Behavior of Accumulated Assets and Sources of Funding

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Abstract **- Behavior of asset accumulation or wealth accumulation becomes an important issue to study because it has the potential for aggregate and global financial imbalances. Economic theory explains that the accumulation of assets as a function to improve welfare in the context of business processes, has implications for the welfare of stakeholders, if the process of asset accumulation occurs due to sales growth, saving and investment, all three will not interact. To discuss this matter, research has been carried out on the manufacturing sub-sector in Indonesia Stock Exchange with pooling data for 2014-2018 and 342 samples. The results showed that sales growth, debt to equity ratio, and changes in equity had a positive effect on asset accumulation, while saving behavior as measured by marginal propensity to save had no effect on asset accumulation, and interestingly, asset turnover had a negative effect on asset accumulation as an indication that investment growth is not matched by an increase in income, meaning that the level of asset productivity is relatively low. This finding implies that asset growth does not make it more productive in generating sales growth, meaning that the accumulation of assets occurs due to an external funding mechanism and an increase in equity compared to a mechanism of growth, saving and investment.**

*Keywords***:** *assets accumulation, financing, productivity, growth*

I. INTRODUCTION

Recent economic developments in developing countries have shown unfavorable developments triggered by slowing global economic growth. In addition, the composition of economic growth is uneven, especially in developing countries, including Indonesia. In Indonesia up to 2018 the slowdown in global economic growth affected domestic economic growth as a negative shock marked by capital outflow and current account deficit (CAD) in addition to higher import growth. Domestic economic risks are also triggered by low productivity levels, which result in lower asset accumulation growth (Bank Indonesia Report 2018). While in the view of economic theory that the national saving rate is related to the level of consumption, investment, current account, capital account, interest rate, exchange rate and long term growth rate [16] [1]. In line with Laura [23] empirically tested the existence of an aggregate relationship between income, saving and wealth accumulation as a comprehensive model in household data. Savings behavior is an endogenous variable as a function of income and investment distribution and economic growth as an asset accumulation process and as a counterweight to financial stability [17].

In some countries, especially developing countries in Asia show inconsistencies between saving behavior and economic growth. [12] show that economic growth does not significantly reflect aggregate saving behavior in several Asian countries. This is indicated that capital accumulation does not contribute to higher economic growth due to the low level of asset productivity. This also occurs at the corporate level which shows higher corporate saving growth compared to investment growth [5]. As also indicated by [25], that private companies with high productivity are limited financially and must rely on their own savings for financial investment, while state-owned enterprises (SOEs) with low productivity have more access to external finance, this is contrary to [26] which shows that companies that are more difficult to access external financing will do more savings.

In Indonesia, an interesting concern is the aggregate contribution of corporations to economic growth, which to date has not only shown slowing growth but also indicates sectoral imbalances. In 2018 businesses in the agricultural sector contributed the lowest profitability and value to shareholders, while the largest contribution was in the infrastructure, utilities and transportation sub-sectors, besides the mining sector and industrial sub-sector. While

the level of profitability is reflected by the value of ROE and ROA, where the average ROE value is 2 times greater than the ROA for all business sectors (Bank Indonesia Report 2018). This implies that assets have accumulated to shareholders, or the size of external funding sources. Besides that, the imbalance of ROA and ROE will create an internal financial imbalance where there will be a cash surplus funded by debt and the potential for capital out flow. For this reason, internal financial policies can be carried out through an emphasis on the balance of growth between the interests of shareholders and the growth of the company.

Based on the description above this study examines how the mechanism of asset accumulation which is a causal relationship with sales growth, productivity, investment and funding and how sources of funding for asset accumulation in companies in the sub-manufacturing sector on the Indonesia Stock Exchange.

II. LITERATURE REVIEW

In view of economic theory that saving is a function of income, investment and consumption for the purpose of asset accumulation and welfare and saving has a function as investment funding which has implications for economic growth, and also as a function of purchasing power parity [4] [2]. At the corporate level the accumulation of assets occurs because the productive investment process is to produce sales growth and profits are partly invested and partly saved in the form of securities, cash, or securities. Although [3] prove significantly that there is no asset accumulation in the form of bank deposits, stocks, or bonds. Sources of investment funding can come from (1) external and internal funds, internal funding sources come from (2) retained earnings, (3) additional equity such as the issuance of new shares and (4) capital gains. Theory pecking order [15], shows that the determination of the optimal capital structure is based on a hierarchical funding decision based on the lowest cost of capital sourced from internal funding sources (earnings) to external funding sources (debt).

