

BRANDEIS INTERNATIONAL
BUSINESS SCHOOL

Spillovers, Spillbacks and the Role of the US Dollar

Comments by
Stephen G Cecchetti

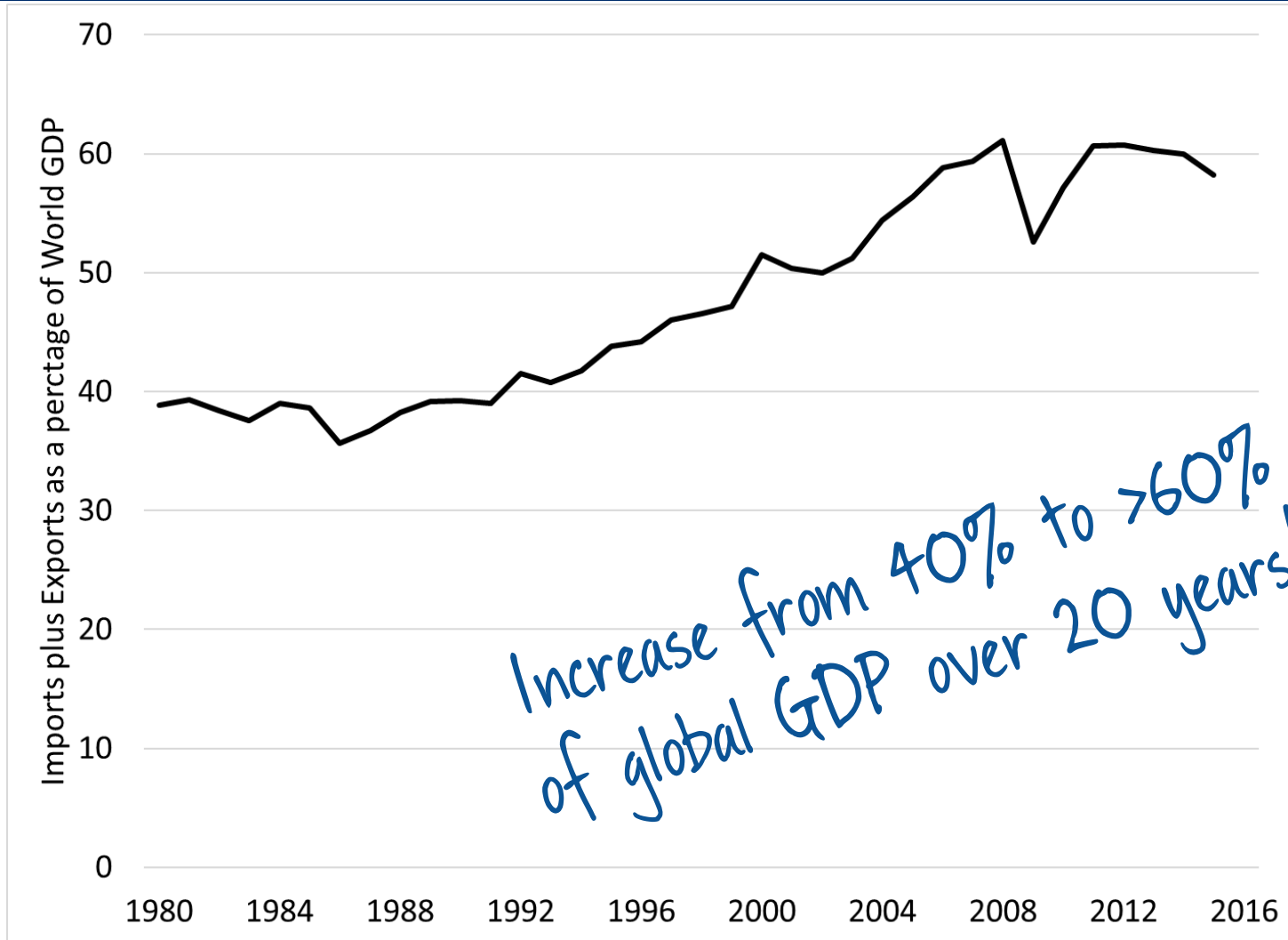
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A quarter century of globalization

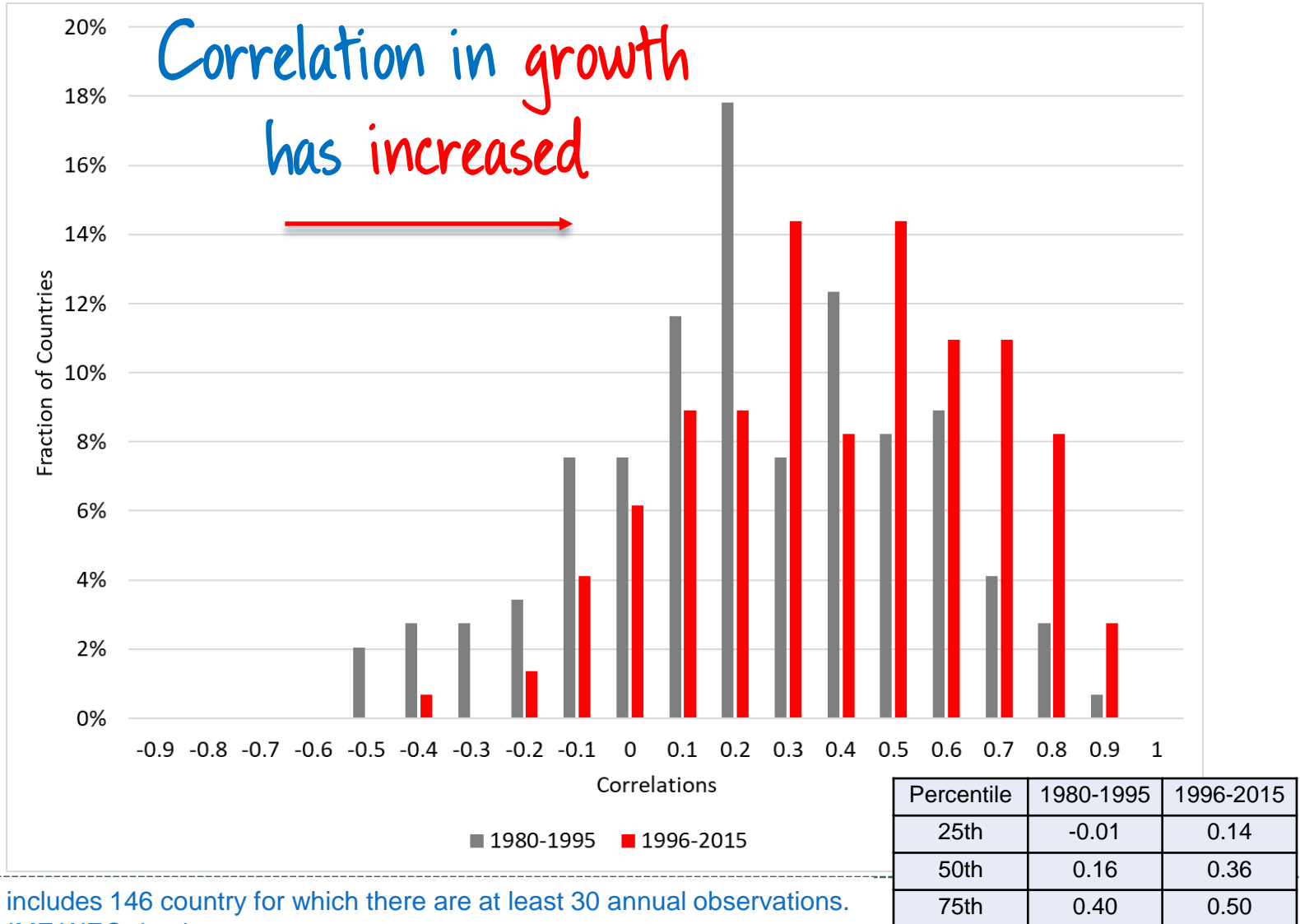
- Goods and service flows have increased
- Cross-country correlations have increased
- Information flows have increased
- Cross-border holdings have increased

