SBAMR | Sustainable Business Accounting and Management Review

e-ISSN 2684-6845
Volume 1 No 1 June 2019

Factors Affecting Investment Opportunity Set: A Study of Company Advantages and Limitations

Article info:
Received April 22, 2019
Revised May 15, 2019
Accepted May 30, 2019

Correspondence:
[1]Wiwik Supratiwi
wiwik_s@feb.unair.ac.id

Recommended citation:
Sari, P., & Supratiwi, W., 2019, Factors Effecting Investment Opportunity Set: A Study of Company Advantages and Limitations, *Sustainable Business Accounting and Management Review*, 1(1), 1-8.

Permata Sari, Wiwik Supratiwi[1]
Accounting Department, Faculty of Economic and Business, Universitas Airlangga, Surabaya, Jawa Timur, Indonesia

DOI: 10.6084/m9.figshare.8218382

ABSTRACT: *This study aims to prove the influence of Company advantages - company profitability and size, and company limitations - systematic risk and leverage, on the Investment Opportunity Set (IOS) in automotive companies listed on the Indonesia Stock Exchange during the period 2013 to 2017. There are 5 automotive companies that used as samples based on purposive sampling technique. The results of the study prove that the company's advantages have an effect on IOS, while the company's limitations have no effect on IOS. These results prove that the company must be able to maintain its advantages so that it can have greater growth opportunities. On the other hand, with the lack of evidence of company limitations as a factor affecting IOS, it does not mean that companies are not careful in making financial policies.*

Keywords: *Company Advantages, Company Limitations, Investment Opportunity Set*

INTRODUCTION

The progress of a country is determined by the growth of investment in the country. At present, Indonesia still has the opportunity to become an investment destination. This opportunity will not be realized as a real investment if the stock market conditions in Indonesia are not conducive. Investment opportunity set or Investment Opportunity Set (IOS) is something that must be maintained so that investment in Indonesia develops. According to Smith and Watts (1992), IOS is a proxy combination of company growth, which is described as market value. In the last quarter of 2018, the Composite Index fell by around 2.5% (IDX, 2019).

The company's growth potential can be indicated by the difference between stock market value and book value and investment opportunities that can generate profits. Myers (1977) divides the company into two components. Assets in place that is assessed independently from the chance of corporate investment in the future and growth options that are evaluated based on future discretionary investment decisions.

The company's Investment Opportunity Set (IOS) determines its ability to profit from growth prospects. The value of option growth depends on the discretionary expenses subsequently by the manager. Component of company value, which results from the choices to make investments in the future is IOS. The combination of assets owned with investment options in the future that are measured by IOS will show the value of a company. Therefore, this study aims to prove the factors that influence IOS.
Research evaluating IOS proxies associated with company growth, dividend policy, debt policy or financing has been carried out by Abbott (2001), Abor and Bopkin (2010), Smith and Watts (1992), Ardestani, Rasid, Basiruddin, and Mehri (2013), Wang (2010), and Mullah (2011). Based on these studies, the advantages and limitations of the company can increase the value of the company.

LITERATURE REVIEW

Companies that have an Investment Opportunity Settlement will be better because it can show the high level of dividend growth expected by investors and the low risk of the company. The size of the company is one of the factors that illustrate excellence because it has relatively large assets that can increase its

investment options so that it is easier to compete and control the market. While the profitability of the company; seen in the form of a company that owns or earns a substantial profit; will have a relatively large opportunity to compete with the same type of company.

Limitations in the form of leverage are one of the constraints of companies because companies must cover fixed costs or pay expenses as a result of using assets or funds while the risk can be interpreted as the probability of not achieving the expected level of profit or the possibility of the return received deviating from the expected. The higher the deviation, the greater the risk. Such conditions also occur in companies that enter the capital market or go public. Where in the current era of globalization, a company must have tips so that the company can survive and compete.

IOS is an investment decision in the form of a combination of assets owned (assets in place) and investment options in the future, where IOS will affect the value of a company. This study uses a single ratio measurement, namely price earnings ratio (PER) as a proxy of IOS. Price-earnings ratio itself is part of the IOS proxy based on price (price based), where the company's growth prospects are partially expressed in stock prices and the growing company will have a higher market value relative to assets owned. Price-earnings ratio is the valuation ratio between stock market prices and earnings per share on the stock during a period (Martin, 2014).

