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Optimizing Monetary Policy Transmission Through The Emerging Market Interest Rate Channel

Wahyu Indah Sari
Universitas Pembangunan Panca Budi
Email: wahyuindahsari@dosen.pancabudi.ac.id
Ade Novalina
Universitas Pembangunan Panca Budi
Email: adenovalina@dosen.pancabudi.ac.id
Annisa Sanny
Universitas Pembangunan Panca Budi
Email: annisasanny@dosen.pancabudi.ac.id

Corresponding author: wahyuindahsari@dosen.pancabudi.ac.id

Abstract. *Research using the ARDL Panel Model includes Inflation, Gross Domestic Product, Total Money Supply, Exchange Rates, Consumption, Investment, and Interest Rate in Asia's Three Emerging Markets namely India, China, and Indonesia which aims to boost the economy. This study uses secondary data with a quantitative research type using ARDL Panel Regression, the software used is Eviews 10 with cross-section data for 3 Emerging Market Countries, namely India, China, and Indonesia time series data for 2001-2020. The research results show that Exchange Rates, Investments, and Interest Rates can also be leading indicators to support price stability in Indonesia, China, and India, but their positions are unstable in the long run and short run. The main leading indicator in optimizing the variables in controlling price stability in the Three Emerging Markets Asia is Consumption seen from the stability of the short run and long run, where the long-term and short-term interest rate variables are significant in controlling price stability.*

Keywords: *Monetary Policy, Price Stability, Emerging Markets*

INTRODUCTION

Monetary policy is not something that stands alone, but there is interdependence on several variables in the economy. On the one hand, monetary policy is heavily influenced by factors in the economy, while on the other hand monetary policy can also directly influence monetary and financial conditions which in turn will have an impact on real sector conditions or what is commonly called the real sector . Monetary policy implementation cannot be carried out separately from other macroeconomic policies, such as fiscal policy, sectoral policy, and other policies. Everything leads to the achievement of the ultimate goal, namely the social welfare of society or social welfare (Ade, & R., 2018).

The monetary policy transmission mechanism is a topic that is always discussed in monetary economics both in theory and in practice at central banks. Like a map, the transmission shows a process in which monetary policy by the central bank will affect various economic activities so that in the end it will achieve the target of economic growth and inflation stability (Warijoyo, 2016).

Issues regarding the transmission of monetary policy are still an interesting topic and are being debated, both among academics and practitioners at the central bank. Interestingly, the transmission of monetary policy is always associated with two questions. First, whether

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*Corresponding author, e-mail wahyuindahsari@dosen.pancabudi.ac.id

monetary policy can influence the real economy besides its effect on prices. Second, if the answer is yes, then through what transmission mechanism does the influence of monetary policy on the real economy occur? (Taylor., 2010).

The monetary policy strategy of a country that is carried out by the monetary authority in its implementation differs from that of other countries, according to the objectives to be achieved and the transmission mechanism that is believed to apply to the country's economy (Masky, 2007).

Inflation is defined as a continuous and persistent increase in general prices of an economy (Hera, 2008). So inflation is a condition where there is a sharp price increase that takes place continuously over a long period of time. Along with the price increase, the value of money fell sharply in proportion to the increase in these prices. The inflation rate as an indicator of macroeconomic stability is often the center of attention for economic observers in particular and the public in general. The fluctuation of the inflation rate is at least a reflection of the economic turmoil in a country. A high inflation rate is certainly a very detrimental thing for a country's economy. But not all prices increase lead to inflation. The prices of individual goods and services are determined in many ways. In a perfectly competitive market, the interaction of many buyers and sellers.

The amount of inflation before and during COVID-19 in the Three Emerging Market Asia countries is as follows:

