

The Empirical Analysis of the Exchange Rate Pass-Through in Lao PDR.

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ABSTRACT

This paper provides a comprehensive analysis of exchange rate pass-through and their impact on inflation in Laos. The research used a Vector Autoregression (VAR) model to analyses the interaction between important macroeconomic variables. It also utilizes impulse response function analysis and variance decomposition to further investigate this relationship. The results of empirical research show that exchange rate, oil price and aggregate money has significant impact on inflation in Laos. The paper highlights the significance of policymakers in Laos taking into account ERPT mechanisms when formulating monetary policies.

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1. Introduction

Exchange rate pass-through (ERPT) is a key concept in the area of international economics that evaluates the impact of fluctuations in exchange rates on domestic inflation. [Devereux \(2010\)](#) highlights the significance of comprehending ERPT in order to fully grasp the wider economic effects of changes in exchange rates, particularly in relation to policy formation and economic stability. Import prices serve as the main intermediary in this relationship, as changes in exchange rates have a direct impact on the cost of imports, which in turn impacts the domestic price level ([Phuc & Duc, 2021](#)). The seminal ideas proposed by [Mundell, \(1963\)](#) and [Goldberg & Tille,\(2009\)](#) argue that when exchange rates rise, it results in increased prices for imports. This, in turn, leads to a rise in domestic inflation, highlighting the clear connection between changes in exchange rates and inflationary pressures.

Exchange rate volatility has a broader impact than just influencing import prices. It also affects consumers' expectations of inflation and the pricing strategies of enterprises. [Corsetti et al., \(2008; and Dedola & Lippi, \(2005\)](#) contend that fluctuations in exchange rates might modify expectations of inflation, therefore impacting the actual inflation results. [Obstfeld et al., \(2004\)](#) emphasize that exchange rate variations have several consequences on inflation, such as influencing import prices, creating competitive pressures, and causing adjustments in inflation expectations. The transmission process usually initiates with fluctuations in import prices, which are then followed by adaptations in producer and consumer prices ([Burstein & Gopinath, 2014; Phuc & Duc, 2021](#)). Global

supply chain integration has a major impact on the extent to which domestic pricing reflect changes in international prices and fluctuations in exchange rates ([Beirne et al., 2023; Gopinath et al., 2010](#)). Countries that rely heavily on imported inputs tend to have higher rates of pass-through ([Gagnon & Ihrig, 2004](#)).

Policymakers must have a comprehensive understanding of ERPT in order to effectively manage inflation while formulating efficient monetary policies. According to [Burstein et al., \(2005\)](#) having a comprehensive grasp of the dynamics of ERPT can improve the efficiency of monetary and exchange rate policy. [Gagnon et al. \(2011\)](#) assert that a comprehensive understanding of ERPT is crucial in order to develop effective strategies that might alleviate inflationary pressures. According to [Fleming, \(1962\)](#), precise estimation of pass-through levels can enhance the efficiency of monetary policy and help reduce overall inflation rates. Nevertheless, the degree of exchange rate pass-through. ERPT varies among different economies, as it is affected by factors such as the structure of the market, pricing structures, and the composition of imports ([Goldberg & Tille, 2009](#)).

Although ERPT is important, there is a lack of research on its dynamics in Laos. The recent studies offer valuable insights into Laos' monetary policy framework and its influence on macroeconomic indicators. However, they do not extensively examine the distinctive mechanisms of ERPT in the country. [Kyophilavong et al., \(2014\)](#) analyses the stability and determinants of the money demand function in Laos. They find that exchange rates have a considerable influence on money demand, indicating a long-term feedback link. In their study, [Xaiyavong & Czernawski, \(2014\)](#) provide insights into the policy

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guidelines implemented by the Bank of Lao PDR (BOL). However, they do not discuss the currency rate pass-through mechanism. The study conducted by [Hail Park \(2023\)](#) use vector autoregression (VAR) models to examine the impact of monetary policy on macroeconomic variables such as inflation and real GDP growth. The research emphasizes the significance of highly dollarized monetary systems in determining the efficiency of policy measures. [Srithilat and Sun \(2017\)](#) investigates the correlation between actual exchange rates, inflation, and currency substitution in Southeast Asian economies, including Laos. However, the study does not extensively analyses the exchange rate pass-through phenomenon specifically in relation to Laos.

