a company with high SGR, causing lower DER. But, in this study, it is found that companies with high or low SGR have the potential to experience financial distress, which means that Grow and Broke has happened.

References

[1] Abuhommous, A. (2017). Net working capital and firm growth. *International Review of Management and Marketing*, vol. 7, no. 4, pp. 131–137.

[2] Akalpler, E. and Duhok, D. (2018). Does monetary policy affect economic growth: Evidence from Malaysia. *Journal of Economic and Administrative Sciences*, vol. 34, no. 1, pp. 2–20.

[3] Alkhatib, S. M. and Mishal, Z. A. (2006). The growth-finance relationship: The case of Jordan 1970–2002. *Journal of Economic and Administrative Sciences*, vol. 22, no. 2, pp. 36–50.

[4] Amouzesh, N., Moeinhar, Z., and Mousavi, Z. (2011). Sustainable growth rate and firm performance: Evidence from Iran Stock Exchange. *International Journal of Business and Social Science*, vol. 2, no. 23, pp. 249–255.

[5] Campbell, J. Y. and Vuolteenaho, T. (2004). Bad Beta, Good Beta. *American Economic Review*, vol. 94, no. 5, pp. 1249–1275.

[6] Chen, Y. and Sun, L. (2018). Social organization and its impact on economic growth in China. *Journal of Economic Studies*, vol. 45, no. 1, pp. 126–143.

[7] Chen, J. and Gupta, A. K. (2011). *Parametric Statistical Change Point Analysis*. Boston: Birkhauser. DOI 10.1007/978-0-8176-4801-5

[8] Chen, H., Gupta, M., Lee, A., et al. (2013). Sustainable growth rate, optimal growth rate, and optimal payout ratio: A joint optimization approach. *Journal of Banking Finance*. DOI http://doi.org/10.1016/j.jbankfin.2012.11.019

[9] Churchill, N. C, and Mullins, J. W. (2001). *How Fast Can Your Company Afford to Grow?* Harvard Business School Publishing Corporation.

[10] Constantin, A. (2015). Cash-flow sustainable growth rate models. *Journal of Public Administration, Finance and Law*.

[11] Constantinou, G., Karali, A., and Papanastasopoulos, G. (2017). Asset growth and the cross-section of stock returns: Evidence from Greek listed firms. *Management Decision*, vol. 55, no. 5, pp. 826–841. Retreieved from https://doi.org/10.1108/MD-05-2016-0344

[12] De Almeida Afonso, C. O. and Cavalcante, R. V. M. (2015). Beyond the UN Global Compact: Institutions and regulations. *Advances in Sustainability and Environmental Justice*, vol. 17, pp. 233–251. Retrieved from https://doi.org/10.1108/S2051-

5030201517

[13] Debnath, A. and Das, S. (2017). Relationship between crime and economic affluence in India: An empirical study from 1982 to 2013. *Journal of Criminological Research, Policy and Practice*, vol. 3, no. 1, pp. 27–37. Retrieved from https://doi.org/10.1108/JCRPP-05-2016-0007

[14] Dyllick, T. and Hockerts, K. (2002). *Beyond the Business Case for Corporate Sustainability*. John Wiley & Sons, Ltd and ERP Environment. F-77 300.

[15] Di Cintio, A., Tremmel, M., Governato, F., et al. (2017). A rumble in the dark: Signatures of self-interacting dark matter in supermassive black hole dynamics and galaxy density profiles. The Authors Published by Oxford University Press on behalf of the Royal Astronomical Society. *MNRAS*, vol. 469, pp. 2845–2854. DOI:10.1093/mnras/stx1043

[16] Fischer, T. M. and Sawczyn, A. A. (2013). The relationship between corporate social performance and corporate financial performance and the role of innovation: Evidence from German listed firms. *Journal of Management Control*, pp. 1–26. DOI:10.1007/s00187-013-0171-5

[17] Ghosh, B. N. (2003). Capital inflow, growth sustainability and financial debacles. *Managerial Finance*, vol. 29, no. 2/3, pp. 73–97. Retrieved from https://doi.org/10.1108/03074350310768698

[18] Grablowitz, A., Rudeloff, M., and Voss, G. (2002). A case study on research for sustainable management. *International Journal of Sustainability in Higher Education*, vol. 3, no. 1, pp. 75–83.