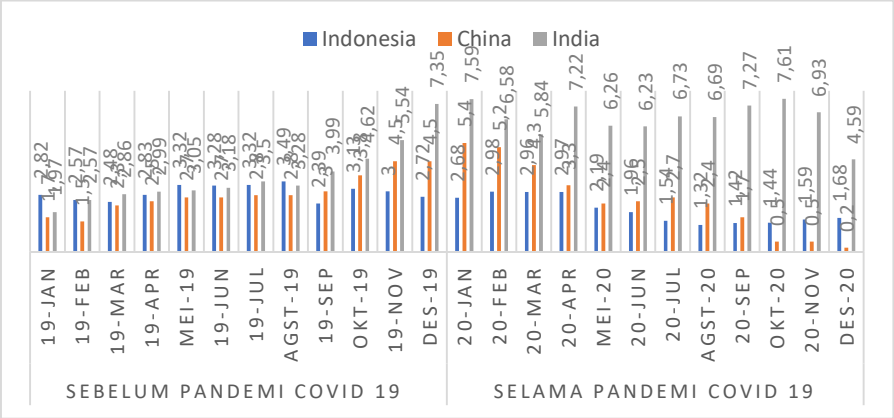

Figure 1.1 Graph of Inflation Data Before and During COVID-19 for the Period December 2019 to May 2020

It can be seen from the table and graph above that inflation data before and during COVID-19 experienced fluctuating shocks every month. It can be seen from the data above, that before COVID-19 hit the world, especially in Indonesia, China, India. It is known that the highest inflation rate was in India, to be precise in December 2019 around 7.35, followed by China, namely in October 2019 around 3.8, then Indonesia was in August around 3.49. as it is known that the world was hit by a virus, the consequences of the virus resulted in an unstable world economy. It can be concluded that in Indonesia, China, India there was a comparison of the inflation rate before and immediately after COVID-19, which was always decreasing, this was due to low demand for goods and services. In contrast to the annual inflation in Indonesia and in other countries. As a result of inflation instability, other economic sectors are also disrupted. It can be seen how the conditions of the exchange rate (exchange rate) in each of these countries.

According to (Mankiw, 2007) The behavior of money in the economy determines the development of fundamental macroeconomic factors such as foreign exchange reserves, economic growth, the current account and inflation. So that the development of the amount of money in circulation will be important and can be used as an analytical tool for decision making in creating good economic conditions. If inflation is at a good level, it will certainly be able to

stimulate the economy to grow in a positive direction according to the expected target (Sipayung., 2013). Apart from that according to (Wardhono, 2019), things that must be done also by conducting monetary policy. A monetary policy is a policy issued by a central bank or monetary authority which includes controlling monetary amounts and interest rates to achieve the desired economic goals. One form of monetary policy is controlling the money supply so that it does not circulate excessively. If there is a large amount of money in circulation, it will cause an increase in prices (inflation) which in turn can have an impact on reducing people's purchasing power.

It is said that if there is a large amount of money in circulation, it will encourage economic activity to develop very rapidly. But if it continues, this is considered dangerous because the price of goods will increase sharply. Conversely, if the money supply is too small, economic activity will slow down. Fluctuations in interest rates affect people's desire to borrow money from banks. Theoretically, the lower the interest rate, the higher the public's desire to borrow money from the bank. That is, at low-interest rates, people will be more motivated to borrow money from banks to meet their needs and expand their businesses. Conversely, when interest rates are high, people will be more inclined to save money in banks than use it to shop and expand their business.

LITERATURE REVIEW

2.1. Monetary Policy Transmission

Monetary policy is all the efforts or actions of the Central Bank in influencing the development of monetary variables (money supply, interest rates, credit and exchange rates) to achieve certain economic goals. (Litteboy, 2016). The monetary policy transmission mechanism basically describes how the monetary policy pursued by the central bank affects various economic and financial activities so that in the end it can achieve the set goals. Specifically, the monetary policy transmission mechanism is "the process through which monetary policy decisions are transmitted into changes in real GDP and inflation". The monetary policy transmission mechanism starts with central bank actions by using monetary instruments that affect economic and financial activity through various monetary policy transmission channels, such as money channels, credit, interest rates, exchange rates, asset prices and expectations. In the financial sector, monetary policy influences the development of interest rates, exchange rates and share prices in addition to the volume of public funds deposited in banks, loans extended to the business world and investments in bonds, stocks and other securities. In the real sector, this policy influences developments in consumption, investment, exports and imports so that this monetary policy influences economic growth and inflation, which is the ultimate goal of the policy. The monetary policy transmission mechanism is a complex process, and therefore in monetary economics theory it is often referred to as a "black box". exports and imports so that this monetary policy influences economic growth and inflation which is the final target of the policy. The monetary policy transmission mechanism is a complex process, and therefore in monetary economics theory it is often referred to as a "black box". exports and imports so that this monetary policy influences economic growth and inflation which is the final target of the policy. The monetary policy transmission mechanism is a complex process, and therefore in monetary economics theory it is often referred to as a “black box”. The complexity of the monetary policy transmission mechanism is influenced by three factors, namely:

a) Changes in the behavior of the central bank, banking and economic actors in their various economic and financial activities. This is related to the anticipatory behavior of banks and economic actors in any changes in the behavior of the central bank.

b) The length of time since monetary policy was pursued until the inflation target was achieved. This is because monetary transmission has a lot to do with the pattern of relationships between various economic and financial variables which are always changing in line with the economic development of the country concerned.
c) Changes occur in the monetary policy transmission channels in accordance with the economic development of the country concerned.

