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THE INFLUENCE OF FOREIGN EXCHANGE RESERVES, EXPORTS, IMPORTS, INFLATION, GROSS DOMESTIC PRODUCT (GDP) AND MONEY SUPPLY ON EXCHANGE RATES IN ASEAN COUNTRIES

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ABSTRACT

The exchange rate for each country is very important because the stronger the exchange rate of a currency in a country, it indicates that the level of the economy in the country concerned has increased and is good. how and whether foreign exchange reserves, exports, imports, inflation, GDP, and money supply can affect the exchange rate in 11 ASEAN countries. This study aims to analyze how the effect of foreign exchange reserves, exports, imports and also inflation on exchange rates in the country, the results of this study are generated from processing using panel data with 20 years of data from 2003-2022 and 11 ASEAN countries. In this study, the method we used to support the creation of this research is a quantitative method with panel data and multiple linear regression approaches where in this study using data - data that has been hung with panel data models used to support the results of this study. The results of this study indicate that the best model is the Fixet Effect estimation and the test results of the foreign exchange reserve variable (X1) has a negative insignificant effect, the export variable (X2) is negative significant, the import variable (X3) is positive significant, the inflation variable (X4) is insignificant, GDP (X5) is negative significant and the money supply variable (X6) has a significant effect on exchange rates in ASEAN countries.

Keywords: Foreign exchange reserves, exports, imports, exchange rate, GDP, money supply.

INTRODUCTION

ASEAN is a country whose economy refers to an open economy where countries participate in export activities, imports with other countries where each country has and uses a means of exchange for the comparison of the value of one country's money to another to facilitate these activities, this comparison is called exchange rate. Which exchange rate is one of the references to economic development in the international market in each country. The exchange rate is a currency value that is applied for current payments and even for the future. When the exchange rate is strengthening, it also has a positive and negative impact. The positive impact is that when buying foreign products, the price will be cheaper. However, the negative impact is that shipping value decreases because Rupiah strengthens. An exchange rate that is too low will be bad for a country and will cause an economic crisis.

The exchange rate can impact the level of transparent economic proposals. because when the value appreciates, the value of foreign products can decrease and the total imports and exports will decrease. Meanwhile, when the value of the currency depreciates, foreign goods will look more expensive and will reduce the level of imports but the level of exports will increase because domestic goods will look cheaper.In order for the economy in a country to stabilize, each country is usually competing to make their currency exchange rate stronger because this indicates that the country's economy has increased and this affects the country's economic sustainability for the future.

Exchange movements in foreign countries are reflected in the availability of foreign exchange, targeted to make government activities run smoothly as well as market intervention, resulting in an increase in exchange prices. will be stable. The higher the foreign exchange reserves, the more stable the currency value tends to be (Utami and Islami, 2021). A balanced value shows that the country is in good condition. The greater the exchange rate, the stronger the economy, the higher the availability of foreign exchange. This high level shows that the country has expertise for the international economy (export) and financial transactions. Foreign exchange reserves are foreign currency, deposits and foreign bonds held by the Central Bank and monetary authorities of a country (Saibuma et al., 2022)

The effect of the the level of inflation in the exchange rate is translated (PPP). Absolute PPP is said by exchange agencies to show that the

value of a product is not the same between several countries. If the comparison of values is in harmony, then the proponent changes and the value decreases. (Noor, 2011).

The amount of GDP movement also affects the exchange rate, if the excessive amount of GDP marketed to the public can cause the price of goods to be cheaper and people flock to consume these goods and the more money in circulation can result in exchange conflicts between countries whose value shrinks. GDP is the number of goods and services obtained goods since 1 year.

