Discussion of “International Reserves before and after the global crisis: Is there no end to hoarding?”
Joshua Aizenman, Yin-Wong Cheung and Hiro Ito

Rajeswari Sengupta (IGIDR, India)

March 6, 2015
13th NIPFP-DEA Research Meeting, Neemrana, India
Discussion of “International Reserves before and after the global crisis: Is there no end to hoarding?” Joshua Aizenman, Yin-Wong Cheung,
and Hiro Ito

Motivation

- EMEs increased reserves accumulation after 1990s crises.
  - Precautionary insurance against volatility associated with financial globalization
  - Mercantilist motive
  - Keeping up with the Joneses
- Post GFC, global macro landscape is volatile again; EMEs no exception.
- Reserve accumulation continued post GFC.
Motivation

- EMEs increased reserves accumulation after 1990s crises.
  - Precautionary insurance against volatility associated with financial globalization
  - Mercantilist motive
  - Keeping up with the Joneses

- Post GFC, global macro landscape is volatile again; EMEs no exception.

- Reserve accumulation continued post GFC.
  - What has been the impact of GFC & structural changes in global economic environment on IR hoarding patterns?
  - Were some countries motivated to supplement IR with new policies post GFC?
Panel fixed effects regressions, supplemented with PCA, for developing (73) & developed (22) countries
Panel fixed effects regressions, supplemented with PCA, for developing (73) & developed (22) countries

Panel fixed effects regressions, supplemented with PCA, for developing (73) & developed (22) countries

- Group explanatory variables in 3 categories: Traditional macro, financial, new.
Panel fixed effects regressions, supplemented with PCA, for developing (73) & developed (22) countries

- Group explanatory variables in 3 categories: Traditional macro, financial, new.
- ‘New’ conditioning variables not studied in detail before GFC (SWFs, macro-prudential policies, access to bilateral swap lines, gross saving, ODI, exports composition)
  - SWF may reduce exclusivity of IR as the main financial buffer.
  - Prudential regulations may reduce hot money inflows & need for IR hoarding.
  - Swap-lines may mitigate need for IR during volatile periods.

Examines adequacy of IR holdings; over or under-hoarding in 2010-2012.
Whether and to what extent countries under-hoarding IR were susceptible to currency depreciation in 2012-13.
Panel fixed effects regressions, supplemented with PCA, for developing (73) & developed (22) countries
- Group explanatory variables in 3 categories: Traditional macro, financial, new.
- ‘New’ conditioning variables not studied in detail before GFC (SWFs, macro-prudential policies, access to bilateral swap lines, gross saving, ODI, exports composition)
  - SWF may reduce exclusivity of IR as the main financial buffer.
  - Prudential regulations may reduce hot money inflows & need for IR hoarding.
  - Swap-lines may mitigate need for IR during volatile periods.
- Examines adequacy of IR holdings; over or under-hoarding in 2010-2012.
- Whether and to what extent countries under-hoarding IR were susceptible to currency depreciation in 2012-13.
Factors determining IR hoarding evolve with global developments.
Factors determining IR hoarding evolve with global developments.

- Pre-GFC: Saving is associated with higher IR & ODI diverts assets away from IR account.

- During GFC: Previous variables insignificant or opposite signs.

- Post GFC: 'New' factors dominate (swap lines, savings, ODI, SWF)

- Developed countries: different motivations for IR holding

- Brazil, India, Indonesia, SAfrica, Turkey: under-hoarding during 2010-2012

- Negative correlation between currency depreciation & over-hoarding of IR in 2012-13.
Main Findings of Paper

Factors determining IR hoarding evolve with global developments.

- Pre-GFC: Saving is associated with higher IR & ODI diverts assets away from IR account.
- During GFC: Previous variables insignificant or opposite signs.
Factors determining IR hoarding evolve with global developments.

- Pre-GFC: Saving is associated with higher IR & ODI diverts assets away from IR account.
- During GFC: Previous variables insignificant or opposite signs.
- Post GFC: ‘New’ factors dominate (swap lines, savings, ODI, SWF)
Main Findings of Paper

- Factors determining IR hoarding evolve with global developments.
  - Pre-GFC: Saving is associated with higher IR & ODI diverts assets away from IR account.
  - During GFC: Previous variables insignificant or opposite signs.
  - Post GFC: ‘New’ factors dominate (swap lines, savings, ODI, SWF)
- Developed countries: different motivations for IR holding
Main Findings of Paper

- Factors determining IR hoarding evolve with global developments.
  - Pre-GFC: Saving is associated with higher IR & ODI diverts assets away from IR account.
  - During GFC: Previous variables insignificant or opposite signs.
  - Post GFC: ‘New’ factors dominate (swap lines, savings, ODI, SWF)

- Developed countries: different motivations for IR holding
  - Brazil, India, Indonesia, SAfrica, Turkey: under-hoarding during 2010-2012

- Negative correlation between currency depreciation & over-hoarding of IR in 2012-13.
I. ‘New’ variables

SWF:

- Out of 73 developing countries, barring oil producers, how many with SWFs?
  - Once IR reaches a level high enough to cover self-insurance needs, countries with high saving rates may opt for SWFs.
  - Estimate a threshold effect in IR; interact SWF dummy with savings rate?
- Instead of SWF dummy, why not use the actual assets in the funds?
I. ‘New’ variables

SWF:
- Out of 73 developing countries, barring oil producers, how many with SWFs?
  - Once IR reaches a level high enough to cover self-insurance needs, countries with high saving rates may opt for SWFs.
  - Estimate a threshold effect in IR; interact SWF dummy with savings rate?
- Instead of SWF dummy, why not use the actual assets in the funds?

