Alternative Monetary Policy for Vietnam: Exchange Rate

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Overview

Introduction and Current Situation

Objective of Study

As the country progresses and opens to increasing trade and capital flows, we posit that **exchange rate targeting will be the more effective instrument for Vietnam in achieving economic growth** (further reinforced by Covid-19). We will examine the possibility of using exchange rate as a monetary policy instrument for the **intermediate to long term horizon**.

Monetary Policy Objectives

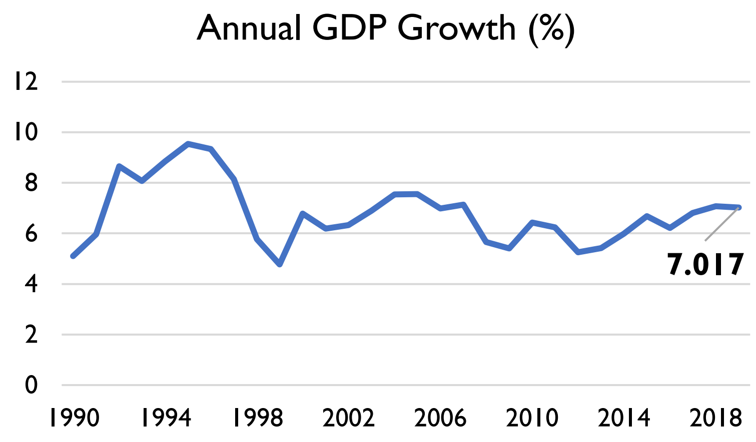
"To control **inflation**, **stabilise macro-economy**, support **economic growth** at a reasonable level, and ensure the **liquidity** of credit institutions. Flexibly manage the reasonable interest and exchange rates in consistence with macro-economic and monetary developments, especially inflation; and ensure the value of Vietnam Dong, continue to restrict the dollarization and goldarisation"

— State Bank of Vietnam

Economic Indicators

Vietnam's economic environment is characterised by high growth and openness to trade and capital flows

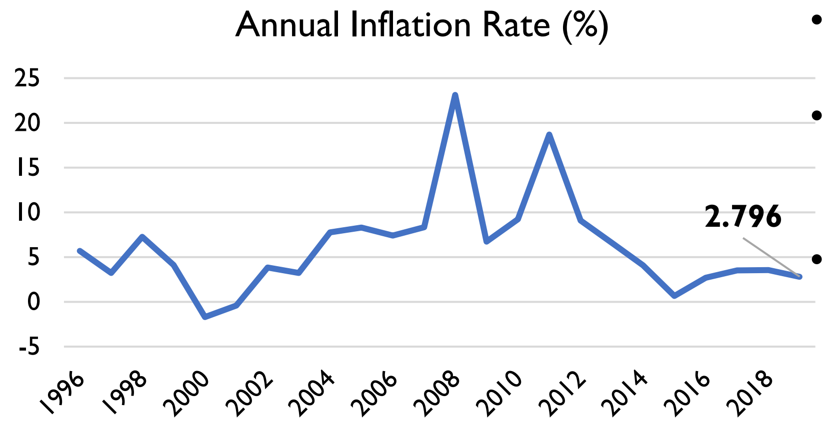
Economic Growth



Source: The World Bank

- Strong GDP growth across the years
- Largely contributed by services, industry production, construction and agro-forestry-fishery production
- Emerging market; High growth and continued development

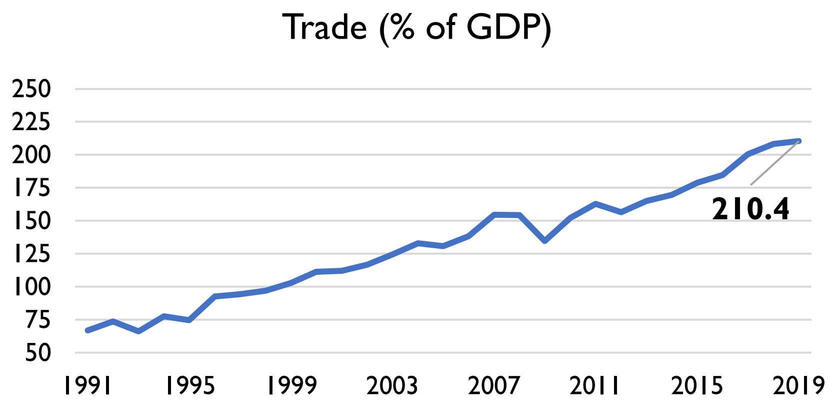
Inflation Rate



Source: The World Bank

- Large fluctuations in inflation rate
- But, in recent years, modest inflation of 2.8%
- Major stabilisation effort to control hyperinflation prior to 1990s