World Trade



Correlation with global growth

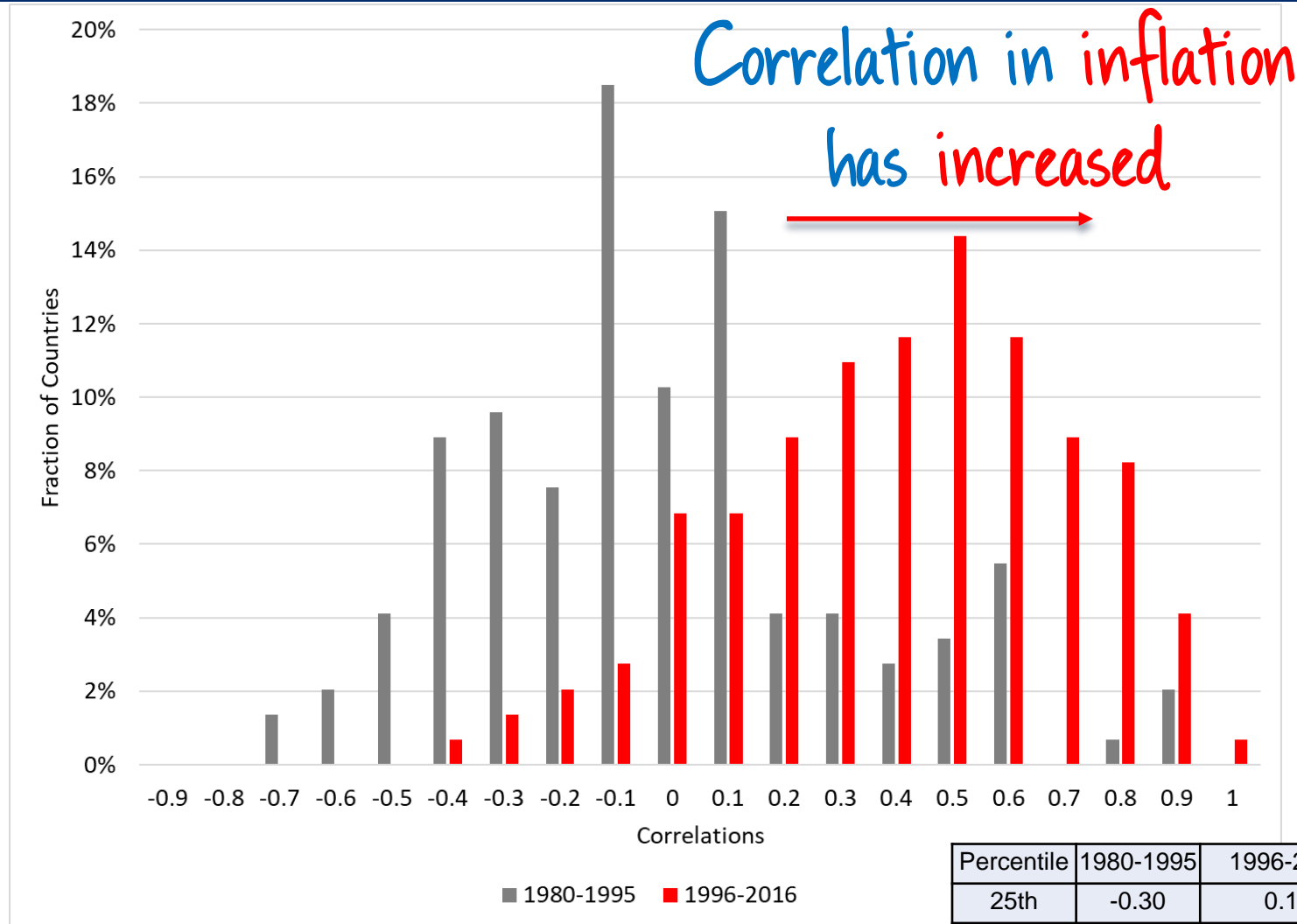
(histogram of bilateral country correlations)



Sample includes 146 country for which there are at least 30 annual observations.
 Source: IMF WEO database.

Correlation with global inflation

(histogram of bilateral country correlations)

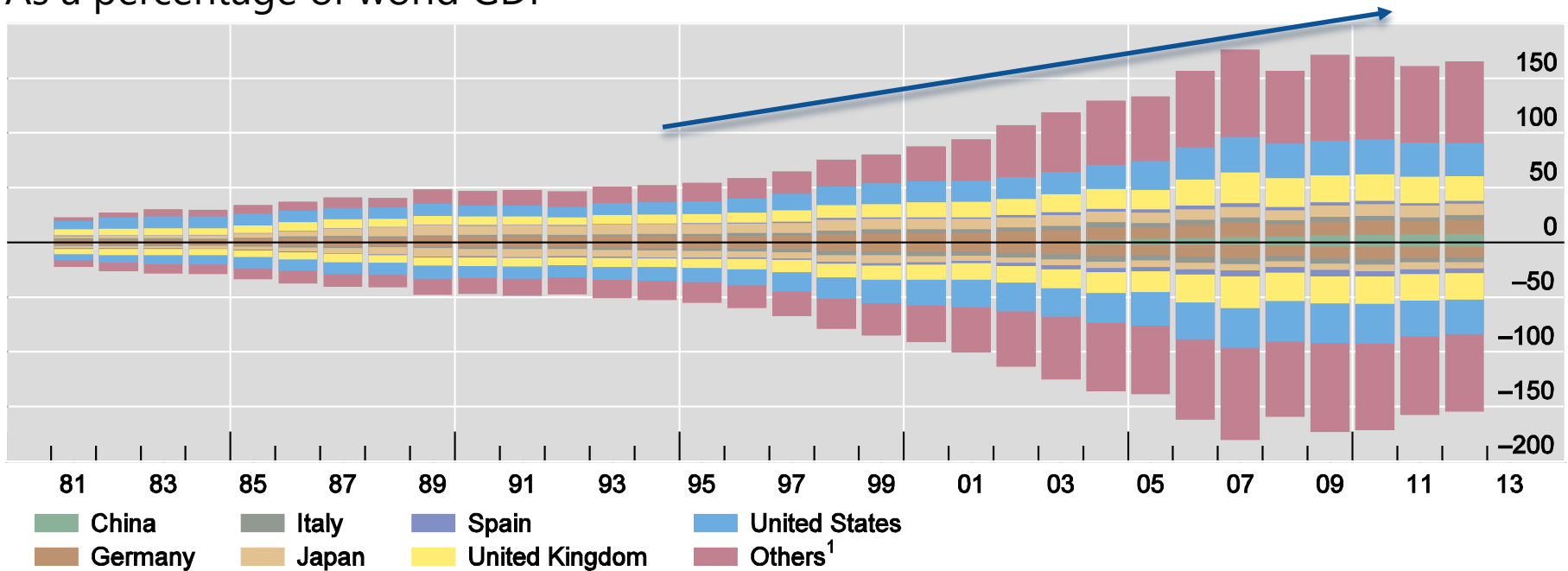


Sample includes 146 country for which there are at least 30 annual observations.
 Source: IMF WEO database.

