



FEDERAL RESERVE BANK *of* NEW YORK

Volatile International Capital Flows to Emerging Markets: Part 2

Linda S. Goldberg Keynote

July 8: CEMLA Conference on Economic and Monetary Policy under COVID 19
(Mexico City, Virtual)

The views expressed are those of the author and do not necessarily represent those of the Federal Reserve Bank of New York or Federal Reserve System

Volatile International Capital Flows – Part 1 Peru, CEMLA 2019

- ✓ Evolution of international capital flows
- ✓ Size and changing global factor (common movement across countries)
 - What are the drivers?
 - How/why does its strength evolve?
 - Differences for advanced economy vs emerging markets?
- ✓ Open questions
 - Different types of participants/ health/ sensitivities
 - New amplification factors
 - Implications of more synchronized business cycles

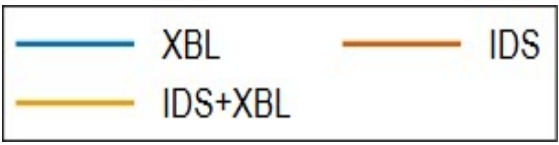
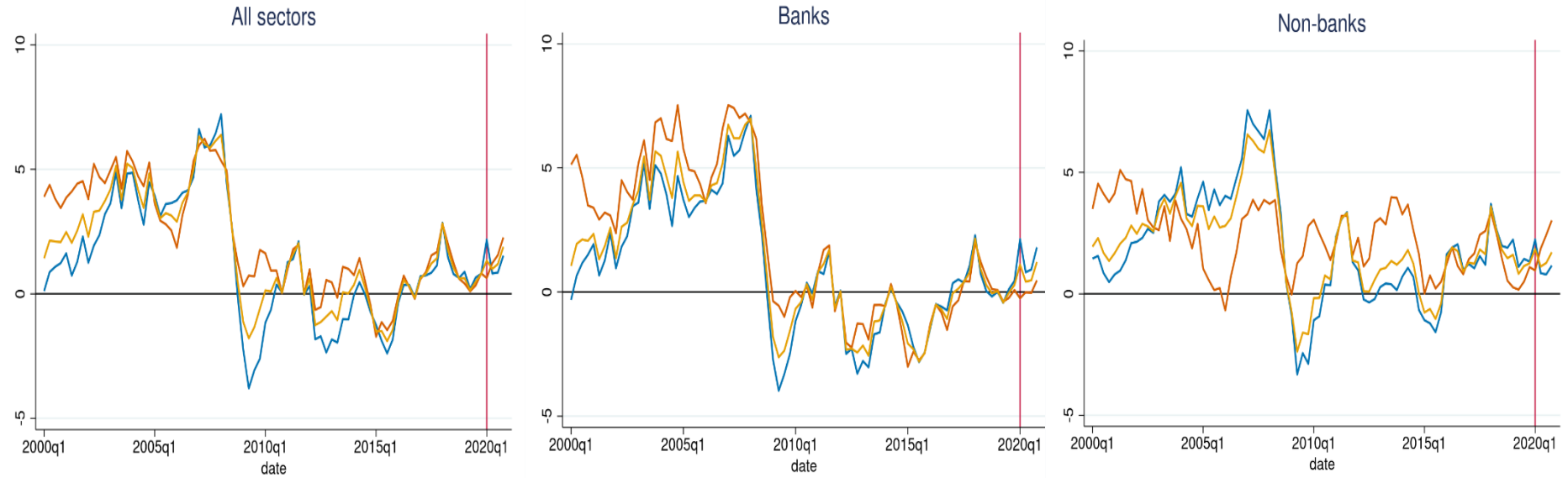
Part 1 Peru, CEMLA 2019: Big picture answers provided

- International capital flows are volatile and complex: composition evolves, drivers and global factor strength change
- Capital flow data (and bank-specific data, IBRN) allow identification of particular channels and decomposition of borrower/creditor behaviors.
- GK Exchange Market Pressure is a useful new complement to global factor and analytical work on international spillovers.
- Amplification factors: weak and under-capitalized global banks, synchronized advanced economy business cycles, big changes in risk sentiment by investors.
- Need to better understand: what different dynamics from market-based financing? What effectiveness of innovations in intervention toolkit?

