Pre-Crisis Cross-Border Liquidity Management, Funding Conditions, and Practices

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The views expressed are those of the presenter and do not necessarily reflect the views of the Federal Reserve Bank of New York or the Federal Reserve System.

Liquidity management in global banks

- Banks organized operations and managed liquidity globally
  - “Internal capital markets”
- Evidence: Banking system experiences (US), global aggregates
- Consequences
  - for banking organizations
  - for economic activity and financial stability
- Role of official liquidity interventions
- Regulation, and interactions with other banking organization characteristics

Lessons from research on bank internal capital markets (1)

International funding flows between global banks and their branches respond to macroeconomic and risk shocks

Local Host shocks

- Stressed local banks, with local funding, contract lending.
- Foreign banks help stabilize credit provision
  - More stable credit is provided through local affiliates, compared with stressed local banks. Increased internal capital market flows (or reduced outflows) occur from parents to support branches.
  - Parents reallocate loans and liquidity across their foreign entities, if internal funds are lower cost than external borrowing.
- Local economies import some of the financial strength (or weakness), stability, and country policies of the parents of hosted branches.

Lessons from research on bank internal capital markets (2)

International funding flows respond to shocks to the parent banks

Balance sheet (idiosyncratic) shocks and home policies. If adverse,

- Stressed parent bank contracts lending at home and abroad.
  - Credit provision in home market is protected relative to foreign lending
- Pecking order in how bank credit contracts to foreign markets
  - X-border lending more volatile than lending by hosted bank branches & subs
  - Reallocation of liquidity to affiliates abroad in line with bank-specific priorities
    - Flows relatively stable to “core” investment locations, safer locations
    - Sharper adjustments for locations that are less important to parent
    - Associated transmission into local lending by those affiliates
    - Analogous patterns across locations involved in funding the parent

Policy transmission and implications

- Monetary policy
  - Transmitted more through x-border lending to unaffiliated banks and nonbanks, compared with through internal capital markets.
  - Transmission through global banks means home monetary policy less effective on home availability of credit, with more policy spillovers abroad
  - Bank capitalization levels reduce international spillovers of monetary policy and risk
  - Likewise international transmission of prudential policies

Policy transmission and implications

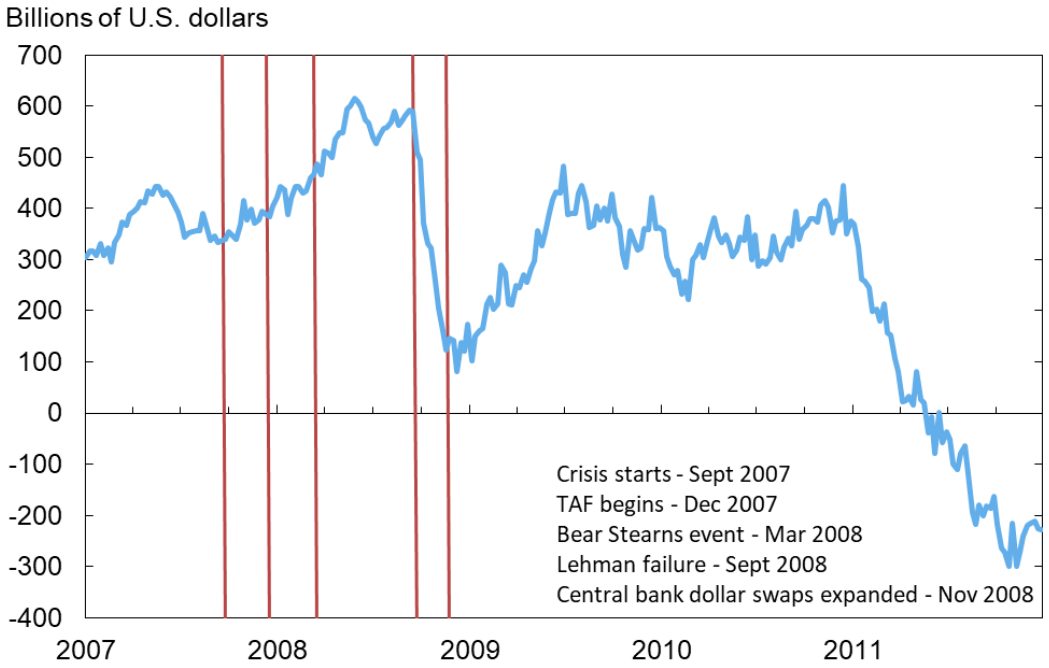
- Liquidity provision and liquidity buffers
  - Official sector liquidity services reduces lending contraction in home and host
  - In the crisis, US discount window and Term Auction Facility extensively used, with dollar liquidity for foreign banks obtained in US sharply reduced when CB dollar swap facilities made dollars available through own central banks.
  - Post crisis, short term liquidity effectively more expensive from Basel III LCR (9/2014, preparation from 2011/2012), money market mutual fund reforms (5/2010 rule amendments, 2014 new rules, 10/2016), FDIC deposit insurance changes (2011) on average for US banks.
  - Reg YY / Intermediate Holding Company and liquidity buffer relevant for US hosted branches of foreign banks (7/2016)

