THE DETERMINANT OF DEMAND FOR MONEY (M$_2$) IN INDONESIA: ANALYSIS OF ORDINARY LEAST SQUARE MODEL

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Abstract

A demand for money serves a strategic role in monetary authority in an approriate and fundamental policy formulation for the economic stability maintenance. Any analysis of the demand for money is a form of study on the economic magnitudes required to provide supports for the government policy in the monetary sector, what is more, unfavourable experience had been perceived by Indonesian society at the end of the 1997 decade. In Indonesia, the economic crisis is considered the most severe compared to those undergone by several countries so far. The overflowing peak of the crisis in 1997 not only devastated the national banking industry but also dragged the people's economy into a maze of slow growth. By looking at the economic situation of developing countries, such as Indonesia which is very vulnerable to disequilibrium, a study for forecasting the economic and monetary conditions is an urgent matter to conduct. Thus, this study aims to delve the determinants of the money demand function in Indonesia, both simultaneously and partially. The econometric model with the Ordinary Least Square approach was applied in analyzing the data of the research. The data used are time series data in quarterly periods of 1990:$_{Q1}$ – 2018:$_{Q4}$. The results of this study found that, simultaneously the national income, the US dollar exchange rates, inflation, deposit rates and the monetary crisishave a significant effect on the demand for money. Partially, the fact is that the national income and the US dollar exchange rate have a positive and significant effect on the demand for money and the deposit interest rates have a negative and significant effect on the demand for money, whereas inflation does not impact the demand for money.Regarding the analysis of dummy, the monetary crisis, this study also revealed that in the period of post-monetary crisis, the demand for money in Indonesia was greater than in the previous period. This research is expected to be capable of enriching the development of science through empirical findings from the correlation of previous research variables that have not been revealed so that it can be a reference for relevantstudies in the future. In addition, the results of this study are also expected to add to the existing references in the academic world so that it can be useful for relevant stakeholders, besides being expected to contribute ideas in making policies to maintain the stability of the Indonesian economy.

Keywords : *Demand for Money, Macroeconomic, Econometric, Economic Stability*

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INTRODUCTION

In the economic circle model, money serves as a link that connects all parts and sectors. The existence of the money allows individuals to specialize themselves in one particular area of activity, then exchange the results with other goods or services needed. Money and credit play a very vital role in the modern economic activities and can greatly help in various aspects of economy, but they can also disrupt the world economy. Circulation of the amount of money is one part of the monetary sectors that supports the national economy in Indonesia, so that with the money supply a balanced economy is encouraged (Gilarso, 2008).

The policy that regulates the amount of money in circulation is called monetary policy (Natsir,2014). As an integral part of macroeconomic policy, monetary policy in Indonesia palys an important role in economic development. Thus, together with other macro policies, such as fiscal policy and balance of payments, the monetary policy is directed at achieving economic growth targets and equitable development, including the income and expansion of employment opportunities, price stability and balance of paymentsscale.

The national economic circle is also influenced by the monetary balance, in that the amount of demand for money is the same as the supply of it. The amount of money in circulation (and especially large changes in the amount of money in the circulation) evidently contributes to the balance between the flow of goods and the flow of money. Therefore, the monetary dimension must be included in the analysis of equilibrium. Experts have suggested the notion of monetary balance as the balance between the demand for money or credit from the public and the supply of the money (by the banking world) in such a way that the money supply is sufficient to serve the effective demand of society. Furthermore, public demand must be in accordance with production capacity, without inflation or unemployment (Gilarso, 2008), as well as money offers that are not fully determined by the monetary authority. However, this is also determined by commercial banks and the public. The banking system will offer a certain amount of money in line with the money demand of the people, one of which is the credit. (Krisna, 2018).

A demand for banknotes and checks is determined by people's demands in maintaining liquidity (Djinar, 2016). One of the basic characteristics of demand for money is that people are interested in purchasing power from their money ownership, which is the value of cash balances in the form of goods that are purchasable with cash, so that money here functions as a means of payment or exchange. The amount of money in circulation demanded by the society, in the form of currency plus the demand deposits, is called money supply in the narrow sense (M_1).The currency is a coin and banknotes in circulation in the community (outside the banking sector), while the demand deposits are the funds deposited in a current account or checking account balance. The money in circulation in the broad sense (M_2) is the sum of M1 and quasi money or the so-called economic liquidity. Economists state that the M_2or the economic liquidity reflects more public purchasing power. In table 1 the data on the money supply for the last 5 years is presented.

