HKMA-BoG-ECB-FRBD Conference (October 15-16, 2015, Hong Kong)
Diverging Monetary Policies, Global Capital Flows and Financial Stability
Discussion on Kim and Shin (2015)

A Discussion on "Offshore EME Bond Issuance and the Transmission Channels of Global Liquidity"

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Woon Gyu Choi
Deputy Governor
Director General, Economic Research Institute
The Bank of Korea

Prepared by: Woon Gyu Choi, Geun-Young Kim, and Byongju Lee

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I. Elements of the Paper

- ❑ Main findings
- ❑ Contribution to the literature
- ❑ Methodology

Main Findings

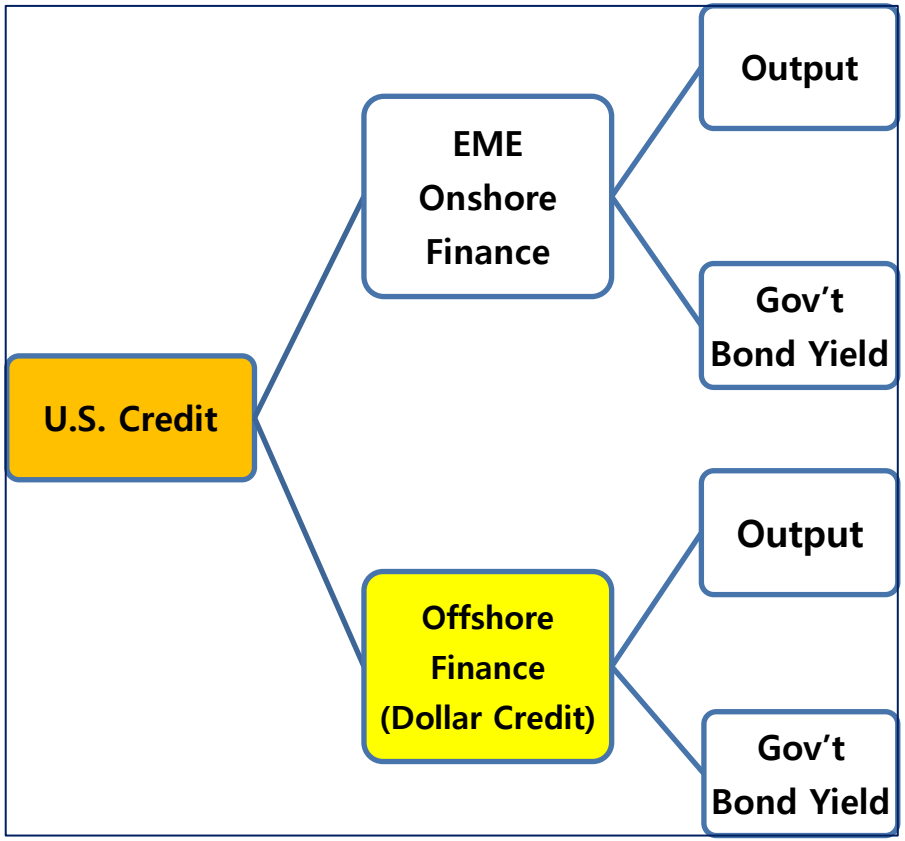
- Finding 1: U.S. credit expansions boost output and lower sovereign bond yields in the EMEs
  - Consistent with the literature
- Finding 2: U.S. credit expansions also stimulate the offshore bond issuance
  - Observed only after 2010
  - Provides a detailed view on a bond-market-led transmission channel, which have been argued by a few authors

Contributions and Related Studies

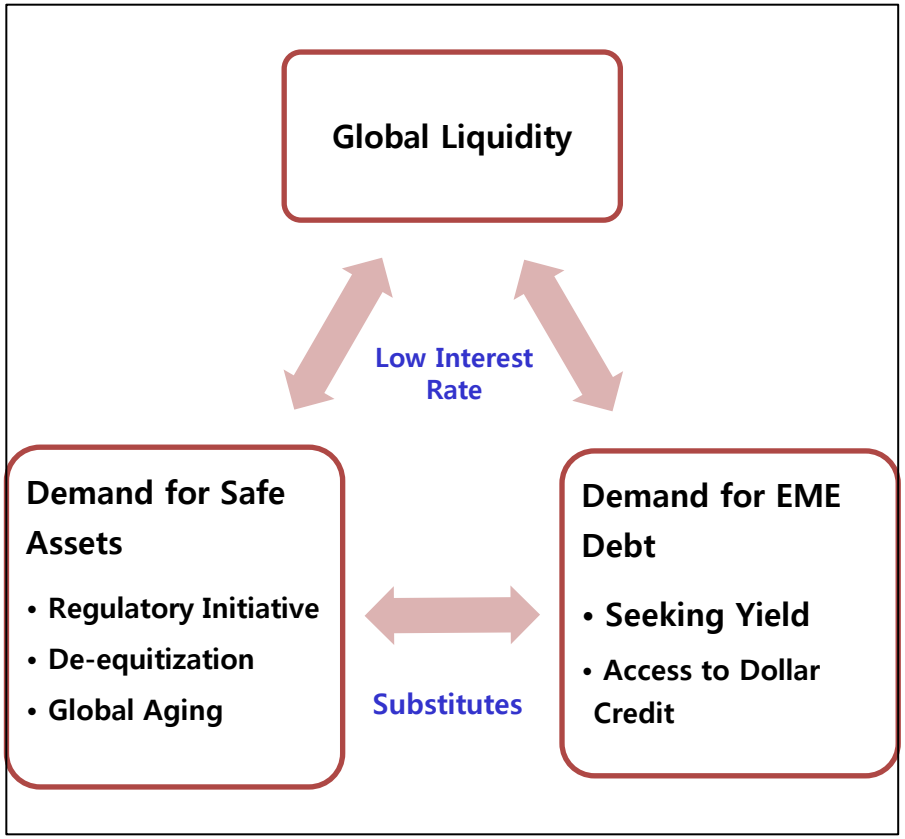
- Finding 1 is relatively well established in the literature
  - Chen et al. (2012), Choi et al. (2014), and Moore et al. (2012)
- Finding 2 is more interesting
  - Provides an empirical support to previous remarks in policy discussion
  - Looking at the offshore debt issuance channel is novel