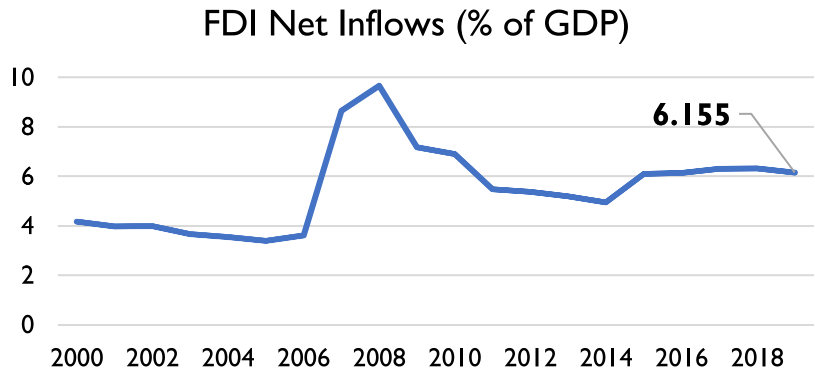
Trade to GDP



Source: The World Bank

- Trade-to-GDP steadily increasing over the years and is high at 210%
- Indicates increasing reliance on trade and susceptibility to world prices

Foreign Direct Investment (FDI)



Source: The World Bank

- FDIs stable at 6% of GDP
- Increasingly difficult to manage capital flows between offshore and domestic banking system with more MNCs

Existing Monetary Policies in Vietnam

Vietnam's goal of supporting economic growth and achieving price stability

As per IMF's classifications, we look at Vietnam's Monetary Policy Regime as well as its Exchange Rate Regime

Monetary Policy Regime – Exchange Rate Anchor (composite)

Intermediate Targets:
- Main target: Exchange Rate (currency composite as nominal anchor)
- Secondary targets: Monetary aggregates, Interest Rate, Inflation

Tools:
- **Open Market Operations**: SBV selects and conducts the sale and purchase of securities on the open market to regulate the reserves in the banking system
- **Foreign Exchange Intervention**: Accumulation of foreign reserves (scaled up to record level)
- **Reserves Requirement Ratio**: required ratio of VND to foreign currencies

Exchange Rate Regime – Soft Peg

Exchange Rate Arrangement:
- **Soft peg exchange rate arrangement**: maintain a spot market exchange rate within a margin of 2% with a basket of currencies
- Achieved through Foreign Exchange Intervention & daily management of FX rates with Credit Institutions

Other Foreign Exchange Management Efforts:
- Continued liberalization in line with international commitments to **ensure free capital flow**
- Active policies to **eliminate dollarization** and **encourage remittance inflows**
- **Facilitation of FDIs**

Goals:
- Inflation control (Price Stability)
- Economic growth

Exchange Rate Regimes

1 Fixed Nominal Exchange Rate	2 Flexible Nominal Exchange Rate	3 Freely Floating Exchange Rate

Ways to Implement

1 Fixed Nominal Exchange Rate

- Currency board where central bank backs all domestic currency with foreign currency
- Unilateral peg where central bank pegs its exchange rate to a currency or group of currencies

2 Flexible Nominal Exchange Rate

- Crawling peg in which currency is allowed to fluctuate within a band of rates
- Managed float where central bank intervenes to direct the value of its currency to a certain direction
- Unilateral fixed peg with frequent discrete adjustments

3 Freely Floating Exchange Rate

Central bank **does not intervene** and allow its currency to be set by the forex market based on DD & SS of other countries

Exchange rate targeting is pursued by the Central Bank for a more active control over the exchange rate, by adopting the 1st or 2nd regime