Percentile	1980-1995	1996-2015
25th	-0.30	0.14
50th	-0.11	0.38
75th	0.08	0.43

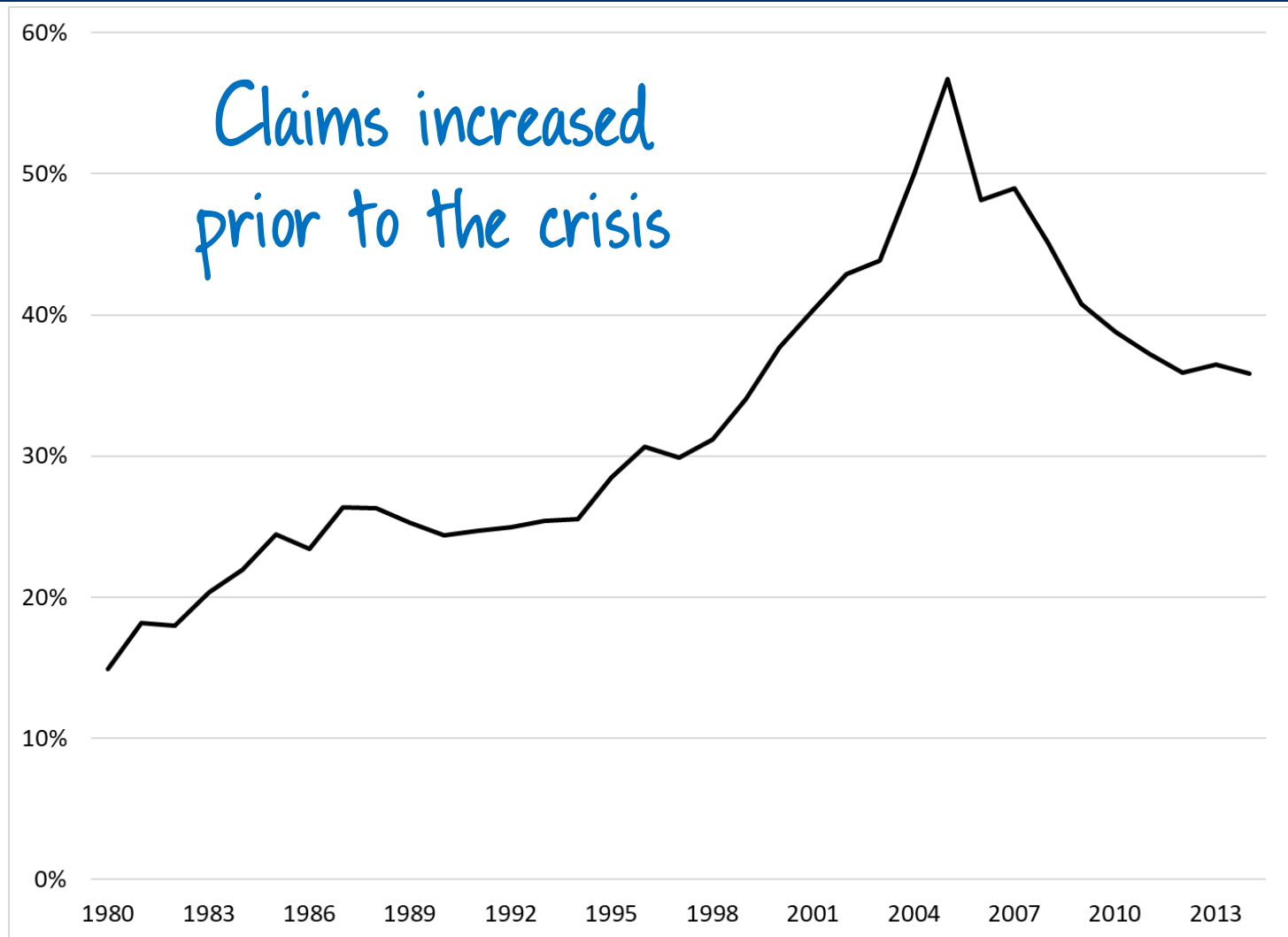
International Investment Positions

As a percentage of world GDP

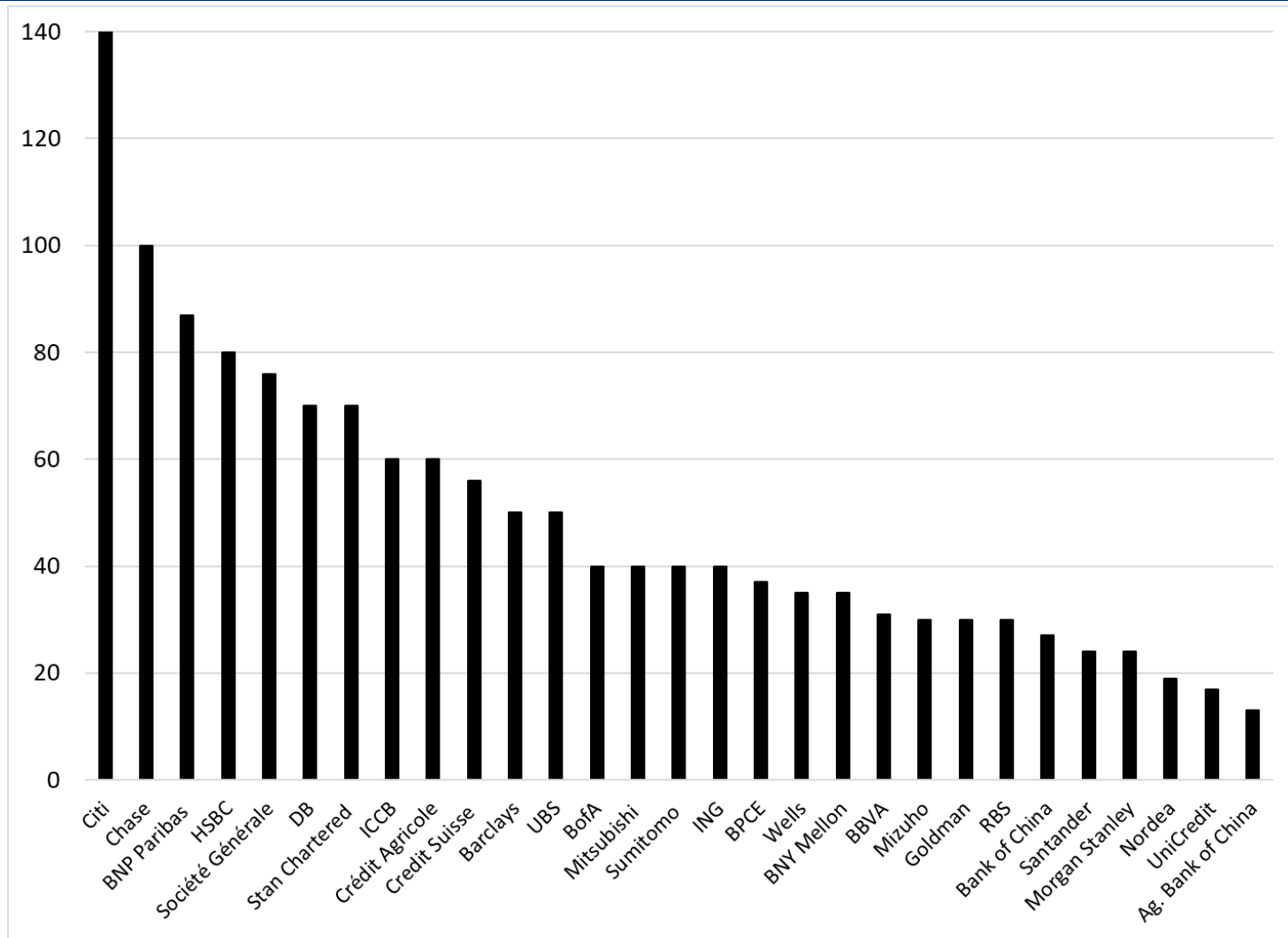


Increase from 50% to >150%
of global GDP over 20 years!

Cross-border bank claims (as a percent of world GDP)



Global Banks: Number of countries of operation

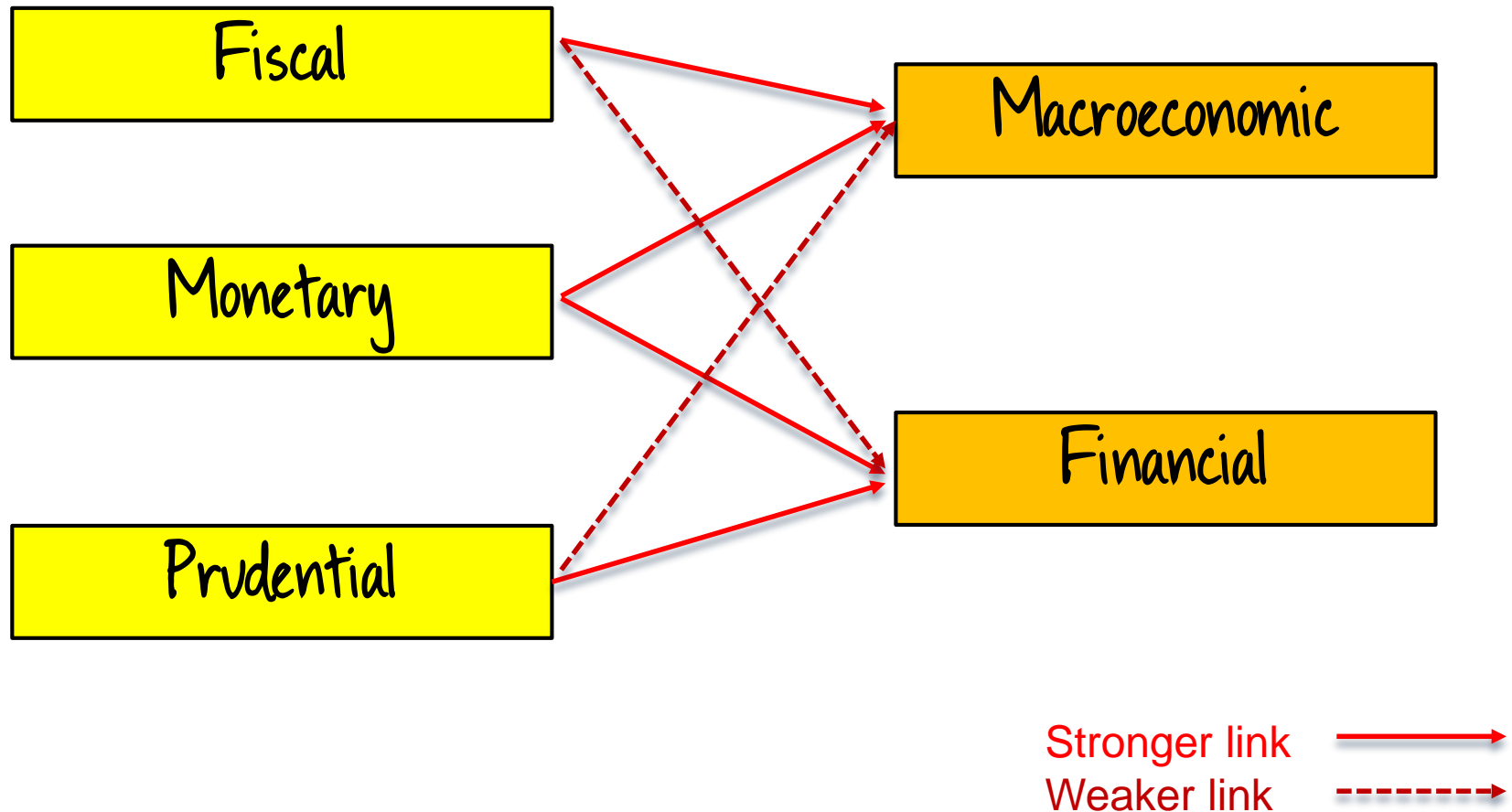


Source: Approximate numbers from bank websites.