Global Liquidity Transmission

GL-Supply Effects

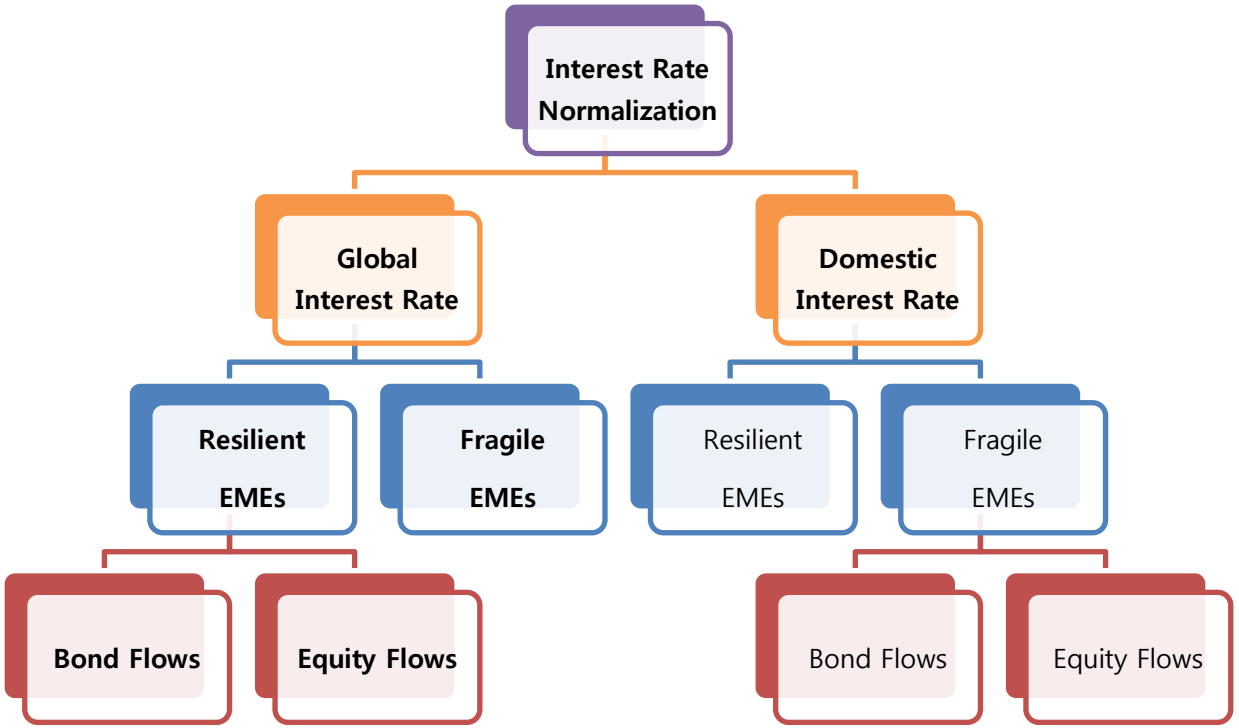


GL-Demand Effects



Alternative Transmission Channels: Diverging Impacts of Interest Rate Hikes on Bond and Equity Flows

(Choi et al. 2015)



- **Global** interest rate hikes outstrip **domestic** interest rate hikes in their impacts on the financial front.
- **Bond flows** are more sensitive to interest-rate differential than equity flows.
- **Fragile EMEs** are more susceptible to U.S. interest rate hikes.

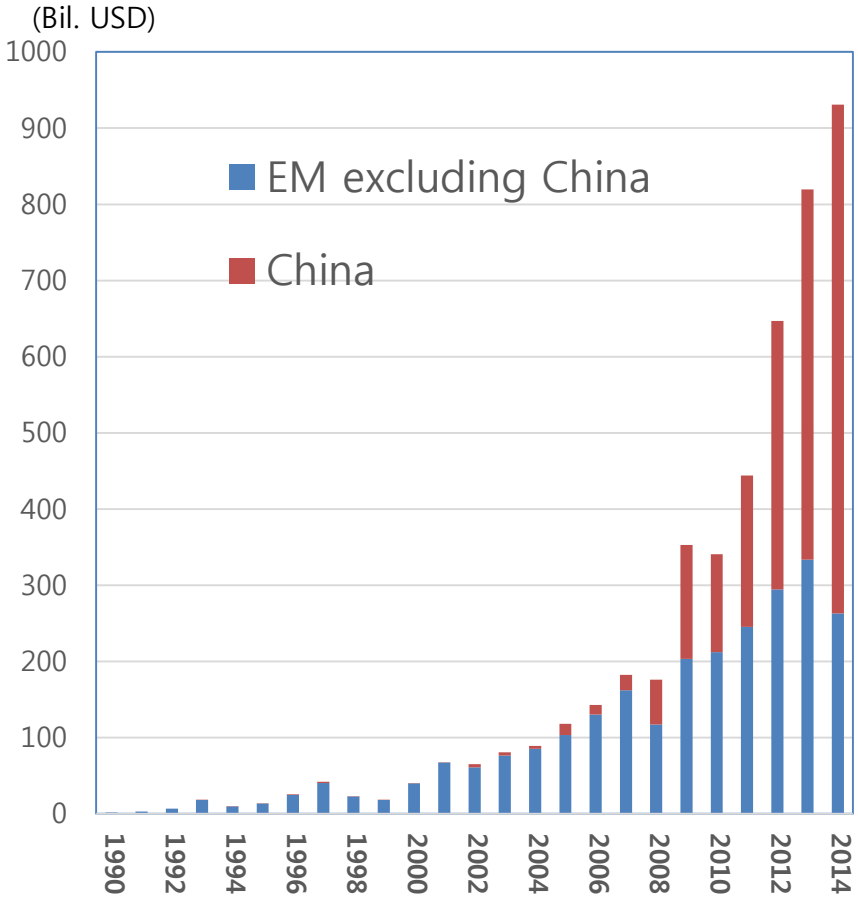
II. Recent Development in Cross-Border Flows

