MINISTRY OF FINANCE

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THE IMPACT OF FISCAL POLICY, EXCHANGE RATE, AND GOVERNANCE ON ECONOMIC GROWTH IN DEVELOPING COUNTRIES

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SUMMARY OF PH.D THESIS OF ECONOMICS

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SUMMARY OF THESIS

The thesis simultaneously studies the direct impact of fiscal policy, exchange rate and governance, and the interacting impact of governance and exchange rate on economic growth in developing countries and two groups of upper and lower middle income countries.

The research of thesis uses the method of GMM in system to assess the direct simultaneous impact of the above factors and the interaction of governance and exchange rate on economic growth in developing countries in the period of 2002 to 2020.

The results show that, governance has a negative impact on economic growth but improves the exchange rate when interacting with the exchange rate to affect economic growth, the exchange rate has a positive impact on economic growth, but fiscal policy has turned from negative to positive in the interaction model of governance and exchange rate in the group of upper middle-income countries.

Developing countries need to further improve the quality of governance – the regulation quality, control of corruption, and voice and accountability to improve the results of fiscal policy, financial markets, and exchange rate stability to promote economic growth.

Keywords: Developing countries, exchange rate, fiscal policy, governance, GMM, interacting variable of governance and exchange rate.

JEL: B22, B52, C23, E02, E12, E62, E63, F43, H62.

CHAPTER 1
INTRODUCTION OF RESEARCH

1.1. Necessity of the thesis

In order to achieve the goal of economic growth, national governments often use a combination of monetary policy and fiscal policy, specifically fiscal policy includes government spending and taxes, and monetary policy is interest rates, money supply through financial institutions to influence or stimulate actors in the economy to participate in production and business activities to create employment for workers, increase savings, increase consumption, and reinvest to promote the growth of the economy. These effects are concertized in the IS - LM model of Hicks (1937)-Hansen (1953) which is based on Keynesian (1936) “the general theory of employment, interest and money”

For fiscal policy, the government uses fiscal tools of tax and government spending to promote economic growth in a country within the scope of the annual budget approved by parliament (Mishkin & Serletis, 2011; OECD, 2002; IMF, 2007). However, the effect of fiscal policy on economic growth in each country is different because fiscal policy has a positive or negative impact on economic growth greatly depending on the public governance environment in each country (Petrovíc, Arsíc, & Nojkovíc, 2020; Baldacci, Hillman, & Kojo, 2004; Hadj Fraj, Hamdaoui, & Maktouf, 2018; North, 1991).

For monetary policy, the IS - LM model which was later studied extensively in an open economic environment under the impact of exchange rate by independent research of Mundell (1963) and Fleming (1962) showing that interest rates and money supply have an impact on inflation and exchange rate, thereby affecting trade or import and export, and attracting foreign investment, these factors affecting economic growth

through the economic growth model based on aggregate demand of Keynesian (1936). Many empirical studies show that money supply and interest rates have an impact on inflation and exchange rate volatility (Frankel, Parsley, & Wei, 2011; Alagidede & Ibrahim, 2017) and exchange rate is not the main policy tool to directly affect economic growth, but it is indirectly transmitted through interest rates, inflation, and terms of trade, thereby affecting economic growth as in the study of Alagidede et al. (2017).

In the extensive IS-LM model of Mundell (1963) and Fleming (1962), it also shows that fiscal policy and monetary policy have a mutual impact on inflation and exchange rates to net exports and foreign direct investment which impact on economic growth through the aggregate demand model of Keynesian (Mishkin et al., 2011, pp. 572-593) and whether these activities are subject to government's impact through tax policies, annual government spending or interest rate policy, money supply on economic growth?

Empirical results have answered this question and public governance contributes to stabilizing monetary policy, enhancing the role of financial institutions, stabilizing interest rates and exchange rates to attract investment, contributing to economic growth (Taylor, 1995; Hadj Fraj, Hamdaoui & Maktouf, 2018). Good governance is about creating an institutional environment with commitments to political stability, guarantees of property rights, as well as commitments to exchange rate stability and foreign investment attraction (Hadj Fraj, Bouchoucha, & Maktouf, 2020; Mankiw, 2021). For developing countries, governance is still bad, financial market is weak, and exchange rates can affect the net asset value of foreign investment, reducing productivity of a country thereby affecting economic growth (Hadj Fraj et al., 2018, 2020). However, there has been no research specifically on the role of the governance quality

in administrating fiscal and monetary policy through exchange rate to economic growth, especially in developing countries with poorer governance quality than developed countries. From the gaps of previous studies and the facts in recent years, the author decides to choose the topic: ***"The impact of fiscal policy, exchange rate, and governance on economic growth in developing countries"*** as the author's doctoral thesis.

