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UNIVERSITY
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AUSTRALIA

INCOME GAP AND EXCHANGE RATE REGIME IN ASEAN

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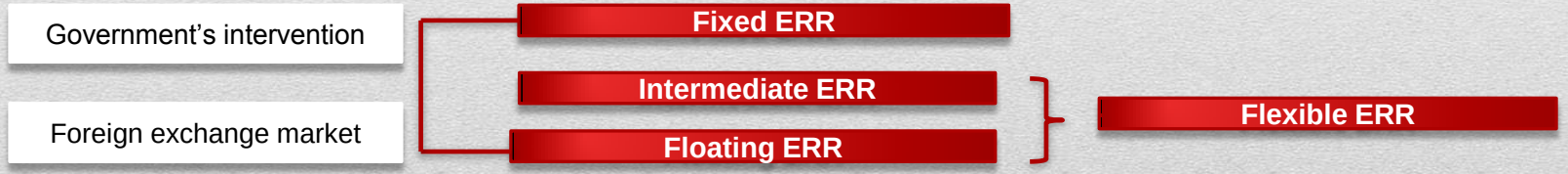
CONTENTS

1. KEY TERMS

- **ASEAN** (Association of Southeast Asian Nations): Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.
- **Income gap**: is the difference in income per capita between countries
- **Exchange rate** is the price of one currency in terms of another currency.
- **Exchange rate regime (ERR)**: is the way that a country manage the exchange rate.

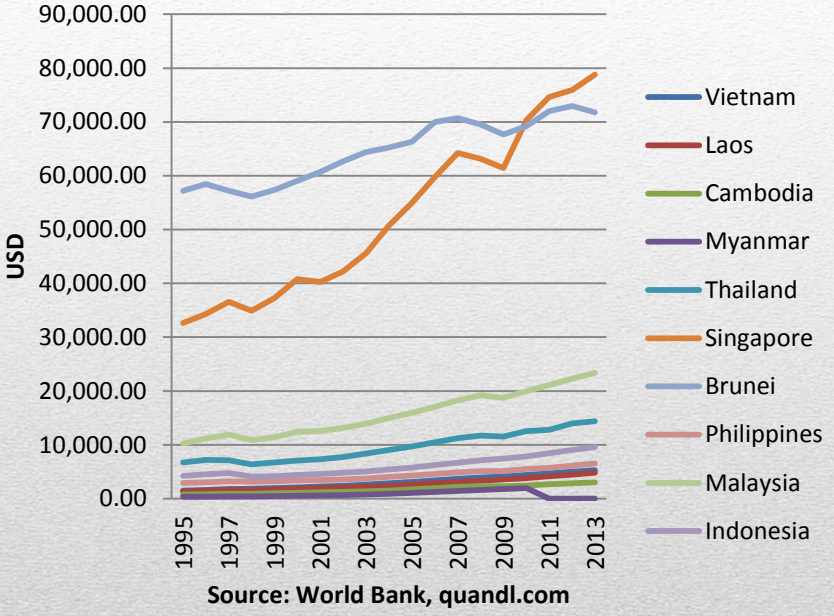


2. MOTIVATION

The ASEAN economic community (AEC): established in 2015 with aims:

- to get closer regional economic integration
- to protect region from future economic shocks
- to support economic growth, macroeconomic stability
- to reduce income gap between ASEAN countries.

Graph 1: GDP/CAPITAL, PPP OF ASEAN COUNTRIES (1995-2013)



Source: World Bank, quandl.com

- Economic integration: ASEAN is more vulnerable to unexpected external shocks.

- a negative factor on economic growth & macroeconomic stability (Raddatz 2007)

- the greater income gap for ASEAN countries, (Masron & Yusop 2008).

