RELATIONSHIP BETWEEN MACROECONOMIC FUNDAMENTALS, BANK'S CREDIT SCHEME, FIRM'S PERFORMANCE, AND FIRM'S VALUE DIMENSIONS

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Abstract

This study investigated the relationship among macroeconomic fundamentals, bank's credit scheme, firm's performance and firm's value dimentions. The research design was explanatory research, using a structural equation model. The sample is PT. Bank Persero industry in Indonesia from 1999-2014 monthly. Empirically, based on confirmatory test it could be described that the variables represented for each dimension were that the dominant variable in macroeconomic was currency exchange rate IDR to USD, and working capital interest rate represented the bank credit interest scheme dimension, ROA was dominant for firm's performance, and the frequency of stock trading was representing the firm's value dimension. For the next, based on structural equation model with regression coefficient, path analysis could be discussed as follows. First, working capital credit interest rate was as weak mediation variable between exchange rate IDR to USD and ROA. Second, working capital credit interest rate influenced the frequency of stock trading through ROA. In this case ROA was as strong mediation variable. The last path analyzed the influence of exchange rate IDR against USD to the frequency of stock trading through ROA. Here ROA was the strong mediation variable.

Abstrak

Kata Kunci:
Fundamental
Ekonomi Makro,
Skema Kredit Bak,
Nilai Perusahaan

Penelitian ini meneliti pola hubungan antar dimensi fundamental makroekonomi, skema bunga kredit, kinerja perusahaan, dan nilai perusahaan. Rancangan penelitian berupa penelitian eksplanatori, dengan menggunakan analisis Model Persamaan Terstruktur (SEM). Sampel penelitian adalah industri PT. Bank Persero di Indonesia periode 1999-2014 secara bulanan. Hasil penelitian menunjukkan, berdasarkan hasil pengujian model konfirmatori dapat dijelaskan bahwa variabel-variabel yang mewakili masing-masing dimensi yaitu: variable perubahan nilai kurs mewakili dimensi fundamental makro, tarif bunga kredit modal kerja mewakili dimensi skema bunga kredit bank, ROA dominan mewakili kinerja perusahaan dan frekuensi perdagangan saham merepresentasikan dimensi nilai perusahaan. Analisis selanjutnya, berdasarkan variable dominan yang sudah diperoleh dengan mendasarkan pada hasil koefisien regresi terstandar dapat didiskusikan analisis jalur, yaitu: jalur pertama, dapat dijelaskan bahwa, bunga kredit modal kerja sebagai variable mediasi yang lemah antara variable nilai kurs dengan kinerja perusahaan ROA. Kondisi jalur kedua yakni bunga kredit modal kerja berpengaruh terhadap frekuensi perdagangan saham melalui ROA, dalam hal ini ROA berperan sebagai variabel mediasi yang menguatkan. Dan jalur terakhir menganalisis pengaruh perubahan nilai kurs terhadap frekuensi perdagangan saham melalui ROA, dalam hal ini ROA mewakili dimensi kinerja perusahaan merupakan variable mediasi yang menguatkan.

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INTRODUCTION

The objective of this research is testing the direct and indirect effect among dimensions using a structural equation model (SEM), for exogenous variables included in macroeconomic fundamental dimension. On the other hand, the endogenous variables are bank credit scheme, firm's performance, and firm's value dimension. Theoretically, the research model was designed based on the theory of economic behavior (Neumann & Morgenstern, 1944) and agency theory by Jensen & Meckling (2002). Principally, everybody will not to get benefit from every opportunity in any situation. In this case, could be develop in the situation of interaction between principal and agent in the corporation's stakeholders, with limited resources go to the market or specific opportunity to optimize economic benefit. This idea suit with economic behavior Smith (1776), he says that in the market there are invisible hands to support the economic behavior for individual or people interest to make optimum economic decision and the market will develop the supply and demand mechanism to form the equilibrium for the price of many goods.

Based on principal agent model, the creditors and investors as principal will first observe macroeconomic condition before making decision to borrow or invest their fund in to the firms. If the situation of macroeconomic fundamental is stable like exchange rate Rupiah to USD, inflation fluctuation, and the level of interest rate of Central Indonesian Bank, for the next stages they are going to analysis the fundamental micros of the firm.

Dealing with of the bank industry in Indonesia, the bank performance indicators can be operationalize to be include in capital adequacy ratio, operating expenses on operating income, earnings, and loan to deposit ratio. Commonly, the bank performance will be influenced by bank credit schemes namely, the interest rate of working capital credit, interest rate of investment credit, and interest rate of consumption credit (Harmono, 2012). On the other hand, the investors will invest in capital market if the macroeconomic condition is stable and bank performance is indicating good formation. The level of equilibrium stock price in the capital market can be indicated in the firm's value dimension. According to Sharpe (1964), the developing pricing theory is mentioned with capital asset pricing model (CAPM). In the CAPM has comparing complicated market information like the macroeconomic fundamental, previews price, risk free, and firm's fundamental with the formula:

$E(R_i) = (R_f + \beta(R_m - R_f)$ in this case;

$E(R_i)$ = Expected Individual Return;

R_f = Risk Free; and R_m = Market Return

With the security market line in CAPM, it is well prepare in pricing of capital with assumption the macroeconomic is stable. On the other hand, when the condition of macroeconomic unstable, apredicting capital price is better by using of macroeconomic for preference in stock pricing model (Ross, 1976; Harmono, 2012).