A quarter century of globalization

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Types of policy spillovers



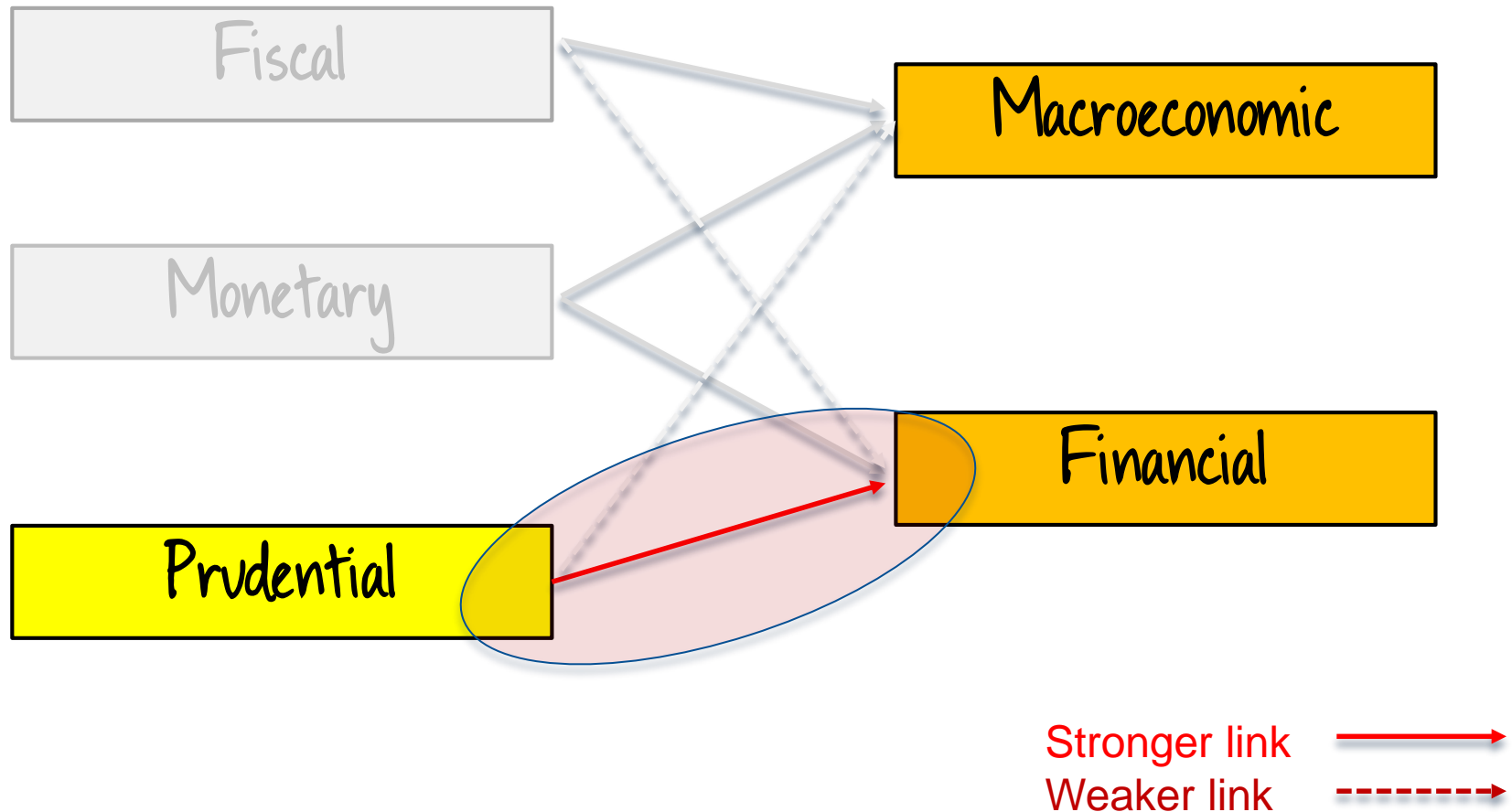
Categories of spillovers

- Monetary Policy \Rightarrow Macroeconomic Real
 - Grisse, Krogstrup, Schmacher: the effective lower bound
 - Stefański: equilibrium real interest rates
 - Faryna, Simola: source of external shocks
- Monetary Policy \Rightarrow Macroeconomic/Nominal
 - Baurle, Gubler, Känzig: inflation

Categories of spillovers

- Monetary Policy \Rightarrow Financial Prices
 - Jablecki: carry trades
- Monetary Policy \Rightarrow Financial Quantities
 - Adam, Benecká, Matějů: portfolio allocation
 - Brzorz-Brzezina, Kolasa, Makarski: foreign banks
 - Avdjiev, Takáts: cross-border lending
- Prudential Policy \Rightarrow Financial Quantities
 - Brzorz-Brzezina, Kolasa, Makarski: foreign banks

Prudential policy spillovers



Prudential spillovers: International linkages

- Bankhaus Herstatt: June 1974
 - Germany's 35th largest bank failed
 - Banks had transferred DM to Herstatt in the morning
 - Expected to receive USD in New York later in the day

- European Bank USD short positions 2007-09
 - Financing long-term USD assets w/ short-term debt
 - Wholesale funding from both banks and US MMMFs dried up
 - No lender of last resort in USD!

Prudential spillovers

Global finance requires

- 1) A common prudential standard
- 2) Cooperation in overseeing safety and soundness
- 3) Notification, cooperation and coordination of dynamic regulatory-policy adjustments
- 4) Cooperation in resolution of systemic intermediaries

Prudential spillovers

Global finance requires

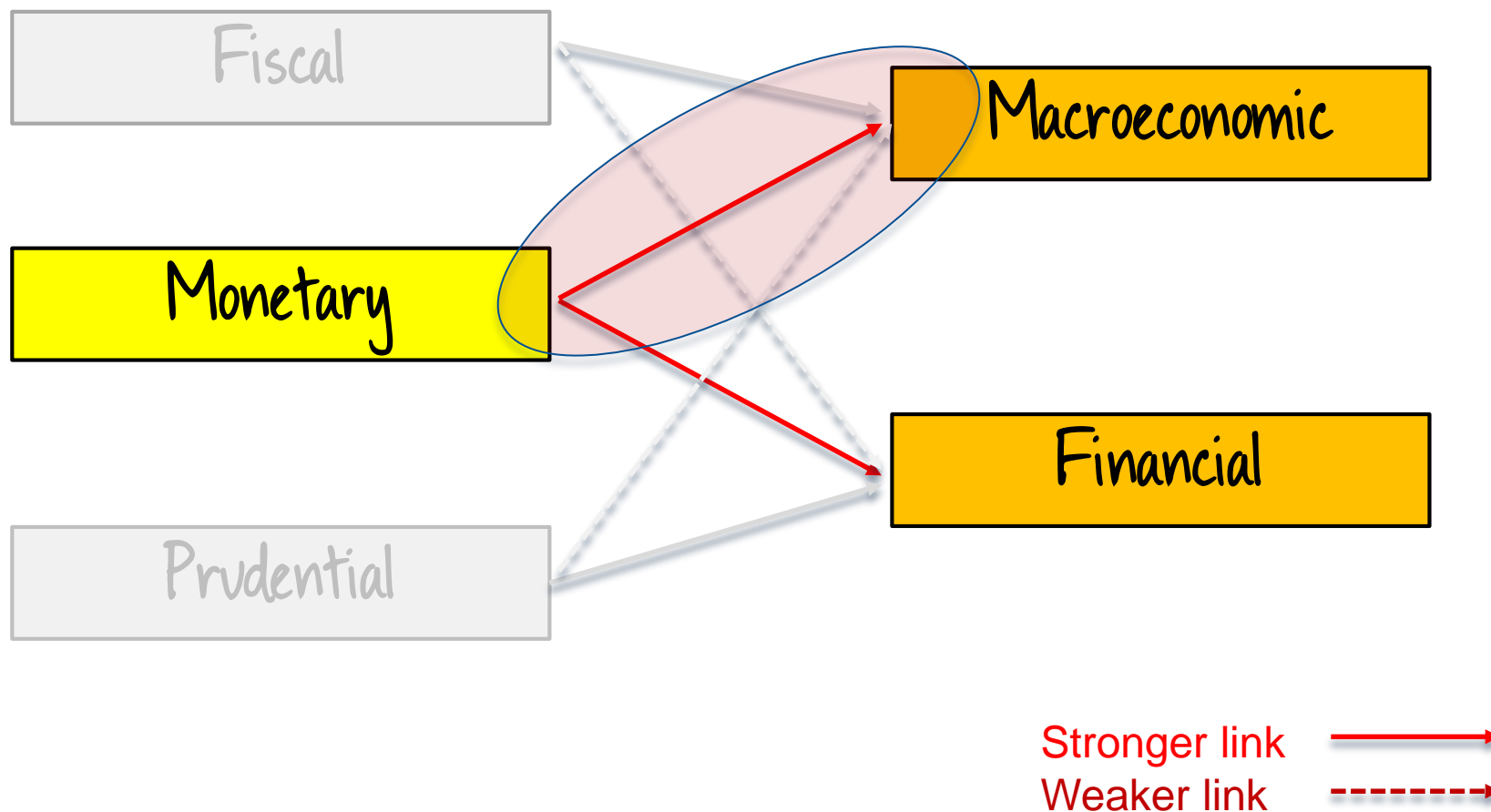
1) A common prudential standard

2) Cooperation in overseeing cross-border financial soundness

3) Notification and coordination of regulatory-policy adjustments

For prudential policy, coordination is essential!

Monetary policy spillovers



Traditional macroeconomic spillovers

- Impact of monetary policy easing abroad
 - Raises demand for exports
 - Leads to exchange rate appreciation
 - Capital inflows to EMEs
- Overall impact depends on relative strength

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No one ignores the spillbacks.

Macroeconomic spillovers: an aside

- Country that is:
 - Very open to trade, very liquid capital markets
 - Flexible exchange rate, inflation target
- **What if $\pi > \pi^T$?**
- Conventional policy response: $i \uparrow$
- But, with higher interest rate:
 - Carry trade increases
 - Credit boom drives up aggregate demand
 - $AD \uparrow \Rightarrow \pi \uparrow$?!!