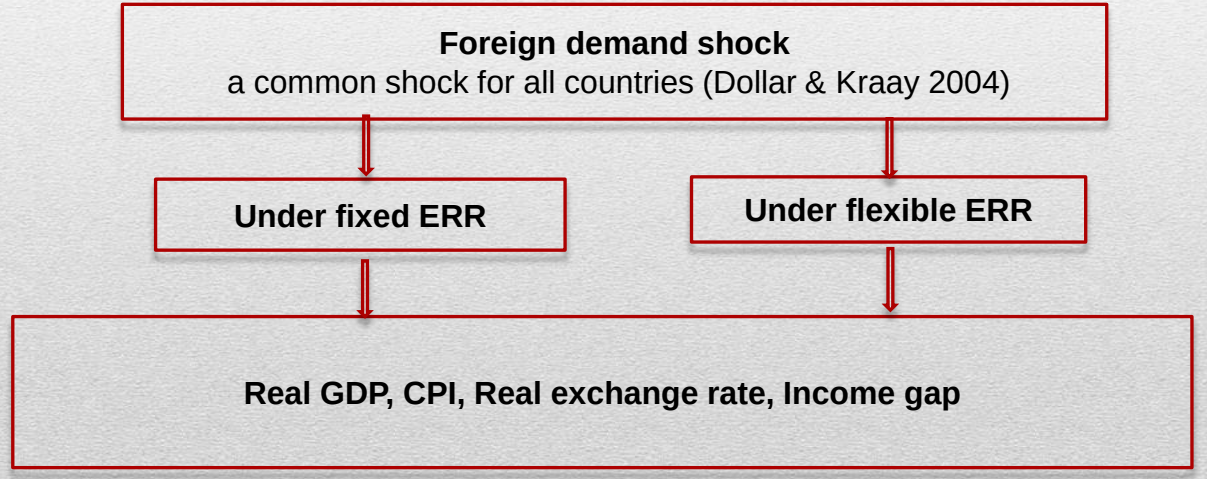
➡ External shocks may affect the success of AEC

Exchange rate regime: an instrument to deal with external shock

3. AIMS AND SIGNIFICANCE OF STUDY

3.1. Aims:

- This study will investigate the optimal exchange rate regime for ASEAN countries to minimise the negative effects of external shocks.



3.2. Significance of study

- The first time the effect and contributions of foreign demand on macroeconomic variables under different ERRs are investigated.

- Enriching the empirical evidences for the choice of ERR by sample of ASEAN countries.

- Extending the existing literature on the choice of ERR by adding income gap into a theoretical and empirical model.

- The first time de facto exchange rate regime classification of IMF is applied.

4. BACKGROUND

AIM	- to investigate which is the optimal exchange rate regime.
SHOCKS	Foreign/domestic nominal shocks, foreign/domestic real shocks
MACROECONOMIC VARIABLES	Real GDP, CPI, real exchange rate, trade balance.
METHODOLOGY	Panel VAR, panel VAR with exogenous, panel structural VAR

Factors	**Fixed ERR**	**Flexible ERR**
Shocks	Domestic nominal shock	Foreign nominal/ real shocks, domestic real shock
Size of economies	Small	Large
Openness	Open	Closed
Capital mobility	Low	High

5. RESEARCH QUESTIONS

1. What are the differences in the effects and contribution of foreign demand shocks on macroeconomic variables between fixed and flexible ERRs?

2. What is the exchange rate policy for ASEAN countries?

6. METHODOLOGY

Structural Vector Autoregressive model:

$$AY_{it} = c_{it} + A(L)Y_{it} + E(L)X_{it} + d + u_{it}$$

Y_{it}: endogenous variables: foreign demand, real GDP, real exchange rate, CPI and income gap.

X_{it}: control variables: trade openness, government spending, financial development, current account.

To distinguish the responses of variables between fixed & flexible ERRs, Y_{it} and X_{it} will be interacted with dummy variables for ERR (D_{fixed}=0 if fixed and D_{flex}=1 if flexible ERR).

