

Macroeconomic Analysis Model, Financial Performance Against Share Traded With Profit as an Intervening Variable in Food and Beverage Sub-Sector Companies on The Indonesia Stock Exchange Period 2016 - 2020

Yunan Surono*, Ali Akbar, Albetris, R. Adisetiawan

Fakultas Ekonomi Univesitas Batanghari, Jambi, Indonesia

*Correspondence email: suronoyunan@gmail.com

Abstract. Smart investors will consider several aspects before investing to avoid the worst possibilities including the company's financial performance. This research aims to look at the macroeconomic analysis model, financial performance against share traded with profit as an intervening variable in food and beverage sub-sector companies in the Indonesia stock exchange for the period 2016 - 2020. Macroeconomic variables will be proxied with indicators of inflation, exchange rates, interest rates and the money supply. Financial performance variables with current ratio indicators, quick ratio (proxy of liquidity), debt to assets ratio, debt to equity ratio (proxy of solvency), total assets turnover, fixed assets turnover and inventory turnover (proxy of activity), return on asset, return on equity, net profit margin, gross profit margin and operating profit margin (proxy of profitability) and earnings per share, price earning ratio and price book value (proxy of market value). The investment approach can also be done by analyzing historical data from stock prices and linking it to share traded that occurs in the market. The research will use profit as an intervening variable, consisting of gross profit, operating profit and net profit. The company has different performance with significant differences in the food and baverages sub-sector, will affect the amount of sales and profits earned by the company. This research data uses secondary data published by relevant and competent parties. This study uses a component-based SEM (Structural Equation Modeling) analysis or variance, namely Partial Least Square (PLS), using Smart PLS 3.0 software. The results showed 1) macroeconomic variables had no effect on financial performance. 2) Macroeconomic variables have no effect on profits. 3) Macroeconomic variables have no effect on share traded. 4) Financial performance variables affect profits. 5) Financial performance variables affect share traded. 6) The profit variable affects the traded share.

Keywords: macroeconomics; financial performance; share traded; profit; intervening

INTRODUCTION

Investors invest in resources and capital that are done today, aiming to benefit in the future, taking into account external and internal factors of the company. External factors are sourced from outside the company in the form of macroeconomics which are factors that cannot be controlled, such as income growth, poverty, inflation, price stability, recession, depression, unemployment and others. Macroeconomics is a part of economics that specializes in studying the mechanisms of the workings of the economy as a whole (Surono, 2021). Bodie (2007) suggested that macroeconomic factors that can affect the economic conditions of the country include inflation, exchange rates, interest rates and the money supply. The internal factors of the company are derived from the performance of the company itself and are factors that can be controlled. Internal factors are illustrated through its financial performance which is illustrated through financial statements consisting of balance sheets, income statements, capital change statements, cash flow statements and notes on financial statements. Financial performance can be analyzed to get an idea, whether the company has good, moderate or bad performance, with financial ratio analysis in the form of liquidity ratio, activity, profitability, solvency and market value (Kasmir, 2014).

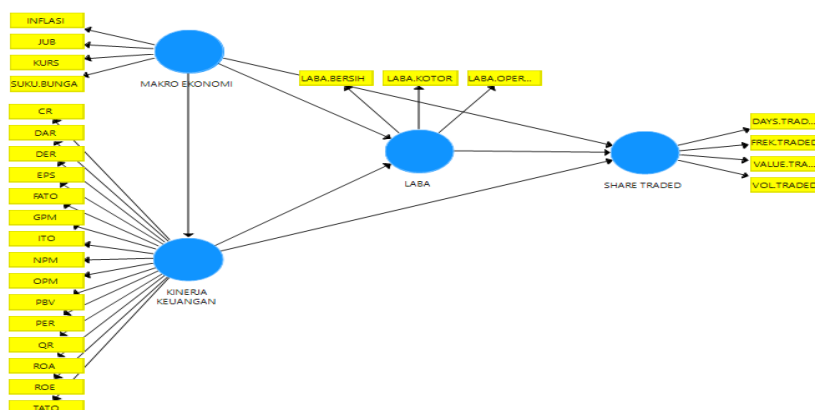
This research uses financial performance variables with indicators of current ratio, quick ratio (proxy of liquidity), debt to assets ratio, debt to equity ratio (proxy of solvency), total assets turnover, fixed assets turnover and inventory turnover (proxy of activity), return on asset, return on equity, net profit margin, gross profit margin and operating profit margin (proxy of profitability) and earnings per share, price earning ratio and price book value (proxy of market value). Smart investors will consider several aspects before investing to avoid the worst possibilities including the company's financial performance. The investment approach can also be done by analyzing historical data from stock prices and linking it to share traded that occurs in the market. This research uses variable share traded that is proxied with volume traded, value traded, frequency traded and days traded.