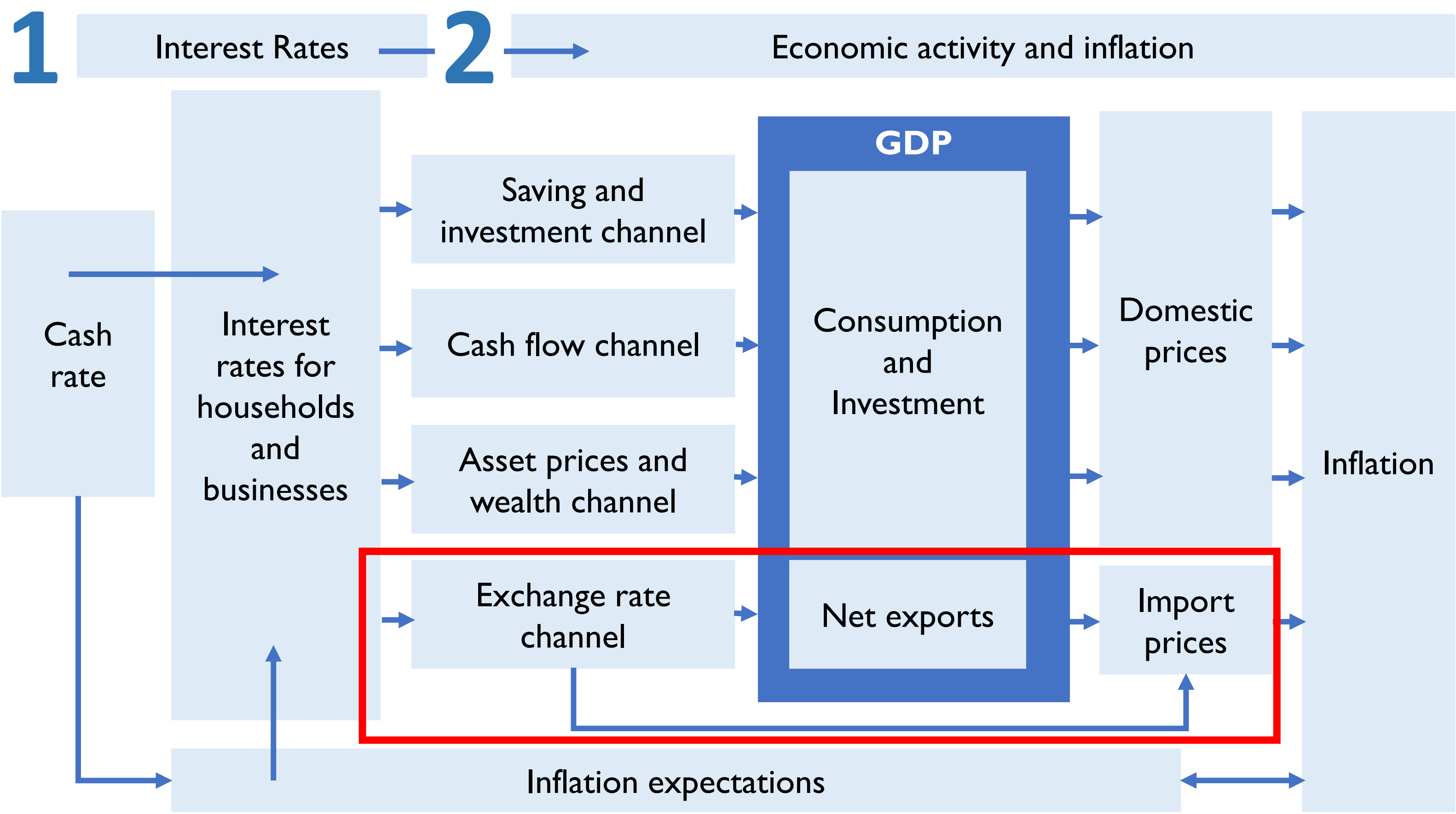
Conditions for Exchange Rate Targeting

Conditions		Reasons
1	Small and Open Economy	Limited resources, high dependence on trade for necessities
2	Strong Competition in Exports and Imports	Increased scrutiny in comparison of price and product offerings in relation to Exchange Rate
3	Dependent on Foreign Trade	Reduction of exchange rates can lead to relative demand and supply pull towards foreign nations

Conditions for Exchange Rate Targeting

Monetary Transmission Mechanism

Monetary Transmission Mechanism



Source: Reserve Bank of Australia

What is it?