Table 1
Money in Narrow Sense (M_1) and Money in Broadest Sense (M_2)
in Indonesia during 2014-2018

Year	Currency (IDR billion)	Demand Deposit (IDRbillion)	Total of M_1 (IDR billion)	Growth of M_1 (%)	Quasy Money (IDR billion)	Total of M_2 (IDR billion)	Growth of M_2 (%)
2014	419.262	522.960	942.221	-	3.209.475	4.173.327	-
2015	464.534	585.960	1.055.440	12.01	3.479.961	4.548.800	8.99
2016	508.124	729.519	1.237.643	17.26	3.753.809	5.004.977	10.02
2017	586.576	804.231	1.390.807	12.37	4.099.996	5.419.165	8.27
2018	625.370	831.779	1.457.150	4.77	4.282.364	5.760.046	6.29

Source : *Bank Indonesia*, 2018 (data processed)

As shown in table 1 it can be narrated that the development of the number M_1 has fluctuated in which the highest number in 2016 reached 17.26 percent but in 2018 it fell to 4.77 percent, or in other words, it experienced gradual degradation of 12.49 percent. This is influenced by the lack of stability in the world economy which brings negative impacts so that public the demand for money is reduced, with an average of only 11.60 percent over the past five years. This implies that the amount of currency and demand deposits in the community is relatively quite low.The amount of M_2 (the money supply in the broad sense) also increased because of the large roles of quasi money large in the monetary sector. In 2016 M_2 developments experienced a fairly high increase and reached 10.02 percent due to the fact that people saved more money in the form of deposits or savings in banks, which is kwnon as near money or quasi money. This condition indicates that the circulation of the quasi money in 2017 is quite high, whereas in 2018, the M_2 only reached 6.29 percent, and that was the same as M1 which increased with the lowest number.

The money demand can be impacted by several macroeconomic variables such as national income, US dollar exchange rate, inflation, and interest rates. Encouraged by the economic conditions of developing countries, such as Indonesia which is very vulnerable to disequilibrium, in addition to Indonesia having experienced an economic crisis at the end of the 1997 decade, studies for forecasting the monetary conditions in developing countries are acuteconcerns to do. Even this is also undertaken by developed countries. For instance, Hwang (2010) conducted a study on the demand for money in Korea, and succeeded in revealing that in the long-run equilibrium, the real income of the community and the interest rate still influence the demand for money in the broad sense (M_2); while for the demand for money in the narrow sense (M_1) the variable had no significant effect. Thus, a special monetary phenomenon concerning the demand for money is interesting to study. The classification of macroeconomic magnitudes impacts the demand for money through various theoretical studies, empirical studies, and data phenomena that have been foregoing carried out and has highlighted the importance of developing research models for the demand for money in Indonesia.

To be able todetermine the importance of the existence of the monetary sector in its relation to the demand for money in Indonesia, there is a need for the practice of conducting a scientific study which is expected to be a basic reference for policy making. This is where the up-to-date nature of the present study lies, supported by empirical data, entering external variables, and developing a dummy variable concept so that it is urgent, as a project that must be done to answer the subject matter. The main issues addressed are: 1) Dothe gross national product (GNP), inflation, deposit interest rates, US dollar exchange rates, and the monetary crisis simultaneously influence the demand for money in Indonesia? 2) How do thegross national product (GNP), inflation, deposit interest rates, US dollar exchange rates, and monetary crisis influence the demand for money in Indonesia partially? Based on these issues, the objective to be achieved in this study is to comprehend in depth the influence of gross national product (GNP), inflation, deposit rates, US dollar exchange rates and the monetary crisis on the demand for money in Indonesia, both simultaneously and partially.

DATA AND METHODS

Types and Sources of Data

The data used in this study is secondary data sequential time from the period 1990: Q_1 to the period 2018: Q_4. Arguments using the 1990 period: Q_1 as the basic year of research, which is a period that is considered providing data availability and the number of minimum data requirements in testing data is a time series, whereas the period 2018: Q_4 is the last year with quarterly data available. The data used were obtained from Bank Indonesia and the Central Bureau of Statistics.

