

The Impact of Business Risk

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Research Article

The Impact of Business Risk on Dividend Policy in Manufacturing Companies Listed on Indonesia Stock Exchange

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Abstract: This study examine the effect of business risk on dividend policy on manufacturing companies listed on the Indonesia Stock Exchange. This study uses two ways to measure business risk, namely the variance in the ratio of operating income to total assets, and the degree of operating leverage. Control variables included in the model are company size, financial leverage, profitability and growth opportunities. Samples of 109 manufacturing companies on the Indonesia Stock Exchange were observed during the 2013-2017 period. Data analysis uses multiple regression. The test results show that business risk as measured by variance of operating profit divided by total assets has a significant negative effect on dividend policy. Dividend policy is also determined by the characteristics of the company, namely size and profitability.

Keywords: business risk, dividend policy, manufacturing companies.

Introduction

The effect of risk on the company's capital structure has been proven empirically, but the effect of risk on dividend policy has not been much studied. Dividend policy is related to capital structure because, the resulting cash flow can be used to increase capital if it is not distributed to shareholders as dividends. Corporate dividend decisions must also be seen as an integral part of the company's capital structure (Horne and John M. Wachowicz, 2008). The dividend payout ratio determines the amount of profit that can be held in a company. The more current profits retained in the company means that there is less money available for dividend payments at this time. The value of dividends paid to shareholders must therefore be balanced with the opportunity cost of retained earnings. Optimal dividend policies are policies that create a balance between current dividends and future growth that maximizes stock prices (Brigham and Daves, 2016).

Dividend payments are usually made in several stages in one year. Dividend payments are generally made every quarter, in other countries there are those who do it twice a year or once a year. In Indonesia, the practice of dividend payments is done twice and some times, another thing that distinguishes the practice of dividend decisions is with regard to who decides the size of the dividend. Unlike the prevalence in developed countries, for example the United States where the size of the dividend is determined by the board of

directors or management of the company, in Indonesia the decision on how much the dividend will be distributed to shareholders is at the annual general meeting (AGM) of Shareholders. That is, the AGM holds the key in dividend policy in Indonesia, so that in many cases, the dividend decision is not a strategic decision of the company's management (Gumanti, 2013).

There is empirical evidence of the effect of risk on dividend policy. Dividend payments are inversely proportional to political risks (Huang *et al.*, 2015). Market risks negatively affect dividend payments (D'Souza and Saxena, 1999). In terms of corporate funding, the existence of risks can prevent the company from obtaining external funding, so the company must rely on external sources and reduce dividends. However, judging from the preference of shareholders on dividends, the risk of causing shareholders to prefer dividends over capital gains, especially if the company is easy to get a banking institution loan as happened in Indonesia. This research uses a different type of risk from previous research, namely business risk, which until this research was conducted, there is no research that examines the effect of business risk there is a dividend policy.

Literature Review and Hypotheses

Business risk

Business risk is the risk faced by ordinary shareholders if the company does not use

debt (Brigham and Daves, 2016). Business risks are inherent in the company's operations. Business risk arises from the uncertainty of operating income and capital requirements. This study uses two business risk proxies. The first proxy is a variant of earnings before interest and taxes divided by total assets (VAREBIT / TA). VAREBIT / TA measures the variability of operating income (Booth *et al.*, 2001). The second proxy is the degree of operating leverage (DOL). Company DOL is a quantitative measure of the sensitivity of a company's operating income due to changes in company sales (Horne and John M. Wachowicz, 2008). DOL is a function of the cost structure (Damodaran, 1999). Companies with high operating leverage (i.e. relatively high fixed costs in the total cost structure) will have high EBIT variability.

Dividend policy

When deciding how much cash to distribute to shareholders, financial managers must always remember that the company's goal is to maximize shareholder value, as a result the target payout ratio should be based largely on investor preferences for dividends versus capital gains. Does the investor prefer the company to distribute profits in cash dividends or the company repurchases shares, or use the profits in the company's operations that will generate capital gains (Brigham and Houston, 2015).

Dividend policy is the decision to determine how much of the net income after tax will be distributed to shareholders in the form of dividends or in the form of retained earnings to develop future business. Dividend policy is measured by the dividend payout ratio (DPR), which is the ratio between the dividend per share (DPS) and earnings per share (EPS).