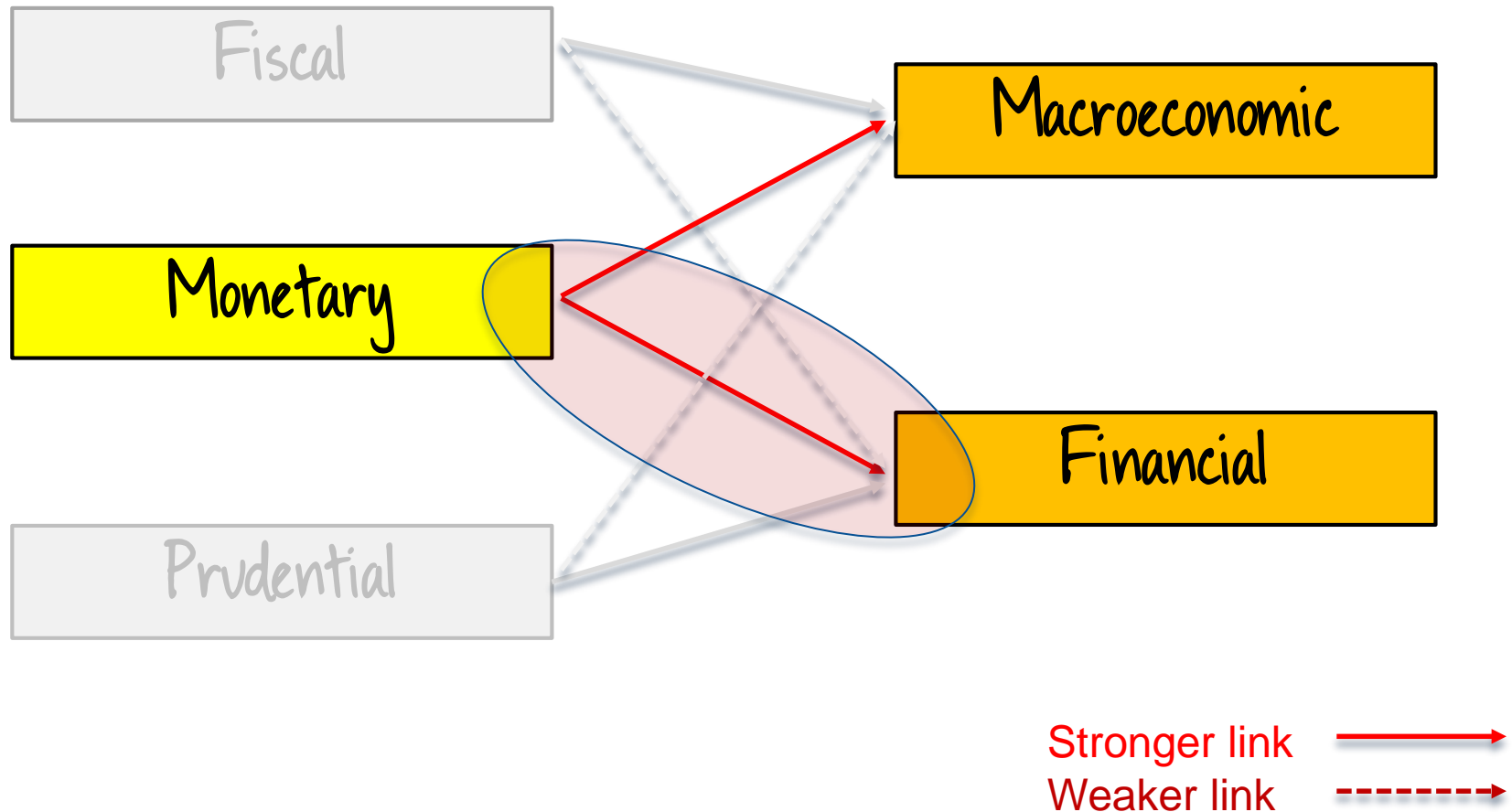
Macro spillovers: Coordination?

- Standard result: welfare gains are small

In the absence of strategic complementarities, welfare gains from coordination are small.

(Remember the envelope theorem: At the optimum, first-order change in the state generates second-order welfare losses.)

Monetary policy spillovers



Financial spillovers

- Banks
- Asset prices
- Capital flows

Prolonged easing & financial vulnerability

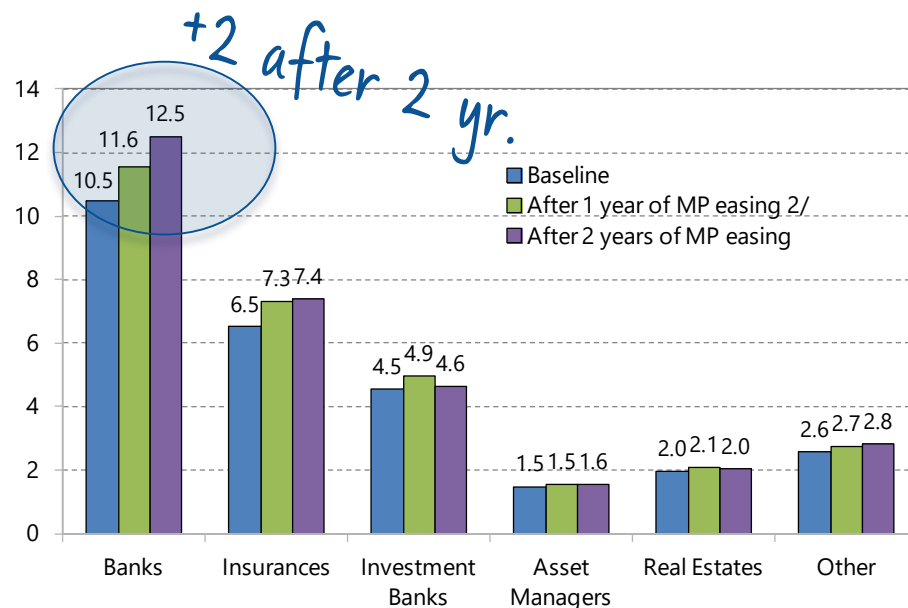
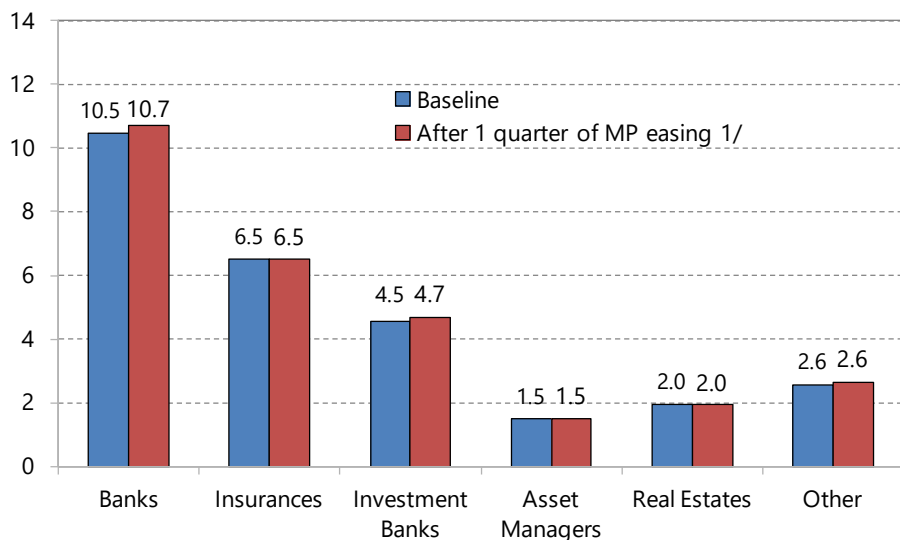
- Examine impact of policy easing on leverage
- Banks, insurance, real estate, asset managers
- Publicly listed financial firms in 22 countries
- Easing:
 - Decline in moving average of 2-year rate
 - Extended easing: 4+ quarters

Prolonged easing & financial vulnerability

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- Banks, insurance, real estate, asset managers
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Own policy and U.S. policy.

Impact of own easing on leverage



Based on data for a total of 994 publicly listed financial firms 19 advanced economies plus Brazil, Mexico, and South Africa from 1998Q1 to 2014Q4.

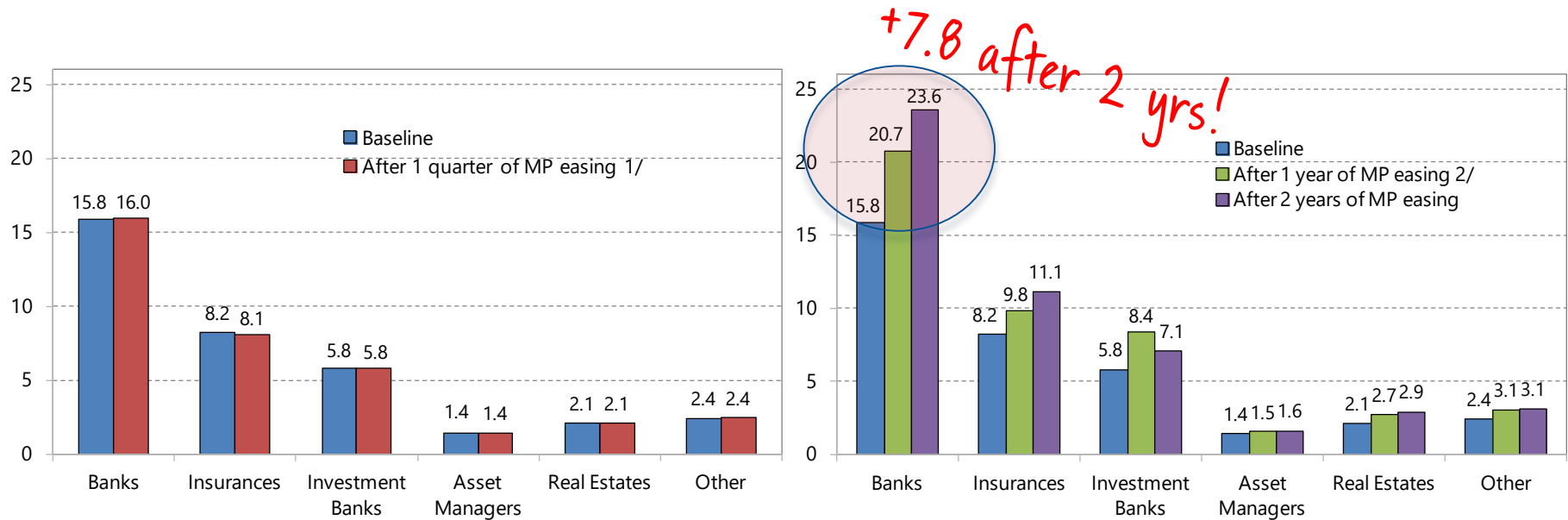
Extended policy easing drives leverage up.