Model Specification

There are three basic rumors about the study of demand for money, both in developed and developing countries. The first is in respect to the interpretation of money; the second is pertaining to thenarrating variables; and the third is concerning the stability of the demand for money (Sidiq,

2005).This study makes use of the interpretation of money in the broad sense (M_2), national income, inflation, domestic deposit rates, exchange rates, and monetary crisis as the explanatory variables. By the opening of the Indonesian economy, the role of the rupiah exchange rate will be crucial in influencing the demand for money. In this study, the function of the demand for money in Indonesia is formulated with the following equation:

M_2 = f (GNP, Inf, IDR, Exchange Rate, KM) .... (1)

where, M_2 refers to the demand for money in the broadest sense, GNP stands for gross national product, Inf stands for inflation, IRD stands for interest rates on deposits, exchange rate refers to the exchange rate of the US Dollar against the Indonesian Rupiah, and KM represents the dummy variable, that is themonetary crisis in Indonesia.

This study looks at the application of the Ordinary Least Square (OLS) Econometric model or the smallest quadrant method on the demand for money in Indonesia with the effect of each explanatory variable, using the *Eviews 9.0* computer software application. Prior to testing the regression model, first several other tests are performed, namely testing the stationarity of data sequentially with stationarity test, co-integration test, and then the classical assumption test which includes multicollinearity, heteroscedasticity and autocorrelation tests so that the model meets the *Best Linear Unbiased Estimator* (BLUE).

The data analysis technique applied is linear Ordinary Least Square regression analysis with a semi log model that is specifically used to determine the effect of independent variables on the dependent variables with the following pattern.

$LY_i = \beta_0 + \beta_1 {}_LX_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_{4L}X_{4i} + + \beta_5 X_{Di} e_i$..............................(2)

Notes:

LY_i = Demand for Money (M_2) in 1990: Q_1 - 2018: Q_4

${}_LX_{1i}$ = *GrossNational Product* (GNP)

X_{2i} = Inflation

X_{3i} = Interest Rate of Deposit

${}_LX_{4i}$ = US Dollar Exchange Rate

X_Di = D = 0 ; Pre-monetary Crisis Period

= D = 1 ; Post-monetary Crisis Period

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression Coefficient

β_o = Intercept

e_i = erorr term

i = Observation – i

RESULTS AND DISCUSSION

Validity Test of Time Series

The testingof the validity of the data in this study needs to be done, which includes testing the stationarity and cointegration.

1)   Stationarity Test

Stationarity testingwas conducted to determine the nature of the data used in research, in which the data is expected to have a variance that is not too large and have a tendency to approach its mean value.

Table2
The Results of Stationarity Test UsingUnit Root Test

Variable	ADF value	McKinnon Critical Value			Notes
		1%	5%	10%	
LMD$_2$	-9.9046	-3.4885	-2.8869	-2.5804	Stationarity of order(1)
LGNP	-8.7155	-3.4885	-2.8869	-2.5804	Stationarity of order (1)
Inflation	-11.1309	-3.4885	-2.8869	-2.5804	Stationarity of order (1)
Deposit Interest Rate	-8.4638	-3.4885	-2.8869	-2.5804	Stationarity of order (1)
LExchange Rate	-10.5087	-3.4885	-2.8869	-2.5804	Stationarity of order (1)
Monetary Crisis	-10.6670	-3.4885	-2.8869	-2.5804	Stationarity of order (1)

Source: Results of Data Analysis, 2018

The results of data stationarity testing are shown in table 2. Through these results, it can be concluded that all data are in stationary conditions. This can be seen in the Augmented Dickey Fuller (ADF) value which is smaller than the McKinnon critical value at the 5 percent significance level.

2) Cointegration Test

Cointegration testing is very important to do in developing an econometric model. Thus the interpretation of the model will not be misleading. The results of cointegration test arepresented in table 3 which shows that the variable of demand for money is cointegrated with all the independent variables examined. This can be seen in the Likelihood Ratio values that are larger than the critical value at the 5 percent significance level.