Definition: Transmission of monetary policy describes how changes in monetary policy instruments flow through Economic activity and Inflations

- Interest Rates
- Economic Activity

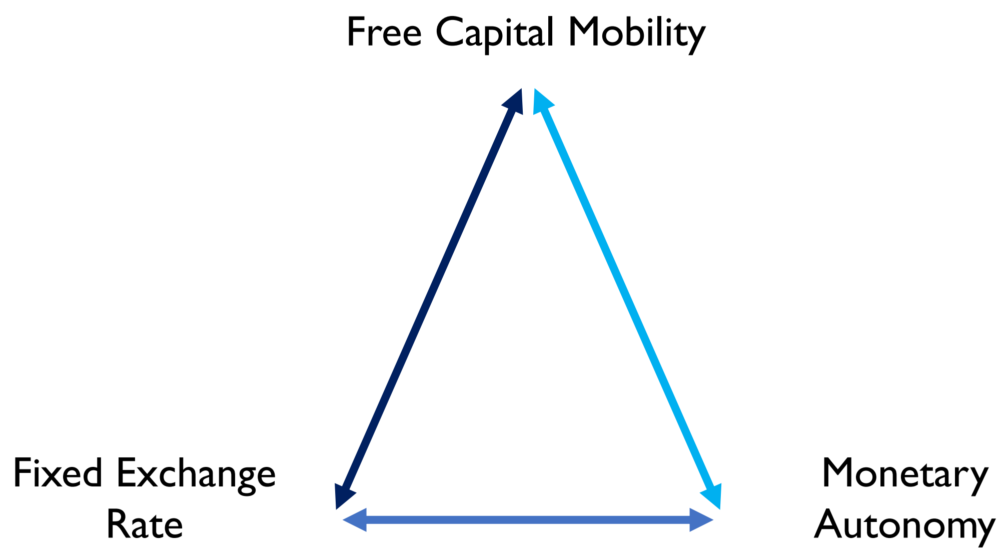
Exchange Rate Channel

- Mechanism helps determine the suitability of Exchange rate controls to attain objectives and the effect of policy implementation
- Suitable for Vietnam – Small Open Economy, Trade Dependent
- Still have to evaluate on a periodic basis and compliance with Policy Trilemma

Evaluation of Exchange Rate Targeting for Vietnam

Trilemma and the need for policy trade-offs

The Trilemma



Linkage between Domestic Interest Rates and Exchange Rates

If interest rate is higher in U.S. than in Vietnam

Flow of capital out of Vietnam to U.S. (assuming free capital mobility)

Downward pressure on the VND (depreciate relative to USD)

Conclusion: Vietnam cannot have free capital flows, fixed EXR, and domestic monetary independence at the same time

Considering their current economic situation, what policy position should SBV choose?

Evaluation of Exchange Rate Targeting:

Advantages and Limitations

Evaluation of Exchange Rate Targeting

Analysing Advantages of EXR using Vector Autoregression (VAR) Model

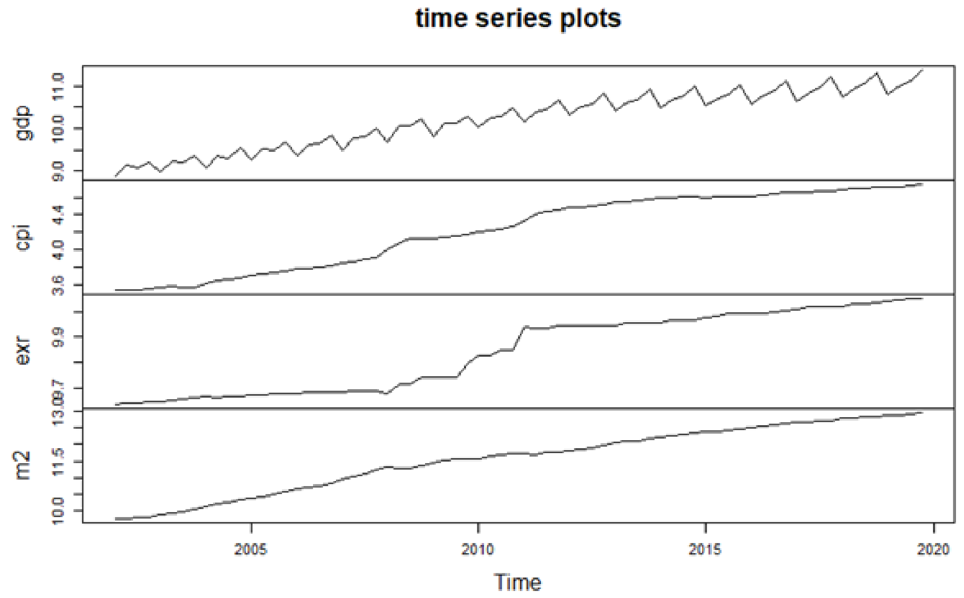
Aim: To compare the effects of using exchange rate targeting, as compared to monetary targeting, in achieving economic growth and price stability in Vietnam