The monetary policy transmission mechanism shows the interaction between the central bank, banks, other financial institutions and economic actors in the real sector through a two-stage process of money circulation, namely:

a) Interaction in financial markets, namely the interaction between the central bank and financial and banking institutions in financial transactions. Interaction through financial markets occurs because, on the one hand, the central bank exercises monetary control through financial transactions conducted with banks in accordance with the direction and targets of monetary policy that have been set. On the other hand, other banking financial institutions carry out investment portfolio transactions for their own interests as well as for customers. This interaction can occur through the rupiah money market, foreign exchange market and capital market. The interaction between the central bank and the banking sector will directly or indirectly affect volume and price developments (interest rates, currency rates,
b) Interaction through the intermediation function, namely the interaction of banking and other financial institutions with economic actors in the real sector. This is due to the banking intermediary function in mobilizing deposits from the public and channeling them in the form of credit and financing to the business world. This interaction will affect the volume and interest rates on demand deposits, savings and time deposits, affecting the money supply, demand for money and public savings. In addition, this interaction will also affect the development of the capital market, both in terms of investment by investors and financing by issuer companies. Interactions between banks and economic actors, both through the financial intermediary function and through the capital market, will have a major impact on the economy, namely:
    1) On the production side, developments in financing in the form of bank credit and stock issuance will affect the production capacity of the business world so that it will determine the level of real output in various economic sectors.
    2) On the demand side, developments in bank lending rates, stock prices and bond yields will determine the cost of capital which will affect investment interest in the business world.
    3) On the consumption side, the effect can occur through income derived from investment in the form of bank deposits, bonds and stocks (income effect) as well as costs that must be incurred if consumption is made through credit (substitution effect).
    4) From the export-import side, the influence occurs through developments in the exchange rate as well as the volume and interest rates on loans, issuance of stocks and bonds needed to finance these export-import activities. The interaction between banking and economic actors will ultimately determine the inflation rate, real output and employment opportunities in the economy.

    Monetary Policy Transmission Channels namely:

    1. Moneyline

       The mechanism for transmitting monetary policy through the money channel begins with the action of the central bank controlling the money base in accordance with the ultimate goal to be achieved, with the money multiplier being transmitted to the money supply according to public demand. In the end, this money supply will affect the economy, namely inflation and real output.

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2. Credit Line
   In the mechanism of transmitting monetary policy through the credit channel, the credit market greatly influences the transmission of finance from the monetary sector to the real sector. The credit market is not always in a state of balance due to unbalanced information or other reasons. There are two credit channels that influence the transmission of monetary policy from finance to the real sector, namely the bank credit channel which is more concerned with bank behavior which is more selective in making credit selection due to asymmetric information or other reasons and the company balance sheet channel which is more concerned with the leverage conditions of companies that are influential in granting credit. The development of bank credit will affect inflation and real output through two things,
3. Interest Rate Line
   The interest rate channel is more concerned with the price aspect in the financial market towards economic activity in the real sector. Monetary policy adopted by the central bank will influence the development of interest rates in various financial sectors which in turn will affect the inflation rate and real output. In the first stage, the monetary policy pursued by the central bank will affect short-term interest rates on the rupiah money market, which in turn will affect deposit rates provided by banks to public deposits and credit interest rates charged by banks to their debtors. In the second stage, the transmission of interest rates from the financial sector to the real sector will depend on their impact on consumption demand and investment in the economy. The influence of interest rates on consumption demand occurs because deposit interest is derived from public income and credit interest is used as consumption financing. The effect of interest rates on investment occurs because lending rates are a component of the cost of capital in addition to bond yields and stock dividends, in investment financing. The two influences above will in turn affect the amount of aggregate demand which ultimately determines the inflation rate and real output.
4. Exchange Rate Line
   The exchange rate channel places more emphasis on the importance of the effect of changes in financial asset prices on various economic activities. The importance of the exchange rate channel in the transmission of monetary policy lies in the influence of financial assets in the form of foreign currency arising from the economic activities of one country to another. The effect occurs through changes in exchange rates and the large flow of funds into and out of a country due to foreign trade activities and the presence of investment capital, which in turn will affect the inflation rate and real output of the country concerned.
5. Asset Price Line
   The transmission mechanism through the asset price channel occurs through its influence on consumption demand for investors, both due to changes in wealth owned and changes in income consumed arising from the investment of these financial assets. The effect of assets on the real sector also occurs investment demand by companies, this is due to changes in asset prices which affect the cost of capital that must be spent in production and investment by companies. The two effects of these asset prices will then affect aggregate demand which will affect the inflation rate and real output.
6. Expectation Line
   With increasing uncertainty in the economy and finance, the channel of expectations is becoming increasingly important in the monetary policy mechanism to the real sector. Economic actors will form certain perceptions regarding future economic prospects in carrying out their business actions. With regard to monetary policy, what is paid the most attention to is the inflation expectations that arise in society. Inflation expectations