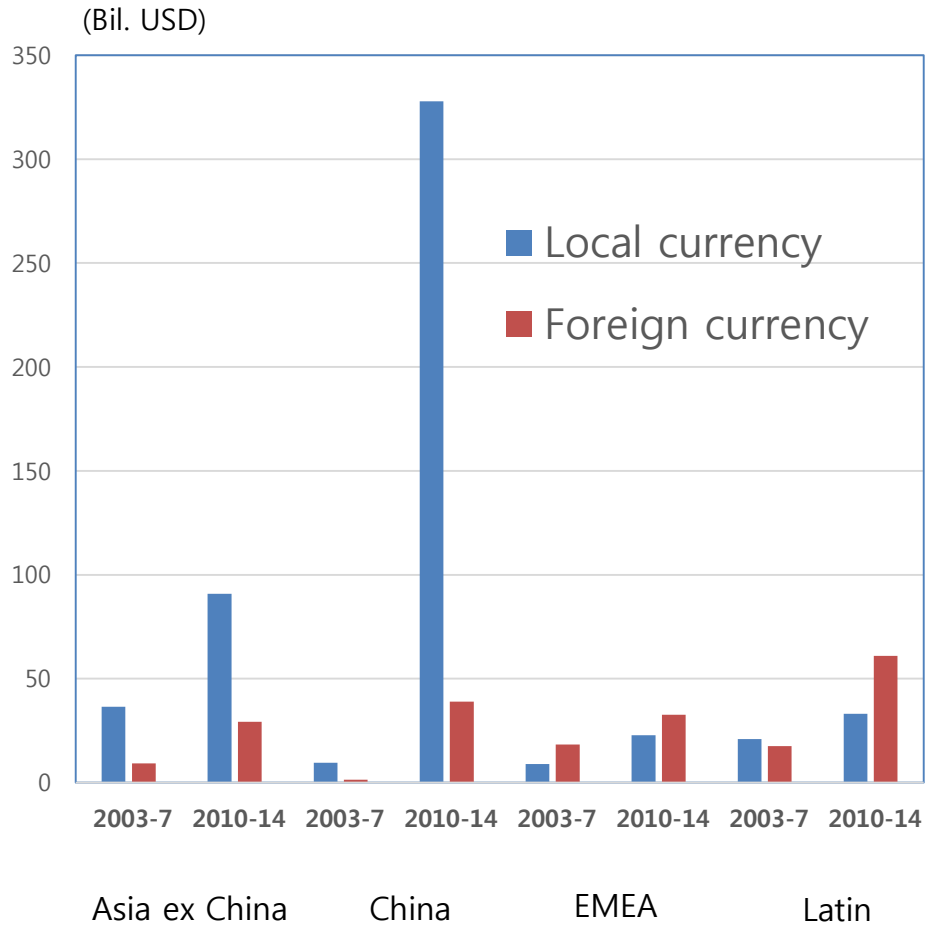
- Recent Evolution in the Financial Landscape
  - How important are debt flows among cross-border flows?
  - Debt flows, especially offshore debt issues, are increasingly important in cross-border financial flows
- Global Fund Flows: Bond and Equity
- Global Funding Network

Implications for interest rate normalization?—debt flows are not balanced among countries

Total Bond Issuance: EMEs and by Region

- *Sheer increases in China's bond issuance…*
- *After the GFC, bond issuance escalated in both local and foreign currencies in Asia, EMEA, and Latin America*