1.2. Objectives of the thesis

Objectives of the thesis are expressed through the following research questions:

(1) Whether fiscal policy, exchange rate, and governance directly impact on economic growth in developing countries or not? If yes, the impact on economic growth is positive or negative? Whether these impacts on economic growth are different in upper middle income countries and lower middle income countries or not?

(2) Whether the interaction of governance and exchange rate stimulates economic growth in developing countries better or not? Whether this interaction improves the impact of fiscal policy on economic growth or not? Whether these impacts on economic growth are different in upper middle income countries and lower middle income countries or not?

(3) What are implications about fiscal policy, exchange rate, and governance in order to promote economic growth in developing countries and specifically in Viet Nam?

1.3. Subjects and scope of research

The main research subjects of the thesis are fiscal policy, exchange rate, governance, interaction of governance and exchange rate, and economic growth in developing countries. Due to the limitation of the data that can be calculated for the case of Vietnam, the sample of observation used in the research is datasets of 93 developing countries, including 48 upper middle

income countries and 45 lower middle income countries, and Viet Nam is classified as a lower middle income country based on the classification of countries by annual income capita. The period of research is from 2002 to 2020.

1.4. Methodology of research

In order to answer the first research question, the thesis uses GMM in system (Generalized Method of Moments in system) for a dynamic panel model (because in the model there is a lagged variable of economic growth as an independent variable) to estimate the regression coefficients to evaluate the direct impact of fiscal policy, exchange rate, and quality of governance on economic growth in developing countries and two sub-samples of upper middle-income countries and lower middle income countries.

In order to answer the second research question, the author firstly uses the regression method of PVAR (Panel Vector Auto-Regression) to test the Granger causality of variables of governance and exchange rate to determine the interaction relationship of these two variables in the interaction model, then the author uses the systematic GMM regression method to evaluate the impact of the interaction variable of governance and the exchange rate on the exchange rate to promote economic growth in developing countries and two sub-samples of upper middle income countries and lower middle income countries.

1.5. Thesis contributions

In comparison with the previous studies in the same subject, the thesis has some new contributions as follow:

Firstly, the thesis uses a composite of governance which is integrated from six dimensions of governance introduced by Kaufmann, Kraay, & Mastruzzi (2011) by the method of principal component analysis (PCA),

and to test the robustness of estimated coefficients the author uses the exchange rate volatility which is estimated by the author. Secondly, the thesis uses fiscal balance as a representative variable of fiscal policy which is calculated by the difference of budget revenue from government spending. Thus, the results of fiscal balance can be positive (fiscal surplus) or negative (fiscal deficit). The variable of fiscal balance will fully reflect the fiscal policy through the impact of budget revenue and government spending. Thirdly, thesis uses the interacting variable of a governance composite and a nominal bilateral exchange rate of developing countries compared with USD in the original year of 2000 to assess the impact of government on exchange rate to economic growth and this is also the different point compared with exchange rate regime in the research of Hadj Fraj et al.(2018). Finally, the thesis evaluates the minimum critical threshold of governance quality in the interacting variable of a governance composite and an exchange rate in which if the quality of governance is improved will make exchange rate to impact on economic growth better.

1.6. Structure of the thesis

Context of the thesis includes 5 chapters, reference, and appendices.

Chapter 1: Introduction of research.

Chapter 2: Theoretical framework and empirical review.

Chapter 3: Methodology of research.

Chapter 4: Empirical results.

Chapter 5: Conclusion and policy implications.

CHAPTER 2

THEORETICAL FRAMEWORK AND EMPIRICAL REVIEW

2.1. Theory of impact of fiscal policy, exchange rate, and governance on economic growth

2.1.1. Theory of direct impact of fiscal policy, exchange rate, and governance on economic growth

Stemming from the theory of impact of fiscal policy on economic growth through IS- LM model (Keynes, 1936) to IS- LM extensive model of Mundell (1963) and Fleming (1962), and the theory of impact of governance on economic growth through five perspectives which are (1) structure of governance, (2) regulation framework and rules of economies, (3) resource distribution, (4) the waste associated with bureaucracy, (5) the failings of the state as responsibility of the legislation. In general, until the author conducts the research, there is no economic theory or economic model showing the simultaneous direct impact of fiscal policy, exchange rate and governance on economic growth, but these effects are mainly from policies and events occurring in the open economy that can change the equilibrium point of the economy in the Keynesian model of aggregate demand or IS -LM extensive model by Mundell (1963) and Fleming (1962). The first is that the effect of fiscal deficit or public savings is negative, which will reduce national savings (which is the sum of household savings and public savings). Therefore, fiscal deficit will reduce credit supply, increase interest rates, cause crowding out investment and these negatively affect the economy (Kim, 2008; Mankiw, 2021). Secondly, trade policy is government policy that directly affects the amount of goods and services which a country imports and exports. Therefore, trade policy does not actually affect the balance of trade, although it can directly affect exports or imports, and it does not change net exports and is also: NX = NCO = S - I, where NX is net exports, NCO is net capital outflows, S is savings, I is investment, and intervention of trade policy only has a negative impact on the economy (Romelli et al., 2018; Mankiw, 2021). Finally, political stability and capital mobility: political instability in a country will have a strong impact on foreign investment in that country, investors will flee that