Part 2 Mexico, CEMLA 2021 (Virtual)

- Revisit prior insights for AEs and EMs with analysis of international capital flows (data from 2018Q4-2020Q4 added).
 - ✓ Global liquidity flows; Goldberg-Krogstrup exchange market pressure.
- Amplification factors: weak and under-capitalized global banks, synchronized advanced economy business cycles, big changes in risk sentiment by investors
 - ✓ Confirmed. Better capitalized banks helped during COVID.
- Need to better understand: what different dynamics from market-based financing?
 - ✓ Still unknowns. Under COVID, nonbank financial institutions were a key part of capital flow and global dollar funding dynamics.
- What effectiveness of innovations in intervention toolkit?
 - ✓ Rush for liquidity challenged market functioning. In dollar funding, CB swap lines and FIMA repo innovations were effective.

Cross border lending (blue) more volatile than market-based flows, especially for bank borrowers. COVID-19: no GFC-type collapse.



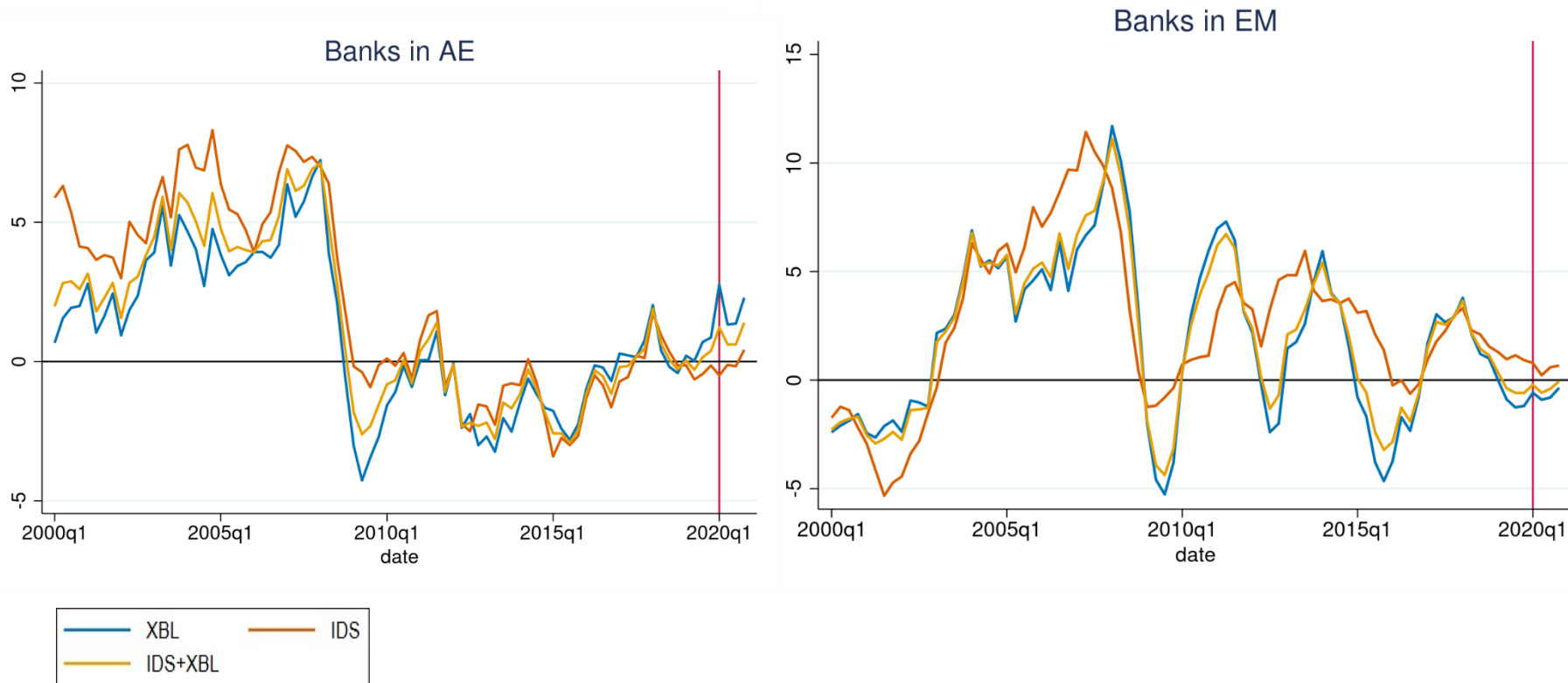
Quarterly Growth Rate_t = (Outstanding Stock_t/Outstanding Stock_{t-1}) - 1