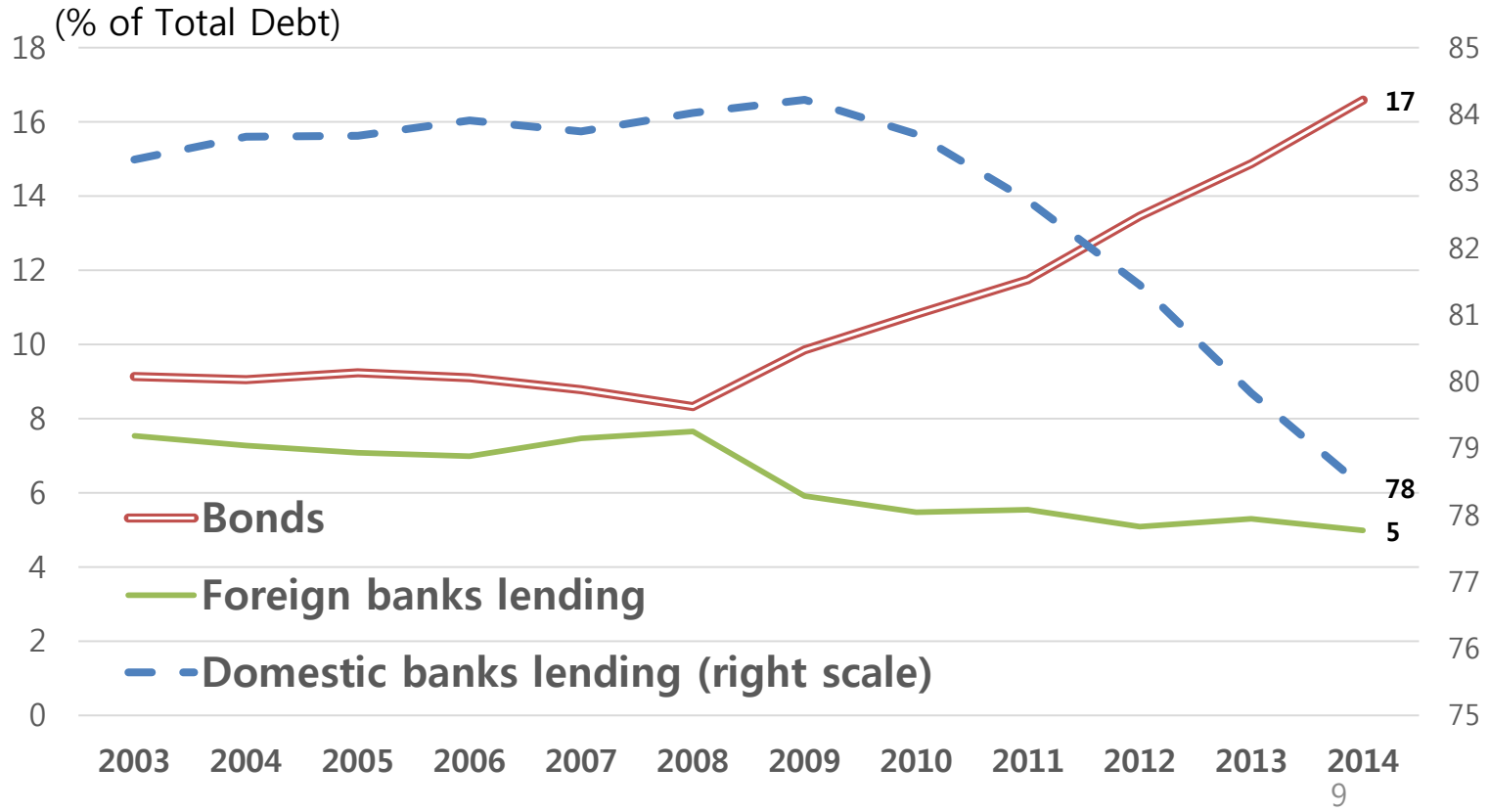




Source : IMF GFSR (2015)

Changing Composition of EM Corporate Debt : Bonds vs. Loans

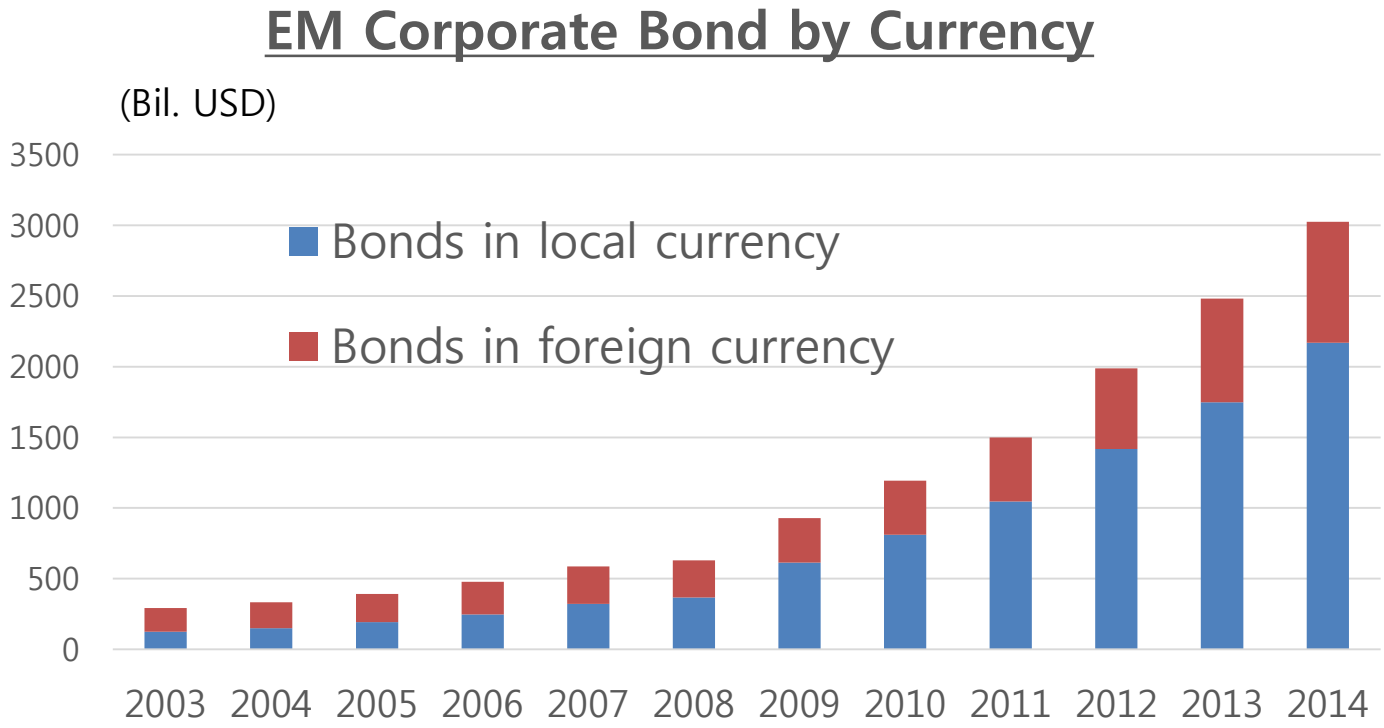
The share of bonds edged up to 17%, whereas that of domestic bank loans declined from 84% to 78% after the GFC



Source : IMF GFSR (2015)

Changing Composition of EM Corporate Debt

Foreign-currency denominated debt has grown faster after the GFC?