HYPOTHESES DEVELOPMENT

Firm's Value

Firm's value dimension in the capital market theory can be reflected by stock price. According to Fama (1974), the primary role of capital market is allocation ownership of the economy's capital stock. In general terms, the ideal is a market in which prices provide accurate signal for resource allocation. That is, a market in which firms can make production-invesment decision, and investors can choose among the securities that represent ownership of firms, activities under the assumption that security price at any time "fully reflect" all available information is call "efficient". Since efficiency market hypotheses appear in capital market theory (Fama, 1974), can be inspiring

to many scientist to explore this theory and can produce the some authentic theory of capital market i.e. agency theory (Jensen & Meckling, 2002), arbitrage pricing theory (Ross, 1976), and capital structure and firm performance evidence from Nigeria (Adekunle *et al.*, 2010). According to Frank & Vidhan (2003), taxes, bankruptcy costs, transactions costs, adverse selection, and agency conflicts have all been advocated as major explanations for the corporate use of debt financing. These ideas have often been synthesized into the trade-off theory and the pecking order theory of leverage. Based on antecedent the previews research can become trigger to the next generation in capital market research and to be clearer in problem solving in to practice. In general terms, the indicators of firm's value are reflected by stock price. When the investors well prepare to analysis market information for to make economic decision, and the condition of capital market is efficient, we will get the equilibrium stock price and reflected firm's value. Accordingly, this study proposes the following hypotheses:

H$_1$:   variables closing price, trading volume activity, and frequency of trading activity have any contributed in firm's value dimension

Firm's Performance

The concept of firm's performance can be exposed through firms fundamental, in general terms, included in firms fundamental, i.e. financial performance, the condition of organization management related in human resources development, production performance, and marketing performance. Commonly, the indicators of firm's performance in financial research can be measured by financial performance can be classified in some terms namely liquidity, profitability, leverage, activity, and firm's growth. Sen & Eda (2008) conducted testing of pecking order theory, examining relation between annual leverage ratio on total asset, profitability, asset structure, and firm's

growth. The analysis revealed that between leverage ratio and total asset, profitability, and sales amount, there is a negative relation which corresponds well to the explanations of pecking order theory.

For a while no meaningful relation was detected for firm's growth, a negative relation was found out between asset structure and leverage level. Variables in the model not included in firm's value dimension. Therefore this research not describes trade off or optimum capital structure. For completely in the integrated model of this research will combine with firm's value dimension in which variables is used can be operationalized with closing price, volume trading activity and frequency of trading activity (Harmono, 2012). Related in firms fundamental can propose the following hypotheses:

H$_2$:   variables capital adequacy ratio, operating expenses on operating income, return on asset, and loan to deposit ratio have any contributed in firm's financial performance dimension

Bank Credit Scheme

Meanwile the others dimension is bank credit interest scheme will be submitted into the model. Logically credit interest scheme, i.e., the interest rate of working capital credit, interest rate of investment credit, and consumption credit. They will be observed by the business peoples, when the interest rate is high the peoples will save their money in the bank, when interest rate is low may be people would be interested in borrowing the money to invest in real sectors or capital stock, while the others would like to spend their money on the consumption of goods. Based on the empirical logic, credit interest scheme can be in to the model as mediation variables between macroeconomic fundamental in influencing of the bank performance (Harmono, 2012). Accordingly, this study proposes the following hypotheses:

H$_3$: variables working capital credit interest rate, investment credit interest rate, and consumption credit interest rate have any contributed in credit interest scheme dimension

Macroeconomic Fundamentals

According to Harmono (2012), The Characteristic on Investor Behavior in Response on the Capital Market Information used Confirmatory Model: Fama Model and Perception Model for a testing of Efficiency Market Hypothesis can disclose that, information capital market consist of macroeconomic fundamental information, kind of industry, firms fundamental, publication and issue information. The mean finding out this model can be showed that, the contingent claim theory between firm's fundamentalism and macroeconomic fundamentalism. In here, variable indicator included in firm's fundamental can be break down to financial performance namely, liquidity ratio, activity, leverage, and profitability ratio.

On the other hand, macroeconomic fundamental with indicator, exchange rate Rupiah to USD, central bank rate, inflation stock price in-

dex, and publication information e.g. initial public offering, merger, stock split, dividend announcement etc. this finding research can be clearer discussion about capital asset pricing model (CAPM) (Sharp, 1964) versus arbitrage pricing theory (Ross, 1976). When macroeconomic condition is stable, CAPM is powerful in predicting price and the opposite, when the condition of macroeconomic unstable, the APT is proper and usefulness to predict stock price. Accordingly, this study proposes the following hypotheses:

H$_4$: variables earnings exchange rate rupiah to USD, inflation, and the interest rate of Indonesian Central Bank have any contributed in macroeconomic fundamental dimension

Relationship between Macroeconomic Fundamentals, Bank's Credit Scheme, Firm's Performance and Firm's Value