country, sell most of the assets invested in that country, and move the invested capital to countries with more political stability and more security. This capital flight negatively affects the economy (Mankiw, 2021; Hadj Fraj et al., 2020).

2.1.2. *Theory of interaction impact of governance and exchange rate on economic growth*

The appropriate exchange rate regime (floating and fixed exchange rate) that each country is adopting depends on the quality of governance. In developing countries, financial market is not yet developed and the government's regulatory capacity is weak, so a fixed exchange rate regime is seen as an easy commitment to audit and the government would not be in a position to deal with the problem of foreign investors' trust (Giavazzi & Pagono, 1988; Drazen, 2002; Frieden, 2002, Hadj Fraj et al., 2018).

There are many studies on the relationship of monetary policy and the quality of governance, such as the study of Rogoff (2004), Huang & wei (2006), Siklos (2000) considering the institutional independence in operating mechanism of central bank and governance which can help to control inflation, especially in countries with poor governance which is a high level of corruption and wide spread of rent seeking, normally having inefficient monetary policy. From this they concluded that good governance coupled with a stable exchange rate policy can help to control corruption and improve economic growth. In some countries, the government intervenes in fluctuations of financial market by devaluing the local currency or raising interest rate to prevent capital outflows and to interfere exchange rate volatility. As a result, if a country has poor governance quality, it can make the economic performance worse from the decision to devalue its currency and reducing the net asset value of companies and banks, while the higher the interest rate, the higher the debt

risk of domestic economic organizations. Therefore, Hadj Fraj et al. (2018) argue that countries with good governance can promote better economic growth.

2.2. Research gap

(1) Many economic theories, such as IS-LM of Keynes (1936) and theory of IS-LM-BP of Mudell (1963) and Fleming (1962) has shown the impact of fiscal policy and monetary policy including exchange rate on economic growth. In addition, these models also show the role of the government in building, operating, and making monetary and fiscal policies to promote economic growth. Therefore, the author proposes the quality of governance as the role of government, along with the impact of fiscal policy, and monetary policy through the exchange rate on economic growth.

(2) When considering the impact of governance components on economic growth, the role of the government in operating fiscal and monetary policy has not yet been shown, as well as the results of previous empirical studies about the impact of the components of governance on economic growth was not uniform. Therefore, the author synthesizes six components of governance into a composite variable to represent the government's impact on economic growth and the author can determine which components mainly contribute to the composite variable of governance by principal component analysis method (PCA).

(3) Inherited from the study of Hadj Fraj et al. (2018) using the interacting variable of the quality of aggregated governance and the exchange rate mechanism, but it did not yet consider the impact of fiscal policy on economic growth simultaneously. The author suggests that it is necessary to further study the interaction effect of governance and exchange rate, along with the impact of fiscal policy on economic growth based on fundamental

economic growth model of Keynes (1936) and the extensive model of IS-LM-BP by Mundell (1963) and Fleming (1962).

(4) For the research sample of the thesis, the datasets used in the study is developing countries, which are divided into two groups of upper middle income countries and lower middle income countries, in order to be able to clearly show the differences in macroeconomic policies that can be overcome and improved to move from a group of lower middle income countries (including Vietnam) to a group of upper middle income countries, instead of studying on two groups of developed and developing countries as in previous empirical studies.