are influenced by developments in inflation that have occurred and the influence of monetary policy by the central bank as indicated by developments in interest rates and exchange rates. The more credible monetary policy, as indicated by its ability to control interest rates and stabilize exchange rates, the stronger the impact on inflation expectations in society. The effect of inflation expectations on aggregate demand occurs because of its impact on real interest rates which are considered in determining the amount of demand for consumption and investment in society. The influence of inflation expectations on aggregate supply occurs through changes in the pattern of formation of product prices by companies. The effect of inflation expectations on aggregate demand and supply will affect real output and the inflation rate in the economy.

2.2. Inflation

Inflation is an economic phenomenon related to its very broad impact on the macro economy. Inflation plays a very important role in influencing the mobilization of funds through informal financial institutions. Inflation is defined as a continuous and persistent increase in general prices of an economy (Hera, 2008).

Inflation is an event that describes a situation and condition in which the price of goods increases and the value of a currency weakens, and if it occurs continuously it will result in a deterioration in overall economic conditions and be able to shake up the political order of a country. Inflation is defined as an increase in the overall price level in an economy (Mankiw, 2007) Another definition of inflation is the tendency of prices to rise in general and continuously (Boediono, 2014). An increase in the price of just one or two goods is not called inflation, unless the increase extends to most of the prices of other goods. From this definition, there are three components that must be met so that it can be said that inflation has occurred (Rahardja, 2015), namelyas follows:

1. Price increases. The price of a commodity is said to rise if it becomes higher than the price of the previous period.
2. general. An increase in the price of a commodity cannot be called inflation if the increase does not cause prices in general to rise.
3. It goes on and on. A general price increase will also not cause inflation, if it only happens for a moment. Therefore, the calculation of inflation is carried out within a minimum period of months.

Inflation based on its severity is divided into 4 types, namely:

1. Mild inflation (below 10% a year).
2. Moderate inflation (between 10%-30% a year).
3. Heavy inflation (between 30%-100% a year).
4. Hyperinflation (above 100% a year).

High inflation is not good, because it will misery the people in a country. On the other hand, inflation that is too low is also very detrimental to the country. Therefore, controlled inflation conditions or reasonable inflation can provide positive and conducive conditions for a country's economy. Inflation is also used to mean an increase in the money supply due to an increase in the price level. Inflation has a major effect on production as well as exports and imports. Inflation causes a decline in production, especially the production of goods to be exported.

The decline in production is due to the increase in production costs so that the cost of goods produced also increases. The impacts caused by inflation in the economy are as follows:

1. Inflation can encourage the redistribution of income among members of society. This will affect the economic welfare of the members of society, because the redistribution of income that occurs will cause one person's real income to increase, but the real income of another person to fall.

2. Inflation can cause a decrease in economic efficiency.
3. Inflation can cause changes in output and employment.
4. Inflation can create an unstable environment for economic decisions.

The impact of inflation felt by individuals and society is worsening income distribution and declining real income.