The present study seeks to examine the scope and consequences of ERPT in Laos, in order to address this existing knowledge vacuum. It is crucial to comprehend the Exchange Rate Pass-Through (ERPT) in the specific economic structure and monetary policy framework of Laos in order to formulate efficient monetary policies and effectively control inflation. This study aims to investigate the impact of exchange rate pass-through on domestic inflation in Laos. The findings of this research will offer significant insights to policymakers, enabling them to improve the efficiency of their monetary and exchange rate policies. The results will enhance economic stability and growth, addressing an essential component of economic management in a trade-dependent and currency-sensitive economy. This research aims to address a significant deficiency in the existing literature and provide realistic policy suggestions to attain macroeconomic stability in Laos.

2. Inflation and Exchange Rate in Laos

Figure 1 displays the changes in Laos's inflation rate (%) and currency rate (Kip/USD) from Q1 2012 and Q3 2023. Between 2012 and 2019, the Lao Kip's value in comparison to the US dollar fluctuated between 8,000 and 9,000 Kip/USD, while inflation was low and constant, mainly staying below 5%. However, both of the indicators began show significant volatility around 2020. The Lao Kip depreciated significantly, as evidenced by the dramatic increase in exchange rates, which peaked in early 2023 at almost 25000 Kip/USD. At the same time, inflation increased rapidly, rising from low levels to almost 40% by the first quarter of 2023 before somewhat dropping. This recent trend reflects considerable economic instability, characterized by rapid currency depreciation and escalating inflation rates.

The economic consequences of the COVID-19 pandemic are the primary cause of the substantial volatility in the exchange rate and inflation in Laos that has occurred since 2020. The pandemic resulted in economic slowdowns worldwide, disrupted global supply chains, and reduced tourism, which was a significant source of revenue for Laos. These elements probably had a part in the decline in foreign exchange reserves and an increase of pressure on the Lao Kip. In addition, the currency's rapid depreciation and a rapid increase in inflation may have been exacerbated by domestic factors, including fiscal deficits, increased public debt, and potential issues in economic policy management .



Figure 1. Exchange rate and inflation rate in Laos from 2012 to 2023

Source: Bank of the Lao PDR.

3. Literature Review

The exchange rate pass-through (ERPT) to domestic inflation is a crucial subject in the field of international economics. It examines the impact of exchange rate variations on domestic price levels. The theoretical basis of ERPT is grounded in models such as the Mundell-

Fleming framework, which suggests that a decrease in the exchange rate leads to an increase in import prices and subsequently domestic inflation ([Mundell, 1963](#)). In contrast, the incomplete pass-through model posits that not all changes in exchange rates result in proportional adjustments in prices. The extent to which pass-through occurs depends on by several variables, including market

structure, pricing behavior, and the types of goods being imported (Goldberg & Tille, 2009). In addition, New Keynesian models highlight the significance of nominal rigidities and imperfect competition in influencing the degree of pass-through (Gali & Monacelli, 2005).

The empirical study on ERPT has progressed, moving away from initial studies that concentrated on the law of one price to more intricate assessments of industrial organisation and price discrimination in product marketplaces (Devereux and Engel 2002; Devereux and Yetman 2010; Taylor 2000 and Gagnon and Ihrig; 2004) noted that alterations in the way prices are determined and people's expectations about inflation have resulted in a decrease in the extent to which changes in costs are transmitted in to consumers over a period of time. Campa and Goldberg (2005) emphasized the influence of macroeconomic variables, such as inflation performance and exchange rate volatility, on exchange rate pass-through (ERPT). They observed that an increase in the proportion of manufactured items in imports is linked to a decrease in pass-through rates. (Adolfson 2007; and Flamini 2007) conducted research that explored deeper into the ways in which comprehension of Exchange Rate Pass-Through can improve the efficacy of monetary policy.

Examination of specific sectors shows notable differences in the exchange rate pass-through within various sectors of the economy. Sectors that have a strong dependence on imported inputs tend to see greater rates of pass-through, as demonstrated by (Feenstra and Gagnon; 1997). Dynamic models have successfully shown the changing characteristics of ERPT by taking into account factors such as fluctuations in currency rates and the trustworthiness of monetary policies (Campa & Goldberg, 2002). Research has demonstrated that the globalization of supply chains affects the exchange rate pass-through, particularly in economies that are more connected relative to those that are less integrated (Gopinath et al., 2010). Furthermore, studies suggest that fluctuations in currency rates have an impact on the pricing strategies of companies and the inflation expectations of consumers, resulting in different levels of pass-through (Corsetti et al., 2008; Dedola & Lippi, 2005).

