Navigating the Future : Climate Macroeconomics, Transition Finance, Green Digital Finance in Japan and Asia

#### Comment

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#### Comment on

#### "Climate Change and Its Macroeconomic Impact"

- Key Question: economic impact of climate change in ASEAN +3
- Finding: impacts vary with weather type, industrial structure, income levels.
- This Paper: "through which mechanism?"
- Key idea: demand side shock (D increase expansionary) vs. supply side shock (S decrease – contractionary)
- Research methodology: Index construction shock identification shock decomposition – analysis
- Shock Identification: 3-Variable (GDP growth, CPI Inflation, Interest Rate) structural VARX (2,1)
  - X: (US GDP Growth, International Commodity Inflation)
- → Sign Restriction

## Key Results (ASEAN +3)

- ► Heat Stress: negative AS shock + positive AD shock → highly inflationary
- Precipitation: negative AS shock → contractionary
- Composite index : higher negative AS shock + lower positive AD shock
  - → mildly contractionary, highly inflationary

From both Pooling OLS over countries

And Panel regression with country fixed effect

#### My Question

- Japan : Only adverse AS Shock (Cold Stress + Precipitation)
- Thailand, Korea: positive AD shock + Negative AS shock (but positive shock stronger)
- Vietnam: Interesting case positive AD shock dominant
- My Question :
- 1. In VARX model, is it enough to include only US GDP and International Commodity price? (should'n't we include other country-specific important variables across different countries?)
- 2. What is the implication? some countries may be benefitted by the climate change? How can we find a good rationale (or incentive) for those countries to be proactive in greening?

# Comment on 'Transition Finance in Japan and in Asia''

- Introduction to Japan's policy for green transformation
- Sovereign transition bond (2024), ETS (2026), Allowance auctioning for power generating companies (2033), Carbon levy on fossil fuel importers (2028)

"Need rigorous strategy and credible pathways"

Ex: FE (Financed Emissions)

How to evaluate the firm's initiative to net-zero, especially for the firms with hard-to-abate industries?

#### My Question:

- 1. How to make the metrics 'rigorous'? → some potential answers from the paper
- 2. What Kind of policies are available?
- 3. How to make the policies more 'credible'?

### Some More comments on the Subject

- Common problems: Lack of Standardization, Limited Market Size and Investor's Awareness, Insufficient Supply of Green Investment Product, Limited Access to Green Data and Information, Complex and sometimes Contradictory Regulation
- Channel for Dialogue needed: more cases, collaboration for finding better practices → But for what ? - ultimate concern is to reduce the sources of 'climate change': inter-country spill-over effect should be also on the table
- What will be the specific collaborative policy framework needed among countries in the region (esp. Korea and Japan)?