[19] Grayson, D. (2011). Embedding corporate responsibility and sustainability: Marks & Spencer. *Journal of Management Development*, vol. 30, no. 10, pp. 1017–1026. Retrieved from https://doi.org/10.1108/02621711111182510

[20] Gustian, D. (2017). Pengaruh Pertumbuhan Perusahaan, Keputusan Investasi, Dan Keputusan Pendanaan Terhadap Nilai Perusahaan. Jurnal Akuntansi, vol. 3, no. 2, pp. 84–100. Higgins, R. C. (1977). How much growth can a firm afford? *Financial Management* (Fall, 1977).

[21] Higgins, R. C. (1981). Sustainable growth under inflation. *Financial Management*, vol. 10, no. 4, pp. 36–40.

[22] Higgins, M. J. (2008). Chapter 9 – Introduction to finance and valuing early stage technology, in *Technological Innovation: Generating Economic Results*, pp. 253–285 (Published online on March 09, 2015).

[23] Horne, J. C. V. and Wachowicz, J. M., Jr. (2005). *Prinsip-Prinsip Manajemen Keuangan*. Jakarta: Salembah Empat.

[24] Jarvis, L. P., Mayo, E. J., and Lane, P. M. (1992). Picking winners: Solving an industrial policy problem with a sustainable growth model. *International Marketing Review*, vol. 9, no. 1, pp. 19–32. Retrieved from https://doi.org/10.1108/02651339210009252

[25] Kang, T., Lobo, G. J., and Wolfe, M. C. (2015). Accounting conservatism and firm growth financed by external debt: The role of debt maturity. *Journal of Accounting, Auditing & Finance*, vol. 32, no. 2, pp. 1–27.

[26] Lee, K. H., Son, S. H., Jang, Y. H., et al. (2017). Sustainable economic cooperation between Korea and the Middle East in times of lower oil prices. *KIEP Research Paper, World Economy Brief 17-07*. Retrieved from https://ssrn.com/abstract=2951496 or http://dx.doi.org/10.2139/ssrn.2951496

[27] Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of Economic Literature*, vol. 35, pp. 688–726.

[28] Lockwood, L. and Prombutr, W. (2010). Sustainable growth and stock returns. *The Journal of Financial Research*, vol. 33, no. 4, pp. 519–538.

[29] Mathew, N. (2017). Drivers of firm growth: Micro-evidence from Indian manufacturing. *Journal of Evolutionary Economics*, vol. 27, no. 3, pp. 585–611. McPhee, W. (2014). A new sustainability model: Engaging the entire firm. Journal of Business Strategy, vol. 35, no. 2, pp. 4–12. Retrieved from https://doi.org/10.1108/JBS-11-2013-0106 Nasim, A. and Amalia, F. R. (2015). Pengaruh Profit Margin, Assets Turnover dan Leverage terhadap Sustainable Growth Rate pada Perusahaan Sektor Jasa yang terdaftar di Bursa Efek Indonesia Periode 2010-2012. Jurnal Riset Akuntansi dan Keuangan, vol. 3, no. 1, pp. 632–648. Nason, R. S. and Wiklund, J. (2015). An assessment of resource-based theorizing on firm growth and suggestions for the future. *Journal of Management*, vol. 44, no. 1, pp. 32–60.

[30] Oliveira, B. and Fortunato, A. (2017). Firm growth and R&D: Evidence from the Portuguese manufacturing industry. *Journal of Evolutionary Economics*, vol. 27, pp. 613–627.

[31] Olson, G. T. and Pagano, M. S. (2005). A new application of sustainable growth: A multi-dimensional framework for evaluating the long run performance of bank mergers. *Journal of Business Finance & Accounting*, vol. 32, no. 9/10.

[32] Pandit, N. and Tejani, R. (2011). Sustainable growth rate of textile and apparel segment of the Indian retail sector. *Global Journal of Management and Business Research*, vol. 11, no. 6, Version 1.0 May.

[33] Perrings, C. and Ansuategi, A. (2005). Sustainability, growth and development. *Journal of Economic Studies*, vol. 27, no. 1/2, 2000, pp. 19–54.