US experience with inter-affiliate transfers

See supplementary charts in appendix for additional visualizations for United States, Germany, Japan, Netherlands, Spain and United Kingdom

Lending by foreign branches in the US to their parent organizations

Internal Lending by U.S.-Based Foreign Banking Organizations to Affiliates Abroad



Source: Board of Governors of the Federal Reserve System, Assets and Liabilities of Commercial Banks in the United States, H.8 release. The series shown is the next amount of lending by U.S.-based foreign banking organizations to their foreign affiliates (negative of "net due to" series)

Pre-crisis , reliance on dollar-denominated runnable short-term wholesale funding from the US to fund the banks' global activities. Dollar exposures accounted for half of the growth in banks' foreign exposure 2000-2007, on balance sheet and off balance sheet.

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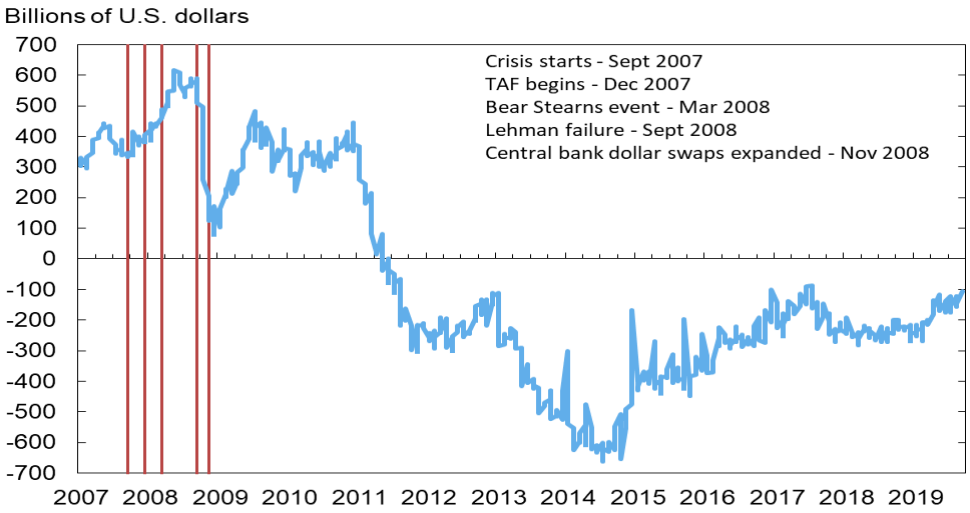

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Short term liquidity in US more costly due to: money market mutual fund reforms (5/2010 rule amendments, 2014 new rules, 10/2016), FDIC deposit insurance changes (2011), Basel III LCR (9/2014, preparation from 2011/2012), Reg YY / Intermediate Holding Company and liquidity buffer (7/2016). Regulation WW, US. LCR, was finalized in October 2014, which is applied to select FBO IHCs, but not US branch and agency networks. US NSFR rule still under proposal.

Concluding points

- Liquidity management across borders a broad practice across global banks.
- Internal capital market flows stabilize credit activity in some cases, and generate volatility in other cases.
- Central bank liquidity facilities damped adverse crisis effects, with some of the domestic liquidity provided flowing across borders through internal channels or replaced by dollar liquidity provided to central banks.
- Global liquidity management is not confined to foreign banking organizations in US, or US banks abroad.
- Pattern of flows has changed considerably post crisis, for a range of possible reasons.

Thank you.

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US banking organizations also actively manage global liquidity

Internal Borrowing by U.S.-Chartered Banks from Related Foreign Offices

Source: Board of Governors of the Federal Reserve System, Assets and Liabilities of Commercial Banks in the United States. H.8 release. The series shown is the next amount of borrowing by U.S.-chartered banks from their related foreign offices ("net due to" series).