Monetary considerations require primarily the function of the total funds existing in the country's economy. More money coming into the economy can share its value exchange demands of its currency against foreign currencies. Differences in the level of national income in two countries can have a significant impact on export transactions, imports of goods, and asset transactions between the countries concerned (Rofi'i, 2023). Here, The total existing funds consist of all residents, not counting the amount of money in banks. an increase in the total funds distributed among citizens to increase their demand of both domestic and foreign goods (Adhista, 2022) which if the money supply is excessive will cause prolonged inflation. Problems regarding exchange rates are often associated with monetary policy, which is called expansive & contractionary monetary rules. expansive type is carried out by the government when the economy is experiencing a recessionary situation, then the government with this policy will try to increase the money supply in society.

A country will face a series of problems, one of which is related to economic stability. This problem is not limited to a single country, but is a recurring problem on a global scale. The factors that affect economic stability vary from country to country and these variables can greatly affect the fluctuations experienced in the economy. The impact of economic stability issues in a particular country can have on other countries as well. For example, in the United States in 2018, there was a housing crisis that caused a global economic crisis. The failure of housing investments in the United States that could no longer operate ultimately affected various economies around the world.

Some researchers try to see what factors can affect the exchange rate including (Noor, 2011) showing the results of foreign exchange has no effect, the higher the exchange rate, the higher the exchange rate greater the economic growth due to the availability of foreign exchange. And also research conducted by (E Diah Lufti Wijayanti et al., 2022) explains that Indonesia's foreign exchange has an impact on normal value, study Farina and Husaini, (2017) shows if delivery has an effect on exchange rates in ASEAN, these results indicate that the value of exports does not contribute much to the exchange rate.

Then an assessment (BR Silitonga et al., 2019) if the shipment has an adverse effect on the exchange. through (N. Dewi, 2020) Sending has no effect on the exchange. not only shipments that have an exchange effect but external shipments too. then study (BR Silitonga et al., 2019) inflation has a bad effect. where if everything goes up everything goes up and vice versa. in line with the study (Diana and Dewi, 2019) if inflation has no exchange effect. However, according to (N. Dewi, 2020) which states that the results of his research inflation affects the exchange rate negatively.

Research conducted by researchers (Jaya, 2018) which states that GDP no effect of causal exchange due to the continuous demand for imported technology that causes the demand for foreign money to increase, this encourages the exchange rate use on dollars. inconsistent with the study (Wilya, 2015) which states that Domestic gross goods dominant effect on exchange. as well as studies (Adhista, 2022) if JUB has an the impact on the exchange of results is due to the effects that follows the movement of the increase or decrease in the amount of money beredar. As with the research (Viphindratin et al., 2017) which also if the total existing funds have a sufficient effect on the exchange rate.

In this research test, all ASEAN countries are the main destination focus, namely Brunei Darussalam, Indonesia, Laos, Cambodia, Myanmar, Malaysia, Singapore, Philippines, Vietnam, Thailand and Timor Leste because this ASEAN country has an average position as a developing country, only one of which has become a developed country, namely Singapore. In this ASEAN country, trade activities are still active and very easy to rise and fall in stability which can later be influenced by the level of exchange rates.

In this study, the problems can be formulated, namely whether foreign exchange reserves, exports, imports, inflation, GDP, and money supply can partially affect the exchange rate in 11 ASEAN countries? whether foreign exchange reserves, exports, imports, inflation, GDP, and money supply can simultaneously affect the exchange rate in 11 ASEAN countries?

The benefits of this research are to add insight into thinking, increase knowledge and for future reference and it is also hoped that this research can become a foundation or basis for further research.

Exchange Rate

Aligned to spending parity theory introduced by Gustav Cassel. The basic theory is that the proportion of the value of one cash to one that cannot be determined by the influence of the direct purchase of cash it applies to labor and also products that exist in each country concerned, the main attribute of this exchange scale hypothesis is a trade good that has a homogeneous nature and also the price of non-trade goods that can be flexible. There are also no barriers to international trade, transportation costs are not large, and inflation measures are comparable.

Therefore, each country has prices that are not the same as each other, even the purchasing power is basically for merchandise that is exchanged starting with one value of money then to the next cash value. describes when the exchange rates based on capital flows and capital markets.

