

# Discussion of: The Shifting Drivers of International Capital Flows

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# Overview

- Broad question
  - ▶ How does the covariance between international debt flows and economic/policy indicators change after the Great Recession?
- Novel and detailed data allows
  - ▶ Decomposition by type of debt (bank versus securities), by type and location of recipient
  - ▶ Analyzing changes in lender composition
  - ▶ Analyzing (statistical) determinants of the covariances
- Results (22 tables, 6 plots)
  - ▶ Covariance between international debt flows and US monetary policy (Fed funds rate) increased

# Discussion

- Format
  - ▶ Follow the steps of the analysis (Fed funds rate only)
  - ▶ What do we learn? What else could we learn?
- Summary of comments
  - ▶ Interpretation on covariances as “impact” is difficult to justify
  - ▶ Structural break: 3 regimes?
  - ▶ Multiple drivers of change in covariance
  - ▶ Capital  $\neq$  Debt (Equity?)

## Step 1: Covariances

- Country-time panel regression:

$$DebtGrowth_{jt} = \alpha_j + \beta_1 \Delta FFRate_t + X_t + \epsilon_{jt}$$

Debt instrument	Loans	Securities
$\Delta FRR$	-1.88*** (0.41)	-1.35* (0.78)
$N$	2,903	2,903

- From the paper: “US federal funds rate has a sharply negative **impact** on loans”
  - ▶ These coefficients are not measures of impact of monetary policy
  - ▶ Although informative, coefficients are very difficult to interpret
  - ▶ Paper: “plausible assumption that Fed funds rate” is “exogenous when controlling for”  $X_t$
  - ▶ No such thing as random monetary policy: If  $X_t$  were the same and monetary policy is different, omitted variable is most likely

## Step 1: Covariances (minor comment)

- Country-time panel regression:

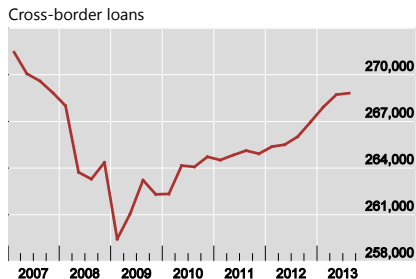
$$DebtGrowth_{jt} = \alpha_j + \beta_1 \Delta FFRate_t + X_t + \epsilon_{jt}$$

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- Loans from 64 countries to each other and other countries
  - ▶ Is lending from US to UK independent from lending from UK to US?
  - ▶ Gross versus net flows?

## Step 2: Structural break

- Authors avoid staking a stance on whether or when the structural change occurs
  - ▶ Instead, let the data say when it happens: Plot of the predictive power of  $FFRate_t$  and  $X_t$  (Sum of Square Residuals)



- There could be periods of low and high predictive power (3 regimes)
  - ▶ Makes you want to see time series of the covariance  $\beta_1$  (instead of just two estimates)

## Step 3: $\beta_1$ before and after 2009

- How does the coefficient of debt growth on monetary policy change after the structural break?

	Before 2009 Q1	After 2009 Q1
$\Delta FFRate$	-2.07*** (0.36)	-6.59*** (0.84)

- Where could this change come from?
  - This paper: Debt flows react more to monetary policy
  - Fed funds rate reacts less to fundamentals, or lower variation in Fed funds rate, e.g. due to zero lower bound  
(Recall that :  $\beta_1 = \frac{cov[DebtGrowth^*, \Delta FFR^*]}{var(\Delta FFR^*)}$ )
  - Debt flows react more to fundamentals (e.g., global trade to GDP ratio is lower since the crisis)
  - Composition of lending changes (e.g., less to more sensitive lenders)

## Step 4: Use bank level data

- Allows controlling for borrower country characteristics (results essentially unchanged)
- Covariance decomposition: how much of the change  $\beta_1$  is due to
  - ▶ Changes in the covariance for a given bank
  - ▶ Changes in the weight of each bank in the aggregate covariance
- Paper correlates these to policy variables (e.g., pre-break capital ratios)
  - ▶ I missed a purely descriptive part
  - ▶ For example: How much of the total variation in  $\beta_1$  is explained purely by composition? How much by changes in bank behavior?



# Conclusions

- The covariance between international debt flows and economic/policy variables changed substantially after the crisis
  - ▶ Important next question: Why?
- Paper concludes: “we show that the aftermath of the global financial crisis has been characterized by a shift in the composition of international capital flows from bank lending toward direct market financing”
  - ▶ Very interesting (but I could not find this in the paper!)
  - ▶ Substitution towards equity?