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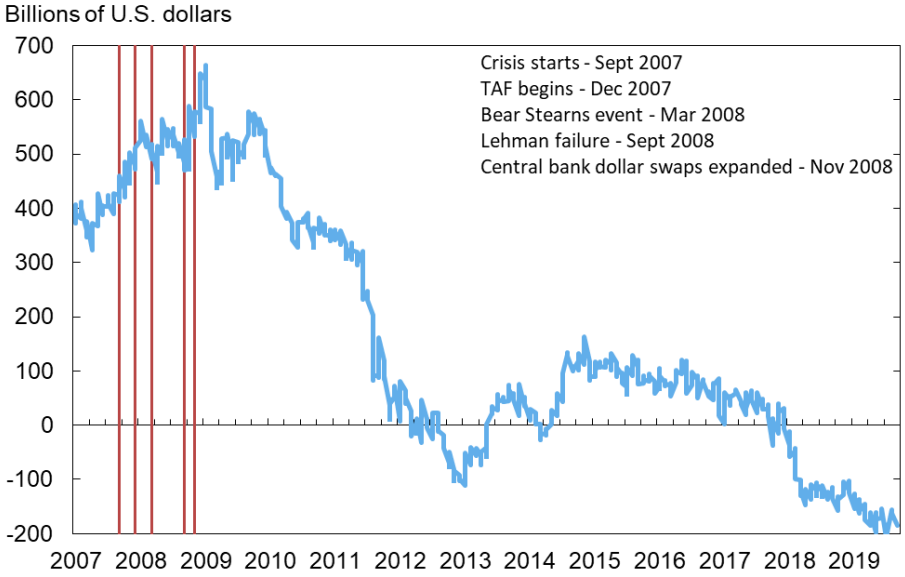

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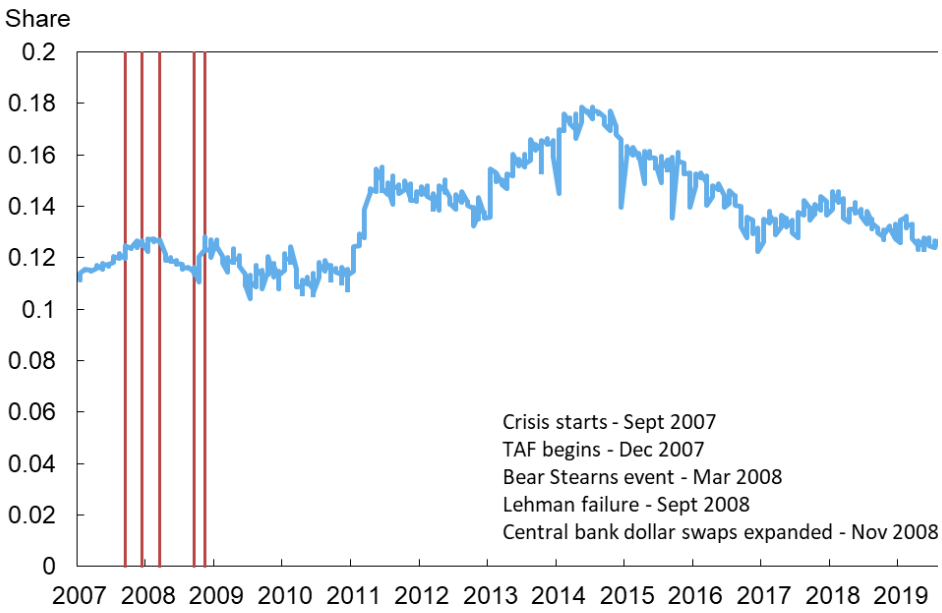
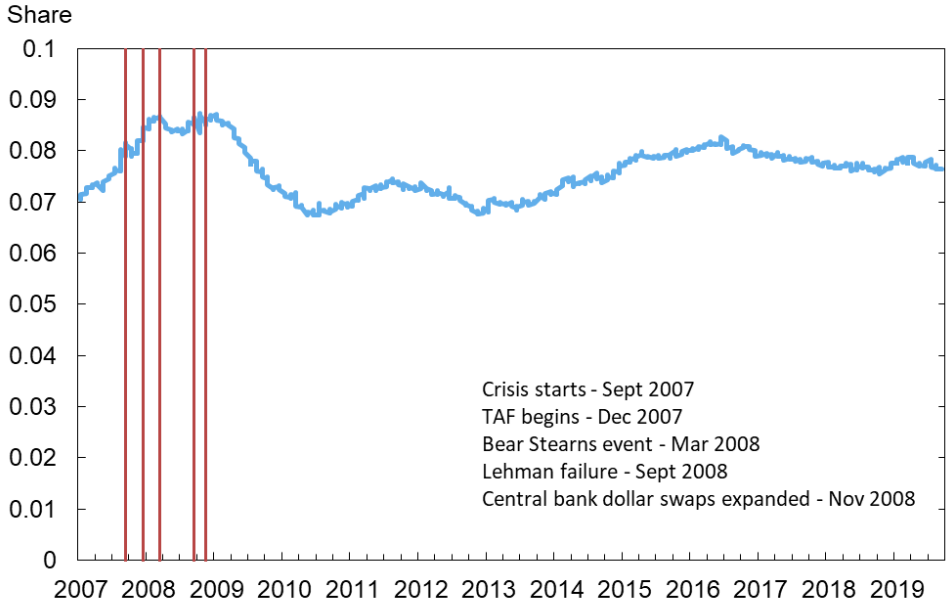
Foreign branches in US have significant assets and total loans