Policymakers must have a comprehensive understanding of exchange rate pass-through in order to effectively manage inflation and maintain economic stability. (Burstein et al., 2005) highlighted the significance of understanding ERPT (Exchange Rate Pass-Through) in order to develop effective policies related to monetary and exchange rates. Research conducted in developing nations has produced diverse results, with certain studies suggesting a greater degree of pass-through in comparison to industrialized economies. These outcomes are influenced by factors such as exchange rate regimes and the level of trade openness (Gopinath et al., 2010). A recent study has investigated the concept of asymmetric

ERPT, revealing notable distinctions between times of currency appreciation and depreciation (Kassi et al., 2019). In general, the literature emphasizes the intricate nature of ERPT and the necessity for customized policy strategies to efficiently handle its impacts.

4. Research Methodology

To analyses exchange rate pass-through (ERPT) in Laos, a vector autoregression (VAR) model will be used in this study. The model will incorporate the following variables: Wop (World oil price), M2 (Broad Money), Ir (Interest Rate), Inf (Inflation Rate), GDP (Gross Domestic Product), Exch (Exchange Rate), and CREDIT (Credit to the economy). Analyze the dynamic interactions among these variables and assess the extent and speed of exchange rate pass-through to various macroeconomic indicators with the VAR model (Sims, 1980). Time-series data over a specific period will be utilized to estimate the model, and impulse response functions will be employed to analyses the impact of exchange rate shocks on various economic factors such as domestic prices, money supply, interest rates, inflation, GDP, and credit availability. In addition, we will conduct variance decomposition analysis to measure the significance of exchange rate fluctuations in explaining changes in other macroeconomic variables. Following (Bernanke & Gertler, 1995; Bernanke & Mihov, 1998; Christiano et al., n.d.; Sun et al., 2010).. VAR can be expressed as:

The Vector Autoregression (VAR) model used in this study is formulated as follows:

$$Y_t = \alpha + \Phi_1 Y_{t-1} + \Phi_2 Y_{t-2} + \cdots + \Phi_p Y_{t-p} + \varepsilon_t \quad (1)$$

Where: Y_t is a vector of endogenous variables including broad money (M2), interest rate (Ir), inflation (Inf), gross domestic product (GDP), exchange rate (Exch), and total credit (Credit) at time t.

α is a vector of intercepts.

$\Phi_1, \Phi_2, \dots, \Phi_p$ are coefficient matrices.

p is the lag order of the VAR model.

ε_t is a vector of white noise error terms.

The VAR model allows for the simultaneous analysis of the dynamic interactions among the variables, providing insights into the short- and long-term relationships between them. The estimated coefficients of the VAR model will be used to understand the transmission mechanisms within the Lao economy and to assess the impact of different variables on each other over time

Data

The data utilized in this study encompass quarterly observations from the first quarter of 2012 to the fourth quarter of 2023. The data were gathered from various sources, such as the Ministry of Investment and Planning of Lao PDR, the Bank of Lao PDR, and the World Development Indicators (WDI) database. We selected this period for various reasons. Firstly, having access to

quarterly data, especially GDP, enabled a more in-depth analysis. Additionally, this timeframe aligns with Laos's entry into the global market, which includes its membership in the World Trade Organization (WTO). Additionally, during this period, there was a consistent and steady macroeconomic environment in both Laos and the global economy, with the exception of the ASEAN financial crisis in 1997.

5. Results and Discussion

5.1 Descriptive Statistic

The variables (Wop, M2, Ir, Inf, GDP, Exch, Credit) exhibit considerable variation based on the descriptive statistics spanning from the first quarter of 2012 to the fourth quarter of 2023. The range of world oil price (Wop) is 22.74 to 114.81 USD per gallon, with a mean of 71.91. In the same way, broad money (M2) shows significant variation, with an average of 88750.99 and a range from 27790.73 to 232734.00 Billion Kip. The interest rates (Ir) have an average of 3.34, with values varying between 1.91 and 5.00 percent. Inflation (Inf) shows significant fluctuations, with an average of 6.82 but ranging from 0.15 to 40.84 percent. The gross domestic product (GDP) has an average of 29804, with a range of 18881 to 42588.55 Billion kip. The exchange rates (Exch) show significant variation, with an average of 10017 and a range spanning from 7735 to 20638. The total credit (Credit) shows significant fluctuations, with an average of 28897 and a range from 6117 to 80891.