Tabel 3
The Results of Cointegration Test Using Johansen Test between
Variable of Demand for Money (M$_2$) and Each Independent Variable

Independent Variable	Eigenvalue	Likelihood Ratio*	Critical Value 5%	Notes
LGNP	0.0412	17.5466	15.49	Lag interval of 1 to 4
Inflation	0.1299	18.5098	15.49	Lag interval of 1 to 4
Deposit Interest Rate	0.1408	21.0832	15.49	Lag interval of 1 to 4
LExchange Rate	0.0698	19.7824	15.49	Lag interval of 1 to 4
Monetary Crisis	0.1271	16.4336	15.49	Lag interval of 1 to 4

Source: Results of Data Analysis, 2018
NB: * Likelihood Ratio = *Trace Statistic*

Classical Assumption Test
1) Multicollinearity Test

The multicollinearity testing in this study was conducted using Klein test model, which compares lower cases (correlation between each independent variable), provided that if R^2 y Xi, Xj....Xn> r^2 Xi, Xj....Xn, then it can be concluded that the model does not have a multicollinearity problem. Based on the test output, it can be explained that the multiple linear determination coefficient (R^2 = 0.9609) is

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larger than the result of the coefficient of determination of all auxiliary regression for national income, inflation, interest rate of deposit, exchange rates and monetary crisis, with the value of R^2 for each variable independents amounted to 0.7540, 0.2348, 0.7548, 0.9004 and 0.9036. Thus it can be concluded that in the model the problem of multicollinearity does not exist.

2) Heteroscedasticity Test

Heteroscedasticity testing was done to find out whether there is variances in the model from one observation to another. In this study the heteroscedasticity testing wasundertaken by applying the Glejser test model, that is, by regressing the absolute value of the residual to the independent variables. If no independent variables has a significant effect on the dependent variables (residual absolute value), there is no heteroscedasticity. In table 4 the results of heteroscedasticity testing using the Glejser test are presented.

Table4

The Results of Heteroscedasticity testing (*Glejser Test*)

Dependent Variables	Significance
LGNP	0.3892
Inflation	0.0822
Deposit Interest Rate	0.1529
LExchange Rate	0.9187
Monetary Crisis	0.4706

Source : Results of Data Analysis, 2018

In table 4, it can be seen that neither the independent variables have significant effects on the dependent variables (residual absolute value), and thus, there is no heteroscedasticity, or in other words, the significance value of each dependent variable is larger than the real level at a 5 percent significancelevel. This implies that the research model does not contain heteroscedasticity problems.

3) Autocorrelation Test

The model used to determine whether or not there is problems in within the autocorrelation in this study is the *Langrange multiplier test*, that was carried out by comparing the (Obs *) R Square. The parameter is the (Obs *) R Square must be larger than the 5 percent significance probability, and then, it can be stated that problems within the autocorrelation of the model do not occur. In the research model the (Obs *) R Square value is 1.0388 and such value is larger than the real level, which is at 5 percent. This shows that the model used in this study does not contain autocorrelation problems.

OLS (Ordinary Least Square) Estimation Results

The model of analysisutilised in this study is multiple linear regression supported by the software program*Eviews 9.0*. The application of multiple linear regression analysis model is aimed at determining the effects of income, inflation, deposit interest rates, US dollar exchange rates, and monetary crisis on the demand for money in Indonesia in 1990: Q_1 - 2018: Q_4, both simultaneously and partially. The results of data analysis using the *Eviews* 9.0 program are presented in table 5.

Table 5
The Results of Model Estimation on the Demand for Money with OLS

Independent Variables	Regression Coefficient	t-*Statistic*	Probability
LGNP	1,221434	10,74451	0,0000
Inflation	-0,006042	-0,672214	0,5029
Deposit Interest Rate	-0,018814	-3,066463	0,0370
LExchange Rate	1,126732	10,34555	0,0000
Dummy	0,140170	3,844544	0,0027
Constant	0,861330	1,229026	0,0090
R Square	0,960990		
F-*Statistic*	541,9580		
Probability	0,00000		
Log Likelihood	-5,459042		
Schward Criterion	0,339997		

Source : Results of Data Analysis, 2018

Based on table 5, the following OLS regression equation is obtained:

$LYi = = 1,861330 + 0,221434 LX_{1i} + 0,006042 X_{2i} + 0,018814 X_{3i} + 1,126732 LX_{4i} + 0,140170_{Di} e_i$

....   (3)

