

Indonesia Mining Company Stock Stability Prediction (ARDL Panel Approach)

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Abstract:- This research aims to analyze whether profitability, sales growth and asset structure have a significant effect on share prices with capital structure as intervening variables in mining companies listed on the Indonesia Stock Exchange for the period 2001-2019. The data in this study was obtained from all manufacturing company reports taken from IDX's website. The population in this study was all mining companies listed on the Indonesia Stock Exchange for the period 2001-2019 as many as 41 companies and a sample of 11 companies. The sample is determined using the purposive sampling method. The type of data used in this study is secondary data with media in the form of audited mining company financial statements. The results of this study show that profitability, sales growth and asset structure have no cynical effect on the share price with the capital structure as a variable intervening in mining companies listed on the Indonesia Stock Exchange.

Keywords:- Profitability, Sales Growth, Asset Structure, Capital Structure.

I. INTRODUCTION

Recent studies show share prices move in the same market due to the magnitude of price changes that indicate market fluctuations in a given period (volatility), the return of bad corporate sceptusan will be very influential will be. Such phenomena are called share price movements or synchronicity, and can also be measured by R2 of asset price regression (Morck et al., 2000; Jin and Myers 2006; Kelly 2014; David and Simonovska 2016). Fluctuations in the share price are associated with two factors namely, company-specific information that affects several share prices and whole market information that affects most stocks. The company's specific uncertainty is a non-systematic risk that can only be mitigated by diversified investments (Beckman et al., 2004; Morck et al 2013). Mobility is a widely used term that refers to inequality of opportunity and dynamic inequality, in the fields of economics, education and politics, etc. (Roll 1988., Morgan et al., 2006; Rodriguez et al., 2008). Mobility ratings are included from within the relative mobility class, which is defined as an average variation of the relative rank position with respect to absolute variables, over a given period of time. Ranking mobility has been widely applied in social dynamics, wealth redistribution, and income status changes (Fields and Ok1999; D'Agostino and Dardanoni 2009; Bossert et al., 2016).

The mobility of the share price increase rating reflects changes in the order in which the price increase is influenced by the specific information of the company. Since information in the broad market impacts most stocks, this will push prices in the same direction, so it will have a smaller direct impact on the order of stock price ratings. It is important to note that the measurement of rank mobility depends heavily on the interval between the two sampling time points (Huang and Wang 2014). Dependency is also established for the financial market time series, high frequency of record trading activity and share price (Wu et al., 2014).

Mining companies need considerable funding. Funds can be obtained from external and internal sources of the company. External sources of funds are sources of funds originating from outside the company, meaning the funds are not obtained from the company's operating activities, but rather obtained from other parties outside the company while the internal sources of funds in the company consist of undivided profits (retained profits) and depreciation, if after tax obtained by the company is not shared with shareholders, then the profit is obtained by the company in carrying out its operations, while depreciation is said to be an internal source because depreciation comes from the company's operations (Martono 2013).

The factors that influence capital structure decision making are sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitude, lender attitude and rating agencies, market conditions, internal company conditions and financial flexibility. In this study, researchers limited only a few factors that influenced capital structure decision-making including profitability and asset structure (Brigham 2015).

An asset structure is the determination of how much funds are allocated to each component of the asset, both in current assets and in fixed assets. Companies that expand their business will need a lot of capital to build new buildings, buy machinery, pay employee salaries and other costs, in which case the asset structure is very important because it can be used as collateral to borrow to creditors (Syamsudin 2007); Barton, 2013). In the research conducted shows the results of research that states that Sales Growth and profitability negatively affect the capital structure. As well as the asset structure negatively affects the share price and Sales Growth affects the share price (Kesuma 2013). In the research conducted shows the results of research that

stated that profitability negatively affects the capital structure while the asset structure and Sales Growth have no effect on the capital structure. Profitability affects the share price while for asset structure and Sales Growth has no effect on the share price (Mahapsari 2013).

II. THEORY

1. Profitability

According to Sartono (2014:115), profitability is the company's ability to make a profit. The addition of foreign capital or own capital will certainly have an impact on the profitability of the own capital. Companies with high profitability will use smaller debt because the company is able to provide sufficient funds through retained profits, in addition because interest payments are a tax deduction then the higher the corporate tax rate the greater the corporate leverage. According to Jensen (2014:97) there is a negative relationship between profitability and debt. In accordance with the Pecking Order Theory that the higher the profitability of the company, the greater the availability of internal funds, so that the company will prefer to fund the company by using internal capital for investments that will result in the use of debt will be smaller. Companies with high returns on investments use relatively small debt.

2. Asset Structure

The asset structure or asset structure is called describing the proportion or comparison between the total fixed assets held by the company and the total assets of the company (Joni, 2015:47). Asset structure is one of the important factors in a company's funding decision, because if the company is faced with financial difficulties in repaying its debts, the company's fixed assets can act as collateral in lending to external parties. according to (Hatta 2013:107) the asset structure reflects how much fixed assets dominate the composition of the company's wealth or assets.