7. EMPIRICAL RESULTS

Figure 1: Impulse response to a negative foreign demand shock

Fig. 1.1a: Real GDP under fixed regime

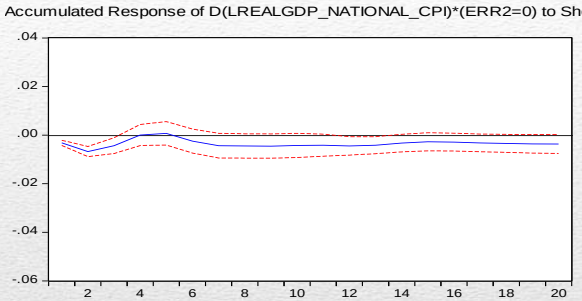


Fig. 1.1.b: Real GDP under flexible regime

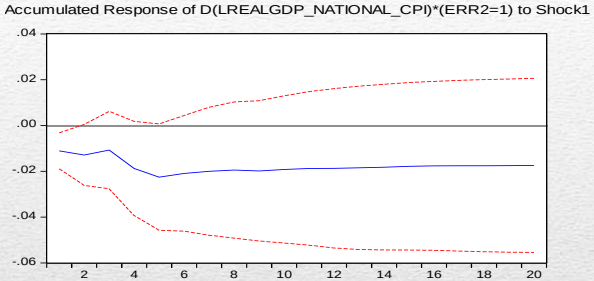


Fig. 1.2a: Real exchange rate under fixed regime

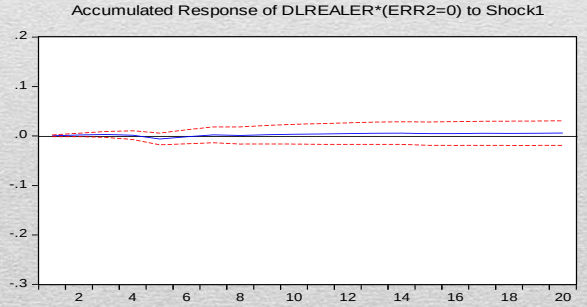


Fig. 1.2b: Real exchange rate under flexible regime

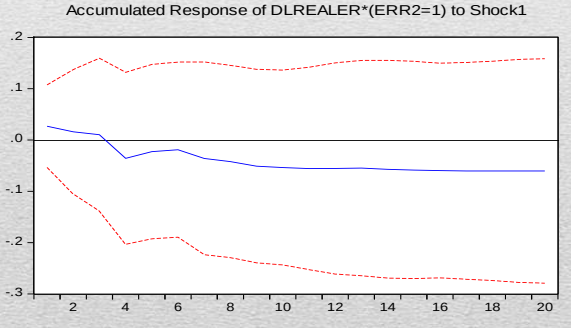


Fig. 1.3a: CPI under fixed regime

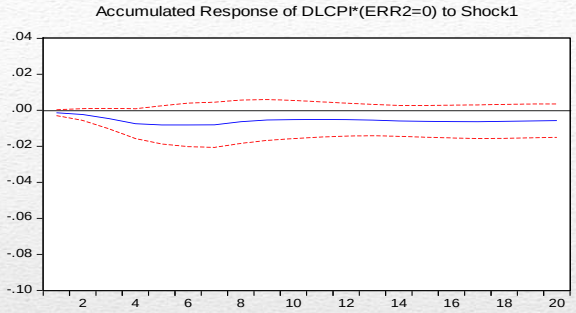


Fig. 1.3b: CPI under flexible regime

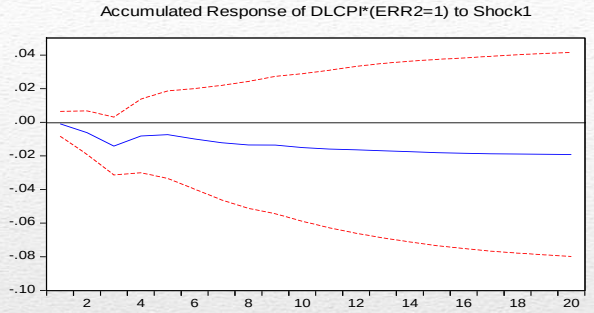


Fig. 1.4a: Income gap under fixed regime