Assets of foreign-related institutions to assets of all commercial banks



Source: Board of Governors of the Federal Reserve System, Assets and Liabilities of Commercial Banks in the United States. H.8 release. The series shown is the assets of foreign-related institutions divded by assets of all commercial banks.

Total Loans of foreign-related institutions to Total Loans of all commercial banks



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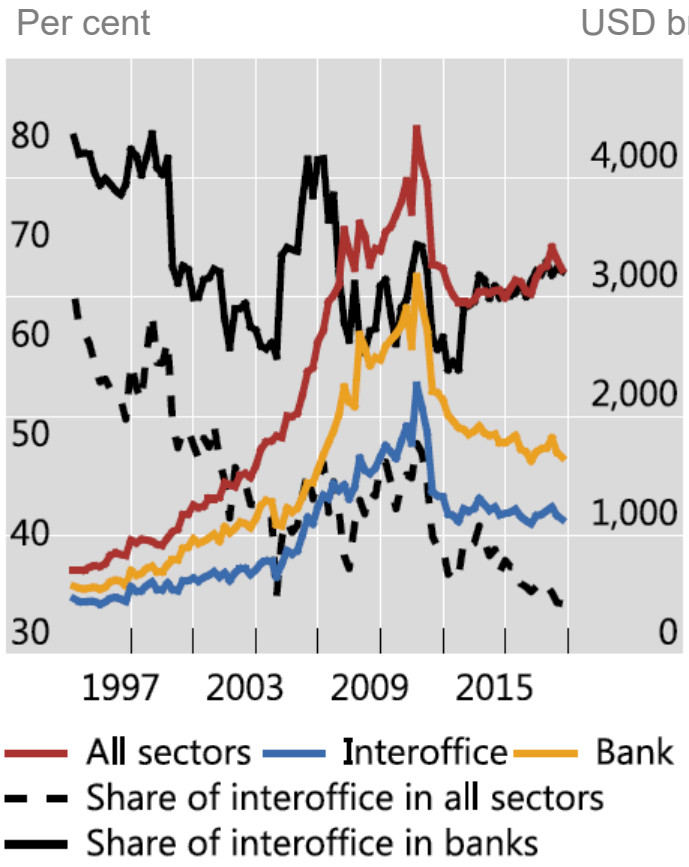
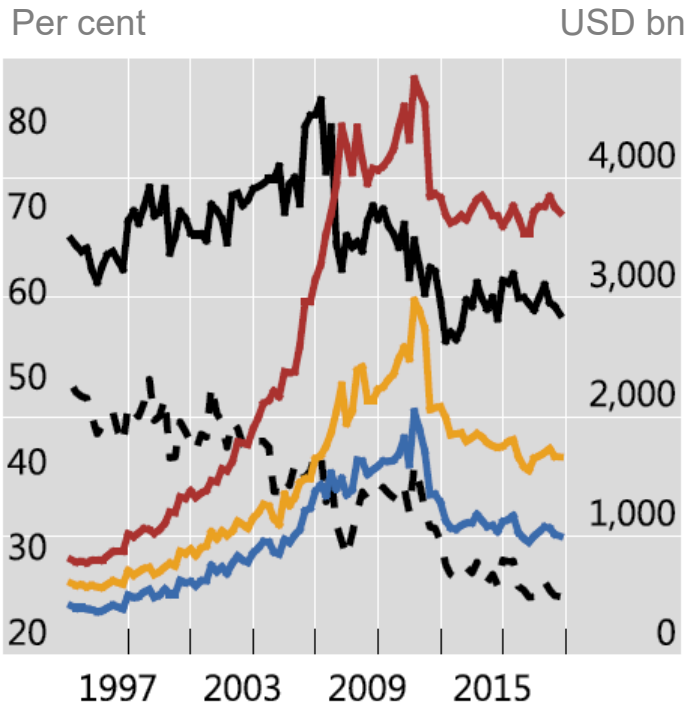
BIS data show the importance of interoffice claims and funding