CHAPTER 3

METHOD OF RESEARCH

3.1. Approach method

Firstly, the author considers the direct impact of each factor of fiscal policy, exchange rate, and governance on economic growth in developing countries (93 countries in the overall sample) and separated into two sub-samples, namely the group of upper middle income countries (48 countries) and the group of lower middle income countries (45 countries) during the period from 2002 to 2020 by the Generalized Method of Moments in System (GMM). Next, the thesis examines the interaction impact of the governance quality with the exchange rate, and the direct impact of fiscal policy on economic growth on the overall and two sub-samples. Because in this interaction model, there is the direct impact of exchange rate, governance quality and the interacting variable of exchange rate with governance quality, the author performs the Granger causality test to evaluate the relationship of exchange rate and governance quality and determine the interaction direction of the quality of governance on the

exchange rate or the exchange rate on the quality of governance in order to determine the critical threshold of impact on the interacting variable. If the results show that there is a Granger causality and the impact direction of the aggregated governance variable and the exchange rate in the interacting variable, the author will perform a systematic GMM test to evaluate the impact of the interacting variable or the transmission of governance quality to exchange rates impacting on economic growth in developing countries and two sub-samples of upper middle income countries and lower middle income countries. From the estimated results of the interacting variable, the author determines the critical threshold point for the impact of the quality of governance on the exchange rate or the pass-through point of the quality of governance through the exchange rate at which the more the quality of governance is improved, the higher the positive impact on economic growth on the studying three samples. Finally, the thesis proposes policy implications of exchange rate and fiscal policy corresponding to the quality of governance in each group of countries, including Vietnam.

3.2. *Research model:*

Model 1: Direct impact of fiscal policy, exchange rate, and governance on economic growth.

$$GDPG_{i,t} = \alpha_{0it} + \alpha_{1it}GDPG_{it-1} + \alpha_{2it}NER_{it} + \alpha_{3it}ICGOV_{it} + \alpha_{4it}FB_{it} + \alpha_{5it}INFL_{it} + \alpha_{6it}TROPEN_{it} + \alpha_{7it}RIR_{it} + \alpha_{8it}NFDI_{it} + \alpha_{9it}CA_{it} + \theta_i + \mu_t + \varepsilon_{it} \quad (3.1)$$

$GDPG_{it}$ and $GDPG_{it-1}$: growth rate of GDP of country i at time t and lagged variable of GDP growth of country at lagged time t-1; NER_{it} : nominal exchange rate of country i at time t; FB_{it} : fiscal balance of country i at time t; $ICGOV_{it}$: governance quality of country i at time t; and other control variables $INFL_{it}$;$TROPEN_{it}$;RIR_{it} ;$NFDI_{it}$;CA_{it} respectively are inflation,

trade openness, real interest rate, net foreign direct investment, and current account of country i at time t; μ_t và θ_i : fixed effect at time t and object i; $\varepsilon_{i,t}$: random errors from the effect of omitted variables in the model.

Model 2: Interaction impact of governance quality with exchange rate on economic growth

$$GDPG_{i,t} = \beta_{0it} + \beta_{1it}GDPG_{it-1} + \beta_{2it}NER_{it} + \beta_{3it}ICGOV_{it} + \beta_{4it}FB_{it} + \beta_{5it}INFL_{it} + \beta_{6it}TROPEN_{it} + \beta_{7it}RIR_{it} + \beta_{8it}NFDI_{it} + \beta_{9it}CA_{it} + \beta_{10it}(ICGOV*NER)_{it} + \theta_i + \mu_t + \varepsilon_{it} \quad (3.2)$$

Similar to the research model of Hadj Fraj et al. (2018) when studying the interacting impact of the quality of governance and the exchange rate mechanism by adding the interacting variable to the previous direct impact model, in which $(ICGOV*NER)_{it}$ is the interacting variable of the quality of governance and nominal exchange rate of country i at time t.

3.3. Method of processing data

3.3.1.PVAR method

$$ICGOV_{i,t} = \beta_0 + \beta_1\sum_{m=1}^{p} ICGOV_{i,t-m} + \beta_2\sum_{n=0}^{p} NER_{i,t-n} + \beta_3\sum_{n=0}^{p} FB_{i,t-n} + U_{it} + \varepsilon_{it} \quad (3.3)$$

In which, ICGOV is an aggregated governance, NER is nominal exchange rate, FB is fiscal balance, U fixed effect of research objects in panel data, ε is random errors. The verification steps are performed in turn according to the following steps: *(i) Test of optimal lag by J statistics of Hansen (1982), (ii) Test of Granger (1969) causality, (iii) Test of the stability of the causal relationship by the modulus of each eigenvalue of the model with the predefined optimal delay.*

3.3.2. GMM method

Using the modeling method of Monte Carlo, Blundell & Bond (1998) have proved that the system GMM estimation method is more efficient than the two-step difference GMM method. Because the system GMM method

combines both the differential equation and the original equation as a SUR system (Seemingly Unrelated Regression). In the first difference equation, the variables used as instrumental variables are lagged variables of the independent variables in the model with the lowest lag of one period. This system of simultaneous equations is estimated by the GMM method. The system GMM method can control specific and potential endogenous effects from the independent variables. The effectiveness of this GMM estimation method is based on the test of two hypotheses about the homogeneity of the instrumental variables and the non-correlation between the residuals. Auto-correlation of residuals was tested by using the method proposed by Arellano & Bond (1991). The appropriateness of lagged variables used as instrumental variables will be tested by Sargan/Hansen test to test the constraint that the overidentification test is satisfied. The system GMM method has the following advantages: Firstly, it is possible to control for the unobserved specific effects of the subjects in the research sample because it does so in the first-difference equation. Secondly it is possible to control potential endogeneity from the independent variables in the model, including from the lags of the independent appropriate variables used as instrumental variables.