XBL = Cross-border loans, IDS = International Debt Securities

Data Source: BIS Locational Banking Statistics, International Debt Securities

Amplitudes of swings are larger for EM **bank** borrowers. Pre- COVID patterns continued or flattened during pandemic.

External Debt Flows, **Bank Borrowers** in AE vs EM 4-quarter moving average of quarterly growth rates, %



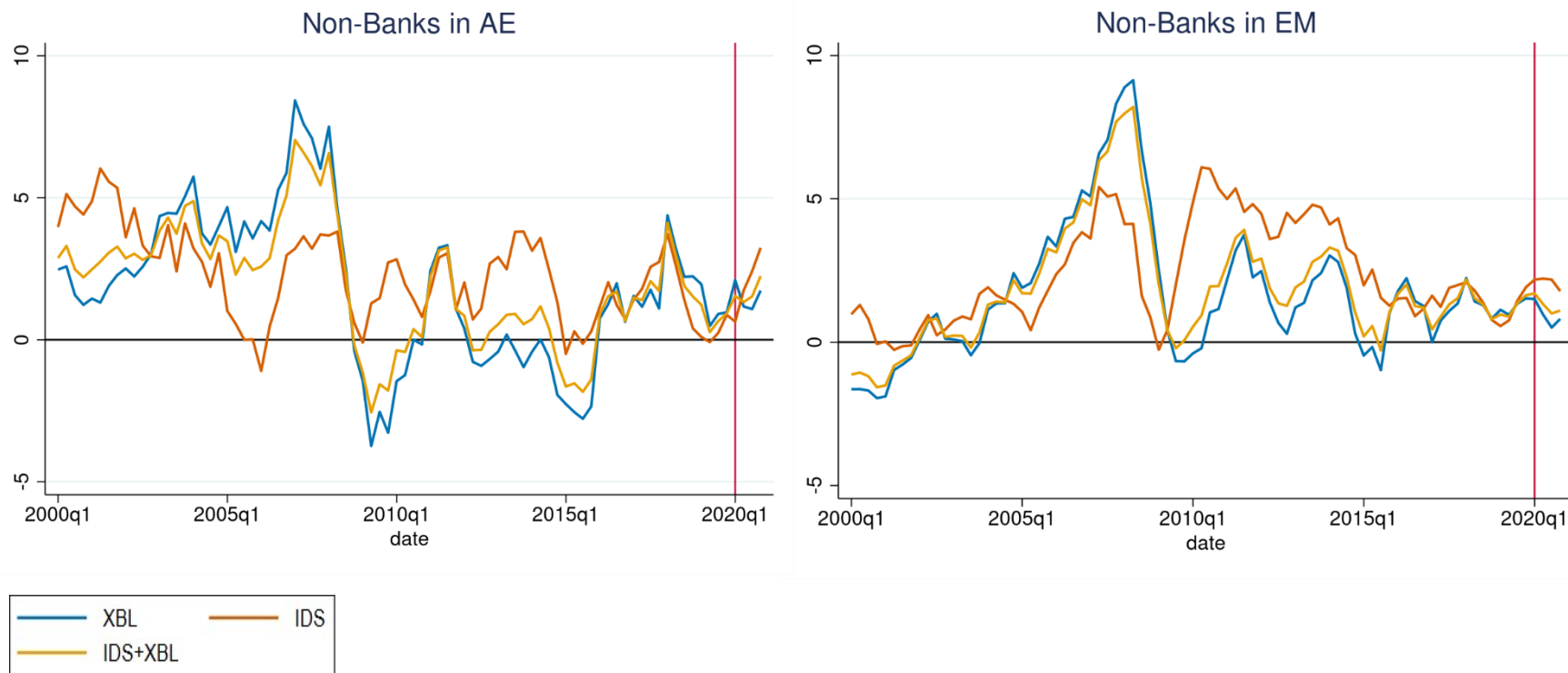
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For nonbank borrowers (corporates), very different pattern relative to GFC. Bank-based credit held up during COVID-19, with further gains in market share for IDS.