Companies that own shares with price-earnings ratios will be attractive to investors to buy these shares because the business entity's high price earnings ratio is beneficial for the prospects and performance of business entities. In such circumstances, companies can obtain funds in the capital market with lower costs of capital compared to companies that have a low price-to-profit ratio. In general, investors or prospective investors use this PER more. PER can measure the results of investors for each rupiah invested. The size of PER is influenced by each change in the variable, where each change in stock prices and earnings per share can result in changes to PER.

Larger companies find it easier to obtain external loans compared to small companies. The size of the assets can be used as an indicator of the opportunity to develop business entities in the future (Ramdani, 2016). Can be identified as a company that has relatively large assets, which can increase the value of investment options so that it is easier to compete and gain market share. Also, large companies will be able to further enhance the value of their investment options by making different investment decisions in making barriers to entry that can stop and delay competition factors in calculating return on investment projects with the concept of opportunity costs.

The higher the size of the company, the more alternative sources of corporate spending after adjusting for the costs of funding the asset. Usually, large-sized companies tend to obtain higher profits, and this is due to the large market share owned by the company. Also, large companies inform that conducting business operations abroad is advantageous compared to domestic services (Ramdani, 2016).

H1: The company advantages represented by the size of the company influences IOS

Profitability is the ability of a company to generate profits. The only measure of profitability that is most important is net income. Investors and creditors are very interested in developing the company's ability to make profits both now and in the future. The profitability ratio consists of the rate of the company's profit margin, the proportion of the return on total assets known as the return on asset ratio (ROA) and the return on equity ratio (ROE). This study uses return on assets as an indicator of company profitability.

This ratio measures the control of total assets after costs and taxes. The results of controlling total assets or total investment show the performance of management in using company assets to generate profits. The company expects returns that are comparable to the funds used. The results of these returns can be compared with alternative uses of these funds. As one measure of effectiveness, the higher the profits, the more effective the company (Mullah, 2011). Return on assets, according to Husnan (Gupta and Newberry, 1997) is a comparison between net income and total assets to measure the return on total investment. From some of the definitions above, one conclusion can be drawn that ROA is a profit level measurement tool that shows the rate of return on business for all investments that have been carried out.

The contracting theory, in principle, uses the assumption that corporate policy valuation aims to maximize the value of the company. Differences in accounting procedure policies can be seen from the perspective of contracting efficiency, where managers will correctly choose accounting methods that will minimize agency cost (Wang, 2010). Thus the manager will maximize the value of the company. A superior competency is a strength possessed by only a small number of competing companies. Organizations that exploit their unique skills will usually obtain a competitive advantage and achieve economic performance above the ordinary.

H2: The company advantages represented by the profitability of the company influences IOS

The leverage ratio can be defined as the use of assets or funds, for which the company must cover fixed costs or pay a fixed expense. There are two types of leverage, namely operating leverage and financial leverage. Operation leverage is concerned with the use of the company's assets or operations which are accompanied by fixed costs. It is said that operating leverage results in "favorable" or real leverage if revenue after deducting variable costs is more significant than its fixed costs. Financial leverage arises when companies use funds with fixed costs in the hope of increasing earnings per share (earnings per share). Companies that use funds with fixed costs are said to produce profitable or positive effects of leverage if the income received from the use of these funds is higher than the fixed burden of using these funds. Debt policy is a crucial decision for every company because this policy is taken by company management to obtain external funding sources for the company to finance the company's operational activities (Subchan and Sudarman, 2011).

If the return on assets is smaller than the cost of debt, leverage will reduce the return on capital. The higher the leverage used by a company, the more significant this reduction. As a result, leverage can be used to increase losses in periods of gloom. So, profits and losses are enlarged by leverage. Moreover, the higher the leverage used, the greater the uncertainty or ups and downs of returns. The use of aggressive debt will make it challenging to find funds quickly and with acceptable conditions. Also, what is clear, the lack of flexibility in liquidity can cause changes in operational strategies and product market strategies, which in the long run will reduce the market value of a company (Yendrawati and Adhianza, 2013).