In the business world the accumulation of assets occurs because of the growth mechanism as an increase in the ability of the business economy in relation to producing / selling products or services [19] [20] [24]. Growth can also be a specific problem, that companies experience growth because market share and profit increase. But it is not uncommon that very rapid growth can lead to the potential bankruptcy. This shows that the company has reached its target market but failed in financial terms to manage growth. Almost all companies need how to manage growth without having to add excessive debt, assets or equity or even have to erode resources by selling assets. Therefore placing corporate sustainability is important as the company's ability to meet the needs of stakeholders both directly and indirectly without disrupting wealth in achieving future goals [22] [9] [8]. Corporate sustainability growth as an indicator of operational and financial performance such as ROA, Dividend Pay Out, Profit Margin, Asset Turn Over and Financial Leverege interact with each other [18]. For this reason, the role of corporate saving as a function of internal financing balance to maintain corporate sustainability. This is based on the corporate saving function for the purpose of financial stabilization when the company experiences financial problems due to decline in growth. In this context,

the asset accumulation process is a function of sales growth and increased investment.

Several studies have shown that sales growth with regard to assets is the relationship between the use of assets in generating sales as a measure of investment effectiveness. Saving is different from investment, but the role of saving is very large in increasing investment in the process of asset accumulation. Several recent studies have shown that global investment is built from corporate saving compared to personal saving [6] [7]. Corporate saving behavior is important for several reasons including (1) as a corporate stabilization function that explains the link between planned corporate saving and planned corporate investment (2) as a function of economic resource allocation that impacts on policies to design distribution of corporate income and increase new sources of funding through the capital market. that corporate saving can have the function of maintaining the balance of company growth through investment.

Corporate income is the company's net profit after tax, while consumption is the dividend payout for shareholders and investment is the investment used on the left side of the company's balance sheet in the form of fixed assets and current assets. However, in the corporate context that investment can function as productive assets to generate sales or non-productive for example with a reason to guard against uncertainty, although it is difficult to distinguish whether assets are used as productive assets or not within a certain period. This behavior can only be seen from the effective use of assets such as assets turn over as a measure of asset productivity in generating sales and inventory turn over, as a measure of inventory turnover of products sold. The problem that often occurs is the high level of liquidity, for example excess cash inventory or stored in the form of securities or deposits that can be sourced from internal and external funds.

III. RESEARCH METHOD

The study was conducted on 112 companies engaged in the manufacturing subsector which were listed on the Indonesian Stock Exchange from 2012 to 2018 meaning there were 342 sample panel data. Data analysis was done descriptively and tested the causality relationship using multiple regression analysis with the fulfillment of its assumptions including univariate normality with Z-Score standardize and skewness testing, mahalanobis and multicollinear tests. Correlation between independent variables shows that the bivarite relationship of all variables is at a value of $-0.5 > Xi < 0.5$, which means there is no multicollinearity.

Saving is a revenue process, while investment is an accumulation of assets that can be derived from savings as retained earnings, debt and additional equity through the sale of new shares. In the financial balance that the function of funding is for investment. So the process of asset accumulation can be written as follows:

So the asset accumulation function can be written as follows:

$$Asset\,Accumulation = f(Existing\,assets, New\,Investement) \quad\dotfill\quad (1)$$

$$Asset\,Accumulation = f(Saving, Growth,\,Investment) \quad\dotfill\quad (2)$$

$$Saving = f(Income) \quad\dotfill\quad (3)$$
$$Growth = f(Sales, Investment) \quad\dotfill\quad (4)$$

$$Investment = f\,(Financing = (Debt, Saving, \Delta\,Equity) \quad\dotfill\quad (5)$$

$$Asset Accumulation = f(Growth\,Sales, ATO,\,Liabilities,\,MPS, \Delta\,Equity) \quad\dotfill\quad (6)$$

Based on the development of the equation model that has been written above, the research model design is as follows:

$$Asset Accumulation = \alpha + \beta_1 S\_Growth_{it} + \beta_2 ATO_{it} + \beta_3 DER_{it} + \beta_4 MPS_{it} + \Delta EQ + \varepsilon \quad\dotfill\quad (7)$$

$$Asset Accumulation = \frac{Assets_{t-1} + New\,Investment_{t0}}{Assets_{t-1}} \quad\dotfill\quad (8)$$

$$S_{Growth} = \left(\frac{Sales_{t0} - Sales_{t-1}}{Sales_{t-1}}\right)100\% \quad\dotfill\quad (9)$$

$$Assets\,Turn\,Over = ATO = \frac{Sales}{Total\,Assets} \quad\dotfill\quad (10)$$

Financing :

$$Debt\,To\,Equity\,Ratio = Debt\,To\,Equity\,Ratio = \frac{Total\,Debt}{Total\,Equity} \quad\dotfill\quad (11)$$

$$Saving = Marginal Propensity To Save(MPS) = \frac{\Delta\,Retained\,Earning}{\Delta\,Earning\,After\,Taxes} \quad\dotfill\quad (12)$$

$$\Delta Equity = \frac{Equity_{t0} - Equity_{t-1}}{Equity_{t-1}} \quad\dotfill\quad (13)$$