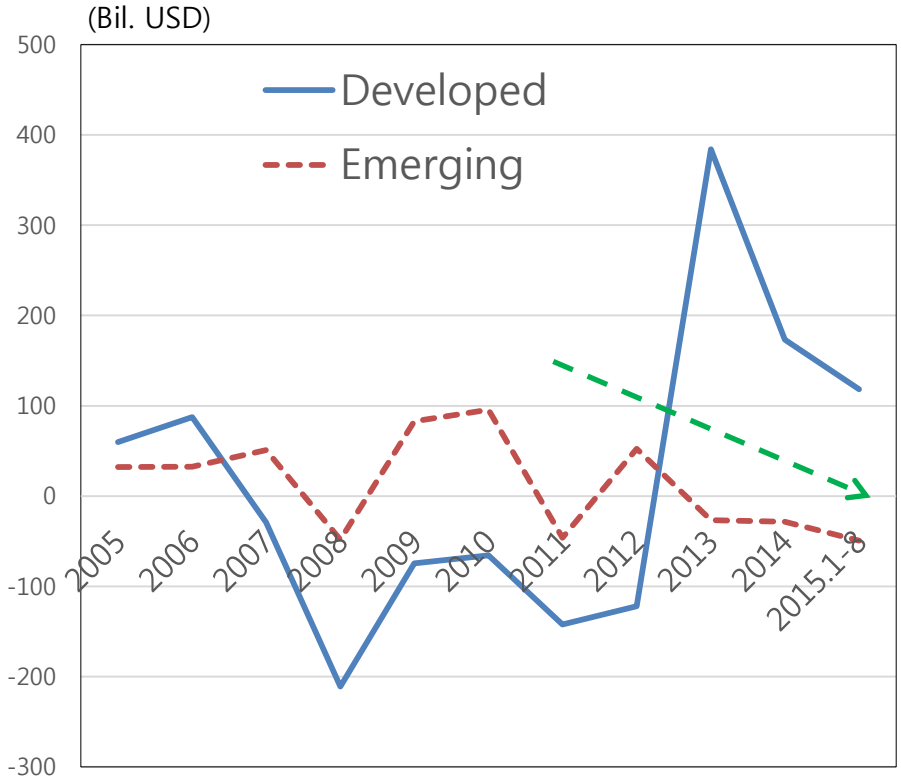
Source: IMF GFSR (2015)

Trend in Global Fund Flows

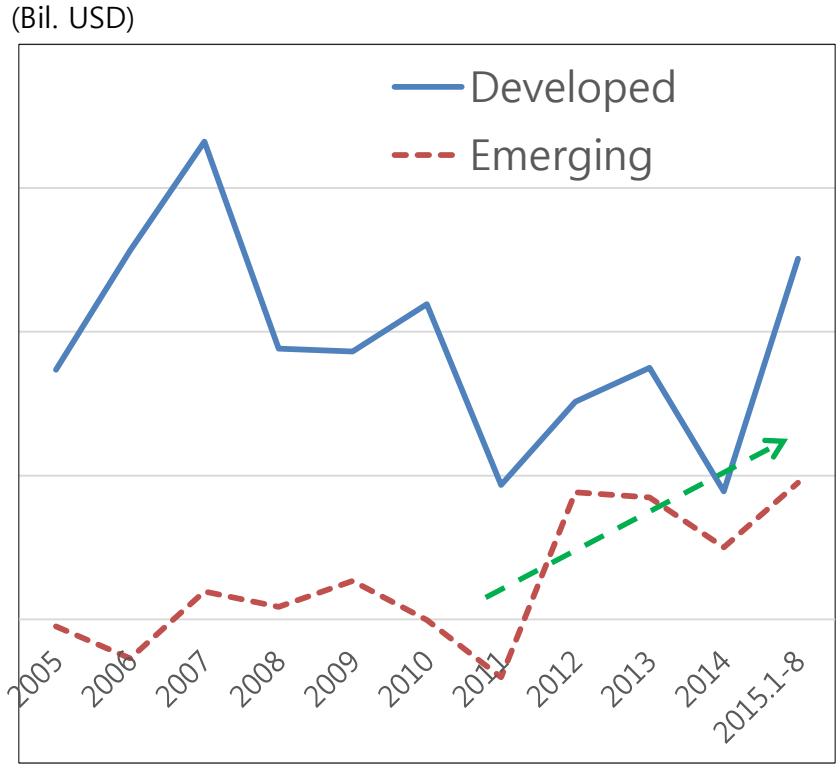
De-equitization in EMEs … but not in developed economies?

Bond inflows in EMEs… Headwinds of U.S. interest rate hikes and reflows in developed economies?