Policy easing \Rightarrow leverage increases

- Policy easing improves
 - Bank net worth
 - Borrower net worth
- Policy easing increases
 - Credit to households and firms
 - Consumer spending
 - Residential and nonresidential investment

These are the intended consequences of monetary easing.

Impact of U.S. easing on leverage



Impact of **U.S.** monetary policy easing is large!
(controlling for own policy)

Impact of U.S. easing on bank leverage

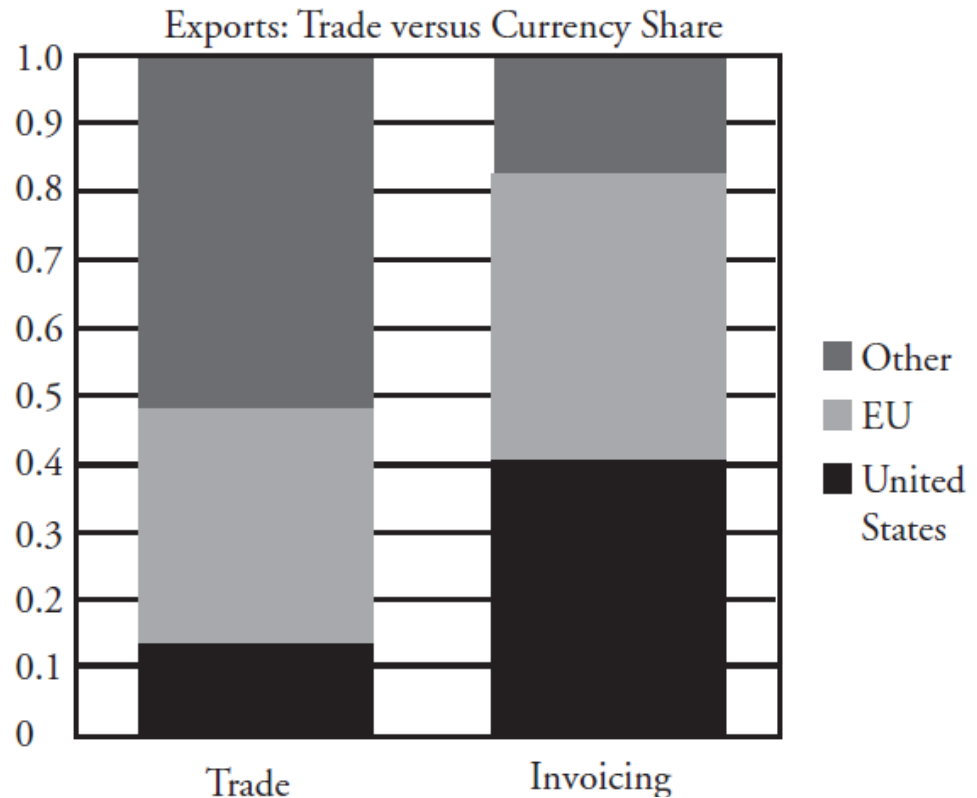
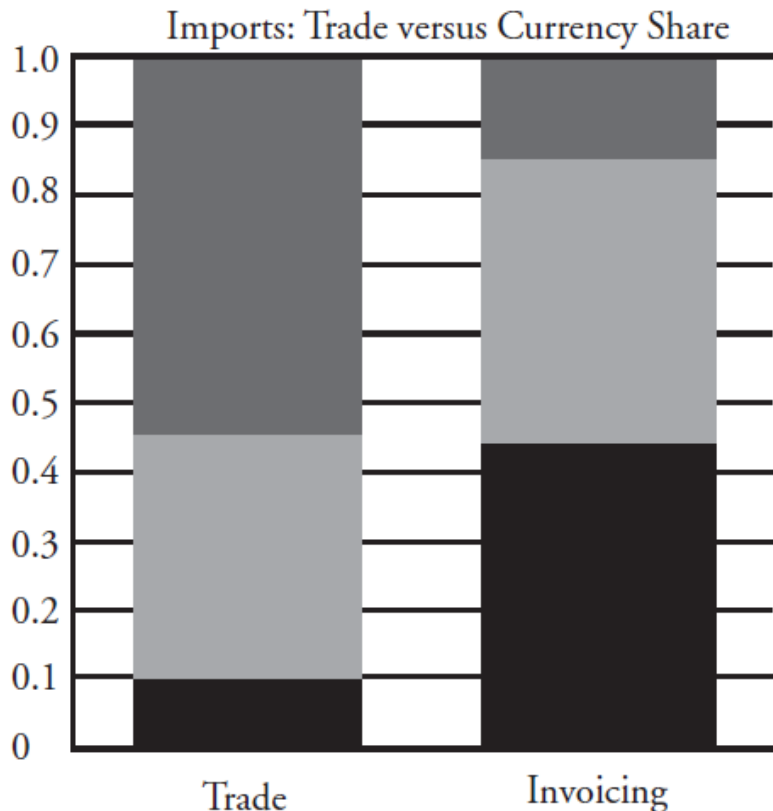
- Own easing increases leverage
- U.S. easing increases leverage elsewhere

Note: U.S. policy has impact on equity, fixed income & fx
(Chen, Mancini-Griffoli and Sahay, 2014.)

Why is U.S. policy so important?

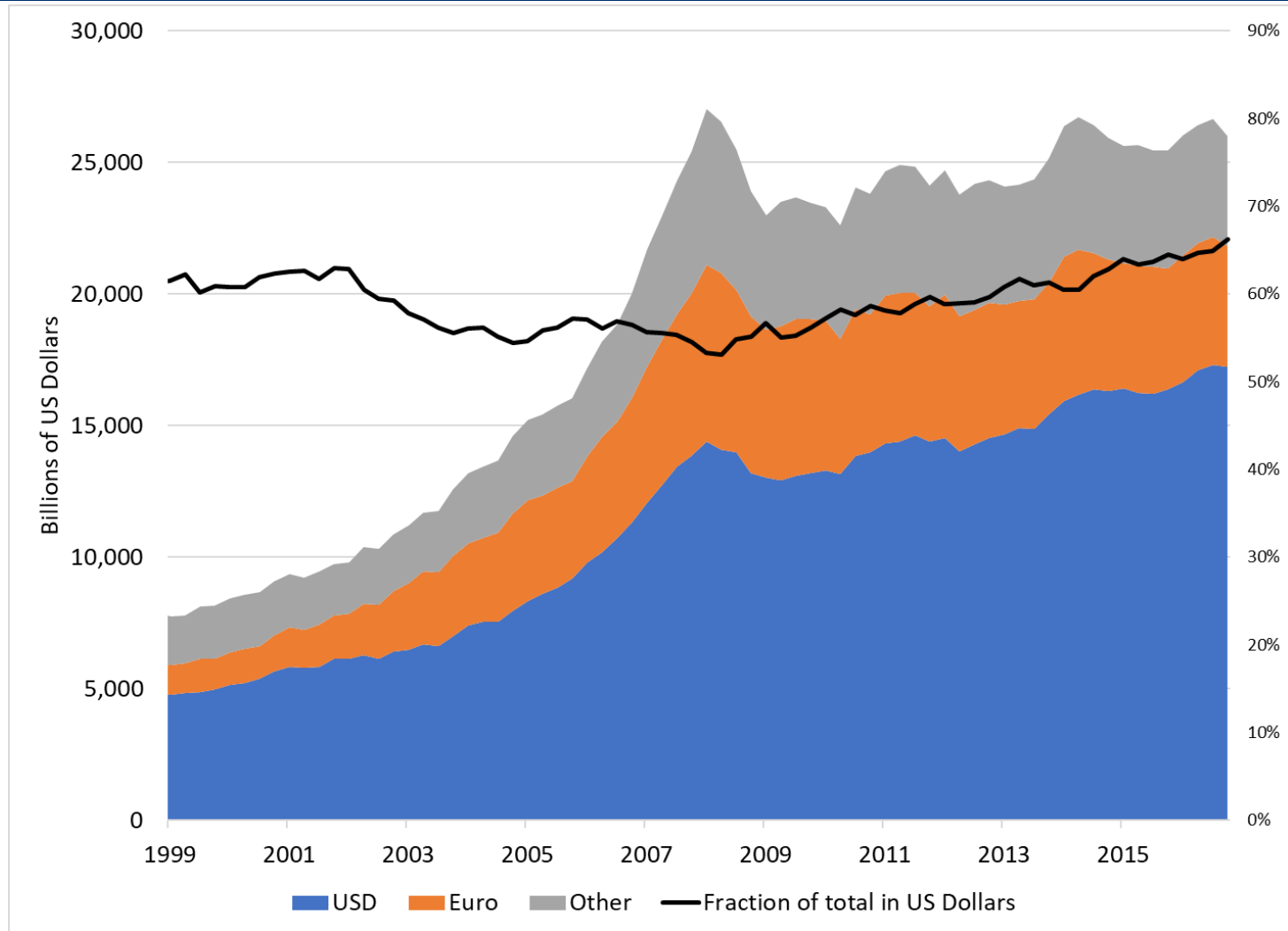
- Global dollar system
 - Dollar invoicing
 - Commodities priced in dollars
 - Short-term liabilities denominated in dollars
 - Securities denominated in dollars
- U.S. policy constrains policy choices elsewhere