CHAPTER 4

EMPIRICAL RESULTS

4.1. Research result about the direct impact of fiscal policy, exchange rate, and governance on economic growth

Economic growth in previous period: regression coefficient of economic growth in previous period has a positive value and similar to the results of D'agostino et al. (2016), Hadj Fraj et al (2018). This result shows that the economic growth rate of the countries in the sample in the current period is often affected by the previous period and has the effect of increasing the

growth rate of the following period. The magnitude of this impact is 0.270, 0.178 and 0.431, respectively across the overall sample, two sub-samples of upper middle income countries and lower middle income countries, in which the economic growth rate of lower middle income countries is generally more affected by the previous period than that in upper middle income countries. *Nominal exchange rate:* Statistically significant at the 5% level of significance in the overall sample and 1% in the sample of upper middle income and lower middle income countries. The results show that the exchange rate has a positive impact on economic growth, even in two sub-samples with the research results in developing countries by Enejoh et al. (2017), Alagidede et al. (2017), Rapetti et al. (2012), and Das et al. (2020). The contribution of the nominal exchange rate to economic growth rate is important in lower middle income countries and highest in the three samples, specifically 0.146 compared with 0.107 in upper middle income countries and double 0.071 in developing countries. *Fiscal balance* has a positive impact on economic growth or promotes economic growth in developing countries, similar to the research results of Benos (2009), Ocran (2011), and Hussain et al. (2017). However, when considering the results on the two sub-samples of upper middle income and lower middle income countries, the fiscal balance has a negative impact on economic growth in the research period with the results are -0.0600 and -0.0408 respectively, consistent with the results of Adegoriola (2018), Aero et al. (2018), Le Thanh Tung (2018), and M'Amanja et al. (2005). *Quality of governance*: has a negative impact on economic growth in developing countries and in the two sub-samples and this result is similar to the study of Hadj Fraj et al. (2018) when it does not yet consider the interaction effect with the exchange rate mechanism in his research. This is contrary to the expectations of the research objective, as well as the theories of governance of Kaufmann et al. (2011), North (1990, 1991), and many other studies

related to the quality of governance and economic growth. Therefore, it shows the need to study the interaction relationship between the quality of governance and other macroeconomic factors to find out how this interaction affects economic growth rate, specifically in this study the author will consider adding the interacting variable of the quality of governance with the exchange rate to the model of the direct impact of fiscal policy, exchange rate and governance on economic growth in developing countries (Hadj Fraj et al., 2018; Baldacci et al., 2004).

4.2. Research result about the interaction impact of governance quality and exchange rate, and impact of fiscal policy on economic growth

Economic growth rate in the previous period: the regression coefficient of this variable is statistically significant at 1%, the estimated results show a positive impact on economic growth on all three samples. Specifically, 0.267 of the research sample is developing countries, 0.154 in group of upper middle income countries, and 0.501 in group of lower middle income countries. This research result is similar to the study of Hadj Fraj et al. (2018, 2020) and Alagidede et al. (2017). *Interaction variable of governance quality and exchange rate:* the regression coefficient of the interacting variable has an impact on promoting economic growth in developing countries in all three research samples 0.233, 0.109, and 0.043 respectively corresponding to the overall sample, the group of upper middle income countries and lower middle income countries. The results of this study are similar to those of Hadj Fraj et al. (2018), in which he believes that the quality of governance interacting with the exchange rate mechanism will promote economic growth. *Nominal exchange rate:* The estimated result of the regression coefficients has positive impact on economic growth. In the overall sample and the two sub-samples, upper middle income countries and lower middle income countries respectively

0.078, 0.125, and 0.111. The degree of exchange rate impact on the interaction model is all improved compared to the previous direct effect model from 0.071 for the overall sample, from 0.107 for upper middle income countries, and except for the group of lower middle income countries, 0.146. This result is similar to the study of Enejoh et al. (2017), Alagidede et al. (2017), Rapetti et al. (2012), and Das et al. (2020). *Fiscal balance:* the regression results of the fiscal balance have a positive impact on economic growth in developing countries (overall sample) and in the group of upper middle income countries respectively 0.034 and 0.067, but the negative impact on economic growth in the group of lower middle income countries is estimated at -0.029. The results in this model are different in the sample of upper middle income countries, specifically in the previous direct impact model, the impact of the fiscal balance is negative on economic growth (-0.060) but in the interaction model this coefficient is positive (0.067). Moreover, in the group of lower middle income countries the coefficient of fiscal balance is also improved from -0.040 reduced to -0.029 in the interaction model.