Data Used

Data Type	Usage
Consumer Price Index (CPI) of all Items in Vietnam	Interpretation of Change in Price Level in Vietnam
Nominal GDP in Vietnam	Interpretation of GDP Growth in Vietnam
Volume of Broad Money (M2) in Vietnam	Effects of Monetary Targeting
Official Rates at End of a Period in Vietnam (VND/USD)	Effects of Exchange Rate Targeting

- Data taken from CEIC database
- **Quarterly data** from 2002 to 2019 was used in the study
- Analysis was conducted in R

Properties of Data

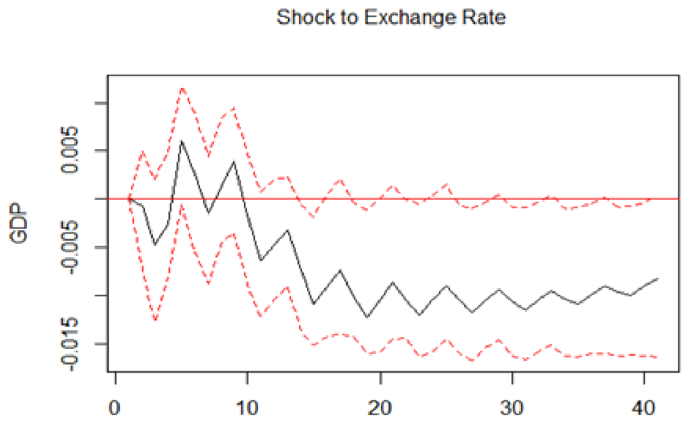


- Time series plots of GDP shows evidence of **seasonality**
- Account for seasonality of data by including seasonal dummies into the model

Evaluation of Exchange Rate Targeting

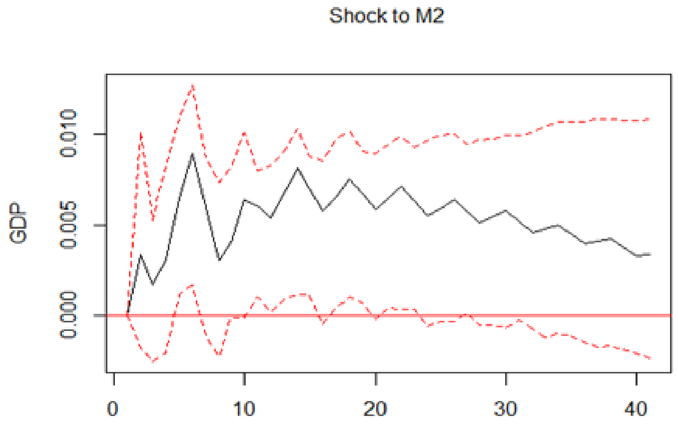
Statistical Significance of Policies based on Impulse Response Functions (IRF)

Response of GDP to Shock in Exchange Rate



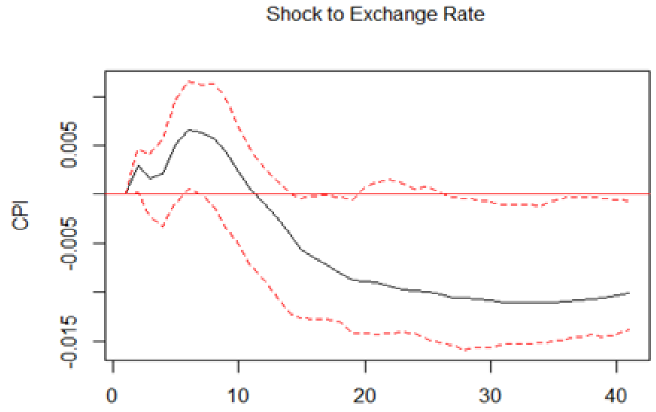
- Appreciation of VND led to an initial fall in GDP, but it quickly increased around the 8th quarter
- Response of GDP becomes negative again in the long run
- Response is statistically significant

Response of GDP to Shock in M2



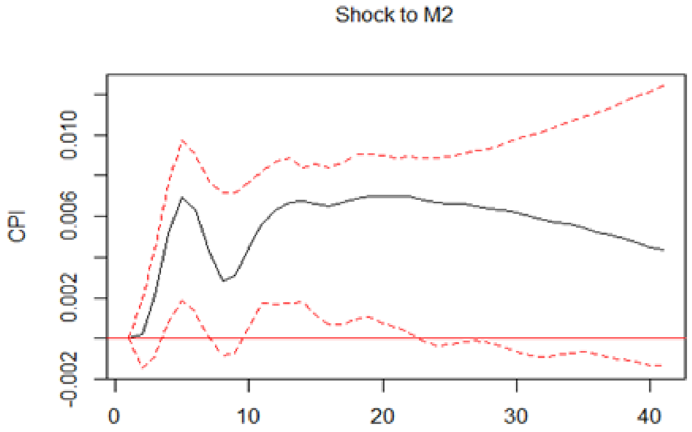
- Increase in M2 leads to a sharp increase in GDP in the short to intermediate run
- GDP slowly decreases after 12 quarters and will continue in the long run
- However, response of GDP to M2 is not statistically significant