Exchange in the form of unity between countries is not the same in each country and is determined by promotions and proposals, and can also be used as a measuring medium. the state a country if its economy is balanced or not. (Aulia dan Masbar, 2016).

Foreign exchange reserves

Keynes' liquidity preference theory, which he proposed in 1936. The central bank uses foreign exchange reserves, among others, for macroeconomic purposes, namely the exchange thought process of incorporating import exchange funding completed by public authorities to help progress interactions, exchange rate management is the reason for precaution, and the fulfillment of wealth diversification requirements (getting returns from investment activities by using foreign exchange reserves) is the motivation behind speculation (Aulia and Masbar, 2016).

foreign exchange in the form of bank accumulation funds in foreign money well as securities, external assets that meet the following requirements: They are explicitly liquid, fixed in a major unrecognized monetary standard, overseen by money-related specialists, and can be used quickly to settle global exchanges. These Foreign exchange is used by banks to pay for transfers between countries parties, this can be understood as the need for individuals to hold cash, for one of the transaction motives, precautionary motives and even speculation motives (Aulia and Masbar, 2016). Foreign exchange is used as an element of observing whether The resilience of the economy is observed by its marketing reach where in its management Bank Indonesia can make payments that can obtain loans (Wisnu, 2019).

Export and Import

Export is a sale of goods or services outside the country which uses a sales system, quality, quantity with terms agreed upon by both parties, the export of goods or services is also one of the superior international trade where this export can influence and see how a country develops its economy (BR Silitonga et al., 2019). The activity of exporting goods or services is one of marketing domestic products, the work of the nation's children who are worthy of consumption not only at home but also abroad. Not only does it affect the country's currency, this activity also affects foreign exchange payments in the form of additional willingness and state revenue, even expanding employment opportunities for the community (Farina and Husaini, 2017).

Import namely the purchase of services and goods between countries using an agreement. This import activity is usually determined by how capable a country is which is determined by its national income, and the lower the country's ability to produce goods or services needed by the community, the higher the interest in buying goods from abroad to meet the needs of the community (Dananjaya et al., 2019).

Inflation

This was introduced by Irving Fisher, explaining that the total existing funds determine the existing value level as well as the development of the total existing funds to determine the value level. of inflation. According to Keynes inflation occurs because people tend to have a demand that exceeds the amount of money available, it can be interpreted that most people want to live more above average to exceed their income and economic capabilities.

Inflation is an event where the value experiences a periodic increase goods in one period. With the fluctuation of this inflation, it causes uncertainty for the welfare of the community and even results in a decrease in the community's day to day purchase of goods or services (Ilmas et al., 2022). Even this inflation if continuously in a country experiencing inflation then the result is weakening the economy and even impoverishing a country, therefore every country must issue the right policies in order to control inflation in their country. Inflation is one indicator that shows government policies are monetary, fiscal or other (Muchiri, 2017).

Gross Domestic Product

According to Robert M. Solow's neo-classical theory requires goods activities carried out by individuals, total capital, use of technology and its acquisition. Through apridar GDP or GDP is all marketing of services and goods resulting from the production of a country, be it by domestic or foreign companies as long as they are still operating in the country and within a certain period. GDP is the price of all services and goods produced in a country in 1 year where GDP is the main element for measuring the health of the economy and can show the ability of customers to finance the various services and products needed to be delivered.

In aggregate, macroeconomic growth for a country's region is indicated by the level of gross domestic product (GDP) achievement. GDP is an increase in the aggregate of services and goods obtained by each sector through business in a country. It is calculated in 3 ways: expenses, income and production. services and goods that are elements of GDP are those used by final customers.

Money supply

The total available funds dominant role in the economy. The dominant total money in a country can share the value that is suppressed by the exchange rate. an increase in total existing funds can increase the value of foreign exchange which is measured in national money (Musyaffa' and Sulasmiyati, 2017). Traditional economics describes funds as a medium of exchange that includes any object. However, modern economics describes funds as a medium that exists to provide transactions for services and goods.

