

# Optimization of Monetary Policy Transmission Through Credit Channels to Foreign Direct Investment

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## ABSTRACT

This study aims to analyze the variable Amount of Money in Supply, Exchange Rate, Interest Rate, Credit, Exports and Tax on Foreign Direct Investment (FDI). This study uses secondary data or time series data for the period 2009-2020. The data analysis model used is ARDL Panel Regression. The results of the ARDL panel data analysis show that the Money Supply, Exchange Rate and Interest Rates can be the leading indicators of Foreign Direct Investment (FDI) in the Five Southeast Asian Countries of Emerging Markets in the short term seen from the short run. So that it can be concluded that a monetary policy transmission that can be recommended is through the management of Foreign Direct Investment and the Money Supply, Exchange Rate and Interest Rate which is much better.

**Keywords:** *Monetary Policy, Credit, Foreign Direct Investment*

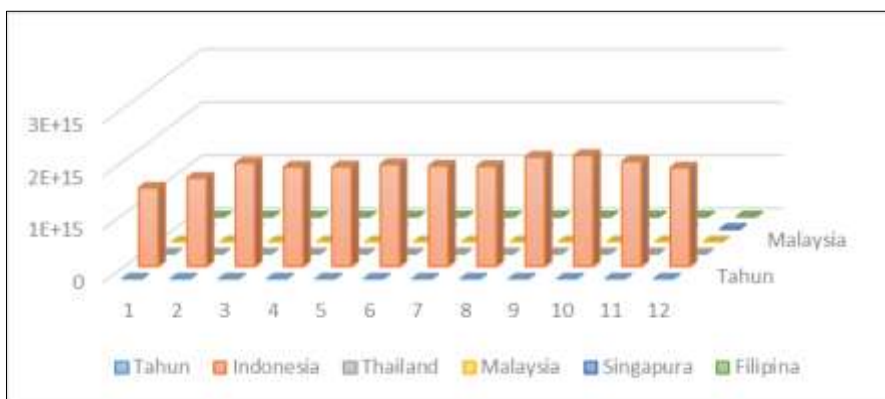
## INTRODUCTION

Monetary policy is the policy of the monetary authority or Bank Indonesia in the form of controlling monetary amounts to achieve the desired development of economic activity. This monetary policy works on a procedure that is considered to use the monetary policy transmission procedure. The monetary policy transmission mechanism is a procedure that describes the stages through which a policy instrument passes to the final target, namely inflation.

There are several channels, namely the interest rate channel, the asset price channel, the credit channel, the exchange rate channel, and the expectation channel.

Like which put forward by Andriy (Andriyani, 2008) that mechanism transmission is channel which connect Among policy monetary with economy. The monetary policy delivery mechanism begins when the monetary authority or the Indonesian bank acts using monetary instruments to enforce monetary policy until its impact on economic activity is visible. Economists argue that the transfer mechanism is an intermediary process that changes real GDP and inflation through the monetary policy mechanism.

Currently, Southeast Asia's emerging market economies are among the world's economies that are still experiencing positive growth despite the global economic crisis. As one of the sectors that can increase domestic strength is domestic banking credit, it is necessary to analyze the status of the credit channel of the Indonesian monetary policy delivery mechanism as one of the pieces of information for implementing optimal monetary policy according to the situation. The global economic crisis is not over. It can be concluded that policy instruments can influence the real economy through credit change mechanisms.

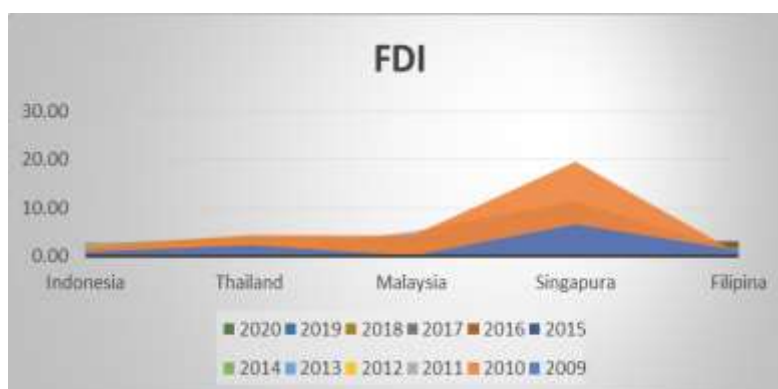


Picture 1.1 Development Credit period year 2009-2020 in Asia Southeast Of emerging Market Countries