Based on the argumentation of some preview findings, the research can construct a developing model which considers macroeconomic fundamentals in influencing to firm's performance and firm's value through bank credit interest scheme.
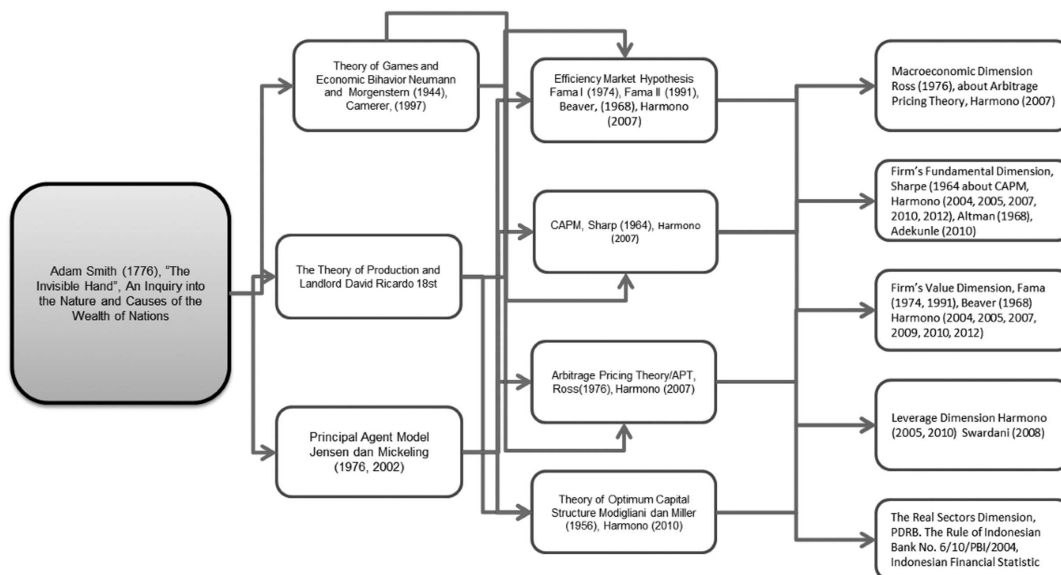
Figure 1. The Research Roadmap in Developing of Research Model
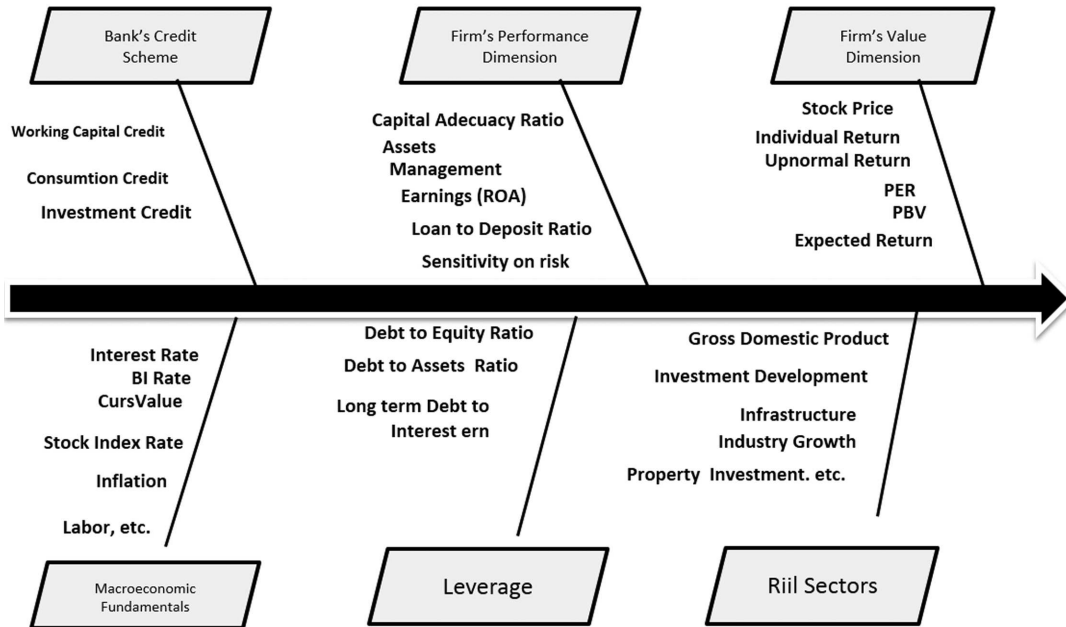
Figure 2. The *Fishbone Analysis* consist of Some Dimension in Building the Research Model 2014
Sources: Primary Data was developed by using theoretical review

The correlation among variables will be establish based on theoretical framework and using structural equation model to get integrated model to disclose interaction between dimension one to others. The research model will test the optimum path that can be exposed by testing for some path analysis as the novelty in the finding of this research. The first path can be analysis from the effect of macroeconomic fundamentals on firm's performance through bank credit interest scheme. The second path will be tested by using the effect of credit interest scheme on firm's value through firm's performance dimension, and the last path is the effect of macroeconomic fundamental on firm's value with the mediation variables include in firm's performance dimension. This study will be testing the optimum path analysis of three path have mentioned previews. The roadmap of theoretical concept can be described as per Figure 1.

Fundamentally, we can construct the conceptual framework of the integrated model through the identification of some dimensions and then to break them down in to some variables to support the building the model. Clearly, the description of each dimension can be shown through the fishbone analysis method on Figure 2.

Based on theoretical construct and relationship among dimension can be formulated of research hypothesis as below:

H_5: macroeconomic fundamental dimension have any significance in influencing on firm's performance through credit interest scheme dimension

H_6: credit interest scheme dimension have any significance in influencing on firm's value, in here the role of firm's performance dimension are as intervening variables

H_7: macroeconomic fundamental dimension have any significance in influencing on firm's value, in here the role of firm's performance dimension are as intervening variables

METHOD

Research design used of descriptive and explanatory research by using confirmatory factors and structural equation model for to test hypotheses, to investigate about interconnection among observed and unobserved variables. The exogenous variables i.e. macroeconomic fundamentals dimension included in exchange rate rupiah on USD, inflation, and the interest rate of Indonesian Central Bank, and for endogenous variablesis bank's credit scheme dimension consists of working capital credit interest rate, investment credit interest rate, and consumption credit interest rate variable. For the next, firm's performance dimension related in capital adequacy ratio, return on asset, operating expenses on operating income, and loan to deposit ratio. The last one, the dimension of firm's value consists of closing price variable, trading volume activity, and frequency of trading activity. Based on the characteristic of the relationship type among variables consist of observed an unobserved variables that, the properly tools can be used for to test the research hypotheses, by using a structural equation model.

This research utilized the Indonesian Banking Statistic Reporting (IBSR) for period of 2009-2014. The sampling method used is purposive sampling, in which had to be published in Indonesian Banking Statistic Reporting (IBSR), by using data panel model which consist of constant cross-sectional units observed for a specific period of time especially for PT. Bank Persero industry in Indonesia since 1999 and the monthly report continuously for period of observation.