External Debt Flows, **Non-Bank Borrowers** in AE v EM
 4-quarter moving average of quarterly growth rates, %



$$\text{Quarterly Growth Rate}_t = \left(\frac{\text{Outstanding Stock}_t}{\text{Outstanding Stock}_{t-1}} \right) - 1$$

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Follow ups on drivers and vulnerabilities

Avdjiev, Gambacorta, Goldberg and Schiaffi (JIE 2020) showed

1. Amplitude of global liquidity provision through banks in response to risk
 - magnified with low capitalization banks/ banking systems.
 - new work by same author team (2021) shows
 - ✓ The magnification of risk shocks interaction with bank health is particularly important for EM borrowers, compared with AE borrowers.
 - ✓ Pandemic period “bright spot”: banks had better risk absorbing capacity, better risk management. Provided a stabilizing role in global liquidity flows during COVID.
 - ✓ Business models matter. e.g. US global banks helped by diversified portfolios, surprising gains from trading operations.

Follow ups on drivers and vulnerabilities

Avdjiev, Gambacorta, Goldberg and Schiaffi (JIE 2020) showed

2. Global liquidity response to AE (US) monetary policy is magnified when

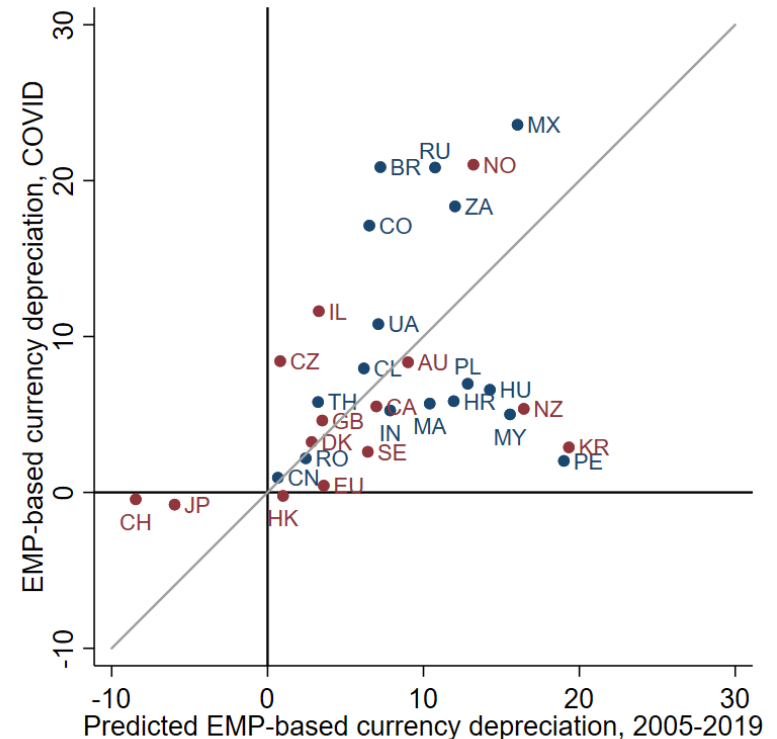
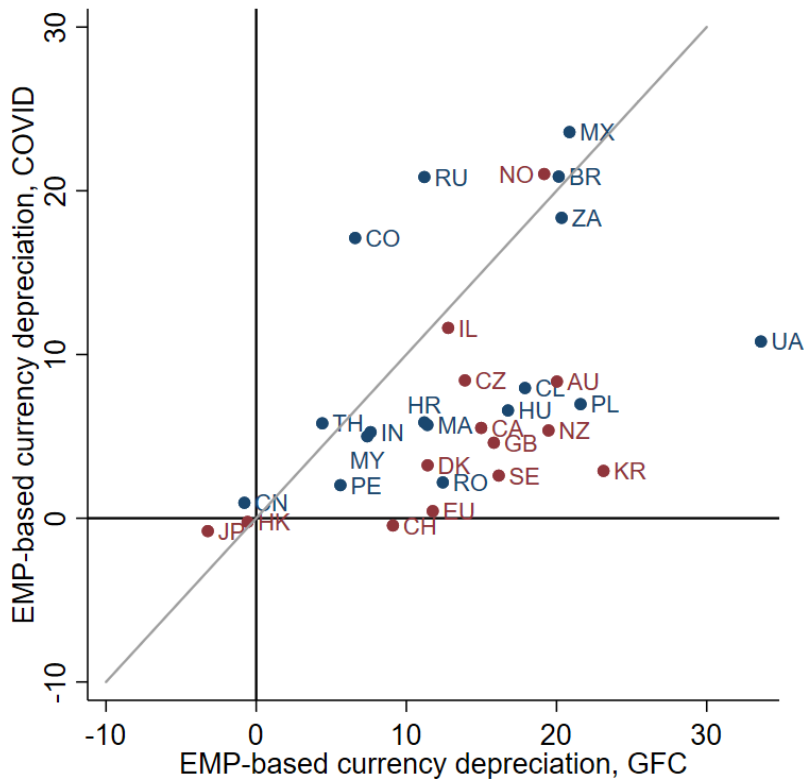
- Key global currencies have common monetary policy response
- New work shows the importance of the relative changes for AEs and EMs
 - ✓ Under COVID, common shock was met by looser monetary policy across regions, so effects of synchronous AE policies moderated.