United States

Cross-border claims



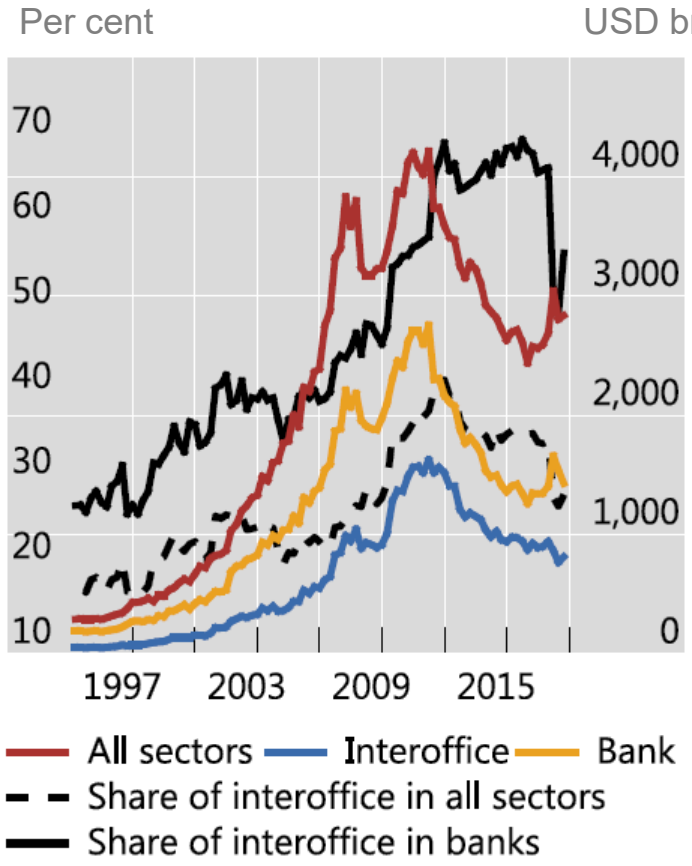
Cross-border liabilities



Source: BIS Locational Banking Statistics by nationality.

United Kingdom

Cross-border claims



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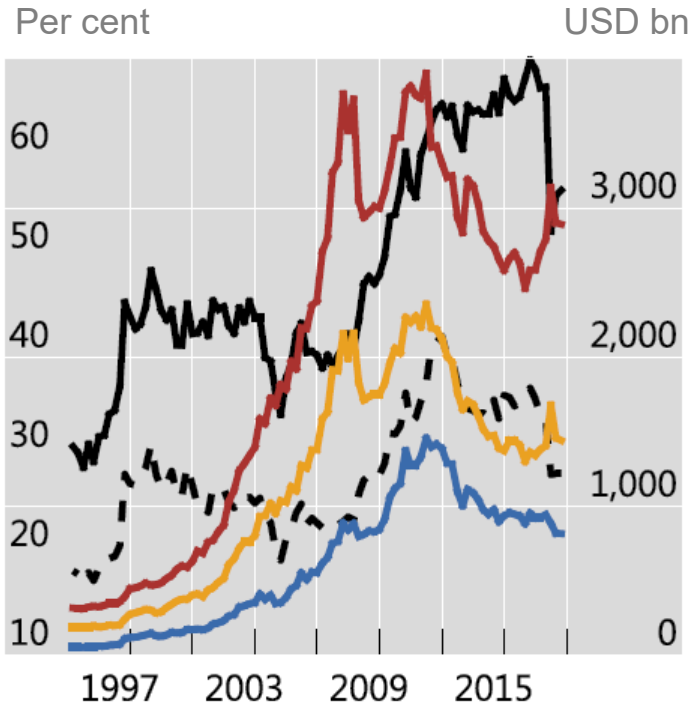