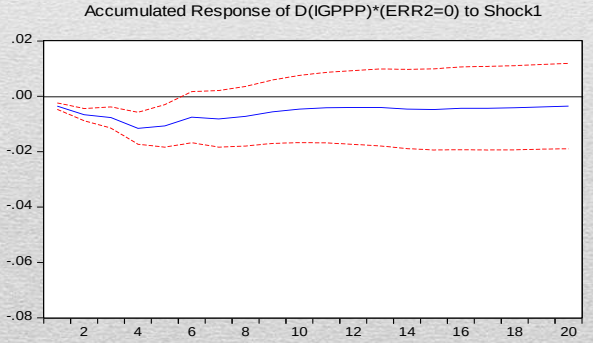


Fig. 1.4b: Income gap under flexible regime

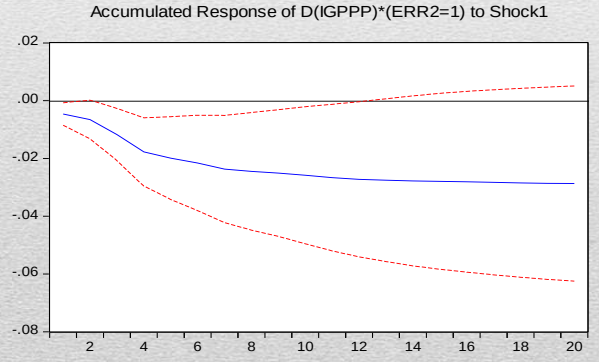


Figure 2: Percent variance of variables due to a negative demand shock

Fig. 2.1a: Real GDP under fixed regime

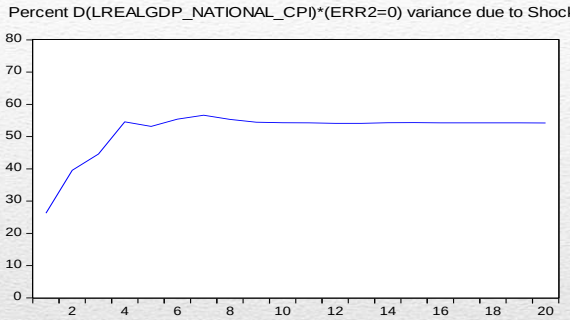


Fig. 2.1b: Real GDP under flexible regime

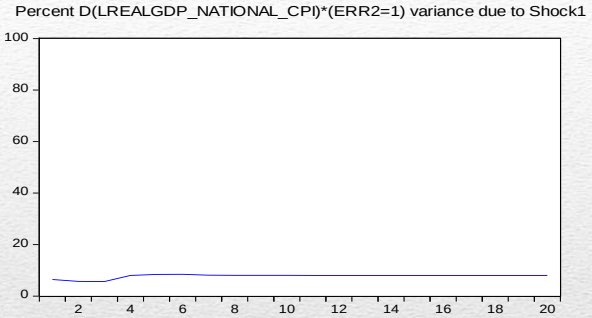


Fig. 2.2a: Real exchange rate under fixed regime

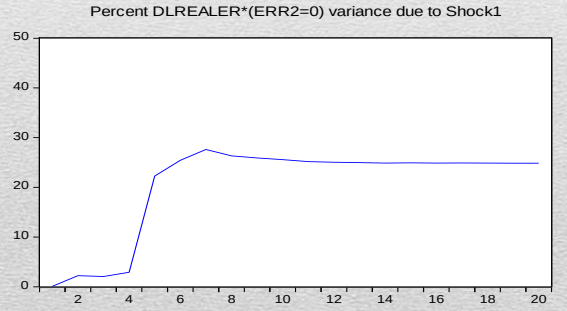


Fig. 2.2b: Real exchange rate under flexible regime

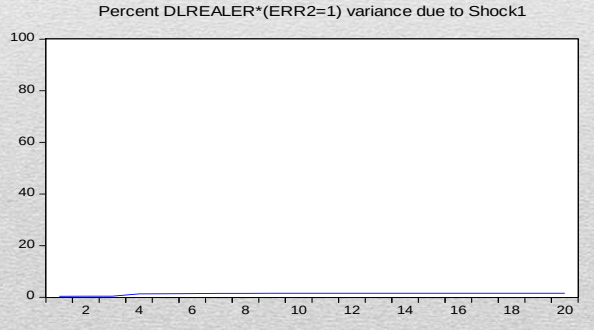


Figure 2: Percent variance of variables due to the foreign demand shocks