According to Keynes, The total available funds impact normalcy market and will determine the interest rate. In this study, Keynes' theory of the amount of money demand is taking from the theory of 'money demand', namely the amount of money requested by the public for transaction needs, just in case and for speculation in the economy (Hasoloan, 2014). Definition of money according to the level of liquidity is divided into:

- M1 is the currency in the community plus demand deposits. M1 deisebut also called The total funds available are short funds.
- M2 is M1 plus savings deposits and time deposits at commercial bank institutions. M2 is known as broad money.
- M3 is M2 plus deposits at non-bank institutions. All deposits in banks and non-bank financial institutions are known as quasi money.

RESEARCH METHODS

This research uses quantitative research that plays a role and targeted at analyzing the effects of foreign exchange, exports, imports, inflation, GDP and also the money supply on exchange rates in ASEAN countries. This quantitative method itself is a study that uses a lot of numbers in it by collecting data. The purpose of quantitative research promises reliable information to control and anticipate events. This research design will involve the collection of secondary data from various relevant sources such as wordbank. The data that will be used is using the time span of the last 20 years starting from 2003-2022. In collecting data, the accuracy of the data used will be considered through the Panel data model. Panel data is in the form of a cross section & time series collaboration (Caraka, 2017).

The population in this analysis is 11 Asean of Brunei Darussalam, Indonesia, Laos, Cambodia, Myanmar, Malaysia, Singapore, Philippines, Vietnam, Thailand and Timor Leste which are relevant in foreign exchange reserves, exports, imports, inflation, GDP and also total funds available at the exchange price. While the sample of this analysis is using the last 20 years of data in each of the 11 countries. The information used by state economies and world banks from 2003-2022. The purpose of collecting data is to collect literature related to the formation of targeted studies in order to obtain analytical methods for dealing with conflict. Information gathering is obtained from the world bank and country economy.

While the independent variable is given the notation X:

$$\ln Yt = \beta 0 + \beta 1X1t + \beta 2X2t + \beta 3X3t + \beta 4X4t + \beta 5X5t + \beta 6X6t \, et$$

Y = exchange rate
X1 = foreign exchange reserves
X2 = exports
X3 = import
X4 = inflation
X5 = gdp
X6 = money supply

Regression is a pattern used to observe the impact between elements. Panel data is in the form of cross data collaboration and time series (Prawoto, 2019).

1. **Common effect model (CEM)**

in the form of a concise pattern that combines both data.

2. **Fixed effect model (FEM)**

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To estimate it, use a dummy method to obtain an intercept ratio.

3. Random effect model (REM)

to predict data related to periods and individuals.

In data processing based on panel data regression, there are several data tests in it, namely:

1) Chow test

in the form of observing the optimal FEM pattern rather than CEM. use a hypothesis: H0 : $\alpha 1 = \alpha 2 = ... = \alpha K = \alpha$ (CEM Model) H1: there is at least one intercept $\alpha i \neq \alpha$ (FEM Model); i = 1,2, ..., K (Sudarno & Ula, 2016).

2) Hausman test

used to observe the optimal pattern between FEM & REM.

