



**MEASURING REGIONAL ECONOMIC
INTEGRATION:
THE CASE OF ASEAN ECONOMIES**

**Discussant:
Rio Khasananda**

RESEARCH OBJECTIVE

- Measure the progress of regional economic integration by focusing on goods and services markets as well as on financial markets.

RESEARCH QUESTION

- What is the current degree of trade and financial market relations?
- Are ASEAN's real and financial market integrated?
- Does the economic integration persistent?



METHODOLOGY

- To examine economic integration : using Real Interest Parity (RIP) framework by Cheung, et al (2002) & Laurenceson (2003)
- Involve countries integrated with flow of goods and services (real and financial integration): using Zivot and Andrews (1992) unit root → structural break

DATA

Table 1: Data Description and Source Details

Data	Country	Source of data
End-of-period nominal exchange rate	All ASEAN countries	International Financial Statistics (IFS), IMF
Consumer price index	All ASEAN countries	IFS, IMF
Money market rate	Indonesia, Malaysia, the Philippines, Thailand and Singapore	IFS, IMF
Lending rate	Cambodia, Myanmar and Vietnam	IFS, IMF
Lending rate	Lao PDR	Bank of Lao PDR
Deposit rate	Brunei Darussalam	IFS, IMF



RESULT

- Assesses the degree of trade relations and interest rate co-movement → country's trade intensity → trade of Cambodia, Indonesia, Laos, Myanmar and Vietnam with ASEAN partner grew significantly, while Malaysia, Singapore and Thailand most important trading partners in the region.
- Correlation of interest rates → Brunei, Cambodia, Indonesia, Laos, Myanmar and Philippines became more correlated with interest rates of ASEAN countries.
- Zivot and Andrews test :
 - Real integration strongly holds amongst ASEAN countries (based on Ho unit root test is rejected in all country pairs) → deviations from PPP are stationary and tend to disappear over time.
 - UIP relatively weak compared to PPP,
 - Real integration has progressed further than financial integration.
- Persistency test → while the real integration has progressed well, financial markets in ASEAN region are less integration compared to the real integration.



CONCLUSION

- Although the region is already relatively integrated in goods and services, financial integration is weak

POLICY IMPLICATION

- Impact of future liberalization is likely to be substantial on financial market
- The pace of financial sector liberalization should be stepped up
- Capital mobility amongst ASEAN economies should be promoted by dismantling the existing barriers.