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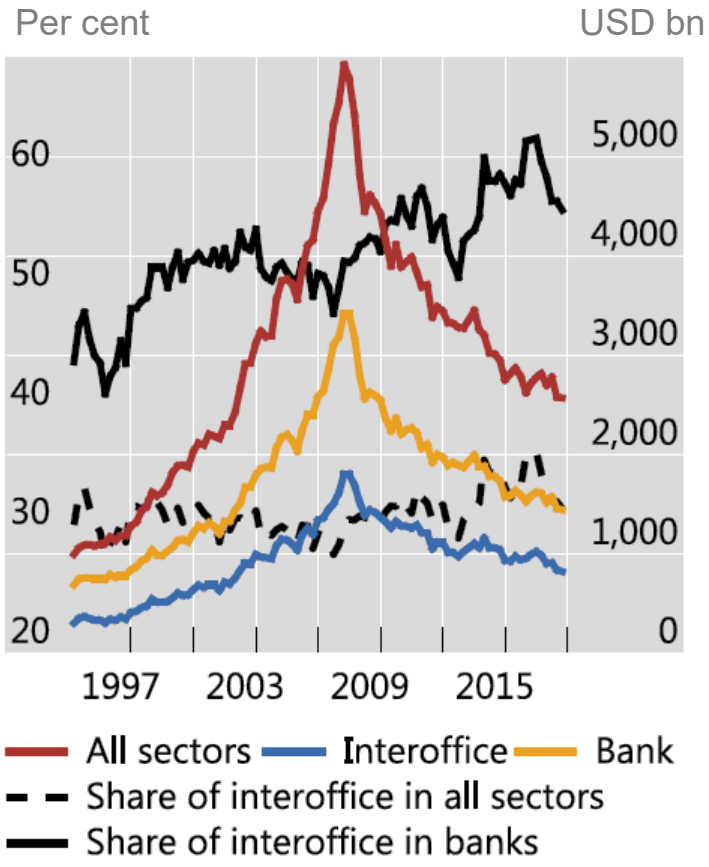
Germany

Cross-border claims



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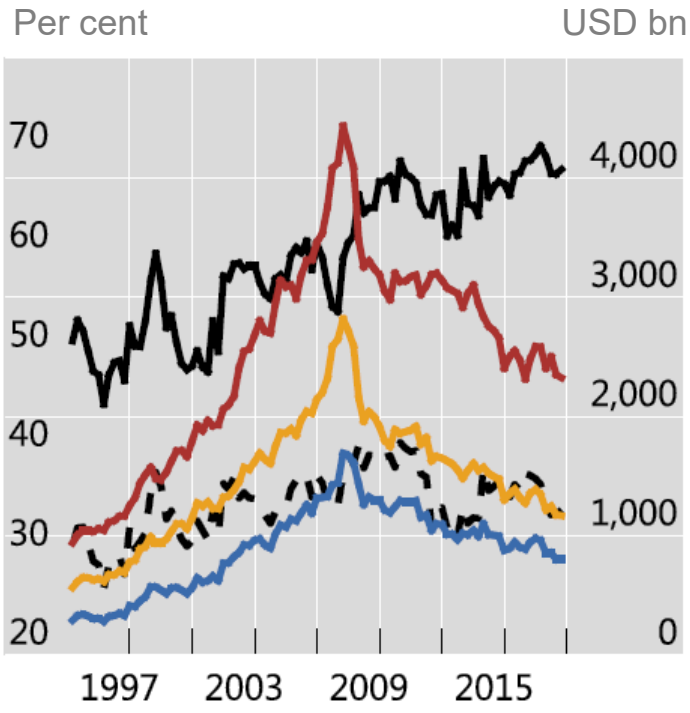

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Spain

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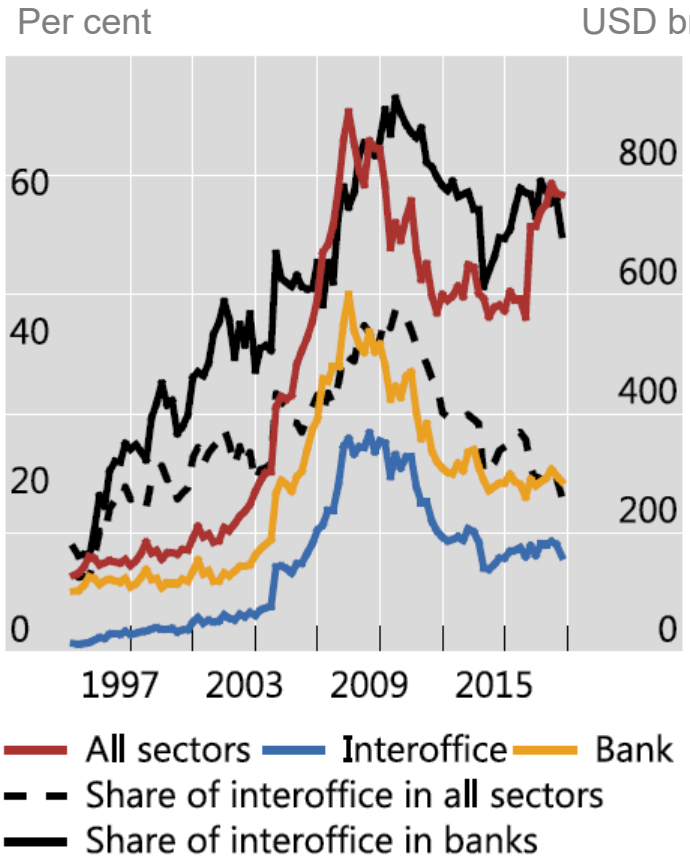