Table 1. Descriptive Statistic

Variables	Mean	Med	Max	Min	Std. Dev.
Wop	72	73	115	23	22
M2	88751	77366	232734	27791	50730
Ir	3	3	5	2	1
Inf	7	4	41	0	10
GDP	29805	30300	42589	18881	6378
Exch	10017	8526	20638	7735	3416
Credit	28897	17859	80891	6117	25204

Source: Author's calculation

Unit root tests are crucial for determining the stationarity of time series data. Stationarity is essential in time series analysis because non-stationary data can produce incorrect and misleading outcomes in econometric models (Engle & Granger, 1987). Table 2 displays the outcomes of the unit root test for different macroeconomic variables, measured both in the level and in the first difference, using the Augmented Dickey-Fuller test (Dickey & Fuller, 1979, 1981). The variables examined consist of world oil prices (lnWop), GDP (lnGDP), money supply (lnM2), credit (lnCredit), interest rate (Ir), consumer price index (lnCPI), and exchange rate (lnExch).

All variables display non-stationarity at their original levels, but they become stationary after enduring the first difference. This is evident from the significant test

statistics observed after the first difference is applied. Thus, it can be utilized in a VAR model.

Table 2 Unit root test results

Variables	Level		First Difference	
	Intercept	Trend and Intercept	Intercept	Trend and Intercept
lnWop	-2.6531	-2.5732	-8.8385***	-8.864
lnGDP	-1.7646	-2.2646	-2.956***	-3.359***
lnM2	0.726	-0.4793	-3.802	-5.817***
lnCredit	-1.2019	-1.997	-6.6803***	-6.607***
Ir	-2.141	-1.649	-6.979***	-7.211***
lnCPI	-1.672	-2.176	-10.333***	-4.930***
lnExch	1.73	-0.119	-5.75***	-6.384***

Source: Author's calculation

Note: *** is a significant level at 1%

5.2 Impulse response function analysis of inflation

Figure 1 presents the impulse response function analysis to investigate the impact of various macroeconomic factors on inflation over the time. These variables include the world oil price (Wop), money supply (M2), GDP, interest rate (Ir), Exchange rate (Exch), and credit to the economy (Credit).

The impulse response function for the shock of oil price (Wop) on inflation (Inf) reveals a significant initial impact, where inflation rises almost immediately after a one standard deviation shock in oil price. This effect peaks around the 6th quarter, illustrating that higher in the world oil price take almost three-quarter lag to increase inflation in Laos. Following the peak, the response of inflation gradually declines but remains positive, suggesting a prolonged and diminishing influence over the time.

Similarly, the impulse response function for the shock of money supply (M2) on inflation (Inf) shows an immediate positive response, with inflation rising shortly after the shock. It is worth noting that the peak effect is typically observed around the 6th period, which emphasizes the significant impact of an increase in money supply on inflation. Throughout the 20 periods, there is a consistent and positive inflation response, even though it slightly declines after reaching its peak. This suggests a notable and persistent impact. Based on the confidence intervals, it is clear that this response is statistically significant, highlighting the importance of money supply for affecting inflation.

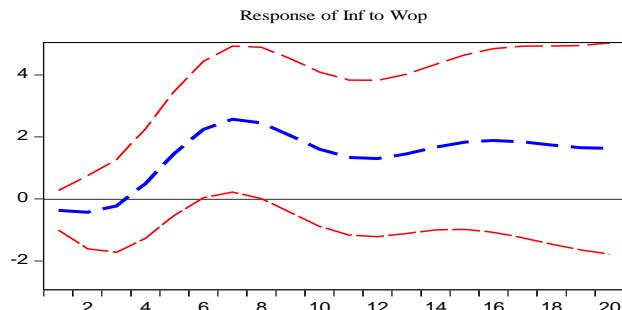
After a GDP shock, the impulse response function demonstrates that, mostly as a result of supply-side improvements, inflation first reacts with a drop during the first two quarters. When GDP experiences growth, it tends to have a positive impact on production costs and prices due to increased productivity and output. This statement highlights the intricate relationship between economic growth and inflation, indicating that an increase in GDP

can initially alleviate inflation before potential demand-driven factors lead to price increases in the future.

The impulse response function illustrates a clear pattern in the response of inflation (Inf) to a shock in the positive interest rate or contractionary monetary policy (Ir). After a one standard deviation shock to the interest rate, inflation tends to show a gradual and modest decline over the following quarters. This response can be understood by examining the correlation between interest rates and inflation. When interest rates rise, it usually results in higher borrowing expenses, which in turn leads to decreased consumer spending and investment. When there is a decrease in overall demand, it has the effect of pushing prices down and reducing inflation.