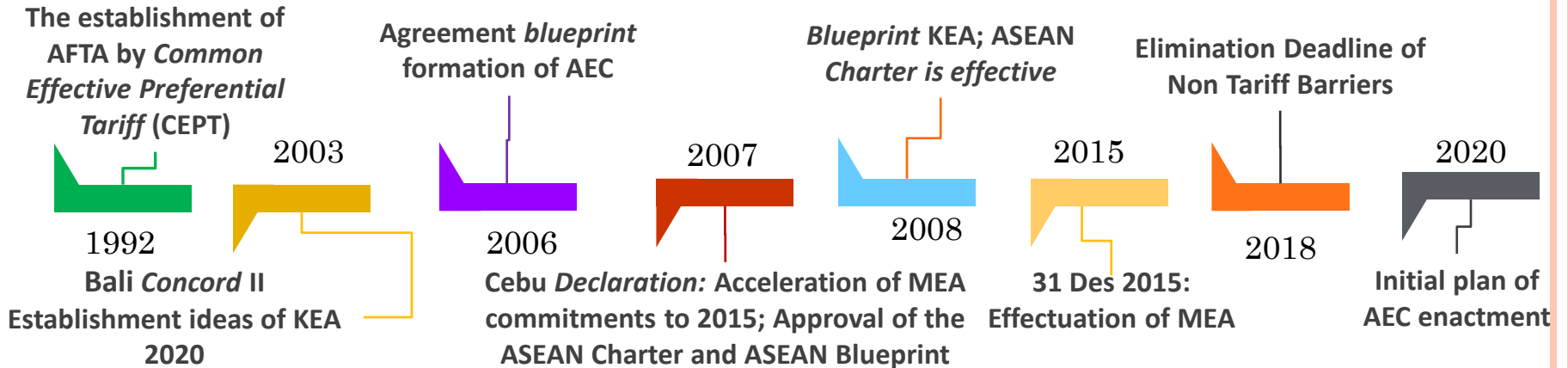


RESPONSE

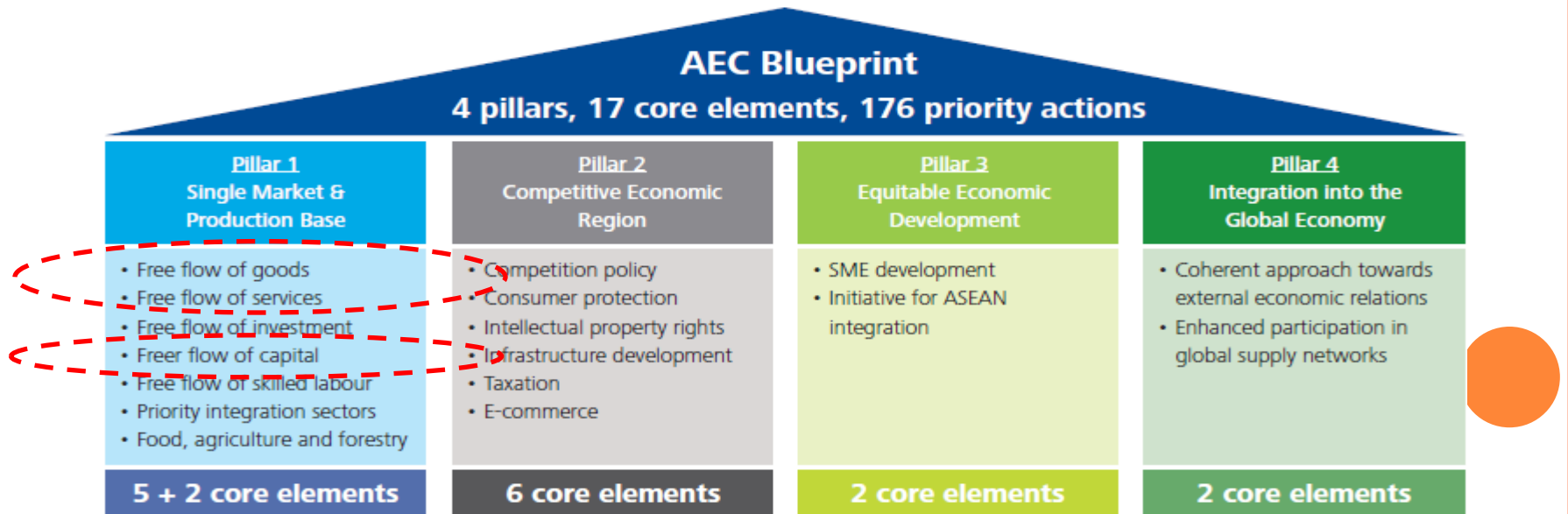


INTRODUCTION

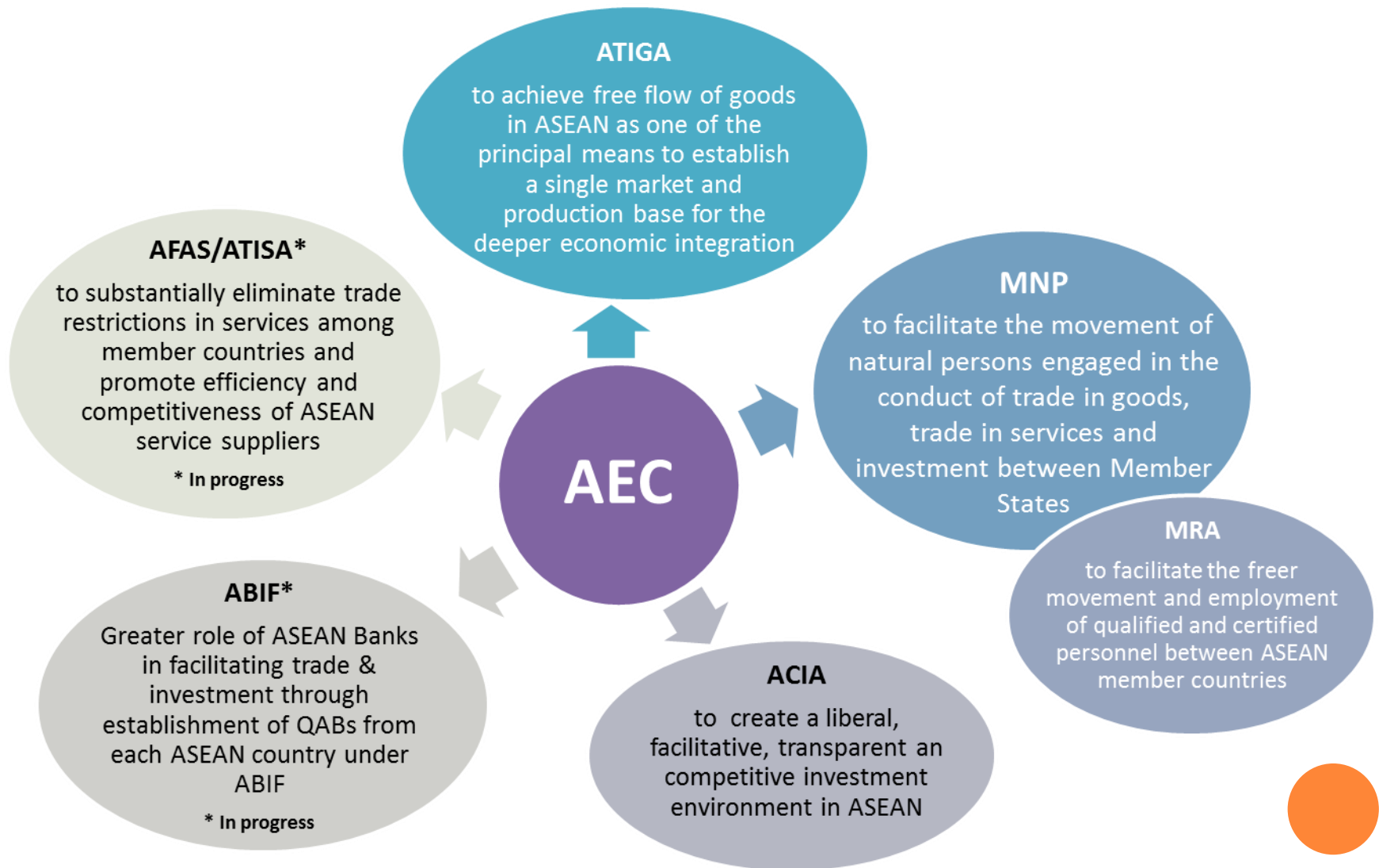
The Evolution of AEC



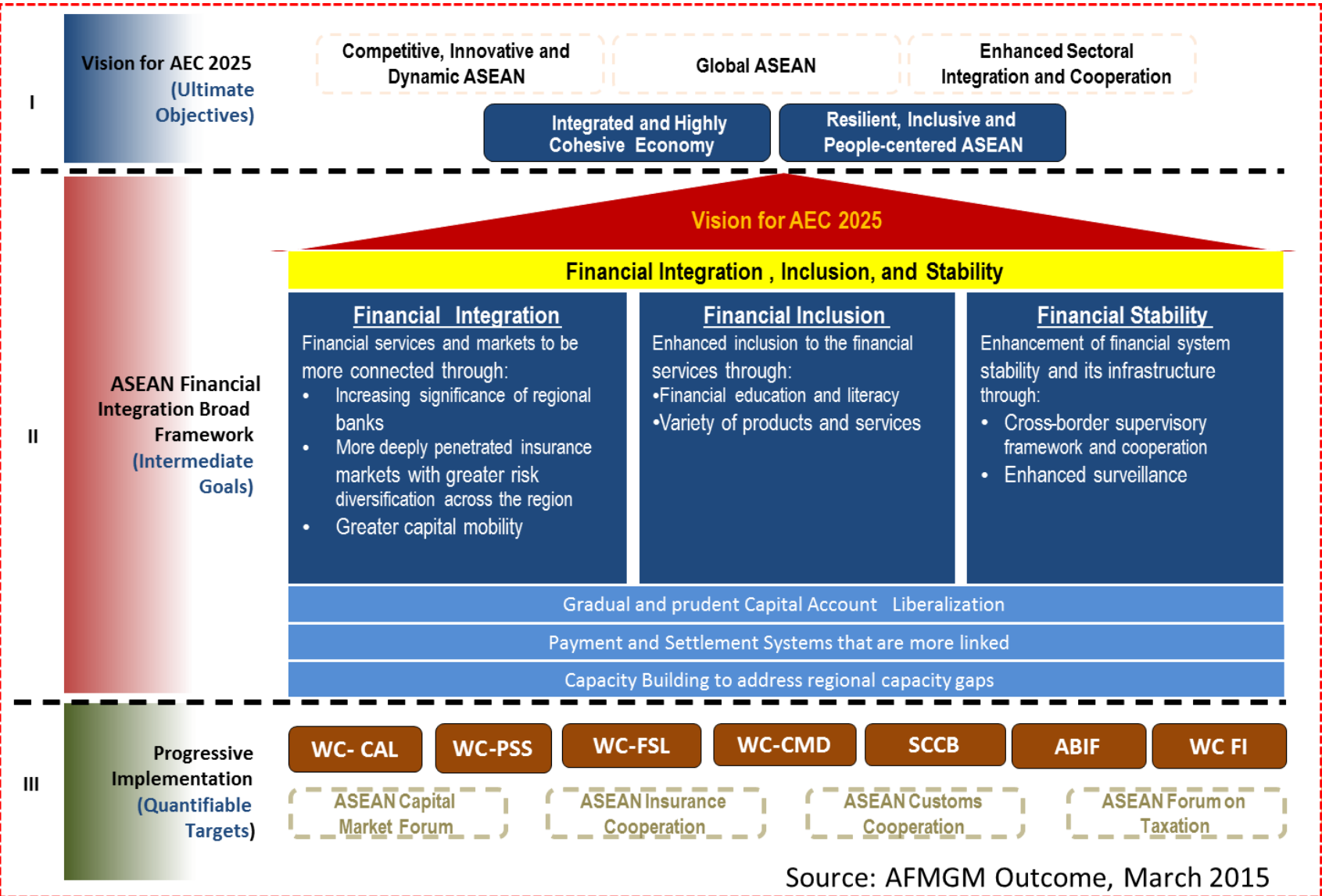
AEC Blueprint



AEC INTEGRATION FRAMEWORK



AEC 2025 VISION FOR FINANCIAL INTEGRATION: THREE PILLARS



Source: AFMGM Outcome, March 2015

METHODOLOGY

Trade Integration Measures

Issues	Indicator	Research Question & Hypothesis
Trade Openness	<ul style="list-style-type: none">The ratio of trade to GDP	<ol style="list-style-type: none">When compared with other countries with similar income levels, how the integration of a country against the world?How the ratio has changed over the first decade?
Trends in trade growth	<ul style="list-style-type: none">The evolution of the volume of exports of both goods and servicesThe annual growth of total exportsThe share of merchandise trade to GDP	Is the growth of exports of goods and services remains? If there is a deviation from the trend, whether the cause of the deviation.?