Response of CPI to Shock in Exchange Rate



- Appreciation of VND causes an increase in the CPI that causes inflation in the short to medium run
- Response then becomes negative in the long run
- Response of CPI to exchange rate is high in terms of magnitude

Response of CPI to Shock in M2



- Increase in M2 leads to increase in CPI but peaks out in the short run
- Response reverses shortly after which suggests greater inflation rates in the long run
- Response has a lower magnitude than exchange rate

Evaluation of Exchange Rate Targeting

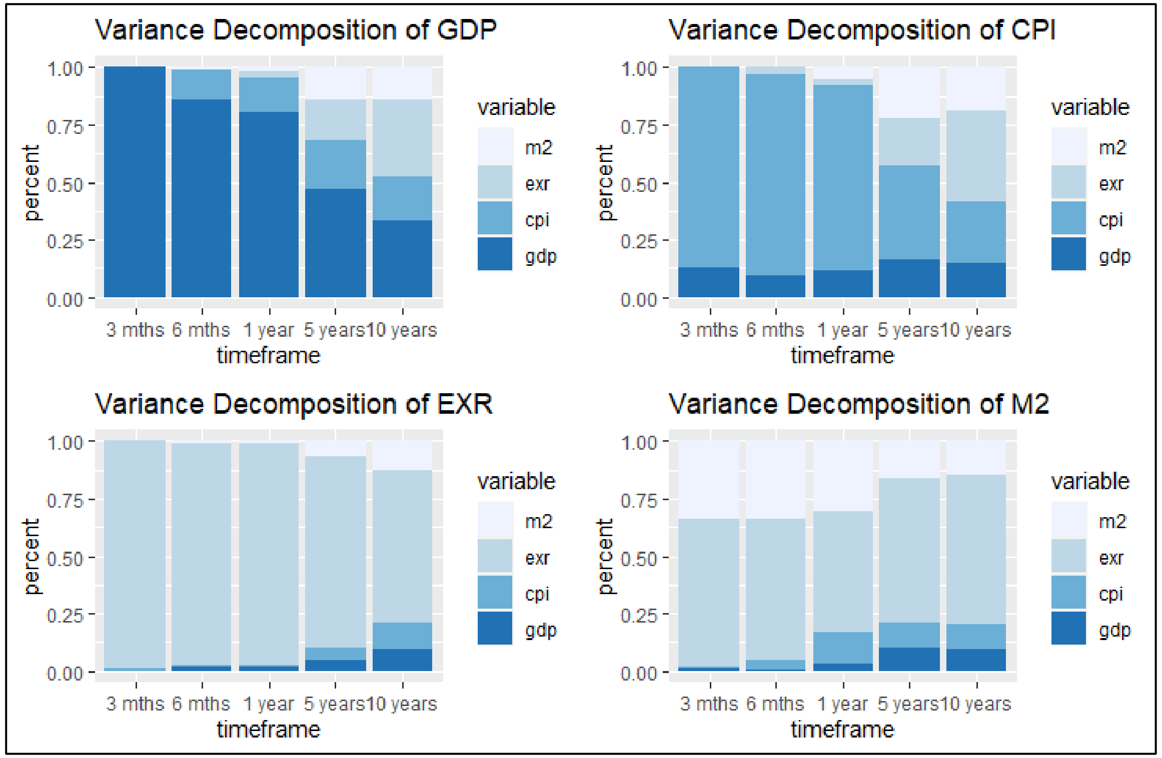
Effectiveness of Policies based on Variance Decompositions and Model Limitations

Variance Decomposition

- **Short Term:** Effects of M2 and Exchange Rate on GDP and CPI relatively limited
- **Long term:** Effects of Exchange Rate on GDP and CPI more significant than M2