On the picture above show that credit still dominate enhancement that is in country Indonesia, Singapore and Thailand. In line with condition the, Bank central as holder authority highest in field monetary has Secrete policy which lead on optimization function intermediation banking as step concrete constructive for push development sector real. Government no no once make an effort for develop sector real, however policy which enforced by government on period past still not yet felt maximum. Management which not enough good from banking plus again issue corruption which very loaded on period order new, finally capable counter formula policy which built by government on moment that.

Dynamics from variables monetary like inflation, level ethnic group flower, GDP (*Gross domestic product*) and which other on in fact has push holder authority monetary which in Thing this is bank central in Secrete policy monetary for then could applied in period which will come.

Mechanism policy monetary which through track credit this also will take effect to FDI on Asia Southeast Of emerging Market Countries the. Problems economy from corner investment view in Asia Southeast Of emerging Market Countries no will stop so just. Following data FDI on period year 2009-2020 in Asia Southeast Of emerging Market Countries.



Picture 1.2 Development FDI period year 2009-2019 in Asia Southeast Of emerging Market Countries

Viewed picture in on that fluctuation FDI very diverse in Asia Southeast Of emerging Market Countries that is Indonesia, Thailand, Malaysia, Singapore and Philippines. In Indonesia on year 2009 investation as big 11.1 and in 2014 fell to 10.8 and always fell in 2019, which was 9.8 and experienced very good growth in 2020 to 14.2.

Thing the noticed in apply policy monetary the is how much accurate policy the related with problem time and impact which will occur. decline FDI on period crisis global and slow growth FDI on post crisis often called as wrong one factor which cause process recovery economy every country the walk with slow compared with country other

which also experience crisis like Korea South. after from crisis global crisis which caused by pandemic very influence change investment on Asia Southeast *Of emerging Market Countries* the.

## LITERATURE REVIEWS

### 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, extended loans 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:

- 1) 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.
- 2) 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.
- 3) 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:

- 1) 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,

2) 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) Money line

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.

#### 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. Credit

Credit is a financial facility that allows individuals or companies to borrow money to buy a product and repay it within a certain period of time. UU no. In 1998, lending was defined as "using money or receivables equivalent to that which obligates the borrower to repay the debt and interest after a certain period of time, based on an agreement or loan agreement between the bank and another party. That is to allow." Time". When someone uses a credit service, they are charged interest.

Of course, when a bank lends money to a customer, it expects the money to be repaid, so to minimize risk (pay) and solvency (pay), the bank needs to repay the loan and interest to its customers. It consists of personality, abilities, capital, collateral, and economic conditions, and is sometimes called 5C analysis (Panca C).

### Types of credit based on the scheme:

#### 1. Investment Credit

Medium to long term loans for investment in capital goods such as factory construction, purchase of machinery, purchase of shophouses/shops, renovation of factories/shops/shops/rent. The installment payment system is decreasing and effective. Working capital loans Short or medium term loans for financing/purchasing raw materials. Fixed or reduced cost structure and effective

#### 2. Consumer Credit

Credit for individual for financing goods personal like house (credit ownership house and credit ownership apartment), vehicle (credit vehicle motorized), like credit without

collateral, credit multifunction, etc scheme installment permanent and flat.

#### 3. Interest-free and installment-free business loans

Credit this provided especially for effort small nor medium. Credit like this very relieve for business owner however stages selection the melting very strict, like Credit Effort People (KUR). Scheme installment permanent or decrease and flat.

### Types of Credit Based on Time:

#### 1. Revolving Credit

Credit which futures time short (1 year) and over and over again (could be extended). Wrong one example product bank which use credit *revolving* is Card Credit.

#### 2. Non-Revolving Credit

Credit which futures time long and no could be extended. Restructurisation Credit when creditor face problem in Thing payment instalment credit, so party bankor institution finance To do Restructurisation Credit.