Importance of US dollar invoicing

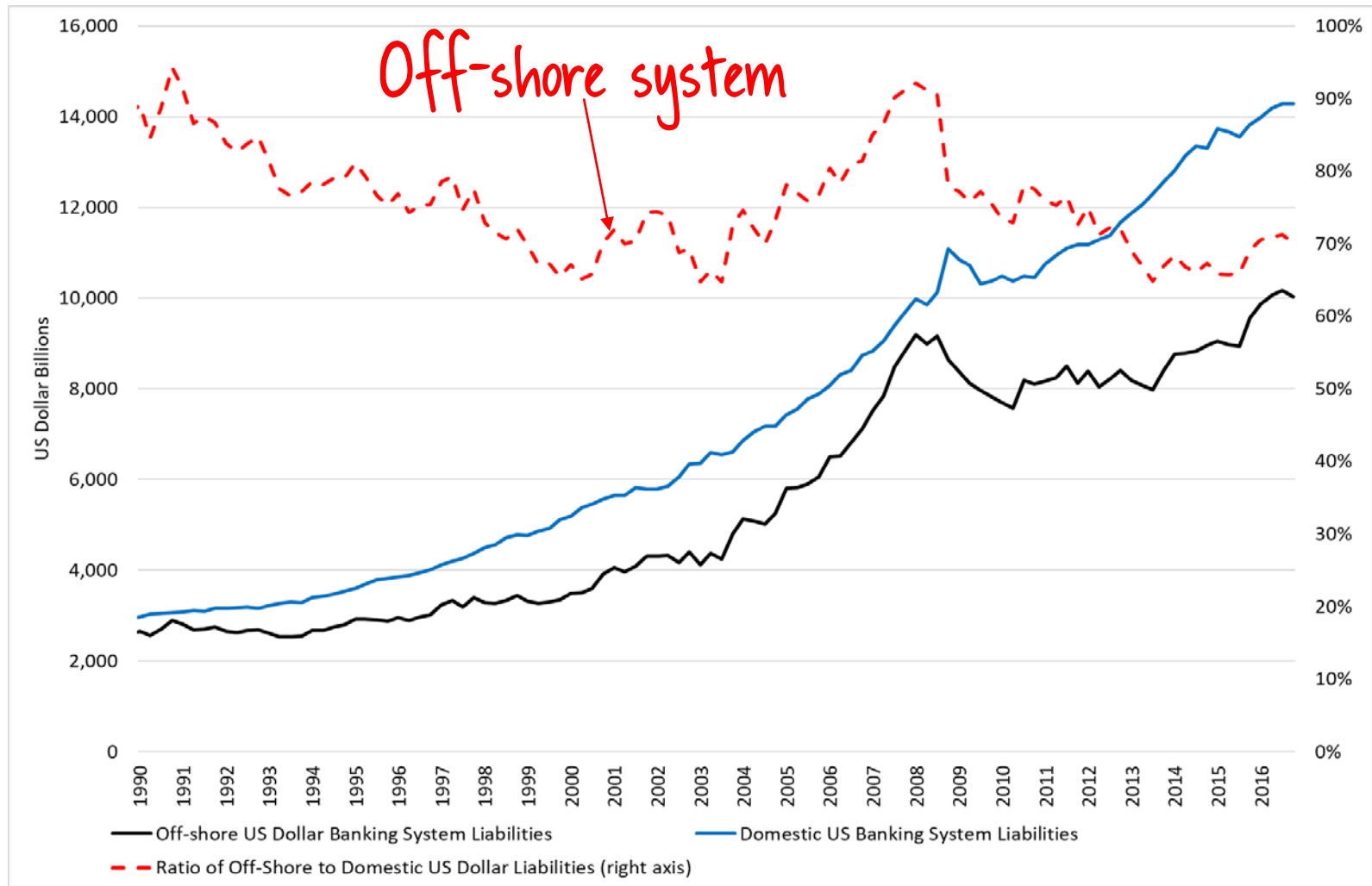


5 times US share in imports, 3 times US share in exports.

Foreign Currency Bank Claims & Securities

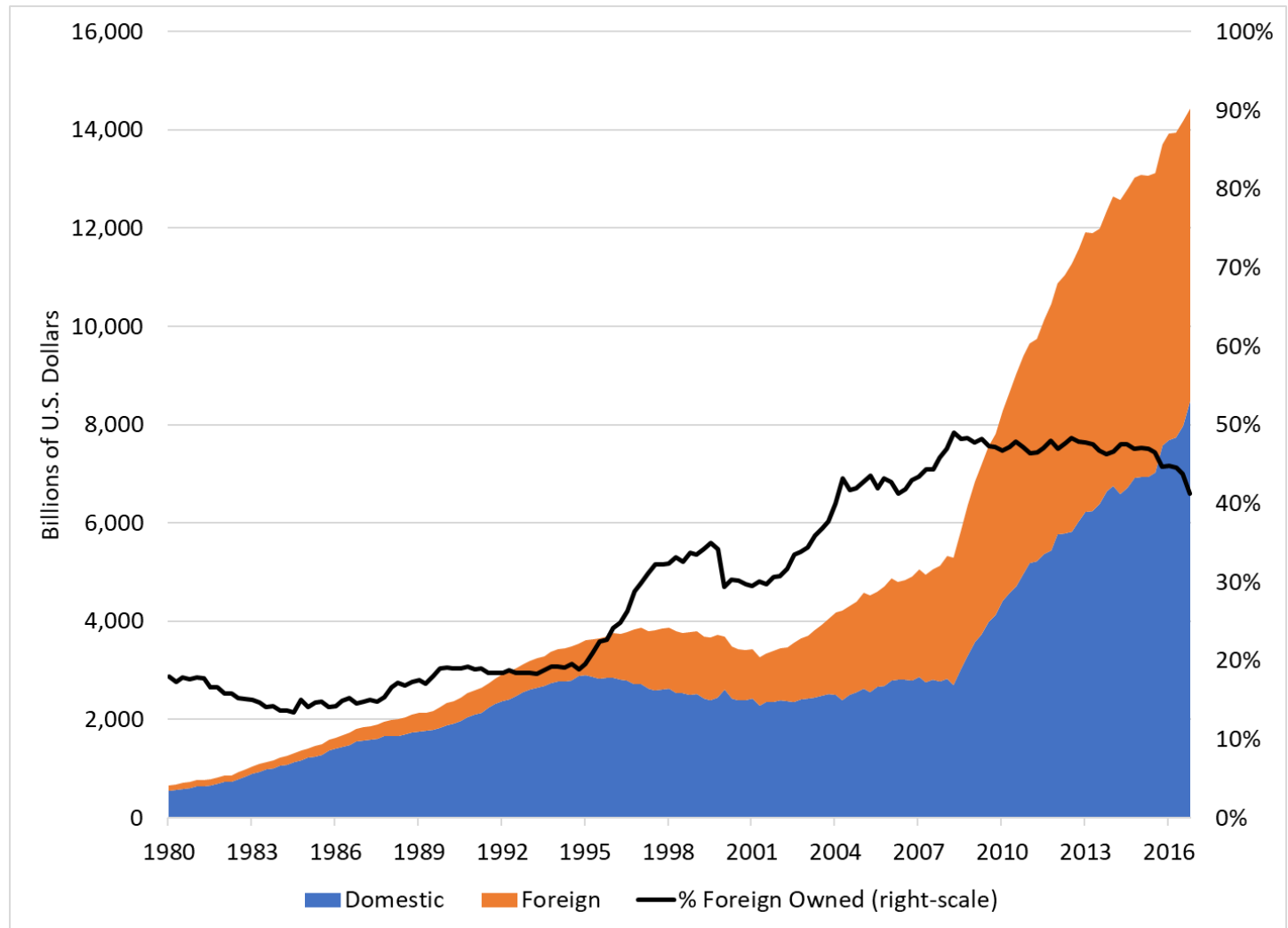


US Dollar-denominated liabilities



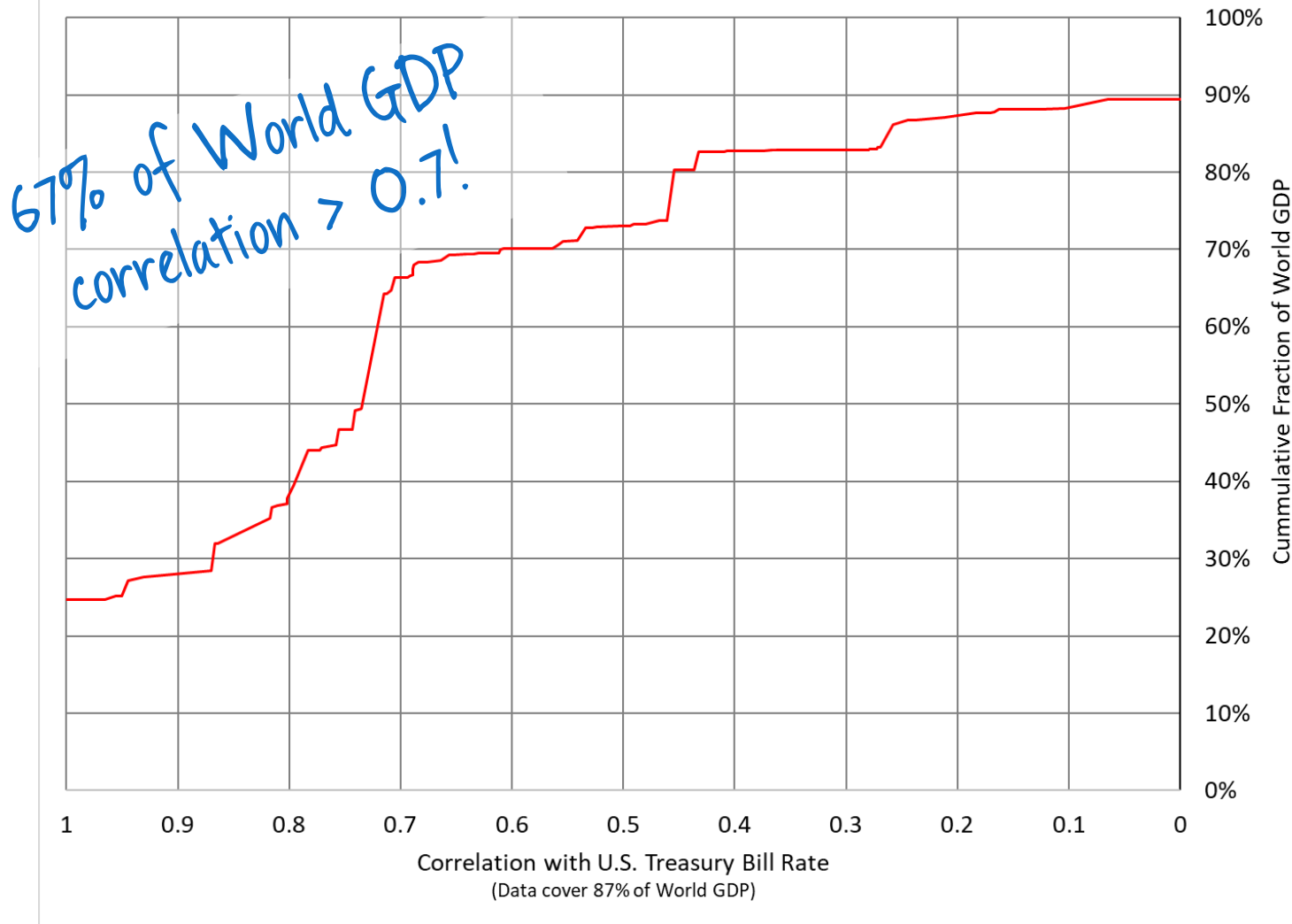
Source: BIS and Board of Governors of the Federal Reserve.