[34] Platt, H. D., Platt, M. B., and Chen, G. (1995). Sustainable growth rate of firms financial distress. *Journal of Economics and Finance*, vol. 19, no. 2, pp. 147–151.

[35] Pradhan R. P., Arvin, M., Hall, J. H., et al. (2017). Financial depth and the trade openness economic growth nexus: Evidence from cross-country panel data. *Journal of Economic and Administrative Sciences*, vol. 33, no. 1, pp. 20–45.

[36] Rădăşanu, C. A. (2015). Cash-flow sustainable growth rate models. *Journal of Public Administration, Finance and Law*, vol. 7.

[37] Ribeiro, R. S. M, McCombie, J. S. L., and Lima, G. T. (2017). A reconciliation proposal of demand driven growth models in open economies. *Journal of Economic Studies*, vol. 44, no. 2, pp. 226–244.

[38] Roca, L., Clément, and Searcy, C. (2011). *An Analysis of Indicators Disclosed in Corporate Sustainability Reports*. Elsevier Ltd. 103e118.

[39] Ross, S. A., Westerfield, R. W., and Jaffe. (2012). *Corporate Finance*. McGraw-Hill. ISBN:978-0-07-8034770.

[40] Saridakis, G., Lai, Y., Muñoz Torres, R. I., et al. (2017). Actual and intended growth in family firms and non-family-owned firms: Are they different? *Journal of Organizational Effectiveness: People and Performance*, vol. 5, no. 1, pp. 2–21.

[41] Saripalli, B. S. and Chawan, V. (2017). Business models sustaining subsistence economies: Evidence from India. *Society and Business Review*, vol. 12, no. 3, pp. 302–316.

[42] Snyman, H. A. (1999). Short-term effects of soil water, defoliation and rangeland condition on productivity of a semi-arid rangeland in South Africa. Academic Press. *Journal of Arid Environments*, vol. 43, pp. 47–62.

[43] Topcu, M. and Çoban, S. (2017). Financial development and firm growth in Turkish manufacturing industry: Evidence from heterogeneous panel based non-causality test. *Economic Research-Ekonomska Istraživanja*, vol. 30, no. 1, pp. 1758–1769.

[44] Van Horne, J. C. (2002). *Financial Management and Policy*. Prentice Hall ISBN:0-13-0326577.

[45] Vasiliou, D. and Karkasis, J. (2014). The sustainable growth model in banking: An application to the national bank of Greece. Retrieved from https://doi.org/10.1108/03074350210767843

[46] Vasiu, D. E. and Ilie, L. (n.d.). Sustainable growth rate: An analysis regarding the most traded companies on the Bucharest Stock Exchange, in S. C. Mărginean, C. Ogrean, and R. Orăștean (eds.) *Emerging Issues in the Global Economy*, pp. 381–394. Springer International.

[47] Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal*, vol. 8, no. 3. DOI: 10.1108/SAMPJ-09-2016-0066

[48] Waddock, S. A. and Graves, S. B. (1997). The corporate social performance – Financial performance link. *Strategic Management Journal*, vol. 18, no. 4, pp. 303–319. DOI: 10.1002/(sici)1097-0266(199704)18:4<303::aid-smj869>3.0.co;2-g

[49] Windolph, S. E., Schaltegger, S., and Herzig, C. (2014). Implementing corporate sustainability. *Sustainability Accounting, Management and Policy Journal*, vol. 5, no. 4, pp. 378–404. Retrieved from https://doi.org/10.1108/SAMPJ-01-2014-0002

[50] Woo, W. T. (2017). An introduction to the first principles for macro stability and sustainable growth in China's new normal. *China Economic Review*, vol. 12.

[51] Wong, A. (2014). Corporate sustainability through non-financial risk management. Corporate Governance: The International Journal of Business in Society, vol. 14, no. 4, pp. 575–586. Retrieved from https://doi.org/10.1108/CG-02-2013-0026 Zahid, M. and Ghazali, Z. (2015). Corporate sustainability practices among Malaysian REITs and property listed companies. *World Journal of Science, Technology and Sustainable Development*, vol. 12, no. 2, pp. 100–118.