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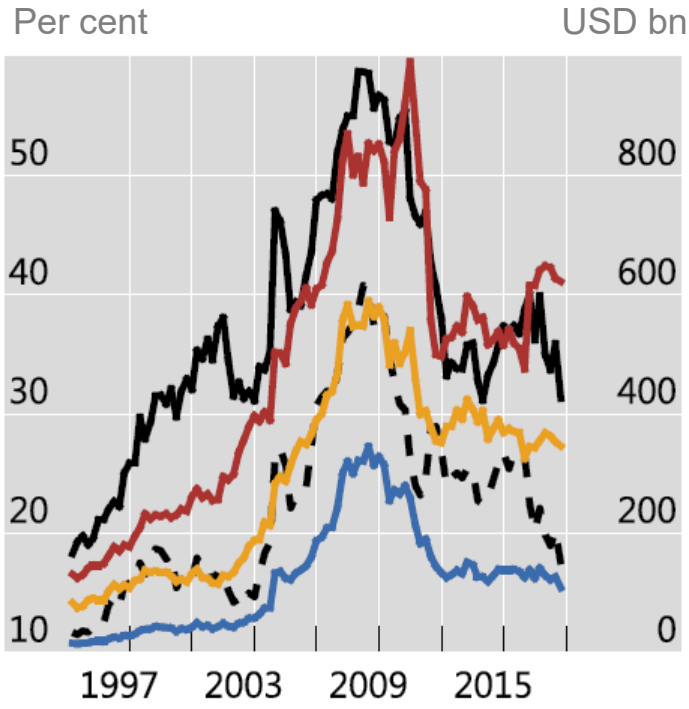

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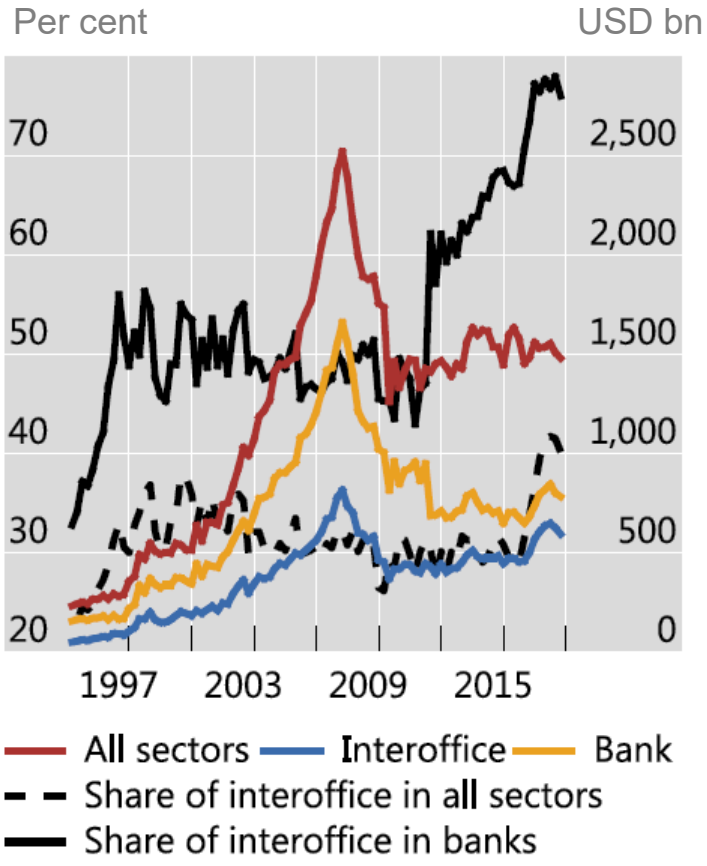
Netherlands

