

Discussion of
Global Liquidity, House Prices, and the Macroeconomy:
Evidence from Advanced and Emerging Economies
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This paper

- 1 Build **new dataset on housing prices** (quarterly frequency, for the period 1990-2012) in 33 emerging market countries (EM) and merge it with existing data for 24 advanced economies (AE) from OECD, BIS, Dallas Fed.
- 2 Find that, unconditionally, housing prices in EM increase faster, are more volatile and less persistent than in AE.
- 3 Run **PVAR analysis** to estimate impact of global liquidity shock on housing prices, consumption, real exchange rates, interest rates and the CA:
 - ▶ use **external instruments approach** to identify structural shock to global liquidity,
 - ▶ find that the shock has stronger impact on EM than on AE,
 - ▶ looks at possible differences in the transmission channels in EM and AE.

How is global liquidity measured?

- **Global liquidity** (GL) is proxied by cross-border bank lending and measures the international supply of credit: i.e., the external loans of banks in all reporting countries (43) vis-a-vis foreign banks (from BIS locational statistics database).
- Cross-border bank lending is a large fraction of total cross-border lending: for example, in 2011 about 70%.
- BIS locational statistics are based on the residence of a reporting bank: i.e., a loan from a French bank to a Greek bank that it owns is registered as a cross-border loan. BIS also provide consolidated data that consider loans from a head office, foreign branches and subsidiaries.
- Note that GL is affected by several factors like: monetary policy, banking regulation, leverage, assets' write-offs, exchange rates, growth of foreign markets, etc.
- Since 1995, GL has gradually increased up to about \$17 trillion (real) on the onset of the Great Recession, and then declined sharply and stayed at lower level of about \$12 trillion.

Comments: PVAR

- Endogenous variables: global liquidity, REER and CA (global); R, C and HP (domestic).
- In PVAR there is the need to estimate the structural form of the VAR to be able to build IRFs.
- Identification technique: external instruments approach (Stock and Watson (2012) and Mertens and Ravn (2013)).
- Intuition:
 - ▶ use instrumental variable in VAR,
 - ▶ identify set of instruments Z that are **correlated** with the desired structural shock (ϵ^{GL}), but that are **orthogonal** to the other (global + domestic) structural shocks,
 - ▶ obtain consistent estimates of the required coefficients that map reduced form shocks into structural shocks by 2SLS.
- Z : combination of US FF, M2, broker-dealer leverage, slope of yield curve, VIX, TED spread that maximize F-stat.

Comments: PVAR

- For the approach to work, we need good (valid) instruments.
- Values for F-statistics (and R²) generally low (mostly below 5) for both EM and AE (Note: authors write "F-stats are reasonably high").
- This might suggest that instruments are **weak**.
- In addition, it is likely that orthogonality assumption is **violated** (for example, the steepening of the US yield curve might determine outflow from EM with effects on the CA, REER, C; shock to Greece might drive up VIX; etc.).
- Possible solution?
 - ▶ Follow Karadi and Gertler (2015) and extract *surprises* from the chosen instruments (say, the VIX) by fitting an auto-regressive process.
 - ▶ Consider for robustness additional instruments?

Minor comments

- In unconditional analysis:
 - ▶ Why focus only on quarterly log changes? Separate trend from cycle using HP-filter?
 - ▶ It would be nice to see t-tests on the differences between moments in AE and EM and standard errors with respect to the cross-section of countries to better understand the statistical significance of some of the claims.

Conclusions

- This is a very good and polished paper, lots of robustness checks.
- Analyze impact of global liquidity shock on AE and EM: important policy implications (i.e., changes in banking regulation and capital requirements, exist strategy from QE, etc.).
- Some concerns about instruments used in PVAR.