The composition of exports, RCA, and trade integration	<ul style="list-style-type: none">RCA from each sectorCAGR export for 5 s.d. 10 yearsExports per capita	<ol style="list-style-type: none">Do competitiveness develops differently in each sector? Are there dramatic changes in the particular sector? Why?How exports per capita to grow throughout the past 30 years and what if compared to its peers?
Market share	<ul style="list-style-type: none">The performance of the market share for superior products	Whether the market share is increasing in the world of a country, region or country? How it performs compared with its main competitors?
Trading partners	<ul style="list-style-type: none">Trade intensity indexTrade complementarities index	<ol style="list-style-type: none">Whether a country "overtrade" or "under trade" with its trading partners?Do the role of trade agreements in improving bilateral and regional trade?Whether a country has a high penetration rate to its trading partners?How to match the export profile of a country with the import profile of its trading partners?

METHODOLOGY

Financial Integration Measures

- Price Indicators → to measure the degree to which the price of the same financial asset is equalized across countries e.g. degree of co-movement of stock market (when financial market become more integrated market movement of stock price become more associated with each other, the measure can not stand alone without observing the bilateral correlations also).
- Quality indicators → to measure financial asset cross border trade volume and holdings e.g. cross border holding of total international portfolio assets and liabilities in major world regions

Parity methodology

- To produce relevant simulation and policy guidance in the future, researchers should consider to address CGE models which including financial sector and international capital flows.



RESULT

$X_{ij,t} = (Ex_{ij,t} + Ex_{ji,t}) / (\text{ASEAN's total world trade})$ Instead of

The intraregional trade intensity of region "i" is defined as

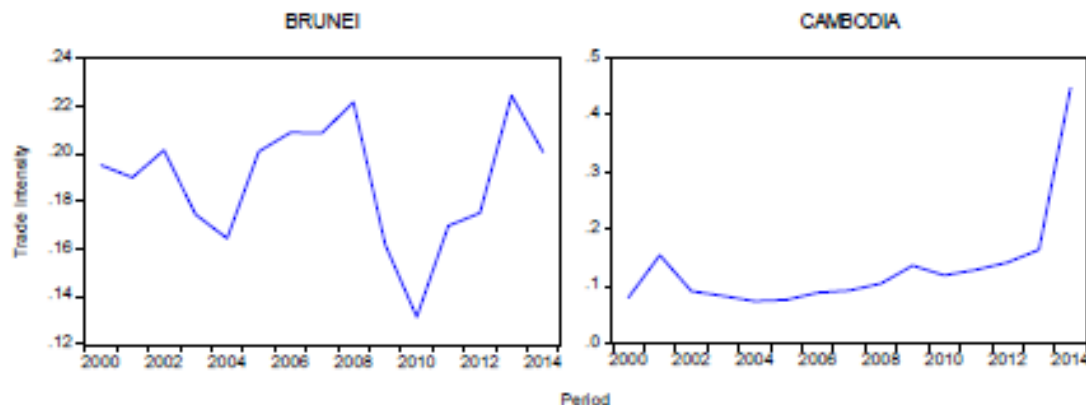
$$IT\ Intensity_i = \frac{(X_i + M_i) / (X_i + M_i)}{(X_i + M_i) / (X_i + M_i)}$$