The impulse response function for the response of inflation (Inf) to a shock in the exchange rate (Exch)

Response to Cholesky One S.D. (d.f. adjusted) Innovations ± 2 S.E.



provides interesting insights. After a one standard deviation shock to the exchange rate, inflation experiences a significant and immediate increase. This response highlights the significant influence of exchange rate fluctuations on import prices. When the domestic currency depreciates, it leads to higher costs for imports, resulting in increased prices for imported goods and services. As a result, this pass-through effect causes an increase in overall price levels and contributes to inflation. Exchange rate shocks provide the strongest short-term inflationary pressures, which eventually diminish as the economy adjusts, as evidenced by the first steep jump in inflation that progressively decrease off over the course of successive quarter.

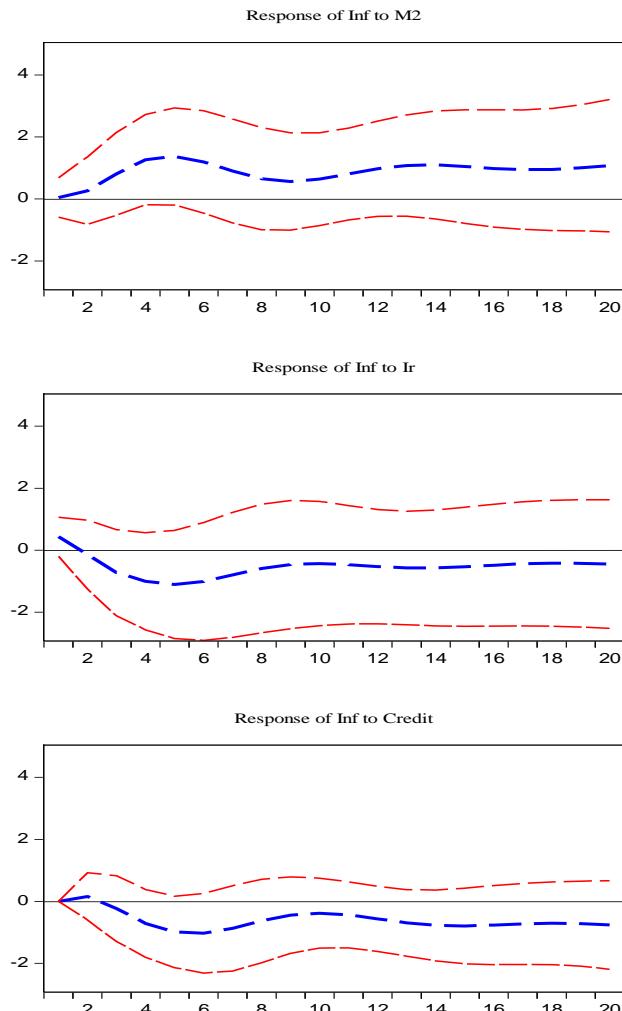


Figure 1. Impulse Response Function of inflation (Inf)

Source: Author's calculation

5.3 Variance decomposition analysis

The results of the variance decomposition examination provide a thorough understanding of the variables influencing the inflation (Inf) variability. The analysis determines the contributions of various economic variables over different time horizons, including world oil prices (Wop), money supply (M2), gross domestic product (GDP), interest rates (Ir), exchange rates (Exch), and credit to the economy (Credit), by breaking down the variance inflation. Notably, the variance in inflation is significantly influenced by world oil prices initially by 15% in the short-run, but this influence gradually decreases in the medium run.

On the other hand, the contributions from exchange rate and money supply increase dramatically, indicating their growing influence on the dynamics of inflation. The variance in inflation is influenced by the exchange rate initially by 8% in the short-run, and sharply increasing in the medium run, peak to 25% in the 6th quarter. This effect is slightly decrease in the long-run. The variance in inflation is influenced by the money supply initially less than 1% in the short-run, but this effect increasing sharply in the medium run and the long run up to 23% in the 10th quarter, and 25% in 20th quarter

The variance in inflation is influenced by the GDP is 1 quarter lag behind by 8% in the short-run. This effect is slightly increasing in the medium run, but decreasing in the long run. Meanwhile credit and interest rate contribute to inflation is less than 5%

Policymakers should take note of this information because it emphasizes how important these elements are in creating monetary and fiscal policies that effectively control inflation. Comprehending these mechanisms facilitates the anticipation of inflationary forces and the prompt implementation of measures to stabilize the economy.