Analysis

Analysis techniques useddescriptive analysis and structural equation model with Amos Software, for to getempirical evident to realized research hypotheses, the formula and notation of each variable can be shown as below.

Confirmatory analysis, Macroeconomic Fundamental Dimension (MFD) (X)

Inflation Fluctuation $(X_{1.1})$
$= \lambda p1.MFD + \delta 1$

BI Rate $(X_{1.2})$
$= \lambda p2.MFD + \delta 2$

Exchange Rate Rupiah on USD $(X_{1.3})$
$= \lambda p3.MFD + \delta 3$

As a manifest variable of macroeconomic fundamental (latent variable)

Bank Interest Scheme Dimension (BISD) (Y_1)

Working Capital Credit Interest Rate (WCCIR) $(Y_{1.1})$
$= \lambda b1.BISD + \varepsilon 1$

Investment Credit Interest Rate (ICIR) $(Y_{1.2})$
$= \lambda b2.BISD + \varepsilon 1$

Consumption Credit Interest Rate (CCIR) $(Y_{1.3})$
$= \lambda b3.BISD + \varepsilon 1$

As a manifest variable of Bank Interest Scheme (latent variable)

Firm's Performance Dimension (FPD) (Y_2)

Capital Adequacy Ratio (CAR) $(Y_{2.1})$
$= \lambda bf.1. FPD + \varepsilon 1$

Return on Asset (ROA) $(Y_{2.2})$
$= \lambda bf.2. FPD + \varepsilon 1$

Operating Expenses on Operating Income (OEOI) $(Y_{2.3})$
$= \lambda bf.3. FPD + \varepsilon 1$

Loan to Deposit Ratio (LDR) $(Y_{2.4})$
$= \lambda bf.4. FPD + \varepsilon 1$

As a manifest variable of Firm's Performance Dimension (latent variable)

Firm's Value (FV) (Y_3)
Closing Price (CP) $(Y_{3.1})$
$= \lambda bf.1.FV + \varepsilon 1$

Trading Volume Activity (TVA) $(Y_{3.2})$
$= \lambda bf.2.FV + \varepsilon 1$

Frequency of Trading Activity (FTA) ($Y_{3.3}$)
= λbf.3.FV + ε1

$$Firm's\ Value = \alpha + \beta Macroeconomic\ Dimension$$
$$+\beta Credit\ Interest\ Scheme$$
$$+\beta Firm'sPerformance + ei$$

RESULT

Empirical Tests

Descriptive statistics, data fluctuation of each variable can be indicating the condition of macroeconomic fundamental in Indonesia, with a timeframe on 1999-2013 monthly. And then the supporting data related in the condition of credit interest scheme consists of working capital credit interest rate, investment credit interest rate, and consumption credit interest rate. The next data on firm's financial performance in detail variables are capital adequacy ratio (CAR), return on asset (ROA), operating expenses on operating income (OEOI), and loan to deposit ratio (LDR). The last data deals with firm's value dimension i.e. closing price variable, trading volume activity and frequency of trading activity variables. In order to give exact empirical evident will be conducted on the hypothesis using inferential statistic with structural equation model using software Amos Version 20 for windows.

Firm's Performance

The condition of firm's financial performance especially for limited liability banks in Indonesia consisting of Bank Rakyat Indonesia (BRI), Bank BNI 46, Bank Mandiri, and Bank Tabungan Negara (BTN), can be indicated with simple illustration that, OEOI in average about 91,54%. But at the end of the years, precisely in January there is an increase of up to 121% at the year of 2010. And then at the end of the year on 2011 up to 173% and the top rank on January 2012 up to 202,72%. This condition can commonly indicate that bank performance in Indonesia is normal operation level. Just at the end of every the year operating expenses exceed of operating income. May be the increasing operating expenses is caused by bonus program from management policy but not in efficiency executed. The simple illustration of bank performance is shown as data fluctuation on Figure 3.

Firm's Value Dimension of Bank Perseroin Indonesia

The condition of firm's value indicated by the trading volume and frequency of trading activity in Indonesian Capital Market indicate dynamic fluctuation with positive trend in the 2009-2013 observation period. For the simple illustration on firm's value dimension can be seen from the fluctuation data on Figure 4.

The Condition of Macroeconomic Fundamental in Indonesia

Data condition of macroeconomic fundamental dimension is reflected by currency exchange rate Rupiah on USD, inflation fluctuation, and the standard interest rate of Central Bank of Indonesia. The variables have any significant contributed in macroeconomic dimension are cur's Rupiah on USD and inflation fluctuation. For simple illustration on macroeconomic dimension can be seen from the data fluctuation on Figure 5.

The last dimension is credit interest rate scheme. Data description related in the variables of credit interest scheme dimension are working capital interest rate, investment credit interest rate, and consumption credit interest rate. The condition of credit interest scheme in 1999-2013 period is indicating the decreasing trend and stable data fluctuation. It means that the macroeconomic condition in Indonesia is better to support the development of the real sector and will ultimately increase economic growth. Simple illustration can be seen from the data fluctuation on Figure 6.