### 3. Foreign Direct Investment (FDI)

According to Stephen Hymer's Theory The theory of foreign direct investment was first developed by (Hymer, 1965) by developing the theory of modern monopolistic advantage which shows that foreign direct investment occurs more in oligopolistic industries than in industries that operate in almost perfect competition. (near perfect competition). Hymer argued that the essence of direct investment is maximum profit, which can lead to acts of controlling resources, reducing the degree of competition between foreign investors and operational cooperation between them (Nusantara, 2014).

Then Hymer's thinking was developed by (Buckley, 1976) who assumes that foreign investment decision making is based on: (1) companies must maximize profits during imperfect market conditions, (2) when market conditions are imperfect, opportunities for creating internal markets open up. to cut the impact of market

imperfections, (3) efforts to internalize international markets resulted in the creation of multinational companies (MNCs).

According to Theory (Vernon, 1996) explains the theory of foreign investment with a theory called the Product Life Cycle (PLC) Model in his article entitled International Investment and International Trade in the Product Cycle (1996). This model suggests that a product undergoes three stages, namely:

1. The first stage is the innovation stage, in this stage the product is developed and marketed for the first time. It requires a close relationship between the production design and marketing groups of the company and the market that this product will serve. Therefore production and sales are still carried out domestically.
2. The second stage is that the company begins to think about the possibility of finding new markets in other relatively developed countries and export activities begin to be carried out with the aim of third world countries. The company's advantage lies in economies of scale in production, transportation and marketing. Pricing and location strategies are based on the actions and reactions of other multinational corporations and not on competitive costs.
3. The third stage is where the product has been standardized so that research and management skills are no longer important. Unskilled and semi-skilled workers are starting to get a place and consequently products are moving to developing countries because labor costs are still low. Then the products produced in these developing countries will be re-imported to their countries of origin and also to the markets of more developed countries. Therefore, the location of production will be determined more by the difference in cost and market distance. Investment abroad will be seen as a way to maintain the company's competitiveness in its innovative products.

According to JHDunning's theory, the approach "The OLI Framework" put forward (Dunning, 1995) explains the factors influencing foreign investment through electrical design theory. In this theoretical design, a set consisting of three requirements is determined if a company is to enter into foreign investment. The three requirements are:

1. Company Specific Advantages (Ownership Specific Advantages), where companies must have specific advantages, especially net ownership advantages when dealing with companies of other countries in serving certain markets, especially foreign markets. In this case related to ownership technology, managerial skills, marketing, product differentiation, trademarks, economies of scale and large capital requirements for factories with minimum efficient size.
2. Internalization of Advantage It is in a company's best interest to exercise unique proprietary advantages rather than licensing to foreign owners.
3. Country Specific Advantages (Locational Advantages) are things that can be utilized by companies located abroad or the host country. For example, natural resources, labor with low costs and certainty.

The OLI Framework put forward by Dunning above has several weaknesses, including not being able to further explain the existence of foreign companies (MNCs), particularly regarding developments in FDI. Therefore comparing the data with existing theory.

Developments in the global economy indirectly influence the understanding of what and how FDI is and what variables influence it. This is based on the fact that the dynamics of the economy will continue to go hand in hand with existing developments. The theory of FDI, based on empirical studies that have been conducted in several countries, has led to several new approaches to understanding FDI (Sarwedi, 2002).

## MATERIALS & METHODS

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 five Emerging Market Countries namely Thailand, Malaysia, Philippines, Indonesia and Singapore.

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 (Rusiadi, 2014). 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:

$$FDI_{it} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

Following ARDL panels formula *regression* based on country

$$FDI_{THAILANDt} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

$$FDI_{MALAYSIA t} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

$$FDI_{PHILIPINAt} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

$$FDI_{INDONESIA t} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

$$FDI_{SINGAPURAt} = \alpha + \beta_1 KREDIT_{it} + \beta_2 SB_{it} + \beta_3 EKS_{it} + \beta_4 KURS_{it} + \beta_5 JUB_{it} + \beta_6 TAX_{it} + e$$

Where:

Credit : Rate Credit (%)

SB : Interest rate (%)

ER : Exchange rate (Eye Money per country/US\$)

JUB : Amount of money in circulation (%)

FDI : *foreign Direct Investments* (%)

Taxes : Tax revenue (Billion us\$)

Ex : Export (%)

€ : *error term*

$\beta$  : coefficient regression

$\alpha$  : constant

i : amount observation

t : many time

Model Panel ARDL which accepted is model which have lag cointegrated, where assumption mainly is score coefficient on Short run Equation have slope negative with level significant 5%. Terms Model Panel ARDL value negative (-0.597) and significant (0.012 < 0.05) so model received.

