Discussion of "The Effects of Fed Policy on EME Bond Markets" by J. Burger, F. Warnock and V. Warnock

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The views expressed here do not necessarily reflect those of the Central Bank of Brazil



Paper investigates

- (1) drivers of composition of US investors' portfolios of local and foreign currency EME bonds
- (2) drivers of EME bond market size scaled by the size of the corresponding economy
- Key insight: Normalized relative weights. Should change only after <u>active</u> portfolio decisions and not because of valuation effects
- Studies if active portfolio reallocations respond to (i) EME fundamentals, (ii) US conventional and unconventional monetary policy components of 10Y Treasury yield

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Data and method

- Unbalanced annual panel covering 14 EME from 2006 to 2015 (or 12 from 2006 to 2014 when yields variable is included).
- BIS statistics used to assess bond market capitalization (denominator in the relative weights).
- Treasury TIC data used to asses US portfolio allocation (numerator in relative weights).
- Method consists of panel regressions with country fixed effects (and, in some specifications, time fixed effects).
- Note: The unconventional policy indicator used in some of the panel regressions is the point forecast from a first stage regression of 10y treasury yield on one quarter ahead LSAP.

Main results for the mkt size regressions

- Fundamentals matter for local currency EME bond market developments: low inflation volatility, stronger creditor rights and positive current accounts, specially for government bonds. Mixed evidence for foreign currency bond.
- Global factors matter for both local and foreign currency EME bond market developments: as captured by time fixed effects, or US monetary policy variables.
 - Easing conventional monetary policy (lower 10y yields) helps EME bond market deepening across the board.
 - Unconventional policy (lower proj(10y yields | LSAP) helps government bonds market, esp. local currency bonds.

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Main results for the portfolio weights regressions

- Fundamentals matter for US reallocation towards EME bonds: stronger creditor rights increase weights, and, in some specifications, so does low inflation volatility, low growth and high yields. Except for creditor rights, results vary for local vs foreign currency, and private vs government.
- Global factors matter for both local and foreign currency EME bond market developments: time fixed effects (+ local gov., local priv., foreign currency), or US monetary policy
 - Easing conventional mon. policy (lower 10y yields) tilts investors toward EME gov't <u>local currency bonds</u>.
 - Unconventional policy tilts away from USD bonds.

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Robustness Exercises 1

The paper uses *either* fixed effects or macro controls. An alternative would be macro controls + time trend. Show that macro variables are not just picking up a trend

Many robustness exercises along the dependent variable dimension. It would interesting to test specifications with different independent variables with similar interpretations



Robustness Exercises 2

How much time series variation in the fundamental variables relative to the cross-sectional variation? Depending on answer regressions might be more informative of *allocation* than *reallocation*

Would be interesting to explore alternative specifications, using first differences, purely cross-sectional regressions etc



Robustness Exercises 3

- Unconventional policy indicator is the point forecast from a regression of 10y treasury yield on one quarter ahead LSAP.
 - 1. Generated regressor. Bootstrap

- Also, would be useful to check if results are robust to using other measures of unconventional policies
 - e.g., FG and LSAP factors identified by Swanson (2015)



Differences relative to previous dataset

- Overall results are relatively similar to those obtained before by the same authors with a dataset with more countries and fewer years.
- Important difference: good creditor rights appears to be the main fundamental in this new version, while low inflation volatility appears to be the main fundamental in the previous dataset.
- Interesting to explore this difference. Is it due to different sample of countries or different time period? If heterogeneity important, should warrant analysis by country or countrygroups.



Alternative strategy

- <u>"Proxy variable" approach</u> explored by Barroso (2016)
- Motivated by <u>portfolio balance theories</u> of monetary policy transmission
- Could try specification with US weights on the LHS and market weights or non US weights on the RHS, so that market weights would "proxy" for common drivers of allocation



Barroso (2016)

- Causal impact of quantitative easing policies. Motivated by the portfolio rebalancing channel hypothesis
- The argument goes back to Tobin (1969, 1982). That is, reduced supply of long-term treasuries pressures long term bond prices and moves investors towards other assets



Barroso (2016)

- Given capital inflow data from different sources to the same recipient economy, one source is a close proxy for unobserved variables driving investments from other sources
- > Paper considers flows from US and ROW to the same EME.
 - Brazil: very detailed monthly dataset
 - Other EMEs: quarterly TIC data as in Warnock's paper
- Key identification assumption: QE has stronger effect in US than in other countries
 - Flows from ROW to a given EME serve as counterfactual to US flows in absence of QE
- Add some controls



Figure 1. Capital flows from ROW to Brazil



Source: Barroso, João (2016). "QE and US investor rebalancing towards foreign assets" Note: In the figure, QE2 includes Twist; QE3 include Tapering period.

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Figure 2. Capital flows from US to Brazil



Source: Barroso, João (2016). "QE and US investor rebalancing towards foreign assets" Note: QE2 includes Twist; QE3 include tapeting period.

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Barroso (2016)

- Both the "Brazil only" dataset and the EME dataset give the same result: "More than 50% of US flows to EMEs during the QE policies caused by QE policies"
- Paper looks into types of flows. It turns out portfolio flows are particularly sensitive, specially debt
- Also looks into QE rounds. Results are basically the same and equally distributed around QE policy rounds
- > Overall, strong evidence that QE cause portfolio rebalancing.
- Caveat: cross-sectional identification; if QE had absolute effects but no differential (US vs others) effect, would estimate a zero



Endogeneity

- Estimated effects of QE policy may be related to the common response of portfolio weights and QE policy to expected weakness in the US economy relative to expected weakness abroad.
 - Barroso (2016) tries to address this concern by including a surprise index summarizing deviations of actual growth from expected growth, which proxies for growth revisions
 - Authors control for economic growth
- I would favor using more forward looking variables like consensus expectations



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