The results of the variance decomposition analysis illustrate that the money supply and exchange rate have a considerable long-term impact on the variability of inflation. Initially, the exchange rate explains about 8% of the variance in inflation in the short run, but this influence escalates sharply, peaking at 25% by the sixth quarter, before slightly diminishing in the long run. Similarly, the money supply's impact on inflation starts at less than 1% in the short run, surging to 23% by the tenth quarter and reaching 25% by the twentieth quarter. On the other hand, GDP's effect on inflation shows an 8% contribution with a one-quarter lag in the short run, increasing slightly in the medium run but declining in the long run. Contributions from credit and interest rates remain relatively small, each influencing inflation by less than 5% References

Table 3 Variance decomposition analysis results

Variance Decomposition of LOG(CPI):								
Period	S.E.	Wop	M2	GDP	Ir	Exch	Inf	Credit
1	0.26	15.49	0.52	0.42	0.04	8.21	75.33	0
10	0.4	21.53	23.71	7.29	7.25	22.57	13.39	4.27
15	0.41	30.32	25.21	4.26	5.88	18.76	10.09	5.47
20	0.41	35.27	25.68	2.78	4.64	15.88	9.23	6.52
Variance Decomposition of LOG(M2):								
Period	S.E.	Wop	M2	GDP	Ir	Exch	Inf	Credit
1	0.07	0.09	99.91	0	0	0	0	0
5	0.09	5.31	65.8	1.7	2.1	6.11	5.74	13.24
10	0.09	17.79	50.51	0.66	1.71	7.51	7.61	14.22
15	0.09	27.15	41.18	0.48	1.39	7.56	8.67	13.58
20	0.1	32.68	36.08	0.6	1.14	7.14	9.27	13.09
Variance Decomposition of LOG(GDP):								
Period	S.E.	Wop	M2	GDP	Ir	Exch	Inf	Credit
1	0.3	6.5	1.2	92.3	0	0	0	0
5	0.5	6.2	3.6	79.6	2.4	1.2	2.4	4.6
10	0.6	5.8	6	73.7	2.6	1.7	3.6	6.6
15	0.6	6.7	8.9	67	2.5	1.5	4.8	8.6
20	0.6	9.7	12.1	58.3	2.2	1.5	6.1	10.2
Variance Decomposition of IRD:								
Period	S.E.	Wop	M2	GDP	Ir	Exch	Inf	Credit
1	0.06	3.96	13.76	3.98	78.31	0	0	0
5	0.15	35.73	5.73	8.25	47.92	1.66	0.36	0.36
10	0.22	47.73	3.97	9.4	33.11	2.26	2.68	0.85
15	0.28	49.86	3.67	9.84	30.45	2.12	3.16	0.91
20	0.33	49.5	3.81	10.22	30.1	2.33	3.16	0.9
Variance Decomposition of LOG(EXC):								
Period	S.E.	Wop	M2	GDP	Ir	Exch	Inf	Credit
1	0.03	0.06	45.01	3.44	0.13	51.38	0	0
5	0.06	16.84	30.82	6.56	8.01	31.89	3.35	2.53
10	0.11	28.49	27.42	4.37	7.45	24.81	3.84	3.62
15	0.14	34.53	26.59	2.88	6.06	20.55	4.7	4.69
20	0.18	37.93	26.28	2.05	4.91	17.48	5.59	5.76

Source: Author's calculation

6. Conclusion

This paper has provided a comprehensive analysis of exchange rate pass-through dynamics, particularly focusing on its implications for inflation in the context of Laos. The literature review highlighted the significance of ERPT in international economics and its various determinants, including exchange rate regimes, trade openness, and macroeconomic stability. The methodology employed a Vector Autoregression (VAR) model, impulse response function analysis, and variance decomposition to analyze the dynamic interactions among key macroeconomic variables and assess the extent and speed of exchange rate pass-through to inflation and other economic indicators.

Empirical results revealed that the impulse response function analysis explores the effects of various macroeconomic factors on inflation over time. Notably, shocks in oil prices and money supply exhibit immediate and significant impacts on inflation, peaking around the 6th quarter. GDP shocks initially lower inflation due to supply-side improvements but eventually contribute to inflation as economic growth occurs. Positive interest rate shocks lead to a gradual decline in inflation over subsequent quarters, reflecting the inverse relationship

between interest rates and inflation. Exchange rate shocks result in an immediate increase in inflation due to their influence on import prices, with the strongest short-term inflationary pressures observed.

The variance decomposition analysis investigates into the factors shaping inflation variability, revealing significant insights for policymakers. Initially, world oil prices exert a notable influence, gradually diminishing in the medium term. Conversely, contributions from exchange rates and money supply escalate over time, peaking at 25% in the medium term. GDP's impact lags by one quarter, showing a moderate effect. Meanwhile, credit and interest rates have minor influences, each contributing less than 5%. These findings underscore the importance of considering these variables in crafting effective monetary and fiscal policies to manage inflation.