Equity Fund Flows



Bond Fund Flows

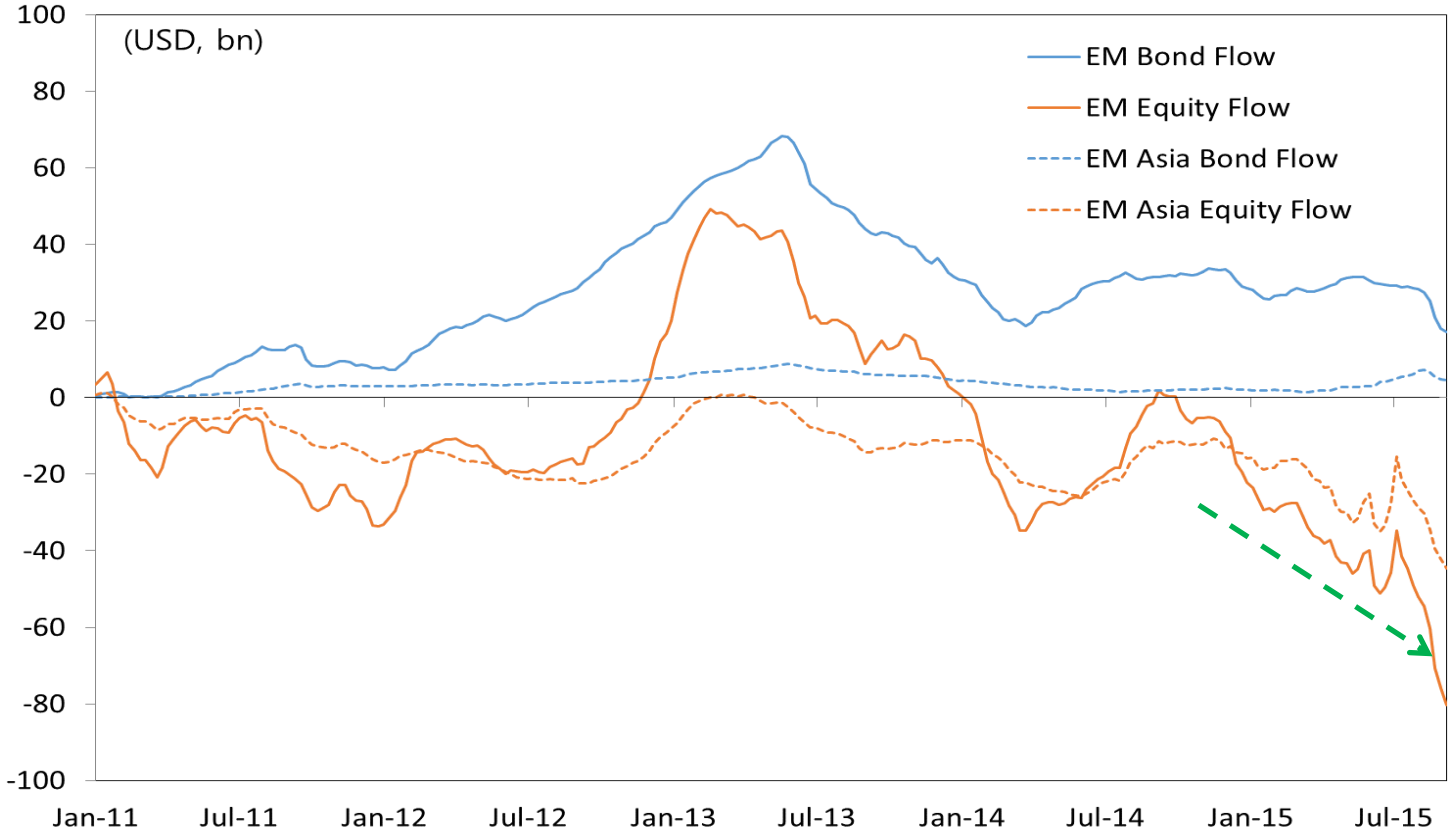


Source: EPFR (Emerging Portfolio Fund Research)

Movements of Bond and Equity Flows to EMEs

Recently net equity flows to Asian and EMEs edged down, while net bond flows to EMEs are still positive…

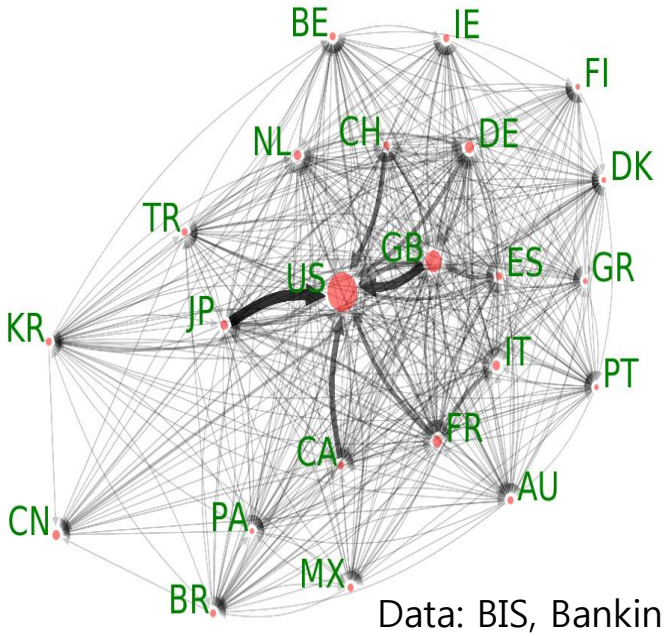
Net Flows into EM Funds (2011.1 - 2015.7)