Likewise, according to Modigliani and Miller (1963): "the existence of profits derived from taxes using debt for financing ... does not always mean that companies must always try to use as much debt as possible in the capital structure. There are several obstacles imposed by creditors, coupled with other dimensions of the problem of financial strategy in the real world that are not fully understood using a static equilibrium model framework. These additional considerations, which are specifically grouped under the heading 'the need to maintain flexibility' are usually realized by not using the maximum ability of the company to get credit.

H3: The limitations of the company represented by leverage affect IOS

Systematic risk, known as general risk (general risk), is a risk associated with changes that occur in the market as a whole. These market changes will affect the variability of an investment return, for example, economic conditions, and tax policy. This change causes there is a tendency for all shares to move together and hence always exist in every stock.

Systematic risk is the minimum level of risk that can be obtained for a portfolio through the diversification of a large number of randomly selected assets. Systematic risk is a risk that comes from economic conditions and general market conditions that cannot be diversified. If you want to know the contribution of stock to the risk of a portfolio that is diversified well, then what is measured is the market risk which is a measure of the sensitivity of the stock to market changes. Profit sensitivity to market changes is referred to as the investment beta (Yendrawati and Adhianza, 2013).

Theory of constraints recognizes that constraints limit the performance of each company. Obstacle theory then develops a specific approach to support the goal of continuous improvement (Hansen & Mowen, 2009: 407). Investors are sure to reject risk. High-risk securities are expected to bring higher yields compared to lower risk securities. This meaning implies that investors demand compensation for risk returns.

H4: The limitations of the company represented by systematic risk affect IOS

RESEARCH METHODS

Operational Definition and Variable Measurement

The variables that will be used in this study are five (5) variables consisting of one dependent variable and four independent variables. The dependent variable in this study is the Investment Opportunity Set. The independent variables in this study are company size (size), profitability, debt policy, and systemic risk. Explanation of variables and measurements is summarized in table 1.

Table 1. Operational Definitions and Variable Measurements

No	Variable	Operational Definition	Variable Measurement
1	Investment Opportunity Set (IOS)	the company's growth prospects are partially expressed in stock prices and growing companies will have a higher market value relative to their assets (Ardestani et al., 2013)	Ratio scale. PER = Stock Price/ EPS Legend: EPS = Earnings per Share
2	Company Size	The size of the company is the big picture companies that are determined based on nominal size for example the amount of wealth and total sales of the company in one sales period (Dewi & Jati, 2014)	Ratio scale. Company Size = Ln(Total Assets)
3	Profitability	It is proxied by ROA which is measured as pre-tax profit divided by total assets, including in the basis of the regression model to control the operating performance or profitability of the company (Gupta & Newberry, 1997; Nugroho dan Suryarini, 2018)	Ratio scale. ROA = Pre-tax income / total assets.
4	Leverage	The use of loan funds to increase the potential return on an investment (ForexIndonesia, 2018)	Ratio scale. DER = Total liabilities / Total equity
5	Systematic Risk	Risks caused by factors of macroeconomic changes. This risk can be measured by beta symbolized by β. Systematic Risk Measurement portfolio is as follows (Hartono, 2014: 247)	Ratio scale. Systematic Risk = βp 2 x σm 2 Legend: βp = beta portfolio σm = variants market return

Population and Samples

The population in this study were all automotive companies listed on the Indonesia Stock Exchange and in SahamOk. Sampling in this study was carried out by purposive sampling method with the criteria: 1) Banking Companies that have been listed on the IDX (IDX, 2018) and Shares of Stock during the period 2013-2017; 2) Companies whose shares are registered from 2013-2017; 3) Available data on PER, Size, ROA, and Leverage; and 4) Audited financial statements for the period 2013-2017. Based on these criteria, the sample in this study amounted to 4 companies for five years.

Regression Model

To investigate investment opportunities that are influenced by company size, profitability, debt policy, and Company Systematic Risk, this study uses the multiple regression model as follows:

IOS = a0 + b1Size + b2 Profitability + b3Leverage + b4Risk + e

IOS is an investment opportunity set proxied by PER.