Cross-border claims



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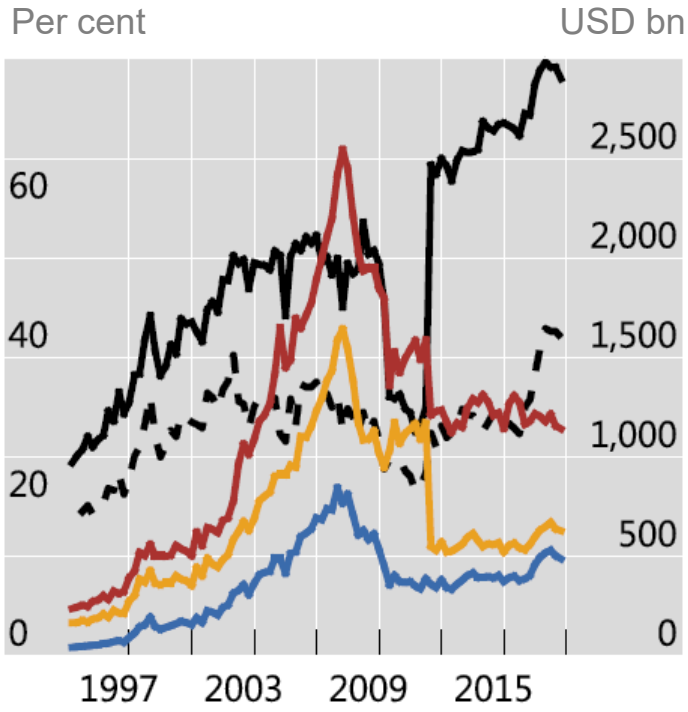

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Japan

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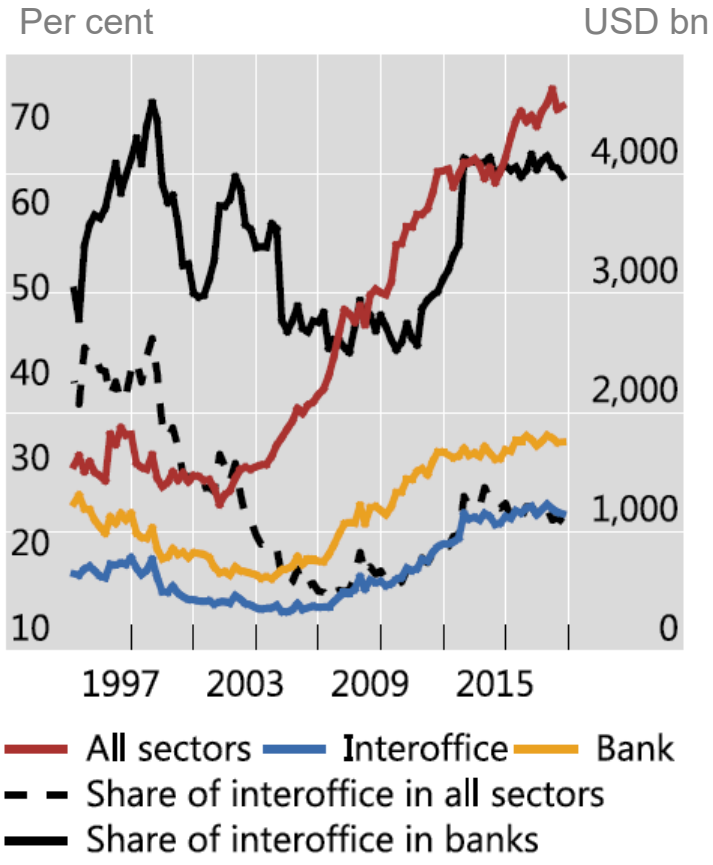

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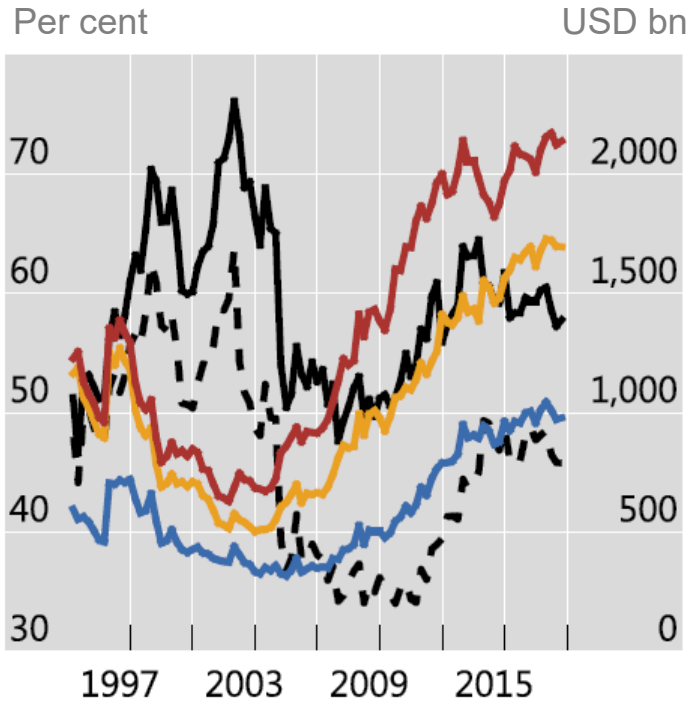

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