Companies whose capital is mostly embedded in fixed assets will prioritize the fulfillment of their own capital needs, but not necessarily because according to Joni (2015:82), procurement for fixed assets requires little funds and allows for the emergence of additional debt burdens for the company. Tangible fixed assets used as collateral can reduce the risk of corporate bankruptcy and financial hardship costs to finance the company's activities (Joni, 2015:83), Companies whose assets are suitable for credit guarantee will give confidence to external parties to provide large amounts of loans and will result in the use of pliers greater than their own capital in the company's capital structure.

3. Sales Growth

Growth according to Fahmi; (2012:79) is as follows: "The growth ratio is a ratio that measures how much the company is capable of maintaining its position in the industry and in economic development in general. This growth ratio is seen in various aspects of sales, earnings after tax (EAT), earnings per share, dividends per share, and the market price of the share sheet." According to Sofyan (2013:308) Growth is "The growth ratio represents the

percentage of growth of the company's posts from year to year. This ratio consists of increased sales, increase in net income, earnings per share, and increase in dividends per share."

4. Shares

Astuti (2013:76) defines shares as proof or proof of ownership of a share of capital in a limited distribution. Preferential shares are stocks that have different characteristics to ordinary shares. These preferred shares have a fixed payout each year. According to Astuti (2013:86) Preferential shares have the right to first earn dividends, but do not have voting rights. Preferential shareholders have the maximum payout rights of the nominal value of the shares first after the creditors if the company is liquidated. The share price is the price that occurs in the exchange market at a certain time determined by the market participants and determined by the demand and supply in question in the capital market (Jogiyanto, 2014:96). The share price is one indicator of the company's success because the high share price will give a profit that is capital gain and the growth prospects of the company can also be seen from the movement of the share price so that investors in general will be more interested in investing in the company that gives it a profit. These conditions make it easier for management to obtain funds from outside the company.

5. Capital Structure

The capital structure that can maximise the value of the company or the share price is the best capital structure (Husnan, 2014:91). The four main factors affecting the capital structure are: Business risk, or the level of risk contained in the company's operations if it does not use debt. The greater the risk to the company's business, the lower the optimal debt ratio. Corporate tax position. The main reason for using debt is because interest costs can be deducted in tax calculations, thus lowering the actual cost of debt. Financial flexibility, or the ability to add capital to reasonable requirements in deteriorating circumstances. Conservatism or management aggressiveness. Some managers are more aggressive than others, so companies are more likely to use debt to boost profits.

III. METODE

In this study, the panel used data between time and data between companies. Regression panels are used to obtain the results of estimating each individual characteristic separately. Regression Panel testing stock price with formula:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 Z_{it} + e$$

$$Y_{PKPKt} = \alpha + \beta_1 X_{1PKPKt} + \beta_2 X_{2PKPKt} + \beta_3 X_{3PKPKt} + e_1$$

$$Y_{PTBA_t} = \alpha + \beta_1 X_{1PTBA_t} + \beta_2 X_{2PTBA_t} + \beta_3 X_{3PTBA_t} + e_2$$

$$Y_{SMMT_t} = \alpha + \beta_1 X_{1SMMT_t} + \beta_2 X_{2SMMT_t} + \beta_3 X_{3SMMT_t} + e_3$$

$$Y_{ARTIt} = \alpha + \beta_1 X_{1ARTIt} + \beta_2 X_{2ARTIt} + \beta_3 X_{3ARTIt} + e_4$$

$$Y_{ELSA_t} = \alpha + \beta_1 X_{1ELSA_t} + \beta_2 X_{2ELSA_t} + \beta_3 X_{3ELSA_t} + e_5$$

$$YRUISt = \alpha + \beta_1 X1RUISt + \beta_2 X2RUISt + \beta_3 X3RUISt + e6$$

$$YANTMt = \alpha + \beta_1 X1ANTMt + \beta_2 X2ANTMt + \beta_3 X3ANTMt + e7$$

$$YCITAt = \alpha + \beta_1 X1CITAt + \beta_2 X2CITAt + \beta_3 X3CITAt + e8$$

$$YCKRAt = \alpha + \beta_1 X1CKRAt + \beta_2 X2CKRAt + \beta_3 X3CKRAt + e9$$

$$YCTTHt = \alpha + \beta_1 X1CTTHt + \beta_2 X2CTTHt + \beta_3 X3CTTHt + e10$$

$$YMITIt = \alpha + \beta_1 X1MITIt + \beta_2 X2MITIt + \beta_3 X3MITIt + e11$$

Where:
 Y : Share Price
 X1 : Profitability
 X2 : Sales Growth
 X3 : Asset Structure
 Z : Capital Structure
 e : error term