The effect of business risk on dividend policy

The effect of business risk on dividend policy is not only assessed from dividend theories, but also from capital structure theories, because dividend policy is related to capital structure. Based on tax preference theory, for tax reasons, shareholders prefer reinvestment to company growth rather than dividend distribution. Based on this theory, investors prefer dividend payments when the company does not have a profitable investment opportunity or when not taking investment opportunities because it is too risky. Based on bird in the hand theory, investors prefer dividends because the risk is considered lower than capital gains. The implication of this theory is that

investors prefer dividends when they see a risk in the investment choices of the company.

Investors are willing to pay a premium for stable dividends because first, there is information content in dividends about the company's prospects, secondly there are groups of investors who want dividends as a source of income, and thirdly institutional investors such as pension funds, savings banks, trustees, insurance companies, and certain institutions others can invest in companies with stable dividends (Horne and John M. Wachowicz, 2008). Based on this, companies that face high risk will keep dividend rates low in order to be able to maintain these dividend rates in the future. But maintaining the dividend level allows companies to change their payout ratio policy without changing the value of the rupiah paid per share.

Based on trade-off theory, business risk will lead to lower financial leverage in order to avoid a decline in the value of the company due to financial distress. The implication of trade-off theory is that business risk will cause companies to use equity, thereby reducing dividends. Based on pecking order theory, business risk will reduce debt capacity so that it will use internal sources to fund investment. The implication of the pecking order theory is that business risk will reduce dividends.

Previous research found that other types of risk negatively affect dividend policy. Political risk has a negative effect on dividend policy (Huang *et al.*, 2015). Market risk has a negative effect on dividend policy, this shows that risk factors prevent companies from getting funding sources in the form of debt so they must rely on internal sources of funds by holding back the profits generated (D'Souza and Saxena, 1999).

Hypothesis Formulation

Based on theoretical study and the results of previous studies, the hypotheses proposed in this study are as follows:

H1: business risk as measured by variance of EBIT/TA has a negative and significant effect on dividend policy

H2: business risk as measured by the DOL variant has a negative and significant effect on dividend policy

Research Methods

Data and Sample

The data used in this study are secondary data, namely financial statements. The population in this study were all manufacturing companies listed on

the Indonesia Stock Exchange with an observation period starting from 2013 to 2017. The sampling technique used was sample selection using the purposive sampling method. This purposive method is a sampling method where the researcher has certain criteria or objectives for the sample to be studied. The sample criteria used in this study

are as follows: (1) the company publishes financial statements as of December 31 for the 2013 fiscal year to 2017 fiscal year; (2) the company has information for measurement variables. Based on IDX data, from 154 manufacturing companies on the IDX, there are 109 companies that meet the sample criteria.

Research variable

Dependent variable

The dependent variable is the dividend policy measured by the dividend payout ratio (DPR). The DPR is formulated as follows:

$$DPR = \frac{\text{dividen per share}}{\text{earning per share}} \dots \dots \dots (1)$$

Independent variable

The independent variable of this study is business risk as measured by two proxies, namely: (1) variance of operating income (EBIT) divided by total assets (Booth *et al.*, 2001) and (2) degree of operating leverage (Damodaran, 1999).

$$VAREBIT/TA = \sum_{t=4}^t \frac{\left\{ \frac{EBIT}{total\ asset} - \frac{EBIT}{total\ asset} \right\}^2}{n-1} \dots \dots \dots (2)$$

$$DOL = \frac{\text{persentase perubahan EBIT}}{\text{Persentase perubahan penjualan}} \dots \dots \dots (3)$$

Control variable

Control variables are included in the model to control the effect of company size, financial leverage, and profitability and growth on dividend policy

a) Company size (Size)

The size of the company can be seen from the number of assets owned. Size is measured by the natural logarithm of total assets (Jabbouri, 2016).

$$\text{Size} = \ln \text{Total Assets} \dots \dots \dots (4)$$

b) Financial leverage

Financial leverage is measured by debt to asset ratio (DAR) showing how much the company's assets are financed with debt (Jabbouri, 2016).