## RESULTS

Results analysis Panel ARDL test data pooled that is combined data *cross section* with data *time series*, results panel ARDL more good compared with panel normal, because capable cointegrated period Long and have distribution lag which most in accordance with theory, variable which used in panel ARDL this is variable FDI, JUB, Credit, Exchange rate and Ethnic group Flower because variable Export and taxes has degraded because data no normal on Panel ARDL this so will next use variable which normal with use *software* eviews 10 so obtained results as following :

Table 4.1 output Panel ARDL

Variables	coefficient	std. Error	t-Statistics	Prob.*
Long run Equation				
JUB	-1.23E+09	5.19E+08	-2.365332	0.0277
CREDIT	-15010813	1854006.	-8.096420	0.0000
EXCHANGE RATE	9009756.	1262812.	7.134679	0.0000
SB	-2.17E+09	5.05E+08	-4.295792	0.0003
Short run Equation				
COINTEQ01	-0.570519	0.165729	-3.442484	0.0024
D(JUB)	3219987.	5.24E+08	0.006148	0.9952
D(CREDIT)	1277811.	13443456	0.095051	0.9252
D(EXCHANGE)	1.64E+10	2.03E+10	0.810968	0.4265
D(SB)	6.94E+08	6.67E+08	1.039902	0.3102



C	1.65E+10	1.23E+10	1.340898	0.1943
Means dependent var	-2.09E+09	SD dependent var		7.47E+09
SE of regression	5.40E+09	Akaike info criteria		42.73875
sum squared resid	6.12E+20	Schwarz criteria		43.97965
Logs likelihood	-1141316	Hannan-Quinn criter.		43.21861

Model Panel ARDL which received is model which have lag cointegrated where assumption mainly is score coefficient have slope negative dreluctantly level 5% condition model panel slope ARDL : score the negative - 0.57 and significant with score prob  $0.05 < 0.54$ , so could stated that panel ARDL which used in study this rejected.

Based on reception model, so analysis data conducted with panel per country.

### a. Analysis Panel Country Indonesia

Following results though data panel ARDL for country Indonesia with help program eviews 10

Table 4.2 output Panel ARDL country Indonesia

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.435570	0.004127	-105.5414	0.0000
D(JUB)	-1.28E+09	5.17E+16	-2.48E-08	0.0000
D(CREDIT)	24358011	4.38E+12	5.56E-06	0.0090
D(EXCHANGE)	-737101.0	1.84E+11	-4.00E-06	0.0000
D(SB)	6.16E+08	5.27E+15	1.17E-07	0.0230
C	-2.38E+10	3.69E+19	-6.43E-10	0.0000

Results test Panel ARDL show

1. The amount of money in circulation matters negative significant to *foreign Direct Investments*. Thing this could is known from score coefficient and score probability variable that alone which as big  $< 0.05$
2. Credit give influence positive and significant to FDI which showed by score probability sig which smaller from 0.05 that is as big 0.00.
3. Exchange rate find results take effect negative significant to development FDI. Decision that could seen from score

coefficient and score probability which more small from 0.05.

4. Ethnic group Flower take effect positive significant to development FDI in Indonesia which proven with score coefficient which positive and score prob  $< 0.05$ .

### b. Analysis Panel ARDL Country Thailand

Following results though data Panel ARDL in country Thailand with help program eviews 10:

Table 4.3 output Panel ARDL Country Thailand

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.942059	0.284621	-3.309868	0.0454
D(JUB)	3.56E+08	1.00E+18	3.55E-10	0.3000
D(CREDIT)	-47403121	3.47E+15	-1.36E-08	0.1200
D(EXCHANGE)	-1.31E+08	4.42E+18	-2.96E-11	0.0463
D(SB)	3.21E+09	4.04E+18	7.93E-10	0.0120
C	4.40E+10	6.48E+20	6.79E-11	0.1280

Results Panel ARDL show

1. Amount money circulating no take effect and no significant to *foreign Direct Investments* in country Thailand. Thing this could is known from score coefficient and score probability variable that alone which as big  $> 0.05$ .