The research will use profit as an intervening variable, consisting of gross profit, operating profit and net profit. The company has different performance with significant differences in the food and baverages sub-sector, will affect the amount of sales and profits earned by the company. Profit is the residual amount left behind after all expenses (including capital maintenance adjustments, if any) are deducted on income IAI (2007). This research will be

conducted on companies issuers of the food and beverages sub-sector on the Indonesia Stock Exchange. Indonesia as a large market for food and beverage products produced. Unstable macroeconomic conditions both sourced from home and abroad, and performance factors from each of the different industrial sectors. Stock prices can change at any time, and those price changes will affect the company's value in the market. The stock price will be sensitive to various issues and cases that occur inside and outside the company. The purpose of this study is to analyze the influence of macroeconomics on financial performance in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 – 2020, macroeconomic influence on profits, macroeconomic influence on share traded, influence of financial performance on profits, influence of financial performance on share traded, profit influence on share traded.

METHOD

This study used two free variables, namely macroeconomic variables and financial performance, with share traded variables as bound variables and profits as intervening variables, where analytical calculations using Partial Least Square using Smart PLS 3.0 software. The advantage of this method is that it does not require assumptions and can be estimated with a relatively small number of samples (Haryono, 2017). This study tested the influence between variables, but the relationship of influence between these variables in this study still tends to be weak or not yet known with certainty, this study is theoretical testing and recommends relationships that do not yet have a theoretical basis (exploratory). The variable data will be distribution free (does not assume certain distributed data, can be nominal, ordinal, interval and ratio categories). The steps of testing the partial least square-based research model (Surono, 2021) are: (a) create a structural model design (inner model), by fomulating the model of relationships between constructs; (b) create an outer model design, by making specifications of the relationship between latent constructs with their constructs (reflective); (c) create a path diagram construction, by visualizing the relationship between the latent construct and the construct; (d) estimate the model by using a weighting selection scheme in the model estimation process; (e) evaluate the model by looking at the evaluation of the measurement model and the evaluation of the structural model' and (f) testing hypotheses and interpretations.



Source: processed data

Figure 1
Early Construction of Research.

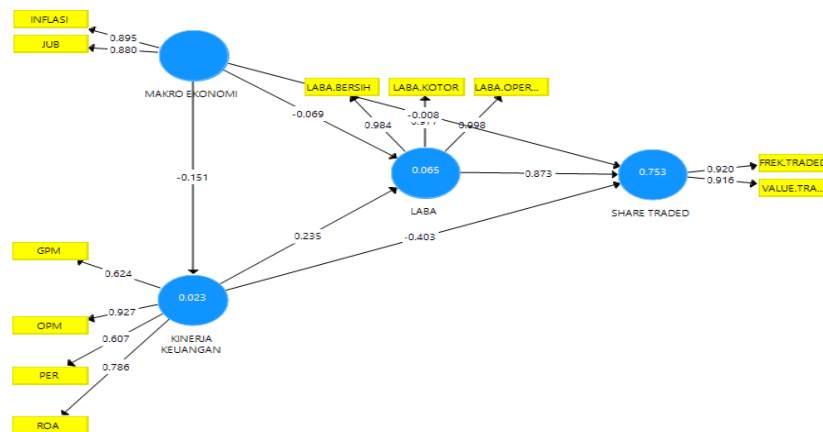
RESULT

Table 1
Construct Reliability and Validity value PLS algorithm sixteen's

	Cronbach's Alpha	rho_A	Composite Reliability	Average variance E xtracted
Kinerja Keuangan	0.732	0.762	0.831	0.559
Laba	0.986	0.986	0.991	0.973
Makro Ekonomi	0.732	0.734	0.882	0.788
Share Traded	0.813	0.814	0.915	0.843

Source: processed data

Based on table 1. Cronbach's Alpha value that has a value above 0.7 in the reliable category illustrates that the reliability test has qualified or in the reliable category and the Average Variance Extracted value has a value above 0.5., which means the data is valid. As for the relationship between latent variables with their constructs and also relationships between latent variables as seen in figure 2 below;



Source: processed data

Figure 2
Results of The Construction of The Sixteenth Study.