Building upon the information presented in table 5, it can also be concluded that, simultaneously the gross national product (GNP) variable, inflation, deposit rates, the US dollar exchange rates, and the monetary crisis have a significant effect on the demand for money in Indonesia from 1990-2018. This is indicated by the significance value or probability value that is smaller than the real level, which is at 5 percent. Similarly, if the calculated F value is compared, that is (541.9580)> F table (2.30), it indicates that there is a positive and significant influence of the independent variables raised in this study on the demand for money in Indonesia with a 95 percent confidence level. Partially the gross national product(GNP) variable and the US dollar exchange rateshave a positive and significant effect on the demand for money (M_2) in Indonesia with a significance value that is smaller than the real level, at 5 percent; meanwhile, the variable of interest rate of deposits has a negative and significant effect on the demand for money. The inflation variable does not affect the demand for money (M_2) in Indonesia, whose significance value is greater than the real level, at 5 percent. The *dummy* variable, which has a significance value of 0.0027, is smaller than the real level at 5 percent. This shows that there is a difference in the condition of demand for money (M_2) in Indonesia, in which, in the post-monetary crisis period, the demand for money (M_2) is larger than that before the monetary crisis, with the rate of increase is $e^{0.140170} = 1,1504$ times compared to that in the period before the monetary crisis (euler = natural log number 2,718) Bendesa (2007).

The Simultaneous Effects of Gross National Product (GNP), inflation, deposit interest rates, US dollar exchange rates, and the Monetary Crisis toward the Demand for Money in Indonesia during 1990 -2018

The results of statistical analysis with *Eviews* 9.0 software summarized in table 5 can be concluded, namely that simultaneously the gross national product (GNP), inflation, time deposit rates, US dollar exchange rate and monetary crisis variables have a significant effect on the demand for money in Indonesia which can be explained through the F count value, which is (541.9580)> F table (2.30) and the sig value, which is 0.0000 <0.05 of the real level with a confidence level of 95 percent. This result is supported by the coefficient of determination (R^2) of 0.9609 which means that 96.09 percent of the variation in demand for money in Indonesia is explained by the gross national product (GNP), inflation, time deposit rates, US dollar exchange rates and monetary crisis, while the frequency, 3.91 percent, is explained by other factors that are exluded from the estimation of the research model.

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The Effect of Gross National Product (GNP) on the Demand for Money during Indonesiain 1990 - 2018

The gross national product (GNP) coefficient value is 1.2214. The positive value of the coefficient indicates that if an increase in income occurs, and it will cause an increase in demand for money, or in other words if the national income rises by 1 percent ceteris paribus, an increase in demand for money of 1.2214 percent will be triggered and when viewed from the dimension of elasticity, the national income variable is elastic, because the increase in demand for money that exceeds one unit will cause the national income to get increased. This increase will be immediately responded by the increasing demand for money. This is in accordance with the theory that classical and Keynes argued that the demand for money is positively influenced by income. The increase in the community income results in increase in the level of their needs, and therefore the demand for money is also increasing to meet their needs, besides because money is also utilisedfor speculation.

Inflation Does Not Have Impacts on the Demand for Money in Indonesia during 1990 - 2018

The inflation coefficient is minus 0.006042 and shows that if an increase in inflation of 1 percent occurs, it will result in a decrease in demand for money in Indonesia by 0.006042 percent, with the condition that other variables used in this study are assumed to be unchanged. When tested partially by comparing the value of t count with t table, the value of t count is obtained, that is (-0.6772) <t table of (1,658). The results obtained in this study are not in accordance with the theory which suggests that there is a positive and real influence between inflation and demand for money. This is because at 116 observation data in the 28 years, the inflation rate in Indonesia is still relatively stable and is included in the level of intermediate inflation which does not adversely affect the Indonesian economy. In addition, the inflation rate which is the controlling target of the monetary situation in Indonesia has been able to be suppressed by Bank Indonesia as a monetary authority with various monetary policies that have been implemented. Inflation will have a positive and significant effect on the demand for real money in a country if in that period hyperinflation occurs, like that happened in Peru. In the case of Peru, *seigniorage* might have come to the root of the nation's problems which caused inflation. Peru's quarterly budget data between 1979 and 1991 showed that the country experienced a majority budget deficit for this period. At the same time, money in circulation began to grow rapidly because the government was printing money. The reflection of this fact is that real money balances fall along hyperinflation. The results of this study indicate that a change in the inflation rate only causes (albeit important) a decrease in the balance of real money in small amounts in the short term (it is above the three-month period). Changes in the inflation rate caused by a setback in the balance of demand for real money can be considered, because during this time there is no luxury that can be done easily, namely by exchanging their currencies for some assets that produce other interests. The findings of this study are in line with the research conducted by Murjani (2007).