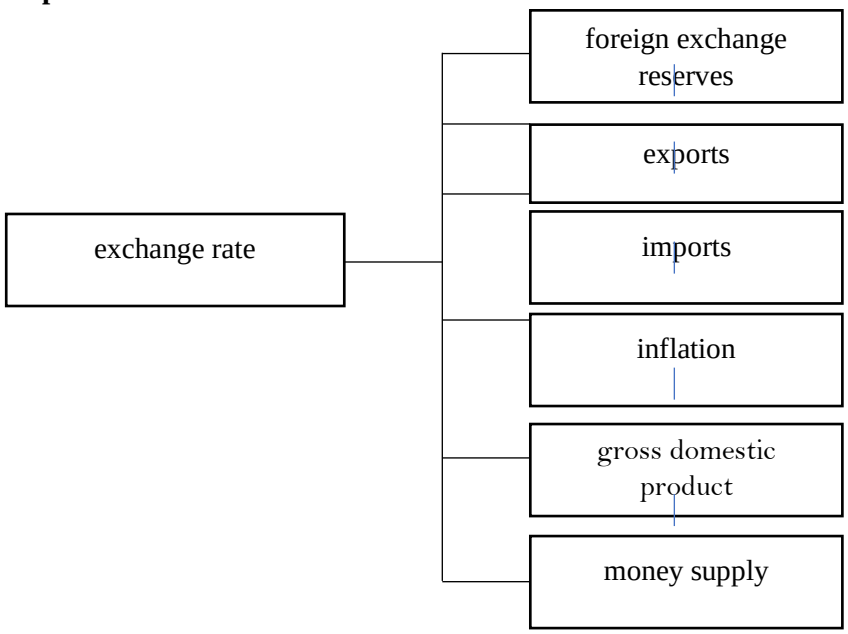
3) Breusch-pagan test (Lagrange Multiplier test)

in order to determine the optimal pattern between CEM & REM, by testing the difference in values..

The hypothesis used:

H0: (CEM model is better)
H1: (REM model is better)

Conceptual framework



DISCUSSION

In data processing with the technique used, namely regression, this panel data has 3 alternative models of methods, namely where there is common effect (CE), fixed effect (FE), and also random effect (RE). therefore, for us to be able to find out which model is the best in processing or testing of this panel data by conducting a test first. Therefore the results of the output of this panel data can be seen as follows .

1. UJI Common effect model (CEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.519314	1.129285	1.345377	0.1800
LOGX1	-0.105199	0.103567	-1.015759	0.3110
LOGX2	-0.377133	0.093383	-4.038552	0.0001
LOGX3	0.341880	0.149668	2.284260	0.0234
LOGX4	-0.164401	0.073638	-2.232570	0.0267
LOGX5	-0.977405	0.139247	-7.019220	0.0000
LOGX6	1.055357	0.023278	45.33663	0.0000

Root MSE	0.954970	R-squared	0.937834
Mean dependent var	4.812839	Adjusted R-squared	0.935960
S.D. dependent var	3.839455	S.E. of regression	0.971621
Akaike info criterion	2.813687	Sum squared resid	187.8653

Schwarz criterion	2.926770	Log likelihood	-282.8098
Hannan-Quinn criter.	2.859422	F-statistic	500.3504
Durbin-Watson stat	0.228493	Prob(F-statistic)	0.000000

2. UJI Fixed effect model (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.195432	2.577652	-2.015568	0.0453
LOGX1	-0.173546	0.092481	-1.876552	0.0621
LOGX2	-0.323001	0.127721	-2.528965	0.0123
LOGX3	0.558309	0.204928	2.724414	0.0070
LOGX4	0.012044	0.067342	0.178850	0.8582
LOGX5	-0.331398	0.264305	-1.253849	0.2114
LOGX6	0.565185	0.161648	3.496406	0.0006

Effects Specification

Cross-section fixed (dummy variables)

Root MSE	0.735442	R-squared	0.963130
Mean dependent var	4.812839	Adjusted R-squared	0.960009
S.D. dependent var	3.839455	S.E. of regression	0.767805
Akaike info criterion	2.388358	Sum squared resid	111.4202
Schwarz criterion	2.662989	Log likelihood	-229.0009
Hannan-Quinn criter.	2.499428	F-statistic	308.5716
Durbin-Watson stat	0.319353	Prob(F-statistic)	0.000000

3. UJI Random effect model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.572969	1.747190	-0.327937	0.7433
LOGX1	-0.207042	0.089237	-2.320133	0.0213
LOGX2	-0.292483	0.110026	-2.658314	0.0085
LOGX3	0.381747	0.168279	2.268537	0.0244
LOGX4	-0.002046	0.063051	-0.032454	0.9741
LOGX5	-0.847128	0.189057	-4.480805	0.0000
LOGX6	0.990557	0.043696	22.66915	0.0000