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
X1	-0.022017	0.013814	-1.593771	0.1133
X2	-0.004434	0.001646	-2.694759	0.0079
X3	0.104716	0.026941	3.886853	0.0002
X4	-0.102672	0.023245	-4.417008	0.0000
Short Run Equation				
COINTEQ01	-0.545979	0.086604	-6.304327	0.0000
D(X1)	0.034757	0.020089	1.730127	0.0858
D(X2)	0.011039	0.007903	1.396773	0.1647
D(X3)	0.203493	0.211480	0.962231	0.3376
D(X4)	0.038730	0.029197	1.326524	0.1868
C	8.031034	1.740461	4.614315	0.0000
Mean dependent var	0.294747	S.D. dependent var		10.20056
S.E. of regression	8.310292	Akaike info criterion		5.581483
Sum squared resid	9599.471	Schwarz criterion		6.700926
Log likelihood	-513.2650	Hannan-Quinn criter.		6.034080
*Note: p-values and any subsequent tests do not account for model selection.				
Sumber : <i>Output Views 2020</i>				

A. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

B. Units

- Use either SI (MKS) or CGS as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as “3.5-inch disk drive.”
- Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity that you use in an equation.
- Do not mix complete spellings and abbreviations of units: “Wb/m2” or “webers per square meter,” not “webers/m2.” Spell units when they appear in text: “...a few henries,” not “...a few H.”

- Use a zero before decimal points: “0.25,” not “.25.” Use “cm3,” not “cc.” (*bullet list*)

C. Equations

The equations are an exception to the prescribed specifications of this template. You will need to determine whether or not your equation should be typed using either the Times New Roman or the Symbol font (please no other font). To create multileveled equations, it may be necessary to treat the equation as a graphic and insert it into the text after your paper is styled.

Number equations consecutively. Equation numbers, within parentheses, are to position flush right, as in (1), using a right tab stop. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign. Punctuate equations with commas or periods when they are part of a sentence, as in.

IV. RESULT

Autoregressive Distributed Lag (ARDL) Analysis

Analysis panel with Auto Regressive Distributed Lag (ARDL) tested pooled data which is a combination of cross section data (objects) with time series data (annual), ardl panel results are better than regular panels, because it is able to be co-integrated long term and has a lag distribution that best fits the theory, using Eviews 10 software, then obtained the following results:

The ARDL Panel model received is a model that has an integrated lag where the main assumption is that the coefficient value has a negative slope with a 5% requirement of the ARDL Panel Model: the negative value (-0.545979) and the significant ($0.0000 < 0.05$) then the model is accepted. Based on the acceptance of the model, the data analysis is done with a panel per country.

Many studies have also found files on the important role of bank lending channels in monetary transmission in developing countries. The response is statistically significant over a period of 6 months only (e.g., Chen et al., 2017; Gozgor, 2014). This is in line with recent studies by, which noted that emerging market exchange rates tend to depreciate after contractive monetary shocks. Through their theoretical model, they have done so showing that this indicates weak demand for channel liquidity in the economy (Hnatkovska et al 2016). This suggests that incoming monetary policy does not send through exchange rates to reduce inflation. Our study supports the findings of Hnatkovska et al. (2016), and also in data-rich settings.

Companies with a higher risk of failure tend to be more active in promoting optimal resource allocation, improving operating efficiency, and optimizing governance structures to better address bankruptcy risk. To expand the literature, future research needs to focus on various possible exogenous failures in the securities market. As a major explosion of public health incidents that occur today, COVID-19 has a major impact on economic development and market capital in the short term. Since the COVID-19 outbreak, the world economy has suffered a severe blow. U.S. financial markets and other countries experienced significant turbulence, and transnational investment also suffered shocks. For this reason, the fall in the share price is to the forefront of the impact of the COVID-19 outbreak (Zhi-xiong Huang ,2020).

Faced with a rapidly evolving outbreak, foreign investors are still optimistic about the Chinese market, and foreign inflows. investment into China has now recovered rapidly. This situation is due to China's effective response to epidemics and huge profits by attracting foreign investment. How can foreign investors influence the risk of falling share prices during the epidemic? In an epidemic situation that has damaged the real economy and caused widespread panic in the market, the risk of falling share prices increases. Whether foreign investment holdings further increase the risk of falling share prices in the stock market, or foreign investors reduce the risk of crashes on companies through their active role in managing companies as well as disclosure of

information requires further investigation (Qi Tang and Siming Huang 2020).

V. CONCLUSION

On a panel of sales growth variables and capital structures that are able to be the leading indicator for control of PPK, PTBA, SMMT, ARTI, ELSA, RUIS, ANTM, CITA, CKRA, CTTH, and MITI companies, but the position is unstable in short runs and long runs. A significant independent variable in a long run is the Sales Growth variable, asset structure and capital structure, whereas in the short run no significant independent variable affects the share price. This indicates that the three variables, namely Sales Growth, asset structure and capital structure only significantly control the share price in the long term in the eleven companies studied. For the management of mining companies listed on the Indonesia Stock Exchange, it is best before making a decision to make a capital structure policy in order to first pay attention to variable profitability, Sales Growth and asset structure thus the company can make a better capital structure policy.

ACKNOWLEDGMENT

Thanks to the minister of research and technology, especially to the directorate of research and community service drpm who provide research grants

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