CHAPTER 5
CONCLUSION AND POLICY IMPLICATIONS

5.1. Conclusion

The research results answered the research questions, as well as the research hypotheses posed. Firstly, governance has a negative impact on economic growth when considered independently in the direct impact model in all three samples, namely developing countries, upper middle income countries, and lower middle income countries. The research results are different from the expectations of the research hypothesis, that the quality of governance in developing countries is not good and does not yet have a direct impact on economic growth as in developed countries

(Poniatowicz et al., 2020), the results of this study are similar to the study of Hadj Fraj et al.(2018). Secondly, exchange rate has a positive impact on economic growth in all three samples. When comparing the degree of impact in two sub-samples of upper middle income countries and lower middle income countries, the exchange rate in lower middle income countries contributes to economic growth higher than that of upper middle income countries. This empirical result is consistent with the expectation of the research hypothesis that exchange rate has a positive impact on economic growth in developing countries (Alagidede et al., 2017; Rapetti et al., 2012). Thirdly, fiscal policy has a positive impact on economic growth in developing countries during the research period of 2002 to 2020 and these results are consistent with the hypothetical expectations of the study and consistent with the research results of Benos (2009), Ocran (2011), Hussain & Haque (2017). However, when considering two sub-samples, the fiscal balance has a negative impact on economic growth in both of groups of countries (Adegoriola, 2018; Aero & Ogundipe, 2018; Le Thanh Tung, 2018; M'Amanja & Morrisey, 2005). Finally, the interaction of the quality of governance and the exchange rate has a positive impact on economic growth in developing countries and two sub-samples of the upper middle income countries and lower middle income countries. The results are consistent with the expectations of the research hypothesis and similar to the results of Hadj Fraj et al. (2018). Specifically, when considering the impact of governance quality on macroeconomic policy, monetary policy through the exchange rate in the interaction model, this interaction result further improves the impact of exchange rate and fiscal policy in upper middle income countries compared to that in lower middle income countries, which can be explained by the better quality of governance in upper middle income countries (the average of governance quality of the group of these countries is 0.309 higher than the group of lower middle

income countries is -0.278) and this result is also consistent with the research results of Hadj Fraj et al. (2018) showing that the quality of governance is better, when interacting with exchange rate mechanism also improves the impact of the exchange rate regime on economic growth. Moreover, when considering the critical threshold of impact of governance quality on the exchange rate which directly impact on economic growth. Specifically in developing countries, this critical threshold for governance quality must be at least from -0.337, and in upper and lower middle income countries -1.143 and -2.611 respectively. From these results, they have shown that the current quality of governance of developing countries in the study period has a positive impact on exchange rate and economic growth (average quality of governance of developing countries is 0.0235 higher than -0.337), similar to the results of upper and lower middle income countries with the current average quality of governance currently at 0.309 and -0.278 respectively (descriptive statistics for variables 4.1, 4.2, 4.3) are greater than the minimum critical thresholds of the group of upper middle income countries and the group of lower middle income countries respectively -1,143 and -2.611 respectively (Table 4.15). This research result is also consistent with the study of Hadj Fraj et al. (2018), the quality of governance in developing countries only positively affects economic growth when indirectly through macroeconomic policies, specifically in this study is the nominal exchange rate.

5.2. Policy implications:

5.2.1. Developing countries

From the research results, to improve and promote economic growth, the author believes that developing countries should pay attention to the implementation of the following policies. Firstly, developing countries need to improve the quality of governance: the quality of governance in