RESULTS AND DISCUSSION

Data Analysis and Regression Model, The results of data analysis for testing classical assumptions, prove that the five variables in this study are normally distributed with Kolmogorov-Smirnov significance level greater than 5%. The Autocorrelation test shows the Durbin Watson value of 1.975 lies between 1.83 and 2.17; that is, there is no autocorrelation in the regression model. The multicollinearity test results in a VIF value greater than 1 for each variable. Thus the regression model does not experience multicollinearity between variables. Heteroscedasticity test proves that the Spearman Rank coefficient has a significance level of more than 5%, so the regression model does not occur heteroscedasticity. The resulting regression model is:

IOS = -39,142 + 4,646 Size – 1,053 Profitability + 0,1150 Leverage – 3,262 Risk

The calculated F value for the regression model is 5.895, with a significance level of 0.005 smaller than 0.05, then the regression model is considered fit (fit). To test the hypothesis with the t-test, give the results in table 2.

Table 2. Hypothesis Test Results
Dependent variable: IOS

Model	t_{count}	Sig
Company Size	3,402	0,004
Profitability	-4,341	0,001
Leverage	0,255	0,802
Systematic Risk	-1,904	0,076

Source: Data Processed

Hypothesis test results in table 2 show the value of tcount on the variable firm size (X1) of 3.402 with a significant level of 0.004 smaller than 5% (sig <5%) then H0 is rejected, and H1 is accepted which means that the variable size of the company partially has a significant effect on the Investment Opportunity Set (IOS).

The tcount on the profitability variable (X2) is -4.3341 with a significant level of 0.001 smaller than 5% (sig <5%) then H0 is rejected, and H1 is accepted which means that the profitability variable partially has a significant effect on the Investment Opportunity Set (IOS).

The tcount on the leverage variable (X3) is 0.255 with a significant level of 0.802 greater than 5% (sig> 5%) then H0 is accepted, and H1 is rejected which means that the leverage variable partially has no significant effect on the Investment Opportunity Set (IOS).

The tcount on the systematic risk variable (X4) is -1.904 with a significant level of 0.076 greater than 5% (sig> 5%) then H0 is accepted, and H1 is rejected which means that the systematic risk variable partially does not significantly influence the Investment Opportunity Set (IOS).

Based on this explanation, it can be concluded that the variable size of the company and profitability that have a significant effect on the Investment Opportunity Set (Y), while the leverage and systematic risk variables partially have no significant impact on the Investment Opportunity Set (IOS).

Discussion

The results of this study prove that the size of the company, the profitability of the company affects the Investment Opportunity Sets of leverage and systematic risk does not change the Investment Opportunity Set because the significant level produced is greater than 5%. The description shows that the company's advantages has an effect on the IOS (Investment Opportunity Set) proxy for automotive companies and their components that go public on the Indonesia Stock Exchange, while the other two for company's limited variables do not affect the Investment Opportunity Set in automotive companies.

This study successfully proved the influence of company size on IOS. This result shows that companies that have a company size that is increasingly seen from their total assets will be more likely to have good business growth. The results of this study are in line with the MM capital structure theory (1963), the more companies have a large size, the higher the value of the company does not necessarily mean that the company must always try to use as much debt as possible in the capital structure. Meanwhile, Nugroho and Suryarini (2018) indicate that the more companies have a large size of assets, the greater the value of the company. There are several obstacles imposed by creditors, coupled with other dimensions of the problem of financial strategy in the real world that are not fully understood using a static equilibrium model framework. There is a significant influence can be seen from the results of the descriptive statistical test between variable size companies with IOS. The results of this study are supported by research conducted by Lestari (2004) stating that statistically total assets which are proxies of company size have a positive effect on IOS.