RESEARCH METHOD(S)

The method used in this study is a type of quantitative method with the ARDL Panel Regression approach using Eviews 10 software with cross section data in 3 Emerging Market Countries namely India, China and Indonesia. ARDL panel regression is used to obtain estimation results for each individual characteristic separately by assuming cointegration in the long run lag of each variable. Autoregressive Distributed Lag (ARDL) introduced by (Russiadi, 2013). This technique examines each variable lag located at I(1) or I(0). On the other hand, the ARDL regression result is a statistical test that can compare two asymptotic critical values. Panel Regression Testing with the formula:

$$INF_{it} = \alpha + \beta_1 GDP_{it} + \beta_2 KURS_{it} + \beta_3 JUB_{it} + \beta_4 KON_{it} + \beta_5 INV_{it} + \beta_6 SB_{it} + e$$

The following is the panel regression formula based on country:

$$INF_{INDONESIAt} = \alpha + \beta_1 GDP_{it} + \beta_2 KURS_{it} + \beta_3 JUB_{it} + \beta_4 KON_{it} + \beta_5 INV_{it} + \beta_6 SB_{it} + e_1$$
$$INF_{CHINAt} = \alpha + \beta_1 GDP_{it} + \beta_2 KURS_{it} + \beta_3 JUB_{it} + \beta_4 KON_{it} + \beta_5 INV_{it} + \beta_6 SB_{it} + e1$$
$$INF_{INDIAt} = \alpha + \beta_1 GDP_{it} + \beta_2 KURS_{it} + \beta_3 JUB_{it} + \beta_4 KON_{it} + \beta_5 INV_{it} + \beta_6 SB_{it} + e1$$

where :
GDP =Gross Domestic Product(billions US$))
ER =Exchange rate(US$ billions)
JUB =Amount of Money in Circulation(US$ billions)
CON = Consumption (%)
INV = Investment (Billion US$)
SB = Interest Rate (%)
INF = Inflation (%)
E =*term error*
β = regression coefficient
α = constant
i = number of observations
t = amount of time

ARDL Panel Criteria:

The ARDL panel model that is accepted is a cointegrated lag model, where the main assumption is that the coefficient value on the Short Run Equation has a negative slope with a significant level of 5%. ARDL Panel Model Requirements: the value is negative (-0.597) and significant (0.012 <0.05) then the model is accepted.

FINDINGS AND DISCUSSION

4.1 Findings

Panel analysis with Auto Regressive Distribution Lag (ARDL) tests pooled data, which is a combination of cross-section (country) data and time series (annual) data. Where the results

of ARDL panels are better than ordinary panels because ARDL panels are capable of long-term cointegration and have the most theoretical lag distribution. In this test use Eviews 10 software, therefore the following results are obtained from the ARDL Panel Test:

Table 3.1 ARDL Panel Outputs

Variables	coefficient	std. Error	t-Statistics	Prob.*
	Long Run Equation			
LN_GDP	0.568350	0.600266	0.946831	0.0413
LN_CURS	-1.510254	1.173252	-1.287237	0.0079
LN_JUB	0.254191	0.125409	2.026889	0.0316
LN_KON	-4.522041	2.755436	-1.641134	0.0112
LN_INV	0.043111	0.124029	0.347593	0.7306
LN_SB	0.014731	0.118241	0.124585	0.9017
	Short Run Equations			
COINTEQ01	-0.482471	0.283814	-1.699953	0.0395
D(LN_GDP)	-0.060931	1.979406	-0.030783	0.9756
D(LN_KURS)	0.494987	1.609032	0.307630	0.7605
D(LN_JUB)	-0.750729	0.642506	-1.168439	0.2518
D(LN_KON)	-3.786135	0.762999	-4.962179	0.0000
D(LN_INV)	0.013096	0.058837	0.222574	0.8254
D(LN_SB)	-0.016415	0.025705	-0.638602	0.5279
C	9.827970	5.560896	1.767336	0.0873

Source: Output Eviews10

The accepted ARDL panel model is a cointegrated lag model where the main assumption is that the coefficient value has a negative slope with a significant level of 5%. These conditions in the ARDL Panel model are negative (-0.48) and significant (0.00 <0.05) then the model will be accepted. Based on the acceptance of the model, data analysis was carried out by panel per country.