 - ✓ EM higher levels of interest rates a continued attractor for global liquidity.

3. Risk sensitivity of market-based finance increased post GFC.

- ✓ New work shows this effect is stronger for flows to EMs.
- ✓ Plus, AEs need to be distinguished as so-called safe havens (net inflows during stress) versus all others.

Exchange market pressure indices show stark differences in international capital flow pressures, GFC vs. COVID strains

- theory-based **Exchange Market Pressure** index [Goldberg Krogstrup 2018, 2021], expressed in currency depreciation units v. USD
 - ✓ Weighted sum of observed exchange rate moves, plus the currency changes that are not realized when foreign exchange intervention and monetary policy changes responded to pressure



Final remarks: Innovations in intervention toolkit, March 2020.

- Broad rush for liquidity, interruptions in corporate funding, challenged market functioning.
- Initially, US branches of foreign banks experienced large uptick in funding needs with customer draws on committed credit lines.
- Foreign parents sourced extra dollars.
- Central banks sold Treasuries.
- ❑ Strains subsided some as dollars settled through central bank swap lines, and as bank dollar demands – including hoarding \$ -- were met.
- ❑ Central banks without swap lines with Fed but with FIMA accounts, now also can have access to new FIMA Repo facility.
- ❑ Facilities supports credit provision at home and abroad, reduce risk of added Treasury market strains and disruptions.
- ❑ Nonbank customers relief was delayed. Open issue for policy debate?



Thank you!