Effects Specification

	S.D.	Rho
Cross-section random	0.484733	0.2850
Idiosyncratic random	0.767805	0.7150

Weighted Statistics

Root MSE	0.783580	R-squared	0.739111
Mean dependent var	1.622750	Adjusted R-squared	0.731245
S.D. dependent var	1.506484	S.E. of regression	0.797243
Sum squared resid	126.4835	F-statistic	93.96261
Durbin-Watson stat	0.308969	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.933370	Mean dependent var	4.812839
Sum squared resid	201.3563	Durbin-Watson stat	0.194081

After implementing this information management, the optimal model is through the Chow Test and Hausman Test

I. UJI CHOW

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.967237	(10,189)	0.0000
Cross-section Chi-square	107.617798	10	0.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.519314	1.129285	1.345377	0.1800
LOGX1	-0.105199	0.103567	-1.015759	0.3110
LOGX2	-0.377133	0.093383	-4.038552	0.0001
LOGX3	0.341880	0.149668	2.284260	0.0234
LOGX4	-0.164401	0.073638	-2.232570	0.0267
LOGX5	-0.977405	0.139247	-7.019220	0.0000
LOGX6	1.055357	0.023278	45.33663	0.0000

Root MSE	0.954970	R-squared	0.937834
Mean dependent var	4.812839	Adjusted R-squared	0.935960
S.D. dependent var	3.839455	S.E. of regression	0.971621
Akaike info criterion	2.813687	Sum squared resid	187.8653
Schwarz criterion	2.926770	Log likelihood	-282.8098
Hannan-Quinn criter.	2.859422	F-statistic	500.3504
Durbin-Watson stat	0.228493	Prob(F-statistic)	0.000000

Hypothesis
H0 = the Ce model is more suitable
H1 = Fe model is more suitable
H0 is rejected if probability <0.05
Information

observed Prob.F can be obtained of 0.0000. the refore it can be seen that this value is smaller than 0.05, therefore from this test it can be decided that H0 is rejected H1 is accepted. in conclusion from these tests the FE model is much more suitable or more appropriate to use than the Ce model

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II. UJI HAUSMAN

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	21.557999	6	0.0015

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOGX1	-0.173546	-0.207042	0.000590	0.1677
LOGX2	-0.323001	-0.292483	0.004207	0.6380
LOGX3	0.558309	0.381747	0.013678	0.1311
LOGX4	0.012044	-0.002046	0.000560	0.5514
LOGX5	-0.331398	-0.847128	0.034114	0.0052
LOGX6	0.565185	0.990557	0.024221	0.0063

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.195432	2.577652	-2.015568	0.0453
LOGX1	-0.173546	0.092481	-1.876552	0.0621
LOGX2	-0.323001	0.127721	-2.528965	0.0123
LOGX3	0.558309	0.204928	2.724414	0.0070
LOGX4	0.012044	0.067342	0.178850	0.8582
LOGX5	-0.331398	0.264305	-1.253849	0.2114
LOGX6	0.565185	0.161648	3.496406	0.0006

Effects Specification

Cross-section fixed (dummy variables)

Root MSE	0.735442	R-squared	0.963130
Mean dependent var	4.812839	Adjusted R-squared	0.960009
S.D. dependent var	3.839455	S.E. of regression	0.767805
Akaike info criterion	2.388358	Sum squared resid	111.4202
Schwarz criterion	2.662989	Log likelihood	-229.0009
Hannan-Quinn criter.	2.499428	F-statistic	308.5716
Durbin-Watson stat	0.319353	Prob(F-statistic)	0.000000