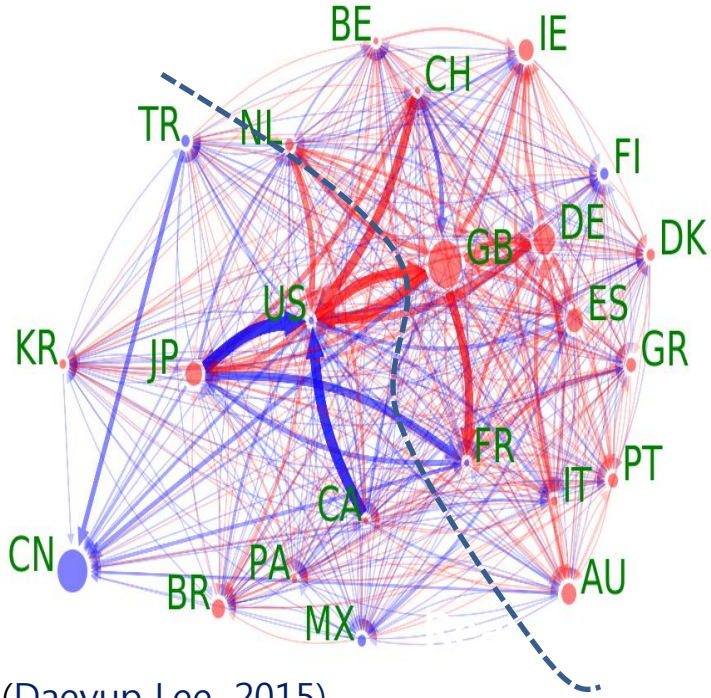
Source: EPFR (Emerging Portfolio Fund Research)

Evolving Global Banking Networks

December, 2014



Shifts from 2011:Q4 to 2014:Q4



Data: BIS, Banking Statistics
Source: BOK staff calculation (Daeyup Lee, 2015)

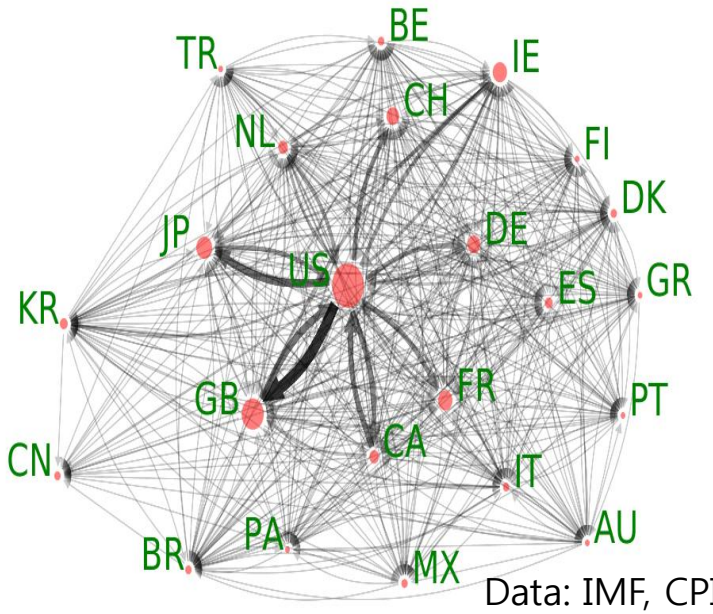
- 22 reporting countries + China
- JP ⇒ US is still the thickest link.

- The network of European area becomes relatively less active (more red(-) links).
- CN experiences the largest increase (the largest blue(+) vertex).

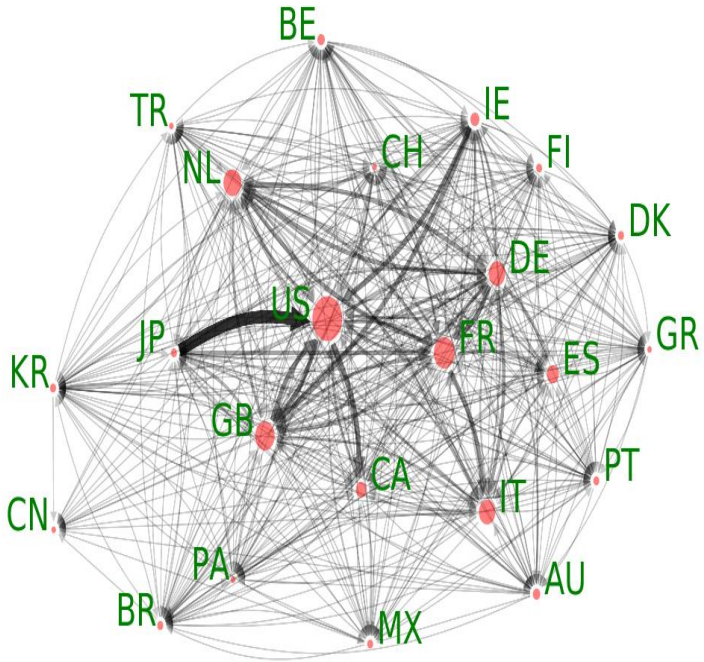
Pattern of Portfolio Investment (June, 2014)

- *The pattern of **bidirectional investment** is **more pronounced in equity** than in debt securities… Hence, equity investment supports the resilience of the domestic financial system… However, interest rate hikes may accompany net capital outflows associated with the unwinding of debt investment.*

Equity and Investment Fund Shares



Total Debt Securities



Data: IMF, CPIS
Source: BOK staff calculation (Daeyup Lee, 2015)