Long Term Results	GDP	CPI
Exchange Rate	33.6%	39.2%
M2	14.2%	19.0%

- Variance in Exchange Rate mainly due to its own shock while variance in M2 mainly due to Exchange Rate
- **Key Conclusions:**
  - Impact of Exchange Rate much higher than that of M2 → Exchange Rate targeting is a more effective policy over Monetary targeting in achieving economic growth *but not necessarily price stability*
  - We believe that economic growth is a more important focus for Vietnam to transit to a more developed nation and recover from the effects of Covid-19



<u>Limitation of Model</u>

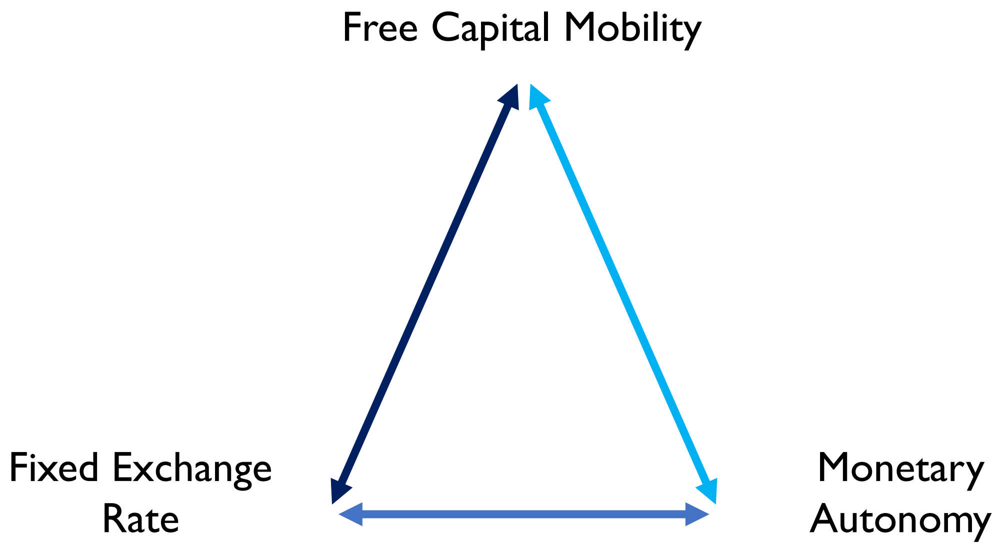
- Potential **omitted variable bias** may lead to exclusion of other variables (e.g. interest rates set by SBV) which may have greater explanatory powers than our current model

Evaluation of Exchange Rate Targeting

Limitations of Adopting an Exchange Rate-Focused Regime

Vietnam as an emerging economy with high FDI

***Recall:* The Trilemma**



Pursuing an exchange rate regime would mean that Vietnam has to give up its monetary autonomy and not be able to control its interest rate

Costs of pursuing an exchange rate regime

1. Need for a vast amount of foreign reserves to defend the value of the currency against speculative attacks

2. Extensive costs in building large foreign reserves which includes:
   - Inflation
   - Fiscal costs
   - Higher interest rates

Pursuing an exchange rate regime is costly, Vietnam must be prepared to deal with the costs or trade-offs associated with it

Case Studies:

Countries and the Asian Financial Crisis

Case Study

Drawing Lessons from Singapore's Exchange-Rate-Centred Monetary Policy

Choice of exchange rate as opposed to interest rate due to…		…relating to the case of Vietnam
Characteristics of the Singapore Economy	Small and open to trade; limited natural resources; highly dependent on imports for necessities	Vietnam's Trade to GDP at 210%, comparable to SG's 319%. Suggests applicable use of exchange rate for Vietnam as it continues to see strong reliance on trade.
Stability & Predictability of Exchange Rate with Price Stability	Economy's openness means that the exchange rate bears a stable and predictable relationship to price stability.	Given that the SBV's monetary policy is geared towards inflation control and Vietnam's economy is increasingly open, exchange rate may be suitable.
Greater Control Over Macroeconomic Outcomes	Exchange rate controllable through direct intervention in the FX markets, allows government to retain greater control over GDP and CPI inflation	Relatively low domestic inflation in SG for last 30 years shows potential effectiveness of exchange rate policy for Vietnam to control large fluctuations in inflation rate.
Multinational Corporations (MNCs)-Dominated Corporate Sector	MNCs rely on funding from their head offices rather than on local banking systems. Small changes in interest rate differentials can lead to large and rapid movements of capital, difficult to target interest rate.	Multination Enterprise (MNE) shares of non-household GDP increased from 10% to 31% from 1995 to 2014. Vietnam is increasingly dominated by foreign firms.