The Effect of the Level of Interest Rate of Deposits on the Demand for Money in Indonesia during 1990 - 2018

The coefficient value of the Deposit Interest Rate is minus 0.018814. This interprets that if the increase in the deposit interest rate by 1 percent occurs, it will result in a decrease in the demand for money in Indonesia by 0.018814 percent, assuming that the other variables used in this study are constant. If tested partially by comparing the value of t count with t table, the value of t count is obtained, namely (-3.0664) <t table of (1,658). Such value shows that the deposit interest rate has a negative effect and is significant at the 5 percent level. In other words, any increase in the rate of deposit rates will encourage individuals to save their money in financial institutions, given the existence of revenue derived from an increase in the interest rate. In addition, according to Cambridge theory, if the interest rates rise, individuals will be encouraged to reduce the money they want to use, even though their transactions remain. This is because cash has an opportunity cost of holding money,

so that when interest rates rise, individuals will save their money in financial institutions, because it is more profitable than holding the cash (Widodo, 2015). The findings of this study confirm the results of research conducted by Nakanishi et al. (2013) and Widodo (2015).

The Effect of US Dollar Exchange Rates on the Demand for Money in Indonesia during 1990 – 2018

The coefficient value of the US dollar exchange rate is 1.1267, with a significance level of 5 percent. This condition indicates that if an increase in the exchange rate by 1 percent occurs, the demand for money in Indonesia will increase by 1.1267 percent assuming ceteris paribus. The positive exchange rate coefficient shows a linear direction or relationship with the demand for money, which means that if the rupiah exchange rate depreciates against the US dollar, it will affect the price of imported products and when the rupiah exchange rate is depressed, it will be significantly impacting the soaring prices of the imported goods which will then increase the demand for money to carry out import transaction activities. The results of this study are in line with the results of the researches conducted by Widodo (2015), Setiadi (2013), and Lungu et al. (2012). When viewed from the side of elasticity, the national exchange rate variable is elastic, because an increase in the demand for money that exceeds one unit will cause changes in exchange rates which tend to increase. This increase will be immediately responded by an increase in demand for money.

The Effect of the Monetary Crisis on the Demand for Money in Indonesia during 1990 – 2018

Natural log estimation value (e = 2,718) indicating means that e 0,140170 = 1,1504 times than before the monetary crisis, implies that the demand for money (M_2) in Indonesia after the monetary crisis is higher at 1,1504 times compared to that in the period before the monetary crisis, assuming that the other independent variables were constant. Statistical tests show that partially the monetary crisis has a positive and significant effect on the demand for money (M_2) at the 5 percent real level. The results obtained about the influence of the monetary crisis on money demand (M_2) in Indonesia are in accordance with the theory which states that the relationship that occurs is a positive relationship. During the crisis, the increase in the amount of money was quite rapid and the increasing desire of the people to hold cash, which was caused by the loss of public confidence in the banking system with the rush (large-scale simultaneous withdrawals by the public) occurred in various banks throughout Indonesia. Meanwhile, the increase in M_2 occurred due to an increase in quasi money consisting of rupiah deposits and foreign exchange deposits (Darmansyah, 2015). One of the the leading factors of the economic crisis that occurred in Indonesia was the process of integrating the Indonesian economy into the rapid global economy. Another factor that also played a role in triggering the crisis was the weakness of economic micro fundamentals reflected in the fragility of the national financial sector, particularly the banking.

CONCLUSIONS AND POLICY IMPLICATIONS

Gross national product, inflation, deposit interest rates, US dollar exchange rates, and monetary crisis simultaneously have a significant effect on the demand for money (M_2) in Indonesia during 1990: Q_1 - 2018: Q_4. The gross national product and the US dollar exchange rates partially have a positive and significant effect on the demand for money (M_2), while the deposit interest rate has a partially negative effect on the demand for money (M_2). The variable of inflation has no effect on the demand for money in Indonesia during 1990: Q_1 - 2018: Q_4. The demand for money (M_2) in Indonesia after the monetary crisis was greater than that in the period or year before the monetary crisis took place.

In setting the policies to create a stable economy, policy makers (government and monetary authorities) should undertakethe steps to keep the amount of cash circulating in the community not too excessive. The affairs that can be done to overcome the high inflation is to reduce the money supply by increasing the savings and deposit rates. In addition, the government necessarily also needs

to maintain the stability of the currency exchange rates so that people do not make excessive speculation, and maintain the economic and political security and stability, so that people have confidence and comfort in the patterns of holding money. Other researchers who are willing to explore the problems of the demand for both M_1 and M_2 money can decompose the effects of the gross national product (GNP), inflation, the US dollar exchange rates, and the monetary crisis.

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