Table 3.2 : Indonesian Country ARDL Panel Output

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	0.015472	0.003793	4.079334	0.0266
D(LN_GDP)	3.421391	2.963533	1.154498	0.0319
D(LN_KURS)	2.083746	0.647671	3.217290	0.0487
D(LN_JUB)	-0.220916	5.038620	-0.043845	0.9678
D(LN_KON)	-3.012330	13.27541	-0.226910	0.8351
D(LN_INV)	-0.062276	0.011200	-5.560582	0.0115
D(LN_SB)	0.002747	0.007143	0.384571	0.7262
C	-0.507851	1.519115	-0.334307	0.7602

Source: Output Eviews10

The ARDL Panel Test results show:

1) *Gross Domestic Product* significant and affect inflation. This can be seen from the probability sig 0.03 < 0.05
2) Exchange rates are significant and affect inflation. This can be seen from the sig probability value of 0.04 <0.05
3) The money supply is not significant and has no effect on inflation. This can be seen from the probability value sig 0.09 > 0.05.
4) Consumption is not significant and has no effect on inflation. This can be seen from the probability value sig 0.08 > 0.05.

5) Investment is significant and has an effect on inflation. This can be seen from the probability value sig 0.01 < 0.05.
6) Interest rates are not significant and have no effect on inflation. This can be seen from the probability value sig 0.07 > 0.05.

Table 3.3 : China Country ARDL Panel Output

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.967432	0.036723	-26.34395	0.0001
D(LN_GDP)	-0.171381	1.632147	-0.105004	0.9230
D(LN_KURS)	-2.722992	1.008832	-2.699153	0.0238
D(LN_JUB)	-2.029498	1.793235	-1.131752	0.3400
D(LN_KON)	-5.312081	28.05562	-0.189341	0.8619
D(LN_INV)	0.129041	0.013888	9.291321	0.0026
D(LN_SB)	0.015318	0.006787	2.256944	0.0092
C	18.55240	102.9771	0.180160	0.8685

Source: Output Eviews10

The ARDL Panel Test results show:

1) *Gross Domestic Product* in significant and has no effect on inflation. This can be seen from the probability sig 0.09 > 0.05.
2) Exchange rates are significant and affect inflation. This can be seen from the probability sig 0.02 < 0.05
3) The amount of money in circulation is insignificant and has no effect on inflation. This can be seen from the probability sig 0.34 > 0.0
4) Consumption is not significant and has no effect on inflation. This can be seen from the probability sig 0.86 > 0.05
5) Investment is significant and has an effect on inflation. This can be seen from the probability sig 0.00 < 0.05.
6) Interest rates are significant and affect inflation. This can be seen from the probability sig 0.00 < 0.05.

Table 3.4 : India Country ARDL Panel Outputs

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.495453	0.020642	-24.00260	0.0002
D(LN_GDP)	-3.432804	1.137309	-3.018357	0.0468
D(LN_KURS)	2.124205	0.625668	3.395098	0.0426
D(LN_JUB)	-0.001774	0.006723	-0.263851	0.8090
D(LN_KON)	-3.033994	6.746457	-0.449717	0.6834
D(LN_INV)	-0.027478	0.006402	-4.291882	0.0233
D(LN_SB)	-0.067311	0.010159	-6.626013	0.0070
C	11.43937	32.52537	0.351706	0.7483

Source: Output Eviews10

The ARDL Panel Test results show:

1) *Gross Domestic Product* significant and affect inflation. This can be seen from the probability sig 0.04 < 0.05.
2) Exchange rates are significant and affect inflation. This can be seen from the probability

sig 0.04 < 0.05

3) The amount of money in circulation is insignificant and has no effect on inflation. This can be seen from the probability sig 0.80 > 0.05
4) Consumption is not significant and has no effect on inflation. This can be seen from the probability sig 0.68 > 0.05
5) Investment is significant and has an effect on inflation. This can be seen from the probability sig 0.02 < 0.05.
6) Interest rates are significant and affect inflation. This can be seen from the probability sig 0.00 < 0.05.

Based on the results of the overall equation above, it is known that the significant long-term influences on inflation in Indonesia, China, India are GDP, exchange rates, money supply, consumption. Then in short terms, namely Consumption. Leading indicator on monetary policy transmission in maintaining price stability against inflation in Indonesia, China, India namely consumption as seen from the stability of the long run and short run, where the variable consumption in the long and short term is effective in supporting economic stability in the country.