Inferential Statistically

Empirically, using standardized regression weights the first path can be analyzed through the direct effect of macroeconomic fundamental on the firm's significant performance with coefficient load-

ing factor -0,336. However, the effect of macroeconomic fundamental on firm's performance is significantly bigger than the path of macroeconomic fundamental to the bank credit interest scheme multiplied by the loading effect of bank credit interest scheme on firm's performance (0,316
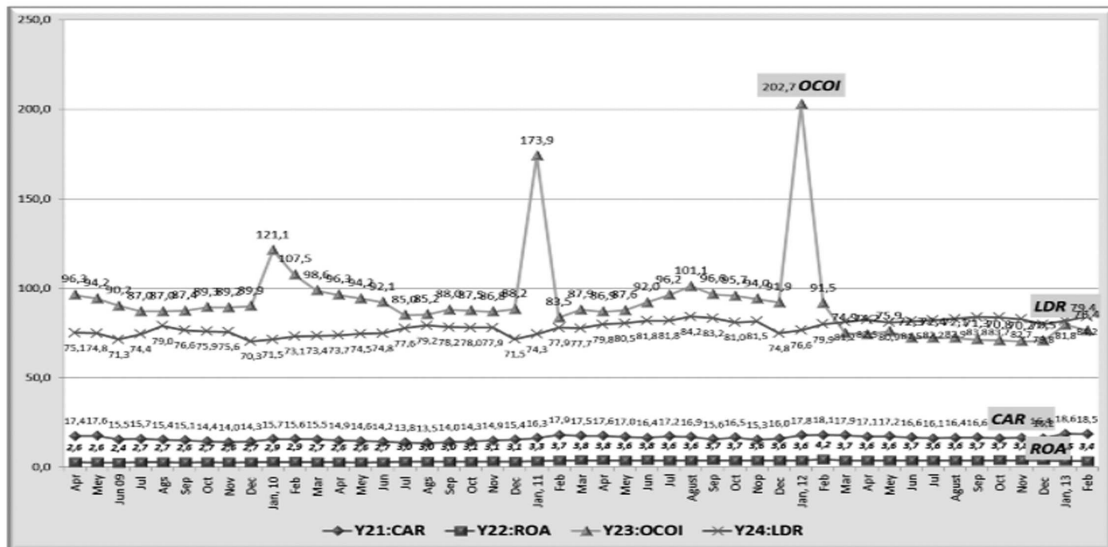

Figure 3: Condition of Firm's Performance (Bank Persero in Indonesia)
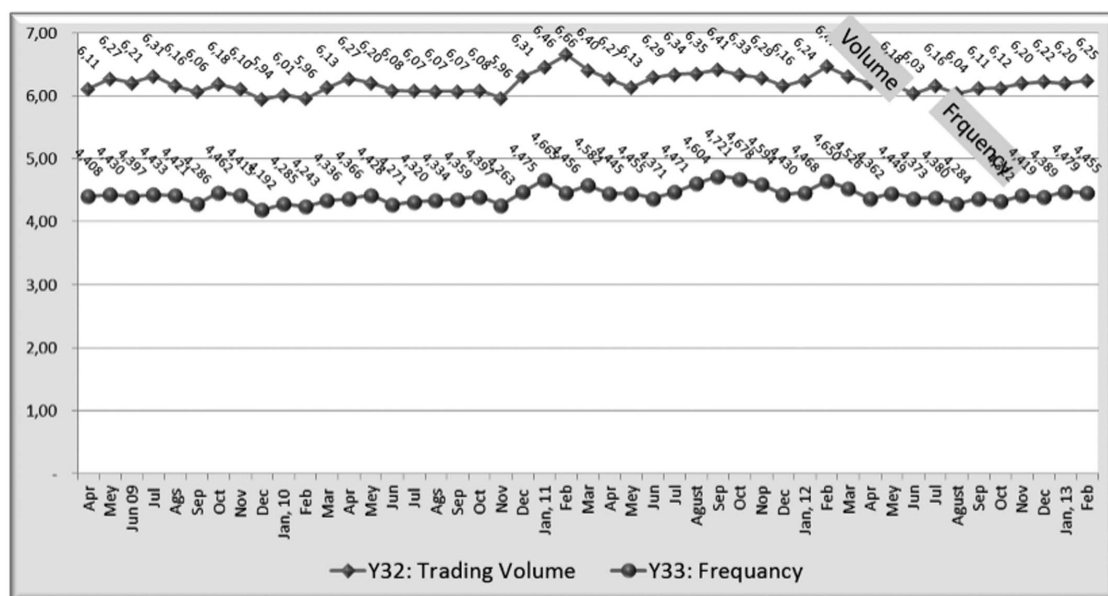Sources: Secondary Data from Indonesian Central Bank have been designed

Figure 4. Condition of Firm's Value for (Bank Persero in Indonesia)
Sources: Secondary Data from Indonesian Central Bank have been designed

x -0,798= -0,252). Therefore, bank credit interest scheme has the role of "weak mediation variables". The second path can be analyzed through the direct effect of the bank credit interest scheme on firm's performance bearing negative significance (-0,798), and the bank performance on firm's value has a significant with loading effect 1,655. If we multiply both correlation (-0,798 x 1,655= -1,321). On the other hand, the loading correlation be-tween bank credit interest schemes on firm's value is lower (1,238) than the other path one of 1,321. Based on this calculation can be concluded that "firm's performance as strength mediation variables" that result is consistent with previews research (Harmono, 2012). The last path can be analyzed through the effect of macroeconomic fundamental on firm's value which has weak correlation coefficient (0,037).
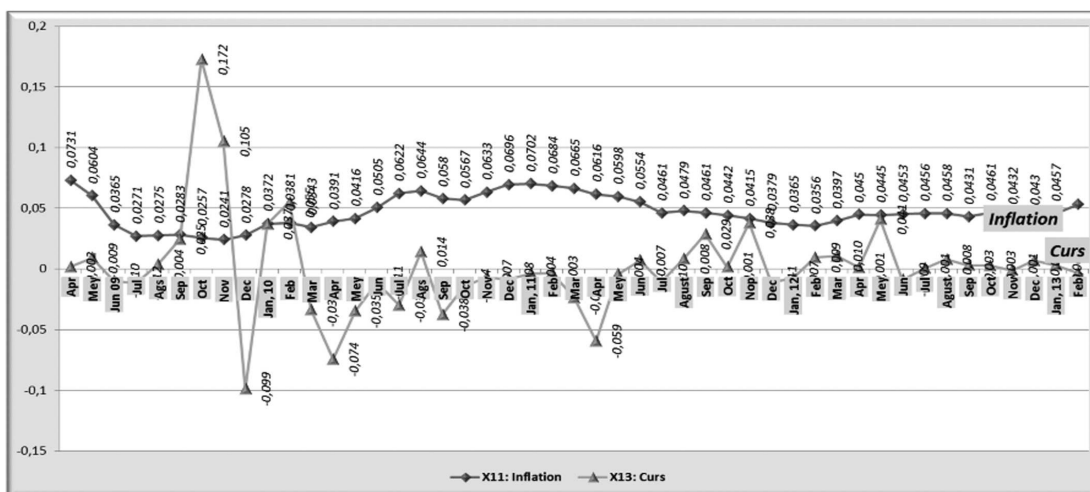