Based on the guidance submitted by Ghazali (2006), then in figure 2 it appears that in variables with indicators that have loading factor values below 0.7 indicate that they have no problem with the feasibility of the data or in the reliable category. Yamin (2011) stated in research the development of new models or indicators the value of loading factor between 0.5 - 0.6 is still acceptable. Figure 2 shows that; (1) macroeconomic variables constructed by inflation indicators with a loading factor value of 0.895 or 89.5% and indicators of the money supply with a loading factor value of 0.880 or 88.0%. The indicators of exchange rates and interest rates are unable to construct macroeconomic variables; (1) financial performance variables constructed by gross profit margin indicator with loading factor value of 0.624 or 62.4%, operating profit margin indicator with loading factor value of 0.927 or 92.7%, price earning ratio indicator with loading factor value of 0.607 or 60.7% and return on asset indicator with loading factor value of 0.786 or 78.6%. The indicators of current ratio, quick ratio, debt to assets ratio, debt to equity ratio, total assets turnover, fixed assets turnover, inventory turnover, return on equity, net profit margin, earnings per share, and price book value are not able to construct financial performance variables; (3) the profit variable is constructed by a net profit indicator with a loading factor value of 0.984 or 98.4%, a gross profit indicator with a loading factor value of 0.977 or 97.7%, and an operating profit indicator with a loading factor value of 0.998 or 99.8%; (4) share traded variables constructed by the frekuensi traded indicator with a loading factor value of 0.920 or 92.0%, and a value traded indicator with a loading factor value of 0.916 or 91.6%. The day trading indicator and trading volume are not able to construct share traded variables.

Table 2
VIF Value (Variance Inflation Factors)

	Kinerja Keuangan	Laba	Makro Ekonomi	Share Traded
Kinerja Keuangan		1.023		1.083
Laba				1.069
Makro Ekonomi	1.000	1.023		1.028

Source: processed data

Table 2. The inner loading values of VIF (inner VIF values) indicate that there is no multicollinearity because it has a value of less than 5, the green color indicates that the variable is feasible. The next step is to calculate by bootstrapping. The results of calculations by bootstrapping on Smart PLS 3.0, obtained path coefficients consisting of original sample (O), means sample (M), standard deviation (STDEV), T statistics ((O/STDEV)) and P values as in table 3 below;

Table 3
Bootstrapping path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Kinerja Keuangan -> Laba	0.235	0.227	0.088	2.681	0.008
Kinerja Keuangan -> Share Traded	-0.403	-0.403	0.129	3.113	0.002
Laba -> Share Traded	0.873	0.877	0.054	16.131	0.000
Makro Ekonomi -> Kinerja Keuangan	-0.151	-0.138	0.125	1.206	0.228
Makro Ekonomi -> Laba	-0.069	-0.070	0.125	0.549	0.583
Makro Ekonomi -> Share Traded	-0.008	-0.001	0.051	0.161	0.872

Source: processed data

The results of the calculation of the coefficient path based on table 3 show that;

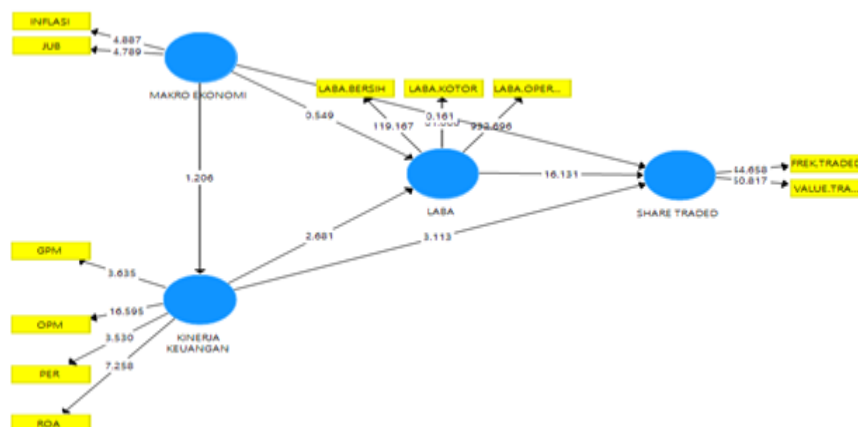
1. Macroeconomic variables have no effect on financial performance variables because the value of P values of 0.228 or greater than 0.05 then the relationship between these variables is said to have no effect.
2. Macroeconomic variables have no effect on profit variables because the value of P values of 0.583 or greater than 0.05 then the relationship between the variables is said to have no effect.
3. Macroeconomic variables have no effect on share traded variables because the value of P values of 0.872 or greater than 0.05 then the relationship between these variables is said to have no effect.
4. Financial performance variables affect profit variables because the value of P values of 0.008 or less than 0.05 then the relationship between these variables is said to have an effect.
5. Financial performance variables affect share traded variables because the value of P values of 0.002 or less than 0.05 then the relationship between the variables is said to have an effect.
6. The profit variable affects the share traded variable because the value of P values of 0.000 or less than 0.05 then the relationship between the variables is said to have an effect.