Holdings of U.S. Treasury Securities

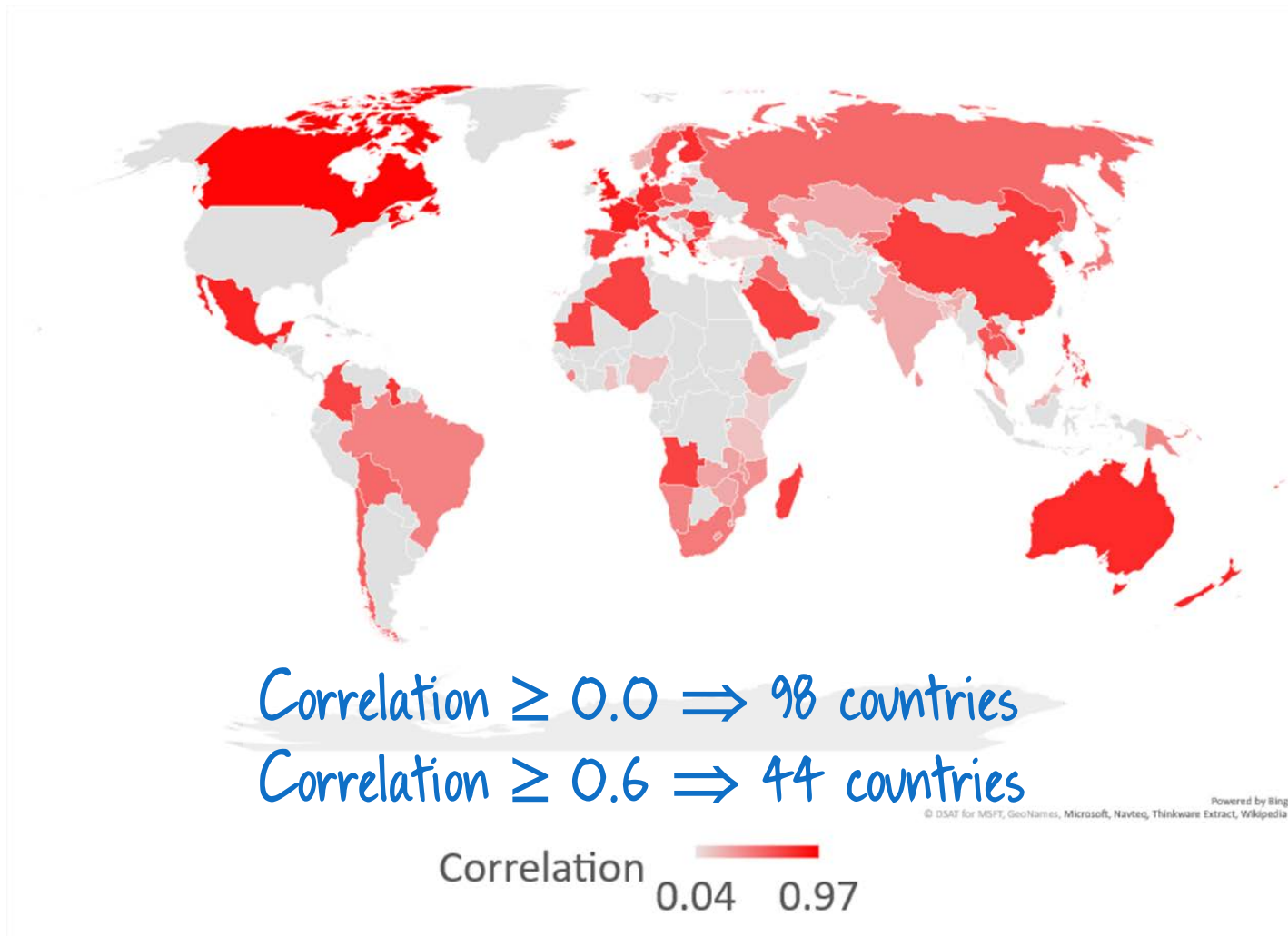


Source: U.S. Treasury International Capital Flows.

Correlation of Short-Term Interest Rates (1990-2016, 112 countries)



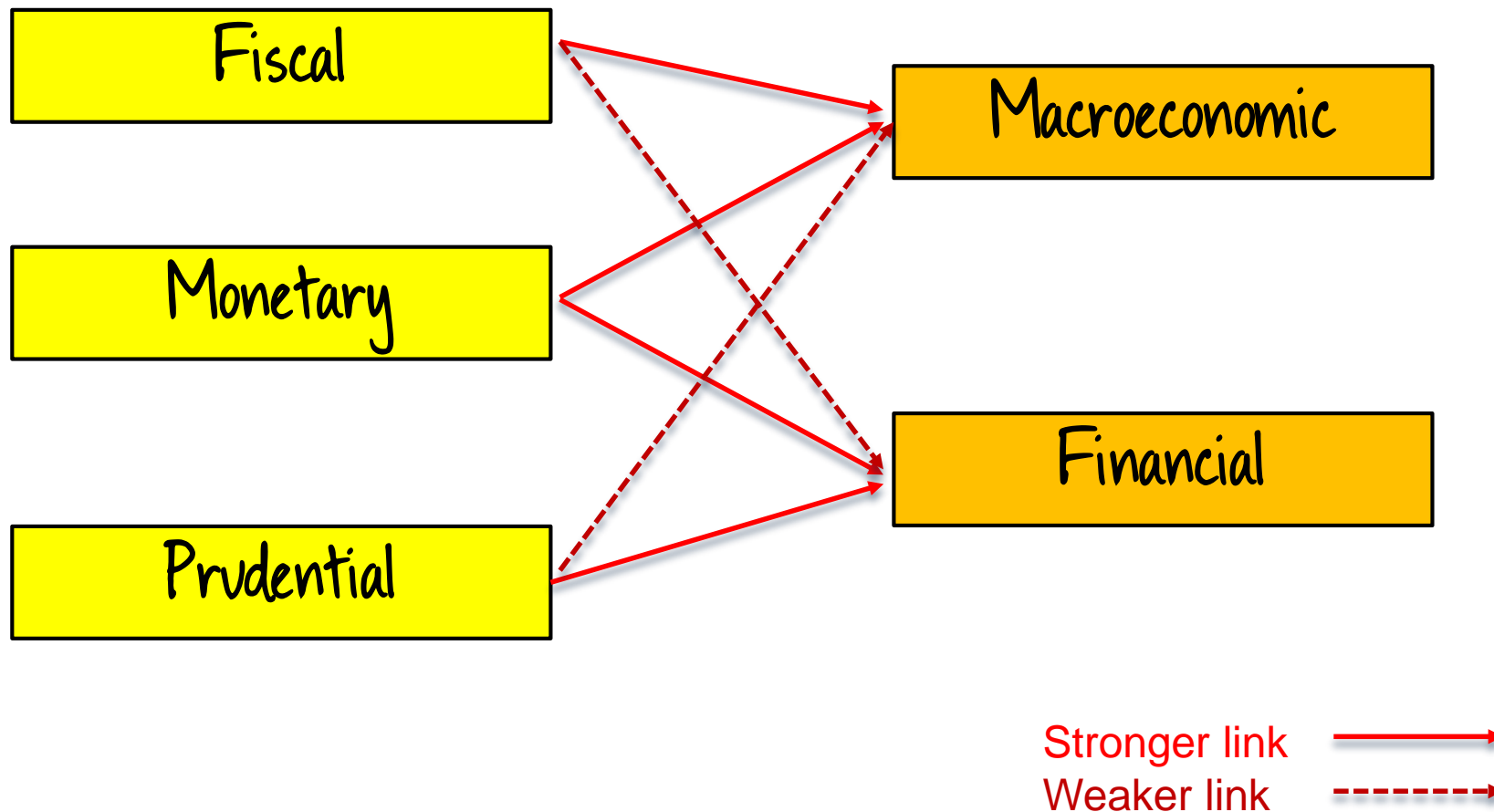
Correlation of Short-Term Interest Rates



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Types of policy spillovers: What we need to know



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