III. Specific Comments

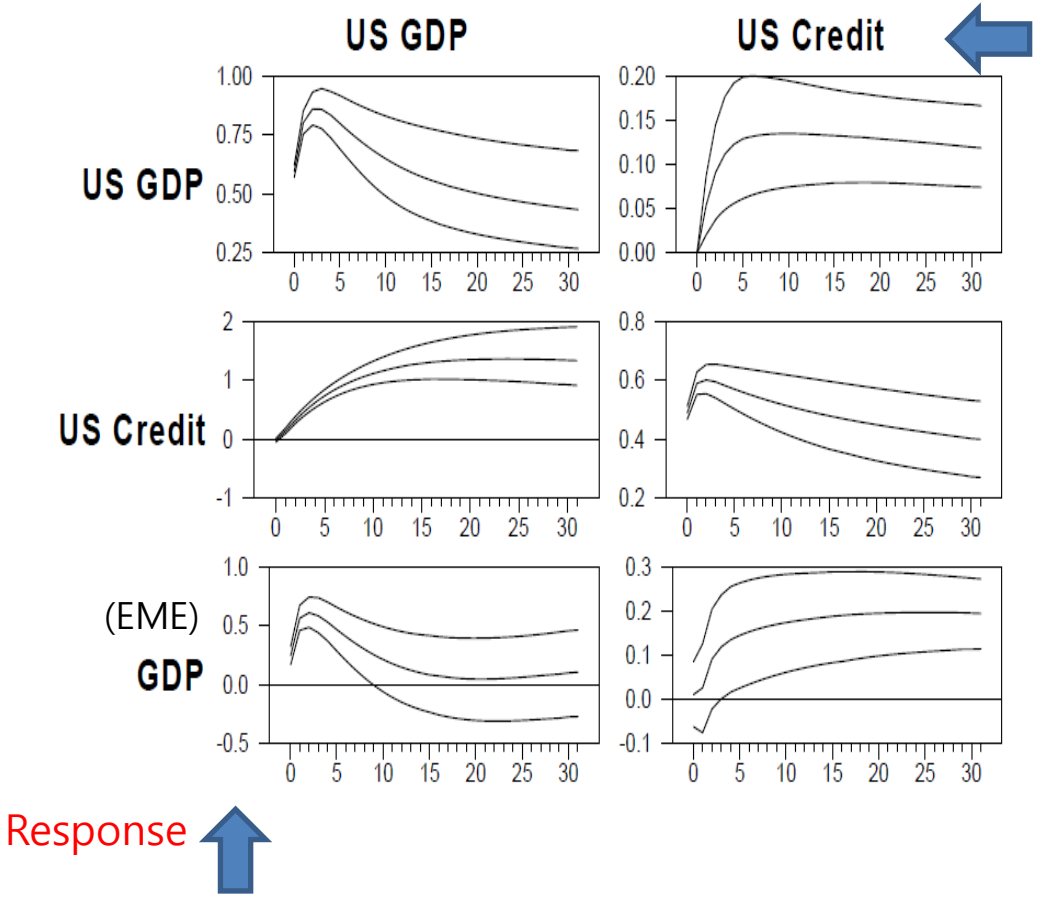
1. Break point: Demarcation of 2010
2. Identification: Permanent vs. Transitory Responses?
3. Unit Root and Estimation

1. 2010 as a Break Point: A Possible Story

- Theoretical basis/motivation of selecting 2010 as a break point is not provided
- A possible cause: strengthened prudential measures
  - After the GFC, EMEs adopted macroprudential measures
  - As regulations on onshore issuance and banks got tightened, firms in EMEs may look for offshore issuance
- Suggestion: grouping countries by the stance of prudential measures

2. Identification

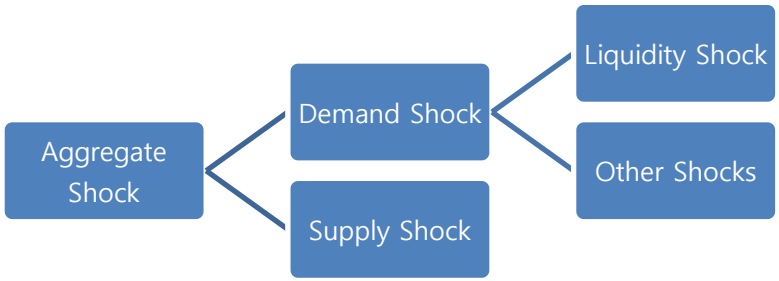
- Figure 4 of the paper



- A 'US GDP' shock has transitory impacts on US GDP (and EMEs' GDP) and persistent impacts on 'US Credit'—consistent with existing studies
- However, a 'US Credit' shock has persistent impacts on 'US GDP' and EMEs' GDP → Against intuition

2. Identification (2)

- These responses seem to be driven by a cointegration between real GDP and private credit in the US
  - This observation, however, is largely inconsistent with the notion of long-run money neutrality
  - This result may be driven by long-run relationships but identifications are based on short-run restrictions
- Alternative or robustness test: use long-run restrictions by Blanchard and Quah (1989)
  - Set the long-run effect of 'US Credit' on 'US GDP' to zero; or
  - Add unemployment to disentangle aggregate demand and supply shocks



3. Unit roots and Estimation

- Levels of real GDP and domestic credit are used in the analysis
  - Highly likely to have a unit root
  - The approach is argued to be "not problematic" due to the Bayesian inference (Sims and Uhlig, 1991)
- Yes, given identified shocks, the impulse responses correctly describe the posterior probability
  - According to Sims and Uhlig (1991): "…in reporting results […] there is no reason to use the special sampling distribution theory generated under the null hypothesis that unit roots are present."
- However, this point of so-called Bayesian unit rooters may not always be agreed
  - Stock (1991): "… disagreement over priors lead to different posteriors, quite different results and a general failure in information transfer"
  - A clear specification on priors in estimation section could be in order

References

- Blanchard, O. J., and D. Quah (1989), "The Dynamic Effects of Aggregate Demand and Supply Disturbances," *American Economic Review,* Vol. 79(4), 655-673.
- Choi, W. T. Kang, K. Kim, and B. Lee (2015), "U.S. Monetary Policy Normalization and EME Policy Mix from a Global Liquidity Perspective," work in progress.
- Sims, C. A., and H. Uhlig (1991), "Understanding Unit Rooters: a Helicopter Tour," *Econometrica*, Vol. 59(6), 1591-1599.
- Stock, J. H. (1991), "Bayesian Approaches to the 'Unit Root' Problem: A Comment," *Journal of Applied Econometrics*, Vol. 6(4), 403-411.

Thank you