2. Credit give influence negative however no significant to FDI which showed by score probability sig which more big from 0.05 that is as big 0.12.
3. Exchange rate find results take effect negative significant to development FDI. Decision that could seen from score

coefficient and score probability which more small from 0.05.

4. Ethnic group Flower take effect positive significant to development FDI in Indonesia which proven with score coefficient which positive and score prob < 0.05.

### c. Analysis Panel ARDL Country Malaysia

Following results though data Panel ARDL in country Malaysia with program Eviews 10 :

Table 4.4 output Panel ARDL Country Malaysia

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.555666	0.032498	-17.09869	0.0004
D(JUB)	-7.77E+08	5.36E+16	-1.45E-08	0.1041
D(CREDIT)	1289445.	5.00E+11	2.58E-06	1.0000
D(EXCHANGE)	-1.41E+10	1.30E+19	-1.08E-09	0.0203
D(SB)	2.90E+08	1.54E+17	1.88E-09	0.0302
C	2.26E+10	5.94E+19	3.80E-10	0.0040

Results test Panel ARDL show

Amount money circulating take effect negative however no significant to *foreign Direct Investments*. Thing this could is known from score coefficient and score probability variable that alone which as big < 0.05.

1. Credit give influence positive and no significant to FDI which showed by score probability sig which more big from 0.05 that is as big 0.00.
2. Exchange rate find results take effect negative significant to development FDI. Decision that could seen from score

coefficient and score probability which more small from 0.05.

3. Ethnic group flower take effect positive significant to development FDI in Indonesia which proven with score coefficient which positive and score prob < 0.05.

### d. Analysis Panel ARDL Country Singapore

Following results though data panel ARDL in country Singapore which helped by program eviews 10

Table 4.5 output Panel ARDL Country Singapore

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.888758	0.036449	-24.38337	0.0002
D(JUB)	1.77E+09	5.35E+17	3.30E-09	0.3130
D(CREDIT)	27939591	4.40E+13	6.34E-07	0.1000
D(EXCHANGE)	9.68E+10	1.67E+21	5.79E-11	0.0398
D(SB)	-7.46E+08	1.58E+18	-4.71E-10	0.0000
C	3.71E+10	2.15E+20	1.73E-10	0.2031

Results test Panel ARDL show

1. Amount Money Out of circulation give influence positive and no significant to FDI which showed by score probability sig which more big from 0.05.
2. Credit give influence positive and no significant to *foreign Direct Investments* which showed by score probability sig which more big from 0.05
3. Exchange rate give influence positive significant to FDI which showed by score probability sig which more big from 0.05.

4. Ethnic group Flower give influence positive and significant to FDI which showed by score probability sig which more small from 0.05.

### e. Analysis Panel ARDL Country Philippines

Following results though data panel ARDL in country Philippines which helped by program eviews 10 :

Table 4.6 output Panel ARDL Country Philippines

Variables	coefficient	std. Error	t-Statistics	Prob. *
COINTEQ01	-0.030545	0.000174	-175.7108	0.0000
D(JUB)	-47224452	2.64E+15	-1.79E-08	0.0207
D(CREDIT)	205129.2	5.71E+10	3.59E-06	0.7219
D(EXCHANGE)	-3.36E+08	8.71E+16	-3.86E-09	0.0000
D(SB)	1.03E+08	4.48E+16	2.30E-09	0.0000
C	2.63E+09	1.63E+18	1.61E-09	0.0000

Results test Panel ARDL show

1. Amount money circulating take effect negative significant to *foreign Direct Investments*. Thing this could is known from score coefficient and score probability variable that alone which as big  $< 0.05$ .
2. Credit give influence negative and no significant to FDI which showed by score probability sig which more big from 0.05.
3. Exchange rate find results take effect negative significant to development FDI. Decision that could seen from score coefficient and score probability which more small from 0.05

4. Ethnic group Flower take effect positive significant to development FDI in Indonesia which proven with score coefficient which positive and score prob  $< 0.05$ .