developing countries is still low, namely the rule of law (-1.689), government effectiveness (-1,1567), and regulation quality (-0.212) - these are the component variables of governance that have the most negative impact on economic growth (Appendix 6a). Developing countries need to improve the legal system to create a legal corridor for activities in the economy. If the legal corridor is strong enough and transparent enough, it will create confidence to attract foreign investment and private investment, thereby promoting economic growth. In addition to perfecting the legal system, governments of developing countries need to improve the efficiency of public investment, control costs of investment in infrastructure, and improve the quality of public investment works. To do so, developing countries need to improve government effectiveness with effective policies to control of corruption to increase the efficiency of public investment (Montes et al., 2018), in addition to improving the legal system to improve regulation quality and rule of law by allowing public participation of citizens and transparency in public investment projects and government spending on health, welfare, and social welfare, especially in recent years during and after the global Covid 19 pandemic which is affecting most countries in the world. According to the World Bank (2017) governance in developing countries needs to be improved to be able to face growth challenges, including political stability, control of corruption, and voice and accountability which are still limitations on the quality of governance that developing countries need to consider and improve. Secondly, implementing an appropriate exchange rate policy: developing countries often apply an export-oriented economic growth policy, so the trade openness is quite large, and the policy to attract foreign direct investment is also quite open. Therefore, the appropriate exchange rate policy is considered as a valve to prevent external shocks and exchange rate speculation (Harrison & Sepúlveda, 2011). Governments of developing

countries need to implement a flexible exchange rate policy in each period to both stimulate exports, attract capital investment, and prevent possible risks when there are changes in the policies of major countries. This has been proven by the interest rate hikes by the US Ministry of Finance to control inflation after the Covid 19 pandemic and this policy is creating shocks to monetary policy, specifically interest rates and exchange rates of the developing countries which are still having to overcome the consequences of the Covid 19 pandemic, such as re-absorbing foreign investment from the economic block-down due to the epidemic, restarting factory operations, and solving unemployment problems. Thirdly, improving the fiscal balance through improving budget revenues and controlling government spending well. As for revenue improvement, a solid source of government revenue is from corporate activities, value-added tax, etc.., and avoidance of losses from improving regulatory quality (or public finance law). Because most studies show that tax or budget revenue has a positive impact on economic growth, but in this study the author's results show the opposite, which also means that the budget revenue of developing countries in the research period has not contributed to economic growth and this is also the reason why fiscal policy has not contributed to economic growth in the group of upper and lower middle income countries (estimated results in the direct effects model).

5.2.2. Upper middle income countries

Countries with quality of governance are more uniform and better than that in lower middle income countries. Specifically, the average governance quality of upper middle income countries is 0.309 while that of the lower middle income countries is -0.278. Moreover, the financial market in these countries is also more developed than that of lower middle income

countries. Therefore, promoting economic growth in these countries does not depend entirely on the quality of governance and the exchange rate.

This is also the development orientation of high income countries or developed countries, where the quality of governance and institutions are better and financial market has developed. Thus in these countries, economic development is no longer dependent on a macroeconomic factor such as exchange rate or exports as those in developing countries, and economic growth is contributed by many different factors such as foreign investment, trade openness, current account, as well as the effectiveness of fiscal policy. For instance, World Bank report (2017) has shown that the case of China's economic growth has been more than double-digit over the past 40 years and this development also shows that although the institutions has barely changed, but adaptive policy decisions and state capacity are the factors to drive economic success through profound changes to mechanisms for accountability and collective leadership. However, in recent years China's economic growth has shown signs of slowing down and requires political incentives to transform the state-based economic model to a privacy corporate-based economic model, competitiveness, and creativity. Many developing countries still face many challenges of transformation and restructuring economy due to pressure from vested interests from previous economic growth models. In Brazil, which has experienced 12 years of sustainable growth, the country is classified as a upper middle income country, but it still has many problems with political stability and absence of violence, and inequality between income classes in society. Therefore, political stability, rule of law, and control of corruption are still challenges to overcome so that upper middle income countries can target to high income or developed countries where the quality of governance can contribute directly to economic growth, including the quality of integrated

governance (Hadj Fraj et al., 2018) and the components of governance (Poniatowicz et al., 2020).

Corresponding to exchange rate, fiscal policy in this group of countries has a positive impact on economic growth, clearly shown in the interaction model of governance quality with exchange rate, this interaction has improved the effectiveness of fiscal policy from negative (in the direct effect model) to positive (in the interaction model), but when considering the separate impact of fiscal policy tools, budget revenue and government expenditure, budget revenue has not yet contributed to economic growth during the study period. Therefore, countries in the upper middle income group need to further improve government effectiveness, control of corruption, components of governance that have a direct impact on the effectiveness of fiscal policy (Montes et al., 2018; Everest -Philips et al., 2009).