Hypotheses
H0 = Re model is more suitable
H1 = Fe model is more suitable
H0 is rejected if probability <0.05
Information

observed Prob.F is 0.0015. And this value is smaller than 0.05, so therefore from this test it can be decided that H0 is rejected H1 is accepted. in conclusion from this test the FE model is much more suitable or more appropriate to use compared to the RE model**.**

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Hypothesis test
Fixed effect model estimation

Variables	Coefisien	Probabilitas
Exchange rate	-5.195432	0.0453
Foreign exchange reserves (X1)	-0.173546	0.0621
Export (X2)	-0.323001	0.0123
Import (X3)	0.558309	0.0070
Inflation (X4)	0.012044	0.8582
GDP (X5)	-0.331398	0.2114
Money supply (X6)	0.565185	0.0006
Prob F(statistic)	0.00000	
R square	0.963130	

T-test

In data processing, The results of the test are used to observe independent variables that can also influence the dependent, through FE test table above, it produces the following discussion. In the test results above, significant and insignificant data are obtained, if significant, it means that the data affects the dependent variable, namely the exchange rate, Significant when variable X changes, variable Y will also change. If it is not significant, it means that when variable X changes, there will be no effect on variable Y. Based on the FE test table above, it produces the following discussion.

Through data processing that has been tested, the probability of foreign exchange reserves (X1) is 0.0621, it can be taken H1 decision is rejected and it is also decided to accept H0. With this In conclusion, foreign exchange has an effect. where the value increases then the availability also increases. also increase or what is also called appreciation in each country, which means that this foreign exchange reserve affects every exchange rate movement in every country in ASEAN.

Through of data processing obtained, the prob value of the export variable (X2) is 0.0123, a decision can be made for H1 to be accepted and also decided to reject H0. Thus, The conclusion is that exports have an exchange effect rates in the relevant ASEAN member countries. In accordance with the theory of balance of payments, exports are often a factor that can drive up and down the exchange rate through value. the increase is experienced by a depreciation of value.

Through of data processing that has been tested, the probability of imports (X3) is 0.0070, In conclusion, H0 is rejected & H1 is accepted. In conclusion, imports have an effect on exchange. imports because it has a very strong relationship complicated because each country's exchange rate when this activity occurs involves two different currencies.

Through of the data obtained, the prob value of the inflation variable (X4) is 0.8582 and it can be decided to reject H1 and also to accept H0. Therefore, The conclusion is that inflation has no effect exchange rates in ASEAN countries. This is because the external pressure is so strong, all Asian currencies weakened in front of the US dollar. Not only Asia, the dollar also strengthened globally. Based on the theory of purchasing power parity (PPP), it can be seen that a high level of inflation will cause shrinking exchange.

Through of the data obtained, the prob value of the GDP variable (X5) is 0.2114 and it can be decided to reject H1 and also to accept H0. Therefore, conclusion GDP has an exchange effect rates in ASEAN countries. This is because there are stronger factors that affect changes in exchange rates resulting in no significance.

Through of the data processing that has been tested, the probability of money supply (X6) is 0.0006, the decision H0 is rejected and it is also decided to accept H1. With this The conclusion is that imports have an exchange effect rates in ASEAN countries. Money supply growth reflects healthy real economic growth, the exchange rate may not be affected or even strengthen. An increase in the money supply in line with economic growth can indicate stability and confidence in the economy, which can support the currency.

F Statistical Test

The test is used to observe the effect between elements if the F prob does not reach 0.05 and <0.05. from finding that Prob F is 0.00000 below 0.05, H0 is rejected & H1 is accepted. Independent conclusions have dependent effects.

From The results use panels that have already been implemented, it shows that the best

model is Fe. This is because the Fe model is a model that often appears in several tests that have been carried out.

DISCUSSION OF RESEARCH RESULTS

The effect of foreign exchange reserves on exchange rates in ASEAN countries

From some of the tests above, it shows that the results of the level of foreign exchange has an adverse effect on exchange. in line with the study (Hasyim, 2019) about the analysis of factors affecting changes in exchange rates which state. (E Diah Lufti Wijayanti *et al.,* 2022) about the analysis of which is the good effect of foreign exchange on exchange.