Figure 5. The Condition of Macroeconomic Fundamental in 2009-2013 period
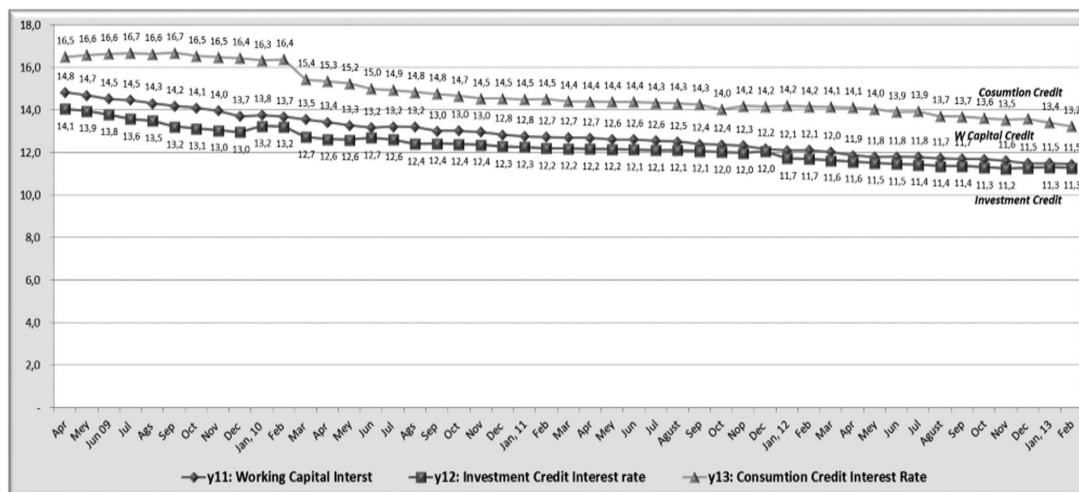Sources: Secondary Data, from Indonesian Central Bank have been edited

Figure 6. Condition of Credit Interest Scheme in 2009-2013 Period
Sources: Secondary Data from Indonesian Central Bank have been designed

Table 1. The Requirement of Structural Equation Model

Description	Score Criteria	Value
CMIN/DF X²-chi-Square	≥ 0,05	3,419= Fit
Probability	≤ 0,05	0,000 = Fit
GFI	≥ 0,95	8,79 = max
TLI	≥ 0,95	0,812= max
RMSEA	≤ 0,08	0,225= max

Table 2. Regression Weights: (Group Number 1 - Default Model)

Description			Estimate	S.E.	C.R.	P	Label
Bank_Interest_Scheme	<---	Macro_Economy_Fundamental	7,730	4,503	1,717	0,086	par_13
Bank_Performace	<---	Bank_Interest_Scheme	-0,683	0,146	-4,672	***	par_8
Bank_Performace	<---	Macro_Economy_Fundamental	-7,057	3,644	-1,937	0,053	par_11
Firms_Value	<---	Bank_Performace	1,497	par_5			
Firms_Value	<---	Bank_Interest_Scheme	0,958	par_9			
Firms_Value	<---	Macro_Economy_Fundamental	0,705	par_12			
y21	<---	Bank_Performace	1,000				
y22	<---	Bank_Performace	0,554	0,112	4,944	***	par_1
y24	<---	Bank_Performace	3,794	0,864	4,390	***	par_2
y32	<---	Firms_Value	,175	par_3			
y33	<---	Firms_Value	,141	par_4			
y11	<---	Bank_Interest_Scheme	1,000				
y12	<---	Bank_Interest_Scheme	0,797	0,017	47,386	***	par_6
y13	<---	Bank_Interest_Scheme	1,077	0,044	24,427	***	par_7
x13	<---	Macro_Economy_Fundamental	1,000				
x11	<---	Macro_Economy_Fundamental	-0,120	0,067	-1,784	0,074	par_10

Table 3. Standardized Regression Weights: (Default Model)

Description			Estimate
Bank_Interest_Scheme	<---	Macro_Economy_Fundamental	0,316
Bank_Performace	<---	Bank_Interest_Scheme	-0,798
Bank_Performace	<---	Macro_Economy_Fundamental	-0,336
Firms_Value	<---	Bank_Performace	1,655
Firms_Value	<---	Bank_Interest_Scheme	1,238
Firms_Value	<---	Macro_Economy_Fundamental	0,037
y21: CAR	<---	Bank_Performace	0,610
y22: *ROA(Dominant Varible)*	<---	Bank_Performace	0,946
y24: LDR	<---	Bank_Performace	0,787
y32: Trading Volume Activity	<---	Firms_Value	0,886
y33: *Trading Frequency(Dominant)*	<---	Firms_Value	0,891
y11: *Working Capital(Dominat)*	<---	Bank_Interest_Scheme	1,001
y12: Investment Credit	<---	Bank_Interest_Scheme	0,990
y13: Consumtion Credit	<---	Bank_Interest_Scheme	0,963
x13: *Curs(Dominat Variable)*	<---	Macro_Economy_Fundamental	1,043
x11: Inflation	<---	Macro_Economy_Fundamental	-0,359

Sources: The Result of Analysis the Research Grand of Postgraduate Team, the Ministry of High Education (DIKTI) of Indonesia 2014, edited.