## DISCUSSION

Based on all results which obtained could seen that which significant in period long influence *foreign Direct Investments* in Asia Southeast of *emerging Market* that is JUB, Exchange rate, Ethnic group Flower whereas in period short no there is which influence *foreign Direct Investments*. Following table summary results test Panel ARDL

Table 4.7 Summary of ARDL Panel Data Processing Results

Variable	Indonesia	Thailand	Malaysia	Singapore	Philippines	Short Runs	Long Run
JUB	1	0	0	0	1	0	1
Credit	1	0	0	0	0	0	1
Exchange rate	1	1	1	1	1	0	1
SB	1	1	1	1	1	0	1

Results analysis test Panel prove

### a. Leading Indicators Effectiveness Foreign Direct Investments In Asia Southeast Of Emerging Market Countries

1. leading indicators foreign Direct Investments (FDI) country Indonesia in mechanism transmission policy monetary through track credit is (JUB, Credit, Exchange rate and SB).
2. leading indicators foreign Direct Investments (FDI) country Thailand in mechanism transmission policy monetary through track credit is (Exchange rate and SB)
3. leading indicators foreign Direct Investments (FDI) country Malaysia in mechanism transmission policy monetary through track credit is (Exchange rate and SB)
4. leading indicators foreign Direct Investments (FDI) country Singapore

in mechanism transmission policy monetary through track credit is (JUB, Exchange rate and SB)

5. leading indicators foreign Direct Investments (FDI) country Philippines in mechanism transmission policy monetary through track credit is (JUB, Exchange rate and SB).

Could our see from explanation on that *leading indicators foreign Direct Investments* (FDI), in mechanism transmission policy monetary through track credit to FDI on every country will experience difference. Results study on same with study which conducted by Brams First (2015) which say that Amount Money Out of circulation take effect positive and significant to *foreign Direct Investments* (FDI) in Singapore in line with study by and Nurimalasari (2017) that Amount Money

Out of circulation take effect significant to *foreign Direct Investments* (FDI) in Indonesia. On study by Rizly Indrawa (2017) find results that Exchange rate take effect significant to *foreign Direct Investments* (FDI). On study amrin, Rahma Wati Daily (2016) obtain results that Amount Money Out of circulation (JUB) take effect negative significant to *foreign Direct Investments* (FDI). From results discussion which on could concluded that every country have method respectively respectively in application mechanism transmission policy monetary through track credit including control *foreign Direct Investments* (FDI).

In control stability system finance, transmission policy monetary run together with policy supporters other which enter into the model the. Transmission policy monetary if conducted with good so will more effective to control *foreign Direct Investments* (FDI) through Amount Money Out of circulation (JUB), Exchange rate and Ethnic group flower. Mechanism Transmission Policy Monetary could defined where something track could control and influence something economy like on rate change price. It means monetary policy transmission mechanism is wrong one policy government which function for arrange and control system economy especially on field credit.

#### **b. Kindly Panel**

kindly panel it turns out Amount Money Out of circulation (JUB), Exchange rate and Ethnic group flower also capable Becomes *leading indicators* for control country Indonesia, Thailand, Malaysia, Singapore and Philippines ,however position no stable in *Long run*. Policy monetary have role which very important if conducted with good in *foreign Direct Investments* (FDI). Study the in line with opinion Anisa ulfathoni Hidayati, Sugiyanto (2019) which put forward that destination from mechanism transmission policy the is for consider analysis on economy macro and micro which finally reach target end that is inflation. In determine Monter Policy Transmission needed also role policy monetary (market

goods and market money) so that no occur something risk systemic which make crisis finance. For Thing the, which must conducted government is roll out something meeting for discuss development condition finance latest.

#### **CONCLUSION**

1. Ethnic group Flower and Exchange rate Becomes *leading indicators* in Asia Southeast *Of emerging Market Countries* (Indonesia, Thailand, Malaysia, Singapore and Philippines), however position no stable on *short run*.
2. leading indicators main mechanism transmission policy monetary through track credit in control FDI in Asia southeast *of emerging Market Countries* that is JUB, Credit, Exchange rate and Ethnic group Flower seen from *long run*, whereas variable JUB, Credit, Exchange Rate, Tribe flower no significant on period short in control *foreign Direct Investments* seen from the short run.

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