Based on the findings, it is evident that policymakers in Laos need to consider the transmission mechanisms of exchange rate fluctuations to inflation and other macroeconomic variables when formulating monetary and fiscal policies. Furthermore, given the limited research on ERPT specific to Laos, there is a critical need for more empirical studies that focus on the country's distinct economic characteristics, exchange rate regime, and trade openness. Such research would provide policymakers with valuable insights into how exchange rate movements impact domestic prices in Laos, enabling more informed decision-making. Some policy recommendations based on this study include:

(1) Enhanced Monitoring and Analysis: Policymakers should prioritize the monitoring and analysis of exchange rate movements and their impact on inflation. This involves regularly assessing ERPT dynamics using appropriate econometric models to understand the transmission channels and anticipate inflationary pressures.

(2) Flexible Monetary Policy: Implementing a flexible monetary policy that responds effectively to exchange rate fluctuations can help mitigate inflationary pressures. Central banks should consider adjusting interest rates and liquidity management tools in response to ERPT dynamics to maintain price stability.

(3) Trade Policy and Economic Diversification: Diversifying the economy and reducing reliance on imported inputs can mitigate the impact of exchange rate fluctuations on inflation. Policymakers should focus on promoting domestic production, encouraging export-oriented industries, and enhancing trade competitiveness.

(4) Exchange Rate Management: Adopting appropriate exchange rate policies and interventions can help stabilize the currency and reduce exchange rate volatility. This includes maintaining a transparent and credible exchange rate regime, intervening in the foreign exchange market when necessary, and implementing measures to manage speculative pressures.

(5) Capacity Building and Research: Investing in capacity building and research initiatives focused on ERPT dynamics in Laos is essential. This involves fostering collaboration between academic institutions, research organizations, and policymakers to generate empirical evidence and policy-relevant insights.

Overall, addressing the knowledge gap on ERPT in Laos and implementing evidence-based policies to manage exchange rate pass-through dynamics effectively are crucial for achieving sustainable economic growth and maintaining price stability in the country.

References

Adolfson, M. (2007). Incomplete exchange rate pass-through and simple monetary policy rules. *Journal of International Money and Finance*, 26(3), 468–494. <https://doi.org/10.1016/j.jimmonfin.2007.01.005>

Birne, J., Renzhi, N., & Panthi, P. (2023). Exchange rate pass-through in emerging Asia and exposure to external shocks. *Economic Analysis and Policy*. <https://doi.org/10.1016/j.eap.2023.10.033>

Bernanke, B. S., & Gertler, M. (1995). Inside the Black Box: The Credit Channel of Monetary Policy Transmission. *Journal of Economic Perspectives*, 9(4), 27–48. <https://doi.org/10.1257/jep.9.4.27>

Bernanke, B. S., & Mihov, I. (1998). Measuring Monetary Policy. *The Quarterly Journal of Economics*, 113(3), 869–902. <https://doi.org/10.1162/00335539855775>

Burstein, A., Eichenbaum, M., Rebelo, S., Benigno, P., Crucini, M., Levin, A., Vegh, C., Wachter, J., Werning, I., Woodford, M., Hall, B., & Eichenbaum, M. S. (2005). *Modeling Exchange-Rate Passthrough After Large Devaluations*. <http://www.nber.org/papers/w11638>

Burstein, A., & Gopinath, G. (2014). International Prices and Exchange Rates. In *Handbook of International Economics* (Vol. 4). Elsevier B.V. <https://doi.org/10.1016/B978-0-444-54314-1.00007-0>

Campa, J. M., & Goldberg, L. S. (2002). *NBER WORKING PAPER SERIES EXCHANGE RATE PASS-THROUGH INTO IMPORT PRICES: A MACRO OR MICRO PHENOMENON?* <http://www.nber.org/papers/w8934>

Corsetti, G., Dedola, L., & Leduc, S. (2008). High exchange-rate volatility and low pass-through. *Journal of Monetary Economics*, 55(6), 1113–1128. <https://doi.org/10.1016/j.jimoneco.2008.05.013>

Dedola, L., & Lippi, F. (2005). The monetary transmission mechanism: Evidence from the industries of five OECD countries. *European Economic Review*, 49(6), 1453–1569. <https://doi.org/10.1016/j.euroecorev.2003.11.006>