In others path, the influence of macroeconomic on firm's performance has significance with loading standardized regression -0,336, and the firm's performance on firm's value is significant with loading value 1,655. With this empirical testing the last one can be concluded that, the firm's performance has strong mediation between the dimension of macroeconomic and firm's value with loading factors (0,336 x 1,655= -0,556). The novelty of empirical study of the best path is firm's performance has any fully mediation variables between macroeconomic on firm's value.

The variables of credit interest scheme consist of working capital credit interest scheme, investment, and consumption credit interest schemein April 2009-February 2013 monthly period, indicates that the macroeconomic condition of Indonesia is in the decreasing trend and stable, when the bank credit interests scheme is steady it would have a multiplier effect toward others aspect and ultimately influence the stability of condition of economic.

By using Structural Equation Model, by deleting one of variables in Bank Credit Interest Scheme Dimension and some variables for each dimension, with confirmatory factors analysis if the model can be generating good of fitness index > 0,05 in fact equel 8,79 and likely hood-ratio chi-square (X^2) have no significance at level 0,05, it means the model is fit and can ilustrate that there is no differences between prediction and the riil observation. On the other hand, after the Indonesian Bank Certificate Variable taken out from the credit interest scheme dimension model, the TLI value from 7,884 increases to become 8,120. Which mean the model is optimal, for a while. The criteria of Tucker-Lewis Index (TLI) > 0,90 that the model is fit. Next, it can be conducted to analyze and get general conclussion (Ghozali, 2005). The illustration of integrated structural equation model can be shown on Table 1.

Dealing with the testing of structural equation model, the results can indicate if a model is fit and it can fully meet criteria requirements of the model, the detail can be seen on Tables 1, 2, and 3.

DISCUSSION

Based on the analysis of structural equation model (SEM) we find that the H_1 had stated that the variables of macroeconomic fundamentals consist of inflation, BI rate, and currency exchange rate have contribute on the dimension of macroeconomic fundamental, in this case currency exchange rate is dominant variable contribute in macroeconomic dimension. In this case, investors intend to analyze macroeconomic fundamentals and they are emphasizing on currency exchange rate Rupiah on USD.

Working capital credit interest scheme, investment credit, and consumption credit interest scheme have contributed in the dimension of bank credit interest scheme. Here, one among the variables that has dominant contribution to the dimension of bank credit interest scheme is working capital credit interest rate. This situation can implicate the majority of community behavior in Indonesia tending to add the working capital on their business then for consumption and investment, a couple years ago, they are tending to use a consumption credit. Based on this results, that is good news, this situation is an interesting condition, with an increasing working capital in to the business surely will trigger economic growth and can be increasing welfare. The next expectation, a community must turn to investment credit in accelerate the economic growing up.

Capital adequacy ratio, ROA, operating expenses on operating income (OEOI) and loan to deposit ratio (LDR) have contribution to the dimension of bank performance. Only OEOI variable does not significant contribution to the dimension of bank performance, with the argumentation that OEOI only reflects the efficiency of the bank operation rather than bank performance.

With the finding of this research it can be suggested that, in measuring the dimension of bank performance it is better by using CAR, ROA, and LDR and delete the OEOI variables. In here, the dominant variables have contribute in the dimension of bank performance is ROA. This is consistent with previews similarly research that, earnings had been responded by investors rather than liquidity, and loan to deposit ratio or firm's size.

The variables of closing price, trading volume activity, and the trading frequency of stock have significant contribution to the dimension of firm's value. In this case, just only closing price has no significant contribution to the dimension of firm's value. In this case, the variable closing price can be aborted, and principally, based on the concept of firm's value, it can be develop in to price of stock like price earning per share (PER), price to book value (PBV) return, and the others. In here, the dominant variables have contribute in the dimension of firm's value is frequency of trading activity.

Will conduct to test of path analysis, macroeconomic fundamentals on the bank performance through bank credit interest scheme dimension. With the testing of this hypothesis can be indicating that the macroeconomic fundamentals dimension were reflected by the variables of currency exchange rate have significance in influencing to the bank credit interest scheme are represented by working capital interest scheme (r= 0,316; p= 0,08). The next path analysis can be shown through the effect of credit interest scheme on bank performance is represented by ROA indicate negative significance (r= -0,798; p= 0,01).

On the other path, the effect of macroeconomic fundamentals has significance on bank performance (r= -0,336; p=0,05). Empirically, multiplying coefficient correlation between macroeconomic fundamental on bank interest scheme with coefficient correlation between bank interest scheme on firm's performance (0,316 x -0,798) equal

to -0,252 is lower than the effect of macroeconomic fundamentals on bank performance (-0,336). Based on the path analysis it can concluded that the role dimension of bank credit interest scheme as "weaknesses mediation variables" between the effect of macroeconomic fundamental dimension on bank performance dimension. In here, the negative and positive value just indicating coefficient signal. For illustration of the relationship among dimension used of path analysis can be seen on Figure 7.
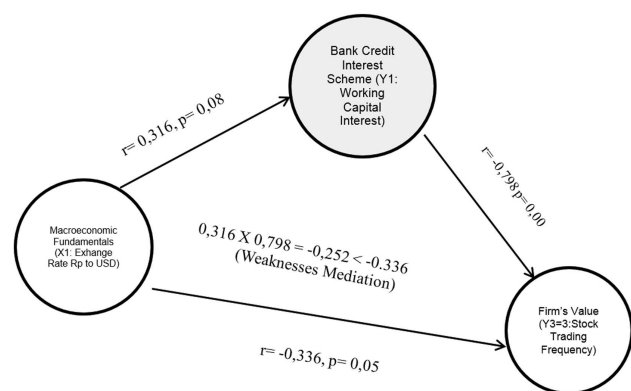
Figure 7. Path Analysis the dimension of Macroeconomic Fundamental, Bank Credit Interest Scheme, and Bank Performance.