where

X_i = total exports of region i to the world;

M_i = total imports of the region to the world;

X_i = total world exports; and M_i is total world imports.



VS ?

$$\bar{Y}_{ijt} = \text{corr}(IR_{ijt}, IR_{ijt})$$

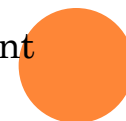
Table 2: Interest Rates Correlation for the period January 2000 - December 2007

	Brunei	Cambodia	Indonesia	Laos	Myanmar	Malaysia	Philippines	Singapore	Thailand	Vietnam
Brunei	1.000									
Cambodia	-0.428	1.000								
Indonesia	-0.329	-0.277	1.000							
Laos	-0.379	0.804	-0.203	1.000						
Myanmar	0.508	-0.681	-0.008	-0.549	1.000					
Malaysia	0.480	-0.893	0.290	-0.699	0.747	1.000				
Philippines	-0.347	-0.197	0.690	-0.097	-0.035	0.201	1.000			
Singapore	-0.021	-0.628	0.618	-0.549	0.301	0.578	0.702	1.000		
Thailand	0.182	-0.796	0.564	-0.653	0.534	0.817	0.588	0.894	1.000	
Vietnam	0.144	-0.716	0.451	-0.795	0.440	0.631	0.357	0.803	0.843	1.000

Its weak because its an instrument of monetary policy that used to manage diverse economic condition



Don't have full capital account convertibility



ASEAN FINANCIAL INTEGRATION: CHALLENGES AHEAD

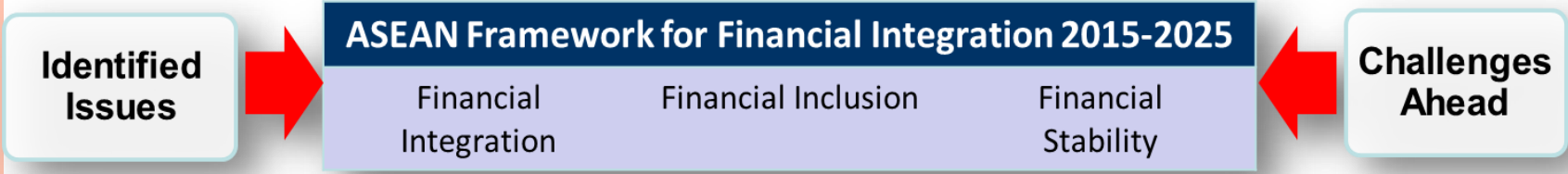
Internal Sources

- **The ease of doing business across ASEAN ?**
- **National governments reform ?**
- **ASEAN commitment to improve long-term growth ?**
- **Internal competition among ASEAN countries ?**

External Sources

- **ASEAN response to global economic dynamics:**
 - **China's deceleration, Japan's sluggish recovery and Europe weak growth**
 - **Volatile capital flows**
 - **Low commodity prices**
 - **Expected interest rate hike by the Federal Reserve**

ASEAN FINANCIAL INTEGRATION 2025: KEY FEATURES



Catalyze ASEAN integration process through facilitating flows of investment and capital by:

Benefit not only institutions but the common ASEAN citizens by:

Ensuring that **financial services meet the need of the real sector (1)**

Balancing financial integration with financial stability to ensure that the benefit of integration will be **sustainable (2)**

To enable realization of

Lowering transaction costs (3)

Having greater consumer choices and protection (4)

Improving financial inclusion (5)

Increasing risk diversification (6)

2025 AEC Vision (Ultimate Objective):
A Cohesive, Integrated, Competitive, Global and People-Centered ASEAN's Economy



THANK YOU



MYANMAR

VIETNAM

LAOS

THAILAND

CAMBODIA

PHILIPPINES

MALAYSIA

SINGAPORE

INDONESIA