IV. RESULTS AND DISCUSSION

The results of the descriptive pooling of sample data processing show that the accumulated assets measured by the average asset growth each year is around 7.3 percent, and the growth of asset accumulation is supported by the increase in average annual sales of 5.3 and the average asset overturn of 1.06 times, which means that asset growth and sales growth are not matched by asset productivity. This means that the level of asset productivity is still relatively low. Besides that, the average ratio of debt to equity as indicated by the average Debt To Equity Ratio of 0.94 percent means that most manufacturing companies are still in a position of high financial distress level, this is only supported by the average additional equity by 0.9 percent and marginal propensity to save by 1.14 percent means that the additional additional savings is higher than the additional income. This explains that saving behavior in manufacturing companies is still relatively low with a relatively low level of productivity. This description has explained that the saving function as stated in economic theory that saving has a function of investment funding sources and is on the watch for economic growth [4] [2], but in this study descriptively shows an increase in accumulation assets are not matched by increased productivity, which is contrary to [18] which explains that there is an interaction between Assets Turn Over and other financial performance, so the corporate saving function through retained earnings is irrelevant to the purpose of internal financial stabilization as stated that the corporate saving function is to internal finance [7].

Multiple regression analysis shows that the regression equation model is a fairly good model shown with a significance value of the F Test number smaller than 0.05. Likewise, the R_square value is 36.2 percent, meaning that all predictor variables are only able to explain changes in asset accumulation by 36.2 percent. Causality relationship between several predictor variables including additional equity with the notation of Ad_Equity assets turn over (ATO); sales growth (S_Growth); Equity to Debt Ratio (DER) shows a significant effect on the accumulation of assets (Acc_Assets) except marginal propensity to save (MPS) has no effect on asset growth. This implies that saving does not play a role in asset growth, but it is indicated that funding sources for growth come from external funds.

Table 1, shows that assets turn over has a negative effect on asset accumulation. This indicates that the higher the ATO, the lower the accumulation of assets or vice versa. This indication implies that asset growth is not proportional to sales growth or low asset productivity levels. In addition, there is a positive effect of debt to equity ratio on asset accumulation and the same thing with increasing equity, but internal funding sources are more dominant than external funds in contributing to asset growth. Likewise, the relationship between sales growth and asset start-up, the higher the sales growth, the higher the accumulation of assets.

TABLE I.   RESULTS OF MULTIPLE REGRESSION DATA PROCESSING

Independent Variable	Unstandardized Coefficients		Sig.	Mean	Std Deviation
	B	Std. Error			
(Constant)	,004	,027	,887	,0734	,17773
MPS	-,005	,004	,284	1,0160	,50558
Ad_Equity	,597	,053	,000	1,1497	5,27514
S_Growth	,001	,000	,000	,9492	1,05705
ATO	-,024	,011	,025	,0535	,18792
DER	,027	,013	,037	,0095	,02711
Dependend variable			Asset Accumulation		
R Square		0,362			
Anova F Test Regression		38,167		Sig	0,000
N sample pooling data		342			

The results of the equilibrium equation can be written down as in equation (14)

$$ACC_{Assets} = 0,004 + 0,001S_{Growth}R_{it} - 0.024\ ATO_{it} + 0.027DER_{it} - 0.005MPS_{it} + 0.597Ad\_Equity_{it}$$

As the Pecking Order theory [15] explains that companies will choose the use of internal funds over external funds for investment financing. This finding shows that both debt and equity are quite significant in determining asset accumulation, not so with retained earnings. Furthermore, if it is related to the company's motivation to build asset accumulation, it shows that the aggressive behavior of asset accumulation is not in line with the increase in productivity. This is contrary to the business life cycle theory [14]. When a company expects maximum growth, it will invest more than maximizing value for shareholders by giving smaller dividends so that high growth will result in lower market values. This is also an argument that shareholders would rather have retained earnings reinvested if additional investment would increase additional opportunities, because this difference would affect tax treatment of dividends and capital gains from income. These findings can also be explained by the product life cycle stage [21], which shows that at a time of high company growth the company will invest with high levels of productivity but when industry trends decline with low productivity level, the company in the position of cash cow that is only collecting excess cash obtained from retained earnings. In line with [10], that abundant corporate saving as a result of declining investment and growth. The life cycle theory hypothesis also explains as the development of saving theory which argues that people will seek to maintain the same level of consumption throughout life through debt or liquidation of assets when income is low and will save when income is high [4].

V.   CONCLUSION

The results of the study concluded several things, namely (1) the accumulation of company assets sourced from debt funds, increased equity and sales growth; (2)increasing investment does not increase productivity; (3) company wealth is built not because of saving behavior or increased productivity but tends to be sourced from debt and an increase in equity that can occur due to the issuance of new shares.

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