Table 4
Bootstrapping results outer loading value

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Frek Traded <- Share Traded	0.920	0.924	0.021	44.658	0.000
GPM <- Kinerja Keuangan	0.624	0.651	0.172	3.635	0.000
Inflasi <- Makro Ekonomi	0.895	0.856	0.183	4.887	0.000
JUB <- Makro Ekonomi	0.880	0.835	0.184	4.789	0.000
Laba Bersih <- Laba	0.984	0.985	0.008	119.167	0.000
Laba Kotor <- Laba	0.977	0.977	0.016	61.066	0.001
Laba Operasi <- Laba	0.998	0.998	0.001	932.696	0.000
OPM <- Kinerja Keuangan	0.927	0.915	0.056	16.595	0.000
PER <- Kinerja Keuangan	0.607	0.606	0.172	3.530	0.000
ROA <- Kinerja Keuangan	0.786	0.771	0.108	7.258	0.000
Value Traded <- Share Traded	0.916	0.923	0.018	50.817	0.000

Source: processed data

Table 4 displays the outer loading value of Bootstrapping results, which shows each indicator has a significant influence on its variables, so it appears that each indicator is able to reflect the variables it formed.



Source: processed data

Figure 3
Bootstrapping results of the third construction.

Table 5
Specific Indirect Effects bootstrapping results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Makro Ekonomi -> Kinerja Keuangan -> Laba	-0.036	-0.035	0.035	1.017	0.309
Makro Ekonomi -> Kinerja Keuangan -> Share Traded	0.061	0.061	0.057	1.072	0.284
Kinerja Keuangan -> Laba -> Share Traded	0.205	0.200	0.081	2.526	0.012
Makro Ekonomi -> Kinerja Keuangan -> Laba -> Share Traded	-0.031	-0.031	0.031	0.987	0.324
Makro Ekonomi -> Laba -> Share Traded	-0.060	-0.062	0.110	0.542	0.588

Source: processed data

The results of the coefficient path calculation to see indirect influences based on table 5. It shows that;

1. Macroeconomic variables have no effect on profit variables with financial performance variables as intervening variables, because they have a P value of 0.309 or greater than 0.05 then the relationship between those variables is said to have no effect.
2. Macroeconomic variables have no effect on share traded variables with financial performance variables as intervening variables, because they have p values of 0.284 or greater than 0.05 then the relationship between those variables is said to have no effect.
3. Macroeconomic variables have no effect on share traded variables with financial performance variables and profit variables as intervening variables, because they have p values of 0.324 or greater than 0.05 then the relationship between those variables is said to have no effect.
4. Financial performance variables affect share traded variables with financial performance variables and profit variables as intervening variables, because they have a P value of 0.012 or less than 0.05 then the relationship between those variables is said to have an effect.
5. Macroeconomic variables have no effect on share traded variables with profit variables as intervening variables, because they have a P value of 0.588 or greater than 0.05 then the relationship between those variables is said to have no effect.

Testing the magnitude of the R-square value as a result of the goodness of fit model test is seen from the magnitude of the R-square value number, the results of running calculate construction to sixteen on endogenous variables of financial performance and obtained numbers of 0.023 or 2.3%, on endogenous variables profit obtained by 0.065 or by 6.5%, in endogenous share traded variables obtained by 0.753 or by 75.3%. The figures show that the magnitude of the influence of data diversity that can be explained by the model is 75.3%, the remaining 24.7% is explained by other variables that have not been contained in the model and include errors. These results give the meaning that this research model is a relatively good model, according to Chin (1998) as in the criteria for PLS.

Table 6		
R Square		
	R Square	R Square Adjusted
Kinerja Keuangan	0.023	0.011
Laba	0.065	0.042
Share Traded	0.753	0.743

Source: processed data

Based on the results above, it can be explained the results of this study based on hypothesis tests among others that:

1. Macroeconomic influences on financial performance in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, showed that macroeconomic variables had no effect on financial performance variables because the value of P values of 0.228 or 22.8%, which is greater than 0.05 or 5% and can also be seen in static T values of 1.206 or smaller than 1.96. The path coefficients value of -0.151 which means that if there is an increase of 1 unit in macroeconomics, there will be a decrease of -0.151 units in financial performance, macroeconomic variables with inflation indicators have a loading factor (outer loading) of 0.895 which means inflation is able to construct macroeconomics, The money supply indicator (JUB) has an outer loading factor of 0.880 which means inflation is able to construct macroeconomics while the US\$ exchange rate indicator against the rupiah and interest rates are unable to construct macroeconomic variables so that it is excluded from research construction. Financial performance variables are constructed with gross profit margin indicators that have a loading factor (outer loading) of 0.624., operating profit margin indicators that have loading factor (outer loading) of 0.927., price earning ratio indicators that have loading factor (outer loading) of 0.607., and return on asset indicators that have loading factor (outer loading) of 0.786.
2. Macroeconomic influence on profits on food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, shows that macroeconomic variables have no effect on profit variables because the value of P values of 0.583 or greater than 0.05 or 5% and can also be seen in static T values of 0.549 or smaller than 1.96. The path coefficients value of -0.069 which means that if there is an increase of 1 unit in macroeconomics, there will be a decrease of -0.069 units in profit. Variable profit in construction with a net profit indicator that has a loading factor (outer loading) of 0.984., a gross profit indicator that has a loading factor (outer loading) of 0.977., and a net profit indicator that has a loading factor (outer loading) of 0.988.

3. The influence of macroeconomics on share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, shows that macroeconomic variables have no effect on share traded variables because the value of P values of 0.872 or greater than 0.05 or 5% and can also be seen in static T values of 0.161 or smaller than 1.96. The path coefficients value of -0.008 which means that if there is an increase of 1 unit in macroeconomics, there will be a decrease of -0.008 units in share traded. Share traded variables are constructed with frek traded indicators that have a loading factor (outer loading) of 0.920., and value traded indicators that have a loading factor (outer loading) of 0.916.
4. The effect of financial performance on profits on food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, shows that the financial performance variable has an effect on the profit variable because the value of P values of 0.008 or smaller than 0.05 or 5.0%, and can also be seen in static T values of 2,681 or greater than 1.96. The path coefficients value of 0.235 which means that if there is an increase of 1 unit in financial performance, there will also be an increase of 0.235 units in profit.
5. The influence of financial performance on share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, shows that financial performance affects share traded variables because the value of P values of 0.002 or smaller than 0.05 or 5.0%, and can also be seen in the statistical T value of 2.681 or greater than 1.96. The path coefficients value of -0.403 which means that if there is an increase of 1 unit in financial performance, there will be a decrease of -0.403 units in share traded.
6. The effect of profit on share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020, shows that profit affects share traded variables because the value of P values of 0.000 or smaller than 0.05 or 5.0% and can also be seen in static T values of 16,131 or greater than 1.96. The path coefficients value of 0.873 which means that if there is an increase of 1 unit in profit, there will also be an increase of 0.873 units in share traded.

CONCLUSION

The conclusions that can be drawn from this study are as follows;

1. Macroeconomic variables have no effect on financial performance in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.
2. Macroeconomic variables have no effect on profits on food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.
3. Macroeconomic variables have no effect on share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.
4. Financial performance variables affect profits in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.
5. Financial performance variables affect share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.
6. Profit variables affect share traded in food and beverage sub-sector companies on the Indonesia Stock Exchange for the period 2016 - 2020.

REFERENCES

- Bodie, Z., A. Kane, dan A. J. Marcus. 2007. *Investment*, 7th Ed. New York: McGraw-Hill.
- Ghozali, Imam. 2006. *Aplikasi Analisis Multivariate dengan Program SPSS*, Edisi Ke 4. Semarang:Badan Penerbit Universitas Diponegoro.
- Haryono, Siswoyo, 2017, *Metode SEM Untuk Penelitian Manajemen, AMOS LISREL PLS*, Luxima Metro Media, Jakarta.
- Ikatan Akuntan Indonesia. 2007. *Standar Akuntansi Keuangan*. Edisi 2007. Penerbit: Salemba Empat. Jakarta.
- Kasmir, 2014, *Analisis Laporan Keuangan*, Edisi Satu. Cetakan Ketujuh. Jakarta: PT Raja Grafindo Perkasa.
- Yamin, Sofyan. 2011, *Generasi Baru Mengolah Data Penelitian Dengan Partial Least Square Path Modelling*. Jakarta, Salemba Infotek.
- Yunan Surono & M. Ade Masyhuri. 2021. Pengaruh Makro Ekonomi, Struktur Modal, Struktur Kepemilikan, Faktor Teknikal Terhadap Profitabilitas dengan Total Pendapatan Sebagai Variabel Intervening Pada Sub Sektor Perkebunan Di Bursa Efek Indonesia Periode 2014-2020. *Jurnal Ilmiah Universitas Batanghari*, 21(3), 1374-1384.