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The views expressed in this talk are those of the individual author and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

### What this talk IS NOT

- Entitled "In Defense of Global Banks" or "In Defense of Global Bankers"
- Not intended to suggest perfect regimes
- Indeed, many initiatives are attempting to
  - reduce the probability of failure of large SIFIs,
  - strengthen the resolution regime and the core financial market infrastructure, and
  - broaden oversight to include activities that occur outside of the core banking system.
  - Some also consider scaling back global banking

### What this talk IS

- DISCLAIMER: my views, not views of FRBNY, FRS
- A response to a sometimes distorted interpretation of existing evidence, and related policy direction
- Focus on trends in Global Banking, business cycle features, and the idea of "Stabilizing" or "Destabilizing"
  - Provide a selective synthesis, pulling from different strands of the literature. Not a full literature review.
  - Maintain a primary focus on industrialized economies

### What this talk IS

Literature is providing a better understanding of

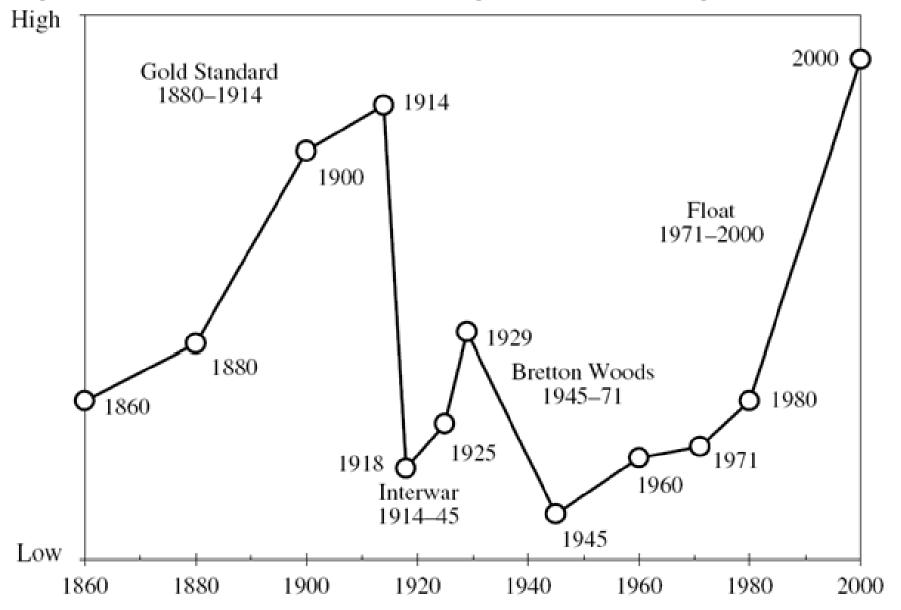
- Different forms of international linkages through banks
  - Cross border, Local claims
  - Internal capital markets
  - Funding reliances (mismatches)
- Cyclical properties, crisis responses
- Efficiencies
- Locational distinctions (entry, participation, withdrawal)

My view: evidence does not justify restricting global banking.

- Will posit what really are the issues.
- Raise issues for empirical research / possible collaborations.