Case Study

Drawing Lessons from Thailand's Managed-Float Exchange Rate Regime

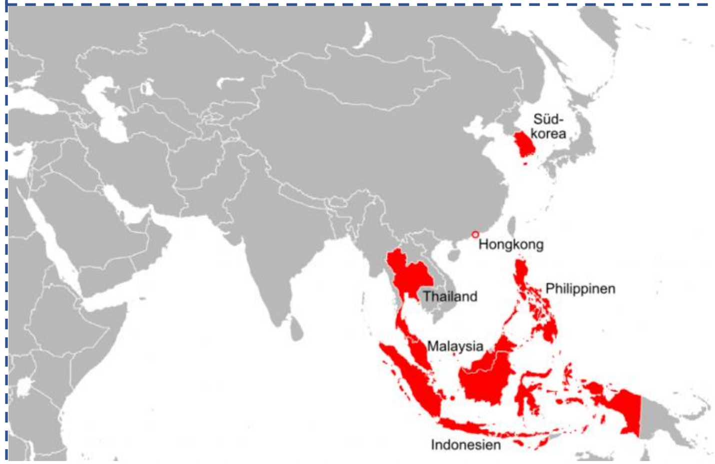
Why Thailand and Vietnam?
Similarities in terms of:

Small and open economies, high dependence on exports

Existing focus on inflation targeting

Economic fundamentals in areas of trade, tourism and investments

About Thailand's Managed-Float Exchange Rate Regime



Following the AFC, Thailand shifted away from fixed exchange rate to managed-float exchange rate regime

- Value of THB would be determined by market DD & SS forces in forex market; no fixed target level for exchange rate
- However, BoT will still intervene in cases of excess volatility stemming from speculative capital flow to reduce inflationary pressures on the Thai economy
- Has helped Thailand achieve price stability as compared to its historical performance and peers in the region, without compromising on economic growth

Vietnam may draw lessons from Thailand's adoption of managed-float exchange rate system, especially in its management of short-term speculative capital in-flow, in achieving price stability in the economy

Drawing Lessons from the Asian Financial Crisis (AFC)

	What happened during the AFC?	What can Vietnam learn from the AFC?
Overview of the AFC	U.S. economic recovery in mid-1990s led to rising US interest rates, which attracted hot money inflow, leading to **USD appreciation**.	Asian currencies that were pegged to USD also appreciated, hurting export growth. Panicked foreign investors started withdrawing from these Asian economies, leading to a huge capital outflow, causing **Asian currencies** to **depreciate**.
Effect of AFC on Vietnam	Vietnam's economy was not immediately affected by AFC in 1997, but in **1999**, the economic situation appeared **much worse** than was predicted in 1997.	Decrease in FDI inflows, **contraction in the external sector**, and high corporate debts for state-owned enterprises, joint ventures, and private companies.
Lessons Learnt for Vietnam	1 **Progressive financial liberalisation** is needed, thus stringent controls over capital transactions should be implemented carefully. Vietnam should attempt to attract more long-term investors by offering incentives.	2 Implement a **more flexible exchange rate policy** which pegs the VND to a basket of currencies. Commercial banks could use forex derivatives to hedge against EXR risks. The SBV should constantly build up more forex reserves.
	3 Companies and financial institutions should have **better corporate finance**, hence regulators should implement comprehensive corporate internal controls and supervisory standards.	4 Vietnam should set up an **early warning system** based on continuous examination of macroeconomic conditions, since it is important to be able to predict when the next crisis may occur.

Discussion and Conclusion

Discussion and Conclusion

Exchange rate-focused regime may be the more effective instrument for Vietnam

Adopting an exchange rate-focused regime may be the more effective instrument for Vietnam to achieve economic growth

Supported by the following factors

- The economic conditions that Vietnam has fulfilled in terms of openness to increasing trade and capital flows
- The advantages of exchange rate targeting over monetary targeting as observed in the VAR model

Closing Remarks

- The SBV could conduct further empirical studies based on the Monetary Transmission Mechanism as presented.
- Impacts on price stability and economic growth resulting from the change in primary and secondary inputs could be analysed to streamline the exchange rate policy instrument implementation.
- We propose an annual review based upon the mechanism to ensure the relevancy of policies, amidst the changing economic climate and inflation sources.
- Vietnam would likely benefit from an exchange rate-focused regime to progress to a more developed nation and recover from the impacts of Covid-19.

Thank You

Team 3

Q&A
Alternative Monetary Policy for Vietnam: Exchange Rate

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