Profitability affects IOS, but in this study, profitability harms IOS. The results of the research by Subchan & Sudarman (2011) also show that companies with high profitability tend to have a more significant set of investment opportunities compared to companies with low profitability. The level of past

profitability of a company is a crucial determinant or determinant of the company's capital structure. Profitability variables show significant results but with a negative correlation relationship caused by a decrease in the profitability of each company during the four years of observation. As indicated by Nurfitriana and Facrurrozie (2018) that Profitability is a moderating variable that modify the relationship between business risk and debt policy. Companies that are profitable use massive debts because they assume debt must be used to continue to capture growth opportunities. Contracting theory that uses the assumption that corporate policy assessment aims to maximize company value is not under the results of this study. That company policy cannot maximize company profitability. High profitability gives a signal about the company's growth in the future. With a large amount of retained earnings, a company may tend to choose to fund from these sources rather than borrowing. The amount of retained earnings reflects the company's ability to finance expansion, so the higher the profitability, the higher retained earnings, and the higher the IOS.

Leverage does not have a significant effect on Investment Opportunity Set because investors feel confident that management and owners of manufacturing companies supported by the Government can solve the company's debt problems so that they avoid bankruptcy (Ramdani, 2006). Debt policy has no significant effect on the investment opportunity set. The insignificant relationship is caused by debt for automotive industry companies can function to increase company productivity, because the company's funding sources can be fulfilled from the size of the debt, so investors see that the debt is profitable. As a result, investors no longer view debt as a risk for companies in the food and beverage industry that can reduce the ability to pay profits to investors. On the contrary, research result from Perdana and Adriana (2018) shows that debt policy has a significant effect on stock price. In investing decision, LDR will have an impact on the company's stock price increase, so that financial ratios have a better influence in explaining changes in stock price

Systematic risk variables do not effect on the IOS (Investment Opportunity Set), which is measured by PER. It is likely to be affected by the monetary crisis in Indonesia in general which can lead to a non-conducive investment climate as a result of changes in political and security factors (Yendrawati and Adhianza, 2013). Investment risk in this study is strongly influenced by market conditions so that the ups and downs of stock prices in the market are less closely related to the growth rate of the company. From 2013 through 2017 is a favorable condition of the capital market, so that the stock price is easily predicted by investors, so investors are not too worried about the movement of stock prices when it has to be associated with the company's growth opportunities. Systematic risk variables show results that are not significant with the correlation relationship being negative. This condition states that the pattern of systematic risk relations is in contrast to the growth of the company as measured by PER where if the systematic risk rises one unit then the value of the company's growth will decrease. Systematic risk variables correspond to the theory of constraints, which recognizes that constraints limit the performance of each company. Investors are sure to reject risk and imply that investors demand risk-return compensation.

CONCLUSION

Conclusions that can be drawn from the results of multiple linear regression analysis include (1) Firm size and profitability of the company influencing Investment Opportunity on automotive companies and their components that go public on the Indonesia Stock Exchange with a significant level of 5% so that the 1st hypothesis and two are validated. (2) Systematic Leverage and Risk does not affect the Investment Opportunity in automotive companies so that the significant level produced is greater than 5%, so the third and fourth hypotheses are not validated.

The results of this study have several limitations, including the sample, used too little (less than 30 in the four observation periods for five companies) so that the possibility of a lack of generalization ability of the findings produced is substantial.

REFERENCES

Abbott, L. (2001). Financing, dividend, and compensation policies subsequent to a shift in the investment opportunity set, *Managerial Finance*, vol. 27, no. 3, 31-47.

Abor & Bokpin, G., (2010). Investment opportunities, corporate finance, and dividend payout policy Evidence from emerging markets, *Studies in Economics and Finance*, vol. 27, no. 3, 180-194.

Ardestani, H.S., Rasid, S.Z.A., Basiruddin, R., & Mehri, M. (2013). Dividend payout policy, Investment Opportunity Set, and Corporate Financing in the Industrial Products Sector of Malaysia. *Journal of Applied Finance and Banking*, Vol. 2 (1), 123-136.

Dewi, N. N. K., & Jati, I. K. (2014). Pengaruh Karakter Eksekutif, Karakteristik Perusahaan, Dan Dimensi Tata Kelola Perusahaan Yang Baik Pada Tax Avoidance Di Bursa Efek Indonesia. *E-Jurnal Akuntans*i, 6(2), 249–260.