$$DAR = \frac{\text{Total Debt}}{\text{Total Asset}} \dots \dots \dots (5)$$

c) Profitability

Profitability is measured by return on assets (ROA) which shows the company's ability to generate net profit by utilizing the assets owned by the company (Ben Naceur, Goaid and Belanes, 2006).

$$ROA = \frac{\text{Earning after tax}}{\text{total asset}} \dots \dots \dots (6)$$

d) Pertumbuhan

Company growth is measured by asset growth (Huang *et al.*, 2015).

$$GROWTH = \frac{asset_t + aset_{t-1}}{asset_{t-1}} \dots \dots \dots (7)$$

Data Analysis Techniques

Data analysis was performed by multiple regression. The regression model is expressed in the following equation:

$$DPR = \beta_0 + \beta_1 VAREBIT/TA + \beta_2 DOL + \beta_3 \text{Size} + \beta_4 DAR + \beta_5 ROA + \beta_6 \text{Growth} + \varepsilon \dots (8)$$

Results and Discussion

Descriptive statistics of the variables are shown in Table 1, consisting of the mean, median and standard deviation values.

Table 1. Descriptive Statistics of Variable

	Mean	Median	Stdev
DPR	0.181	0.000	0.401
VAREBITTA	0.010	0.001	0.103
DOL	23.848	0.674	387.102
SIZE	14.603	14.413	1.584
DAR	0.570	0.507	0.513
ROA	0.047	0.031	0.174
GROWTH	0.107	0.070	0.244

The regression test results are summarized in Table 2. The regression test uses the pooled OLS method and the fixed effect method. In addition to the regression results of the research model, Table 2 also displays the results of tests of the effect of business risk on dividends without involving control variables. It can be seen that without including control variables in the model, business risk does not have an impact on dividend policy and gives a very small R², as well as insignificant F statistics.

Table 2. Regression Result

Variable	pooled OLS			fixed effect		
C	-71.168 *** (0.000)	18.162 *** (0.000)		-71.208 *** (0.000)	18.177 *** (0.000)	
VAREBITTA	-113.764 *** (0.000)	-4.543 (0.791)		-112.889 *** (0.000)	-5.054 (0.768)	
DOL	-0.004 (0.350)	0.000 (0.999)		-0.004 (0.319)	0.000 (0.930)	
SIZE	6.156 *** (0.000)	-		6.145 *** (0.000)	-	
DAR	-5.167 (0.136)	-		-4.935 (0.153)	-	
ROA	92.058 *** (0.000)	-		90.790 *** (0.000)	-	
GROWTH	-0.068 (0.309)	-		-0.056 (0.405)	-	
R-squared	0.161	0.000		0.173	0.015	
Adjusted R-squared	0.152	-0.004		0.157	0.004	
F-statistic	16.758	0.036		10.820	1.342	
Prob(F-statistic)	0.000	0.965		0.000	0.237	

Note: *** significant at 1% confidence level

Business risk as measured by operating profit variance has a significant negative effect on dividend policy, this result is in accordance with the first hypothesis of this study. The existence of business risks will prevent the company from obtaining external funding sources. High business risk causes companies to use profits to increase equity, so this will reduce the payout ratio. These results support trade-off theory and pecking order

theory in explaining payout ratio policies.

Business risk as measured by DOL has no effect on dividend policy, thus the second hypothesis of this study was rejected. Operating leverage will create a fixed burden so that it can be risky if the company's operating profit decreases. This insignificant result shows manufacturing companies that utilize operating leverage can offset the increase in fixed costs by increasing operating profit. This result is

supported by other findings of this study that profitability has a significant positive effect on dividend policy.

Company size has a significant positive effect on dividend policy. Large companies are easier to access external funding sources than small companies, so they are not too dependent on internal funding sources and can share their profits as dividends. Another reason is that large company shareholders are usually institutional investors who prefer dividends (Redding, 1997). The positive influence of company size on dividend policy is mostly found in developing countries (Jabbouri, 2016).