We will be testing the hypothesis that the effect of credit interest scheme on firm's value through bank performance.

With the testing of this hypothesis it can be indicating that the bank interest scheme dimension were reflected by the variables of working capital interest rate have significance in influencing to the firm's performance are represented by ROA (r= -0,798, p= 0,00). The next paths analysis can be shown through the effect of firm's performance on firm's value indicate positipsignificance (r= 1,665 p < 0,00). On the other path, the effect of the bank interst scheme dimension were reflected by the variables of working capital interest rate has significance on firm's value (r= 1,238, p= 0,05). Empirically, multiplying coefficient correlation between the bank interst scheme dimension on

firm's performance with coefficient correlation between firm's performance on firm's value dimension (-0,798 x 1,655) equal to -1,321 is bigger than the effect of fim's performance on firm,s value dimension (1,328). In here, the negative and positive value just indicating coefficient signal. Based on the path analysis it can concluded that the role dimension of firm's performance as "strength mediation variables" between the effect of bank credit interest scheme on firm's value dimension. For illustration of the relationship among dimension used of path analysis can be seen on Figure 8.
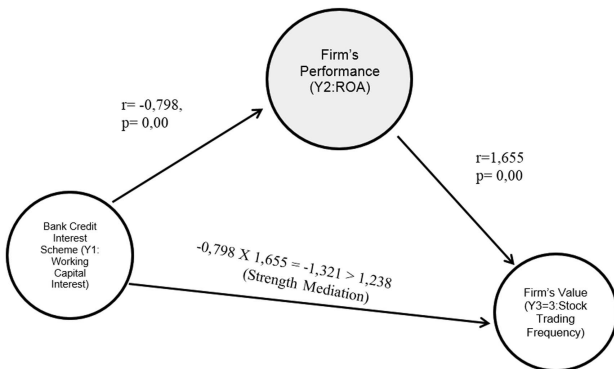

Figure 8. The Path Analysis of among Dimension Consists of Bank Credit Interest Scheme, Firm's Performance, and Firm's Value

We will analysis the effect of macroeconomic fundamental on firm's value through the dimension of bank performance. Empirically, with multiply coeficient correlation between macroeconomic fundamental on bank performance dimension (r= -0,336; p= 0,00) and the bank performance on firm's value dimension (r= 1,655; p= 0,00) equal (-0,556) and than comparing with the significance coefficient correlation between macroeconomic fundamentals on firm's value (-0,037) can be indicating that the direct effetct between macroeconomic fundamentals and firm's value is low coefficient than the effect of macroeconomic fundamentals on firm's value through bank performance dimensions at the level of significance 0,05%. In which based on this

situation can be conclude that the dimension of fim's performance have role as "strength mediation variable" between the effect of macroeconomic fundamentals on firm's value dimension. In here, the negative and positive value just indicating coefficient signal.The illustration for it's path can be seen on Figure 9.
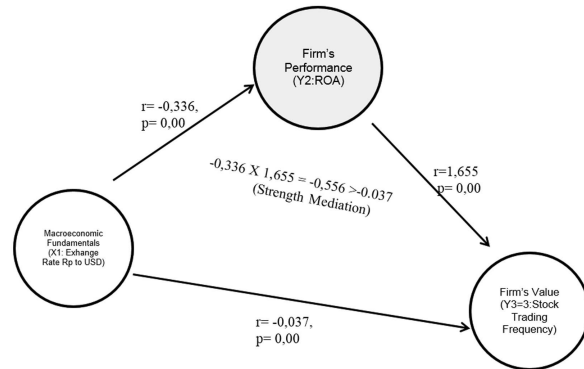

Figure 9. The Path Analysis among Dimension Consists of Macroeconomic Fundamental, Bank Performance, and Firm's Value

CONCLUSION AND SUGGESTION

Conclusion

Principally, based on structural equation model we can get the some point of view in which, with the result of Standardized Regression Weights coefficient, we can be discussed the type of correlation among dimension's in the research model, clearly can be illustrated by argumentation, which are: (1) Based on confirmatory factors analysis to test for macroeconomic dimension they have reflected by currency exchange rate of rupiah against USD and inflation variables. In this case, the interest rate of working capital is representing the dominant variable; (2) By using confirmatory factors analysis to test for credit interest scheme dimension, they have reflected by the interest rate of working capital, investment, and the interest rate of consumptive credit variables. In here, the interest rate of working capital is representing the

dominant variable; (3) By using confirmatory factors analysis to test for firm's performance dimension, they have reflected by CAR, ROA, and LDR variables. This dimension is represented by ROA; (4) By using confirmatory factors analysis to test for firm's value dimension, they have reflected by for the endogenous variables are, trading volume activity, and stock trading frequency included in firm's value dimension variables. Frequency of stock trading is dominant variable; (5) The first path can be analyzed trough the direct effect of macroeconomic fundamental on the firm's performance through bank interest scheme. In this case, bank interest scheme have a role as weaknesses mediation variables; (6) The second path can be analyzed through the direct effect of the bank credit interest scheme on firm's value through firm's performance. In here firm's performance have a role as strength mediation variables; and (7) The last path can be analyzed that the effect of macroeconomic fundamental on firm's value through firm's value through firm's performance dimension. In here firm's performance have a role as strength mediation variables.

Suggestion

For science and technology development, based on the finding research, we can develope theory or the model in financial theory related in pricipal agent model or the others concept. For the future research this model can be replicated with some others dimension for examples, leverage dimension and real sectors dimensions. For practice, based on the finding research, we can use this dimension included in some variables to support to make economic decision, especially for banking industry.

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