Leading indicators monetary policy transmission in maintaining price stability in Asia's Three Emerging Markets, namely Indonesia (Gross Domestic Product (GDP), Exchange Rates, and Investment), China (Exchange Rates, Investment, and Interest Rates), India (Gross Domestic Product (GDP), Exchange Rates, Investment, and Interest Rates). In panel terms, it turns out that investment and interest rates are also the leading indicators to maintain price stability in the Three Emerging Markets of Asia (Indonesia, China, India), but their positions are unstable in the long run and short run.

4.2 Discussion

Based on the results of the overall equation, it is known that the significant long-term influences on inflation in Indonesia, China, India are GDP, exchange rate, JUB, and consumption. Then in short terms, namely Consumption. The following is a summary table of the ARDL Panel test results:

Table 4.12 ARDL Panel Summary

Variables	Indonesia	China	India	Long run	short run
GDP	1	0	1	1	0
Exchange rate	1	1	1	1	0
JUB	0	0	0	1	0
Consumption	0	0	0	1	1
investment	1	1	1	0	0
Interest rate	0	1	1	0	0

Source: Data processed by the author 2020

The results of the ARDL Panel analysis prove that:

1. Leading indicator optimization Asia's Three Emerging Market Countries
   1) Leading indicators on monetary policy transmission mechanism in maintaining price stabilityin Indonesiathrough variables (Gross Domestic Product, Exchange Rate, and Investment).
   2) Leading indicators on monetary policy transmission mechanism in maintaining price stability in China through variables (exchange rate, investment, and interest rates).
   3) Leading indicators on Monetary policy transmission mechanism in maintaining price

stability in India through variables (Gross Domestic Product, Exchange Rate, Investment, and Interest Rates).

It can be seen that the Leading Indicators that maintain price stability in Asia's Three Emerging Markets in dealing with inflation rates in every country experience the same thing. The results of the research are similar to studies that have been summarized, namely research (Dogan, 2012) & (Fadwa. E. F, 2022) states that inflation and unemployment have a relationship and are consistent with the Philips curve, but according to (Vermeulen, 2017) that the unemployment rate does not depend on aggregate demand and that high inflation and deflation can be detrimental to employment and economic growth, due to fluctuations in inflation depending on the unemployment rate. The according to (Dendi. S. S, 2022), (Nairobi, 2022) Ownership Rights, Initial Growth, Physical Capital, and Labor together have a significant effect on economic growth. Economic growth can be driven by the role of property rights, not only that there are several other factors that affect economic growth, which may have an important relationship with these property rights, for example the level of competition in financial markets or such as the distribution of wealth.

According to (Linda. N. F, 2022), (Effendi, 2011) money supply is the amount of currency issued and circulated by the central bank consisting of coins and banknotes including quasi money or near money which includes time deposits (time-deposits), savings (saving-deposits) and currency (savings) accounts domestic private foreign owned. The according (Herlyani. S, 2022), (Kristianti & S. N., 2018) The relationship between the money supply and the exchange rate is that if the rupiah appreciates it will increase consumption, especially imported goods which affect the money supply.

2. Panelly

In panel terms, it turns out that Gross Domestic Product, Exchange Rate, Investment, and Interest Rates are also able to become leading indicators to support price stability in Indonesia, China, India, but their positions are unstable in the long run and short run . Research results (Mohseni, & Jouzaryan, 2016) pointed out that the authorities are economic and social institutions so they can try to reduce and control unemployment and inflation in order to achieve economic growth. Monetary policy controls monetary quantities such as the money supply, price stability, interest rates, which are carried out by the central bank, while fiscal policy controls the economy (fiscal) by changing the government's revenue and spending budget.

CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Based on the results of the research panel, it turns out that exchange rates, investment and interest rates can also be leading indicators to support price stability in Indonesia, China and India, but their positions are unstable in the long run and short run. The main leading indicator in optimizing the variables in controlling price stability in the Three Emerging Markets Asia is Consumption seen from the stability of the short run and long run, where the long term and short term interest rate variables are significant in controlling price stability.

5.2. Suggestions

Based on the results of the discussion and conclusions, there are suggestions that the writer needs to describe, namely as follows:

1. In particular, the central banks in each country studied in this study are expected to be able to consider the consequences of raising and lowering interest rates which can affect

economic activity, especially in external conditions, the financial sector, banking and the real sector.

2. For further research, in overcoming poverty it is better to add other policies such as fiscal and macroprudential policies as well as other variables.

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