5.2.3. Lower middle income countries

In contrast to the results of the group of upper middle income countries, the group of lower middle income countries has a negative average quality of governance and is much lower than that of upper middle income countries. This also means that the quality of governance or components of governance not really good such as political stability (-0.591), voice and accountability (-0.413), and rule of law (- 0.243) need to be improved further (Appendix 6c). Therefore, government effectiveness, control of corruption, and political stability are barriers for countries in this group. According to the World Bank (2017), Nigeria (a lower middle income country) is a country rich in oil resources, but its economic growth rate is slower than that of countries without oil resources and the reason is due to corruption occurred at the Nigerian National Oil Company to lose billions of dollars or in the case of the Somali and Myanmar countries which were

constantly experiencing political instability and violence. Thus, political stability, rule of law, control of corruption, voice and accountability are the components of governance that lower middle income countries need to improve if they are to improve the quality of aggregated governance.

In these countries, financial market is weak and therefore most macroeconomic policies and economic development depend on state management. The results of empirical research show that the economy in these countries depends largely on the impact of the quality of governance and the exchange rate, while the trade openness has not yet contributed to economic growth. Although current account and net foreign direct investment contribute to economic growth, they are still lower than in upper middle income countries. This also implies that lower middle income countries need to further improve the quality of governance, namely: political stability, government effectiveness, rule of law, voice and accountability, control of corruption to develop financial market, improve the efficiency of public investment spending to create more jobs, improve per capita income, and help to reduce the burden of inflation to citizens' consumption. Improving the quality of governance also creates more confidence for foreign investors, attracting foreign direct investment. Moreover, these improvements will further contribute to economic growth towards becoming upper middle income countries.

5.2.4. Policy Implications for Viet Nam

For Vietnam, the fiscal balance has always been in deficit, the highest deficit in 2009 during the time of the global financial crisis and this year's deficit has had an impact on improving the economic growth rate in the following year. This was also the time when the stimulus package of the economy was passed and had the effect of promoting economic growth in the following year in 2010. However, this stimulus package was also a

cause that makes a sharp increase in inflation and a negative impact on economic growth in the following year in 2011, forcing the government and state banks to cut budget spending as well as tighten the currency by raising interest rates and credit restrictions. Since 2013, the fiscal balance has positively been correlated with economic growth in Vietnam, or budget revenues and government expenditures have improved economic growth, but the volatility of the fiscal balance is stronger than the volatility of economic growth. This shows that Vietnam's fiscal policy has had an impact on improving economic growth, but the effect is not high. Moreover, Vietnam's economic growth rate is also volatile and affected by the world economic situation, but it has a lag as well as a slower recovery rate than that of other developing countries, specifically lasting the recovery period from 2008 to 2012 and has recovered since 2013. Similarly, the impact degree of the disease is also lower than that of other developing countries. This also means that Viet Nam’s economy is less affected by external shocks such as the global economic crisis and recently Covid 19 pandemic.

As for the exchange rate and the quality of governance, the exchange rate has remained mostly stable or little fluctuated and the quality of governance has always been maintained at an average level and better improved since 2015. The quality of governance in Vietnam in accordance to the ranking of the World Bank is still low and of six governance components, voice and accountability is the lowest, on average -1.43, followed by regulation quality is -0.53, and rule of law is -0.37, the government effectiveness is -0.17, meanwhile political stability is 0.188. Therefore, Vietnam needs to further improve these indicators to enhance the quality of governance, specifically voice and accountability, the government needs to listen to the opinions of businesses to further improve regulation quality - administrative procedures, investment license, improving the quality of public investment from improving the accountability of investment projects

and controlling corruption. In particular, decentralizing public investment and attaching responsibilities of local authorities in public investment. Continuously reforming the governance environment will help Vietnam transform from a relationship-based governance environment to a rules-based governance environment and outcome-based governance environment. Promoting the development of the financial market, especially the secondary bond market, to help businesses and the government easily raises capital, as well as reduces pressure on deposit and lending interest rates at commercial banks, thereby reducing the impact on inflation and exchange rate, contributing to attracting foreign investment, promoting exports which stimulate economic growth. In recent years, the exchange rate has been well coordinated and controlled by the State Bank in accordance with its commitment to the United States so as not to be classified as a currency manipulator, as well as committed to foreign investors in Vietnam. Transparency in revenue and expenditure of the state budget, especially spending for development investment, because the proportion of spending for development investment in Vietnam always exceeds the annual plan. Besides, budget revenue is still limited and loss. This may be the reason why the fiscal balance did not have a positive impact on economic growth in Vietnam before 2015 because there was always a fiscal deficit of more than 4% of GDP, while the economic growth rate was low and did not increase correspondingly (Graph 5.1). However, since 2015 Vietnam's fiscal policy has been strictly controlled through better controlled infrastructure spending projects and vigorously handling corruption cases which have contributed to economic growth in the following years. Specifically, the fiscal deficit has improved, while the economic growth rate has been better, increasing above 7%.

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