Fig. 2.3a: CPI under fixed regime

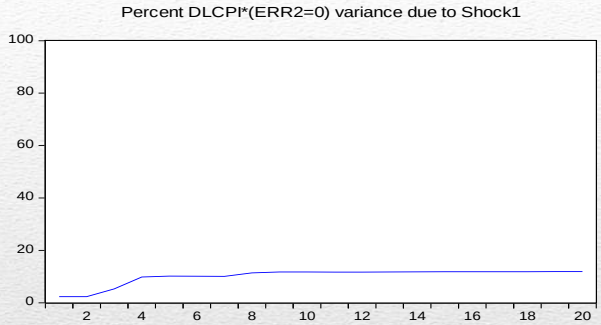


Fig. 2.3b: CPI under flexible regime

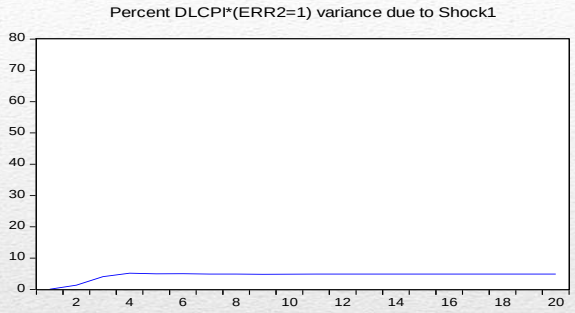


Fig. 2.4a: Income gap under fixed regime

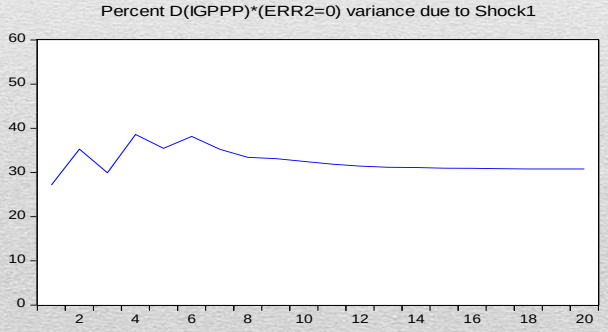
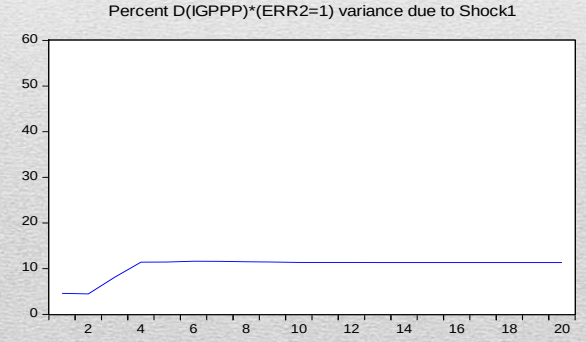


Fig. 2.4b: Income gap under flexible regime



POLICY IMPLICATIONS

Criteria	Optimal ERR
Real output, real exchange rate	Fixed exchange rate regime
Inflation	Flexible exchange rate regime
Income gap	Flexible exchange rate regime

Fixed ERR	Consider the unanticipated foreign demand shocks
Flexible ERR	Foreign demand shocks are not important.