Fairchild, r. (2010). Dividend policy, signaling, and free cash flow: an integrated approach, *Managerial Finance*, vol. 36, no. 5, 394-413.

ForexIndonesia (2018). *Apa Itu Leverage?* https://forexindonesia.org/beritaforex/apa-itu-leverage.html, akses January 30, 2018

Gupta, S., & Newberry, K., (1997). Determinants of the variability in corporate effective tax rates: Evidence from longitudinal data. *Journal of Accounting and Public Policy*, 16(1), 1–34.

Hansen, D.R. & Mowen, M.M. (2009). *Managerial Accounting: Akuntansi Manajerial, Edisi 8*, Jakarta: Penerbit Salemba Empat.

Hartono, J. (2014). *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPFE-Yogyakarta.

IDX, (2019). *IDX Statistics 2018*, https://www.idx.co.id/media/4865/idx-annual-statistics-2018.pdf, akses 15 Januari 2019.

Lestari, H. (2004). Pengaruh Kebijakan Utang, Kebijakan Dividen, Risiko dan Profitabilitas Perusahaan terhadap Set Kesempatan Investasi. *Simposium Nasional Akuntansi VII, Bali*.

Martin. (2014). *Price to Earnings Ratio, Parameter Penting di Pasar Saham*, Artikel Saham seputar Forex. https://www.seputarforex.com/artikel/price-to-earnings-ratio-per-parameter-penting-di-pasar-saham-189779-34, akses January 30, 2018.

Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *The American Economic Review*, 53(3), 433–443.

Mullah, S., (2011). Do emerging market firms follow different dividend policies? An empirical investigation on the pre- and post-reform dividend policy and behavior of Dhaka Stock Exchange-listed firms, *Emerald Studies in Economics and Finance*, vol. 28, no. 2, 118-135

Myers, S.C., (1977). The determinant of Corporate Borrowing, *Journal of Financial Economics*, Vol. 5 (2), 147-175.

Nugroho, A., & Suryarini, T., (2018). Determinant of Thin Capitalization in Multinational Companies in Indonesia, *Journal of Accounting and Strategic Finance (JASF),* Vol 1 (2), 91-100. DOI: https://doi.org/10.33005/jasf.v1i02.27

Nurfitriana, A., & Fachrurrozie, (2018). Profitability in Moderating the effects of Business Risk, Company Growth, and Company Size on Debt Policy, *Journal of Accounting and Strategic Finance (JASF),* Vol 1 (2), 133-142. DOI**:** https://doi.org/10.33005/jasf.v1i02.18

Perdana, M.K., & Adriana, C.H. (2018). Factors influencing the Stock Price of Banking Companies in the Indonesia Stock Exchange, *Journal of Accounting and Strategic Finance (JASF),* Vol 1 (1), 57-68. DOI: https://doi.org/10.33005/jasf.v1i01.26

Ramdani, (2016). *Pengaruh Kebijakan Utang, Risiko Investasi, dan Ukuran Perusahaan terhadap Investment Opportunity Set*, Institusional Repository Universitas Bakrie, http://repository.bakrie.ac.id/324/1/JURNAL%20argamaya%2002.pdf, akses 15 Januari 2018.

Smith, C.W.Jr., & Watts, R.L. (1992) The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies, *Journal of Financing Economics*, 32, 263-292.

Subchan, D., & Sudarman (2011) Pengaruh Kebijakan Utang, Kebijakan Dividen, Risiko Investasi dan Profitabilitas Perusahaan terhadap Set Kesempatan Investasi, *Dharma Ekonomi*, Vol. 18 (33), 1-21,

http://ejurnal.stiedharmaputra-smg.ac.id/index.php/DE/article/view/177/152, akses 15 September 2018.

Wang, D.H.M. (2010) Corporate investment, financing, and dividend policies in the high-tech industry, *Journal of Business Research*, vol. 63, 486-489.

Yendrawati, R., & Adhianza, F.R., (2013). Faktor-faktor yang berpengaruh terhadap Set Kesempatan Investasi (IOS) pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia, *Jurnal Inovasi dan Kewirausahaan*, Vol. 2 (1), 32-41.