Swap Lines:
- How many developing countries had access to bilateral swap lines? (Brazil, Mexico, Korea, Philippines)
- Only a certain ‘type’ of countries (high reserves) were eligible for swap lines – possible endogeneity?
- Interact swap lines with IR opportunity cost to check if acting as substitutes?
Major Comments

I. ‘New’ variables

SWF:
- Out of 73 developing countries, barring oil producers, how many with SWFs?
  - Once IR reaches a level high enough to cover self-insurance needs, countries with high saving rates may opt for SWFs.
  - Estimate a threshold effect in IR; interact SWF dummy with savings rate?
- Instead of SWF dummy, why not use the actual assets in the funds?

Swap Lines:
- How many developing countries had access to bilateral swap lines? (Brazil, Mexico, Korea, Philippines)
- Only a certain ‘type’ of countries (high reserves) were eligible for swap lines – possible endogeneity?
- Interact swap lines with IR opportunity cost to check if acting as substitutes?

ODI:
- Any evidence from literature establishing negative or positive link between ODI and IR?
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
  - Commodity volatility, macro-prudential measures, export composition: Not significant.
  - SWF: Different sign for post-GFC and full sample.
  - ODI: Different sign for post-GFC and pre-GFC.
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
  - Commodity volatility, macro-prudential measures, export composition: Not significant.
  - SWF: Different sign for post-GFC and full sample.
  - ODI: Different sign for post-GFC and pre-GFC.
    - Can understand new variables becoming significant post-GFC but why sign changes?
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
  - Commodity volatility, macro-prudential measures, export composition: Not significant.
  - SWF: Different sign for post-GFC and full sample.
  - ODI: Different sign for post-GFC and pre-GFC.
    - Can understand new variables becoming significant post-GFC but why sign changes?
    - Is there anything specific about post-GFC period driving these?
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
  - Commodity volatility, macro-prudential measures, export composition: Not significant.
  - SWF: Different sign for post-GFC and full sample.
  - ODI: Different sign for post-GFC and pre-GFC.
    - Can understand new variables becoming significant post-GFC but why sign changes?
    - Is there anything specific about post-GFC period driving these?
    - Are these results driven by structural changes or by a few countries?
II. Results for developing countries

- Post-GFC: ‘New’ factors dominate results
  - Commodity volatility, macro-prudential measures, export composition: Not significant.
  - SWF: Different sign for post-GFC and full sample.
  - ODI: Different sign for post-GFC and pre-GFC.
    - Can understand new variables becoming significant post-GFC but why sign changes?
    - Is there anything specific about post-GFC period driving these?
    - Are these results driven by structural changes or by a few countries?

- Traditional factors-Financial exposure: Different sign for post-GFC and full sample
- During GFC: Higher opportunity cost increases IR: Why so?
- Macro-prudential policies have a positive effect on IR: Counter-intuitive; what are these policies?
Major Comments

III. General

III. General

  - Instead of simply dividing into sub-periods, maybe more GFC specific such as interact with VIX etc?
- Why not formally test for structural breaks in the IR/GDP series?
III. General

  - Instead of simply dividing into sub-periods, maybe more GFC specific such as interact with VIX etc?
- Why not formally test for structural breaks in the IR/GDP series?
- If interested in evolution of determinants, why not look at change in IR/GDP?
Major Comments

III. General

  - Instead of simply dividing into sub-periods, maybe more GFC specific such as interact with VIX etc?
- Why not formally test for structural breaks in the IR/GDP series?
- If interested in evolution of determinants, why not look at change in IR/GDP?
- Post-GFC: Too small a sample period of only 3 years (2010-12 model weak even for prediction exercise)
III. General

  - Instead of simply dividing into sub-periods, maybe more GFC specific such as interact with VIX etc?
- Why not formally test for structural breaks in the IR/GDP series?
- If interested in evolution of determinants, why not look at change in IR/GDP?
- Post-GFC: Too small a sample period of only 3 years (2010-12 model weak even for prediction exercise)
- What about countries without SWFs and/or swap line access?
Major Comments

III. General

  - Instead of simply dividing into sub-periods, maybe more GFC specific such as interact with VIX etc?
- Why not formally test for structural breaks in the IR/GDP series?
- If interested in evolution of determinants, why not look at change in IR/GDP?
- Post-GFC: Too small a sample period of only 3 years (2010-12 model weak even for prediction exercise)
- What about countries without SWFs and/or swap line access?
- Renewed capital inflows in 2010: India, Malaysia, Chile & Colombia allowed currencies to appreciate while Korea & Peru increased IR; shift in Trilemma post GFC towards greater MI, less ERS?
Concluding Remarks

- Interesting and insightful analysis bringing into light some less-discussed factors that might help explain IR patterns.
- Throws light on the dynamic nature of IR accumulation.
- Important policy implication: New factors might mitigate IR hoarding going forward.
- Points towards a possible regime-switch in IR accumulation—future research might test this more formally.
Thank You