Devereux, M. B., & Engel, C. (2002). Exchange rate pass-through, exchange rate volatility, and exchange rate disconnect. *Journal of Monetary Economics*, 49(5), 913–940. [https://doi.org/10.1016/S0304-3932\(02\)00130-7](https://doi.org/10.1016/S0304-3932(02)00130-7)

Devereux, M. B., & Yetman, J. (2010). Price adjustment and exchange rate pass-through. *Journal of International*

Money and Finance, 29(1), 181–200. <https://doi.org/10.1016/j.jimmonfin.2008.12.009>

Dickey, D. A., & Fuller, W. A. (1979). Distribution of the Estimators for Autoregressive Time Series With a Unit Root. *Journal of the American Statistical Association*, 74(366), 427–431. <https://doi.org/10.2307/2286348>

Dickey, D. A., & Fuller, W. A. (1981). Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica*, 49(4), 1057. <https://doi.org/10.2307/1912517>

Engle, R. F., & Granger, C. W. J. (1987). Co-Integration and Error Correction: Representation, Estimation, and Testing. *Econometrica*, 55(2), 251. <https://doi.org/10.2307/1913236>

Flamini, A. (n.d.). *Inflation Targeting and Exchange Rate Pass-Through Inflation Targeting and Exchange Rate Pass-through*.

Fleming, J. M. (1962). Policies Under Fixed Financial Domestic Rates and Under Floating Exchange. *Staff Paper-International Monetary Fund*, 9(3), 369–380. <https://doi.org/10.2307/3866091>

Gagnon, J. E., & Ihrig, J. (2004). Monetary policy and exchange rate pass-through. *International Journal of Finance and Economics*, 9(4), 315–338. <https://doi.org/10.1002/ijfe.253>

Goldberg, L., & Tille, C. (2009). Macroeconomic interdependence and the international role of the dollar. *Journal of Monetary Economics*, 56(7), 990–1003. <https://doi.org/10.1016/j.jmoneco.2009.09.008>

Gopinath, G., Itskhoki, O., & Rigobon, R. (2010). Currency choice and exchange rate pass-through. *American Economic Review*, 100(1), 304–336. <https://doi.org/10.1257/aer.100.1.304>

Kassi, D. F., Sun, G., Ding, N., Rathnayake, D. N., & Assamoi, G. R. (2019). Asymmetry in exchange rate pass-through to consumer prices: Evidence from emerging and developing Asian countries. *Economic Analysis and Policy*, 62, 357–372. <https://doi.org/10.1016/j.eap.2018.09.013>

K.srithilat et al. (2018). The Impact of Foreign Direct Investment and Trade Openness on Economic Development in Lao PDR. *Journal of Economics and Sustainable Development*, 9(4), 105–116.

Kyophilavong, P., Uddin, G. S., & Shahbaz, M. (2014). The Nexus Between Financial Development and Economic Growth in Laos PDR. *Global Business Review*, 17(2), 303–317. <https://doi.org/10.1177/0972150915619809>

Mundell, R. A. (1963). *Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates The Canadian Journal of Economics and Political Science / Revue canadienne d 'Economique et CAPITAL MOBILITY AND STABILIZATION POLICY UNDER FIXED AND FLEXIBLE EXCHANGE RATE*. 29(4), 475–485. <https://doi.org/10.1017/S0315489000030036>

Obstfeld, M., Shambaugh, J. C., & Taylor, A. M. (2004). *The Trilemma in History : Tradeoffs among Exchange Rates , Monetary Policies , and Capital Mobility **.

Phuc, N. Van, & Duc, V. H. (2021). Macroeconomics Determinants of Exchange Rate Pass-Through: New Evidence from the Asia-Pacific Region. *Emerging Markets Finance and Trade*, 57(1), 5–20. <https://doi.org/10.1080/1540496X.2018.1534682>

Sims, C.A. (1980). Macroeconomics and Reality. *Econometrica*, 48(1), 1–48.

Srithilat, K., & Sun, G. (2017). The Impact of Monetary Policy on Economic Development: Evidence from Lao PDR. *Global Journal of Human-Social Science: E Economics*, 17(2), 9–16.

Sun, L., Ford, J. L., & Dickinson, D. G. (2010). Bank loans and the effects of monetary policy in China: VAR/VECM approach. *China Economic Review*, 21(1), 65–97. <https://doi.org/10.1016/j.chieco.2009.11.002>

Taylor, J. B. (2000). Low inflation, pass-through, and the pricing power of "rms. *European Economic Review*, 44, 1389–1408.

Xaiyavong, I., & Czerkawski, C. (2014). *Evaluation of Monetary Policy Rules for Lao PDR: An Econometric Analysis*. 113–129