## General Background on Global Banking: The growth has been tremendous

Fig. 1 International Financial Integration – the long view

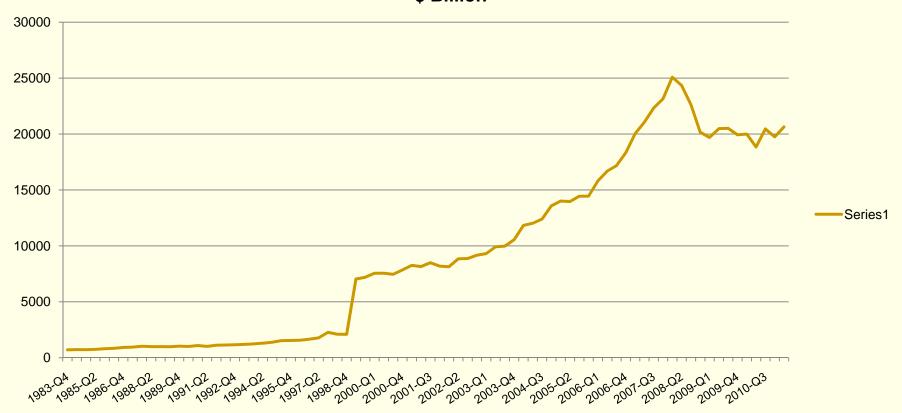


Source: Obstfeld and Taylor (2005) Global Capital Markets

### Increasing globalization of banking via claims.

#### **Global international claims**

1983-2011 \$ Billion

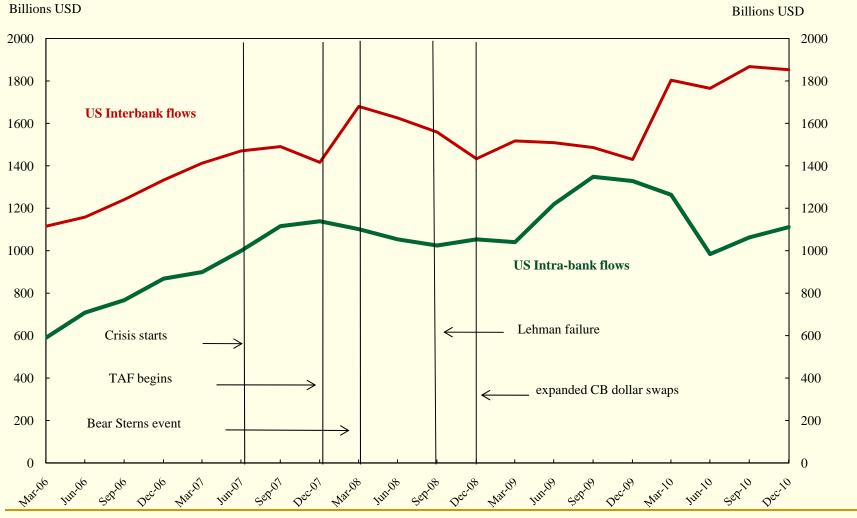


#### In the U.S.:

70% of total banking assets accounted by global banks

Around the world, global bank shares in banking sectors expanded with cross border flows and foreign entry into host markets.

### International claims tell part of the story, but not all. The inter-bank funding market grew dramatically. Missing were the cross-border intra-bank flows across affiliates.



Source: FFIEC 009 and BIS Consolidated Banking Statistics

Note: Intra-bank flows are computed as the sum of net due to (from) of affiliates (in absolute value), from FFIEC 009. Interbank flows are computed as the sum of foreign claims of the U.S. vis-a-vis rest of world and of rest of world vis-a-vis the U.S., from BIS.

Before turning to empirical evidence, briefly review how global banks transmit shocks. Consider a shock to net funding. An asset sell off can drive

Large global bank

Domestic parent balance sheet

↓ Liquid assets

**Deposits** 

Capital

Loans

Other Funds External borrowing \$\display\$



Large build up of \$ (long-term) assets term \$ funding.

financed with short-

down asset prices, putting

downward pressure on all

domestic and foreign bank

related asset classes,

asset valuations.

"contagion"

Before turning to empirical evidence, briefly review how **global banks** transmit shocks. Consider a shock to net funding.

Large global bank

Or, the bank may instead pull back on domestic or **cross-border lending**, a second form of transmission to foreign markets.

Domestic parent balance sheet

Liquid assets

**Deposits** 

Loans

Domestic loans

Cross-border loans

Other Funds

External borrowing \$\frac{1}{2}\$

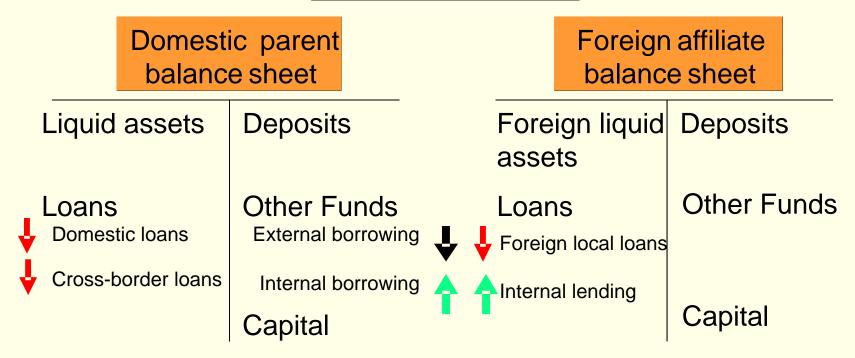
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Capital

Large build up of \$ (long-term) assets financed with short-term \$ funding.

Add an overseas affiliate. A global bank has the extra option of using internal capital market transfers—send less assets to a location abroad being supported, or pull more dollars from a funding source market.

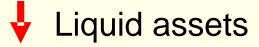
Large global bank



Can damp some of the domestic bank lending consequences, but lead to reduced lending by affiliates (local claims).

Foreign ownership in a host market is not needed for transmission: can be via asset valuation effects and reliance on global funding pools.