Effect of export value on exchange rate in ASEAN countries

From the results of data processing and analysis above, it shows that the value of exports to exchange rates in ASEAN has a significant negative effect, this is in line with previous research. *(BR Silitonga et al.*, 2019) which states that his research has a negative effect where the increase in export changes results the exchange rate is pressed against the US dollar. Exports impact value exchange, in line with transaction balance theory, shipping is always an element that can decrease and increase value exchange between countries. an increase in marketing has the potential to experience a fractional depreciation of funds. but the exchange rate in ASEAN countries is able to influence the level of exports, this goes with research from researchers (Sabtiadi & Kartikasari, 2018) which states that national exports no effect (USD exchange rate).

Effect of import value on exchange rate in ASEAN countries

From some of the tests above, it shows that the results of **the** import level has an impact on and does not have an impact on entry into exchange rates and exchange rates ASEAN. This result is supported by previous research from (Farina & Husaini, 2017) explains whether shipping has an impact on exchange value variable. And this research is inversely proportional to research (E. R. Dewi, 2022) explained that shipping had adverse effect on exchange, this is because if the impoe value rises, it results in not only one good shopping need but all components increase.

The effect of inflation on exchange rates in ASEAN countries

Based on the panel data testing above, it shows that inflation no exchange effect, harmonious (Diana & Dewi, 2019) about the analysis of elements that have an effect on the exchange of dollars for rupiah, it shows that inflation has no effect on the exchange. However, this research is inversely proportional to research from (Wilya, 2015) Inflation causes a reduction in goods that can be purchased and a reduction in the amount other values found. aligned the rupiah to depreciate due to inflation which will affect the decline in the exchange rate.

The effect of GDP on exchange rates in ASEAN countries

Based on panel data processing testing as above, it shows that the amount of GDP It has a negative impact on exchange, according to research (Jaya, 2018) which states that GDP no exchange effect. This research is inversely proportional to research (Wilya, 2015) if gross domestic goods are in effect exchange rate. And also inversely proportional to research (E. R. Dewi, 2022) that the Gross Domestic Product good effect on exchange. This is equivalent to the value of GDP because the value of GDP itself is the value of all goods contained in Indonesia on an economic basis, so if GDP rises, the exchange rate will also rise.

The effect of JUB on exchange rates in ASEAN countries

Based on the panel data processing test above, it shows when existing funds have an effect on the exchange. in line with the study (Adhista, 2022) if JUB has an exchange effect. in line with the study (Viphindratin et al., 2017) describes the total funds available for exchange securities.

CONCLUSIONS

This gain relating to foreign exchange reserves, exports, imports, inflation, GDP and also the money supply (JUB) in asean. it can be concluded that

Simultaneously, the (X1) effect on (X2) is negatively significant, the import variable (X3) is positively significant, the (X4) is insignificant, the (X5) is negatively significant and (X6) has a significant effect on the exchange rate in ASEAN countries.

simultaneously or F test, fellow shares the effect on the bound (dependent).

And, the The R-square of 96.3% is what the exchange can describe how the influences of the independent variables on the exchange rate, and the rest of the percent that has not been discussed in this study.

SUGGESTION

Based on the analysis of foreign exchange reserves, exports, inflation imports, GDP and also the money supply on exchange rates in ASEAN

countries. This researcher suggests that future research should use a dynamic approach, consider both in terms of time used data or regression models used when researching and include additional variables to increase accuracy in research. It is imperative for the government to prioritize maintaining exchange rate stability to prevent an economic downturn. In addition, further research into external debt policy is recommended, as this policy can both increase and decrease a country's foreign exchange reserves. This in turn can affect the quality and quantity of import-export goods, which in turn has an impact on exchange rate fluctuations in a country.For the government, which is tasked with maintaining the stability of the exchange rate and all aspects of the economy in order to make wise policies that will not harm everyone.

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