Debt to assets ratio apparently has no effect on dividend policy. (Ben Naceur, Goaid and Belanes, 2006) explained the insignificant effect of financial leverage on dividend policy because leverage is residual (Fama and French, 2002). However, the findings of this study are the negative influence of VAREBITTA and the positive effect of ROA on dividend policy does not support this opinion because it shows that dividend policy still considers the availability of internal funding sources that can be used for investment funding. The insignificant DAR effect can be caused by companies using internal sources for investment, but also simultaneously using debt, so the debt ratio does not change much. Companies in Indonesia are relatively easy to get loans from banks (Ang, Fatemi and Tourani-Rad, 1997), where the financial system in Indonesia is still bank-based (Kwok and Tadesse, 2006).

ROA has a significant positive effect on dividend policy. The greater the company's ability to generate profits, the higher its ability to pay dividends. These results are consistent with the residual cash flow hypothesis that the higher the cash flow, the higher the dividend (Ben Naceur, Goaid and Belanes, 2006).

Conclusion

From the two business risk proxies tested, only operating income variance has been shown to have a significant negative effect on dividend policy, while DOL has no effect on dividend policy. The test results also indicate the need to control the characteristics of the company in studying the company's dividend policy.

The characteristics of companies with high payout ratio policies are characterized by low operating income variance, large company asset sizes, and ability to generate high profits. Judging from its life cycle, companies with these characteristics are

large companies that have matured (mature) with stable operations, have large assets and profitable. Mature companies tend to have low risk-taking behavior (Al-Hadi, Hasan and Habib, 2016).

References

1. Al-Hadi, A., Hasan, M. M. and Habib, A. (2016) "Risk committee, firm life cycle, and market risk disclosures," *Corporate Governance: An International Review*. Wiley Online Library, 24 (2), pp. 145–170.
2. Ang, J. S., Fatemi, A. and Tourani-Rad, A. (1997) "Capital structure and dividend policies of Indonesian firms," *Pacific-Basin Finance Journal*, 5(1), pp. 87–103. doi: 10.1016/S0927-538X(96)00025-X.
3. Booth, L. et al. (2001) "Capital structures in developing countries," *The Journal of Finance*, 56(1), pp. 87–130. doi: 10.1111/0022-1082.00320.
4. Brigham, E. F. and Daves, P. R. (2016) *Intermediate Financial Management*. 12th ed. Cengage Learning.
5. Brigham, E. F. and Houston, J. F. (2015) *Fundamentals of Financial Management*. 8th ed. Cengage Learning.
6. D'Souza, J. and Saxena, A. K. (1999) "Agency Cost, Market Risk, Investment Opportunities and Dividend Policy - An International Perspective," *Managerial Finance*, 25(6), pp. 35–43. doi: 10.1108/03074359910765993.
7. Damodaran, A. (1999) *Estimating Risk Parameters Aswath Damodaran Estimating Risk Parameters*. New York.
8. Fama, E. F. and French, K. R. (2002) "Testing Trade-Off and Pecking Order Predictions about Dividends and Debt," *The Review of Financial Studies*, 15(1), pp. 1–33. Available at: <http://www.jstor.org/stable/2696797>.
9. Gumanti, T. A. (2013) *Kebijakan Dividen. Teori, Empiris dan Aplikasi*. Yogyakarta: UPP STIM YKPN.
10. Horne, J. C. Van and John M. Wachowicz, J. (2008) *Fundamentals of Financial Management*. 13th ed. Pearson Education.
11. Huang, T. et al. (2015) "Political risk and dividend policy: Evidence from international political crises," *Journal of International Business Studies*, 46(5), pp. 574–595. doi: 10.1057/jibs.2015.2.
12. Jabbouri, I. (2016) "Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets," *Research in International Business and Finance*. Elsevier

- B.V., 37, pp. 283–298. doi: 10.1016/j.ribaf.2016.01.018.
13. Kwok, C. C. Y. and Tadesse, S. (2006) “National culture and financial systems,” *Journal of International business studies*. Springer, 37(2), pp. 227–247.
 14. Ben Naceur, S., Goaied, M. and Belanes, A. (2006) “On the Determinants and Dynamics of Dividend Policy,” *International Review of Finance*, 6(1–2), pp. 1–23. doi: 10.1111/j.1468-2443.2007.00057.x.
 15. Redding, L. S. (1997) “Firm Size and Dividend Announcements,” *Journal of Financial Intermediation*, 6(3), pp. 224–248. doi: 10.1111/j.1475-6803.1988.tb00090.x.

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