Domestic bank in a country



**Deposits** 

Other funds



International interbank funds (cross-border borrowing)

Capital

# One way to think about consequences is through looking at business cycle co-movements.

#### International GDP correlations

- Rise with bilateral trade intensity (Frankel-Rose '98EJ) and currency unions (Alesina, Barro, Tenroyo '02 NBER Macro Annual; Rose '00 EP)
- Decline with specialization (Imbs, Clark-vanWincoop, others)

If more financial integration, **Imbs '06 JIE** shows:

- increased consumption correlation,
- more goods trade,
- more production specialization,
- more business cycle correlation (even after effects of finance on trade and specialization are accounted for).

Some evidence by **Kalemli-Ozxan**, **Papaioannou**, and **Peydro-Alcalde** 2009 that banking interconnectedness on net *reduces* business cycle synchronization. (A point not resolved in the literature)

# Studies of bank effects always need to carefully decompose into credit supply v. demand.

Various types of methodologies used.

- Studies of macroeconomic aggregates
- Claessens, Kose, and Terrones. 2011. Cross-country, time series.

  Correlates of duration/ amplitude/ slope of recessions and recoveries, with financial cycles credit, housing, equities.
- <u>Financial cycles more pronounced</u> than business cycles, with downturns particularly deeper and more intense.
- Recessions associated with financial disruptions longer and deeper; recoveries associated with credit booms faster. Especially via housing and equity cycles.
- Credit growth not significantly related to length and depth of recessions, but does strengthen recoveries.

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Studies of microeconomic aggregates

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Various types of methodologies used.

- Studies of microeconomic aggregates
- Peek and Rosengren 2000. AER.
  - Japanese housing and equity declines hurt Japanese banks, with this transmitted through these banks to lending in the US.
  - Japanese banks helped lending in US when US conditions were weaker.
  - Authors make no claims of destabilizing action, just transmission to US in a way that strengthens co-movement.

# Procyclicality appears in all forms of bank credit provision, with some patterns.

Cross-border more volatile than local claims, domestic lending.

- German cross-border lending more sensitive to parent bank than country conditions. Risk aversion key. Banks redirected credit to domestic borrowers. **Duwel, Frey, and Lipponer**. 2011.
- Foreign subsidiaries in the US are more procyclical and volatile than US domestic banks. Correa, Sapriza, Zlate. 2011.
  - Internal capital markets important in transmission. de Haas and Lelyveld, 2009. forthcoming JFI. Cetorelli and Goldberg, various.
- Syndicated lending tightens more on the external side with large events.
  - de Haas and van Horen.2011. "The crisis as a wake-up call: do banks tighten screening and monitoring during a financial crisis?"
  - Giannetti and Laeven. 2011. "The Flight Home Effect: Evidence from the Syndicated Loan Market during Financial Crises,"
  - Financial protectionism? Rose and Wieladek 2011 based on UK.

## Volatility partially reflects the business models of the respective global banks.

These include: search for scale and efficiencies; effects of information asymmetries; perceived legal protection/ bailout differences for domestic v. foreign creditors/debtors); and search for yield.

- Limited role for banks in intl risk sharing. Fratzscher -Imbs 2009.
- Spatial price discrimination in lending Degryse Ongena. 2005 JF.
- spatial distance important for loan volumes. Buch 2005 RIE.
- Roles of information costs and regulatory barriers Buch 2003 JMCB.
- Some affiliates are investment markets and others funding markets, with core and periphery positions in each. Cetorelli - Goldberg. 2011 NBER.
- Local competition improves. de Blas Niles Russ 2011.
- Asymmetric legal protections. Ongena Penas. 2009 JFS. Bondholders
   benefit more from m&A in banking when purchasers are domestic –
   interpretation: bailout likelihood higher.

# Does the evidence point to global banking as stabilizing or destabilizing?

#### Consequences:

- some increase in international transmission, certainly with different channels, but interconnectedness and transmission even without global banks.
- transmission varies across home and foreign countries, depending on status as core or periphery investment or funding market, balance sheets of parent banks, regulation, information structure, regime of policy protections at home.
- smooth local shocks.
- Business cycles more synchronous.
- Some intra-firm efficiencies asserted.
- Is the increase in synchronicity a plus or minus?

### What are optimal policy and research directions?

- I am not convinced shutting down globalness and some transmission channels is an optimal response to the fundamental drivers of volatility and instability.
  - Internal capital markets serve positive functions.
- I don't know a metric for an optimal degree of loan supply responses, cyclical synchronicity across countries.
- Information challenges continue to be important for lenders and regulators: how to resolve these?
- Cross-country lender of last resort functions, liquidity backstop roles, resolution and protections still are issues.
- These are possible directions for academic and policy discussions.
  What can cross-country collaborations yield?