



Relevance of U.S. Financial Accounts in Understanding the U.S. Economy

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Central Bank of Chile

Santiago, Chile

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*The analysis and conclusions set forth are those of the author and do not indicate concurrence by other members of the research staff or the Board of Governors.



Household Net Worth

U.S. household net worth rises to \$85.7 trillion

The net worth of U.S. households rose in the second quarter due to an increase in the value of homes and investments, a positive sign for future consumer spending.

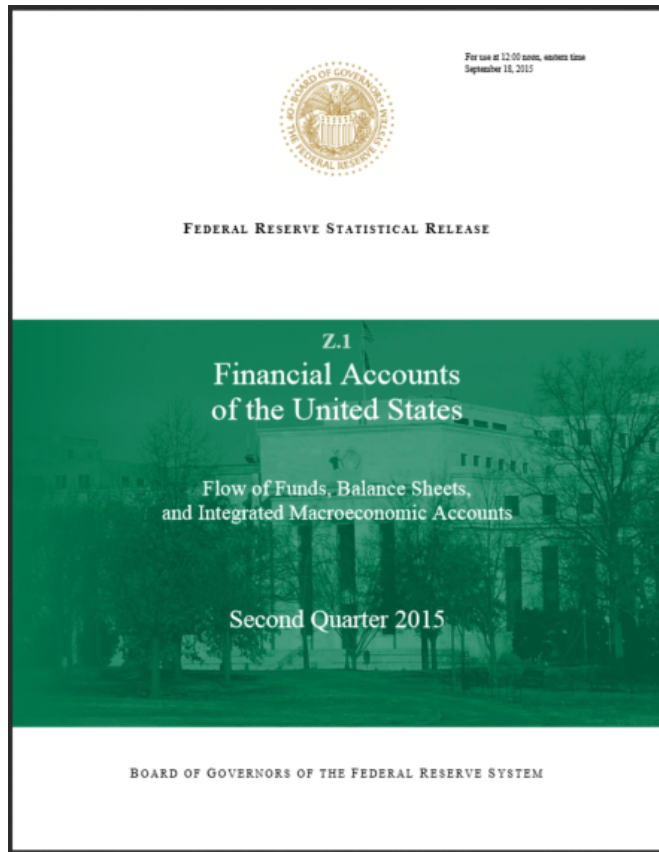
The increase added \$700 billion to the total wealth of American families, putting it at a record high of \$85.7 trillion, a report by the Federal Reserve showed on Friday.

The data suggests that Americans are increasingly on firmer financial footing and consumers may be more apt to open their wallets. However, a recent global stock sell-off could dent consumer confidence and weigh on spending.

Reuters, September 18, 2015



Financial Accounts of the United States



www.federalreserve.gov/releases/Z1/

- Time series:
Annual 1945 – 2014
Quarterly 1952:Q4 – 2015:Q2
- Published 10 weeks after the end of the reference quarter
- Includes flows, balance sheets, and Integrated Macroeconomic Accounts
- Interactive online Guide



Projection

- Household net worth important to forecasts of consumption
- Forecast based on expected movements in real estate, equity markets, and the personal savings rate
- Simplified framework



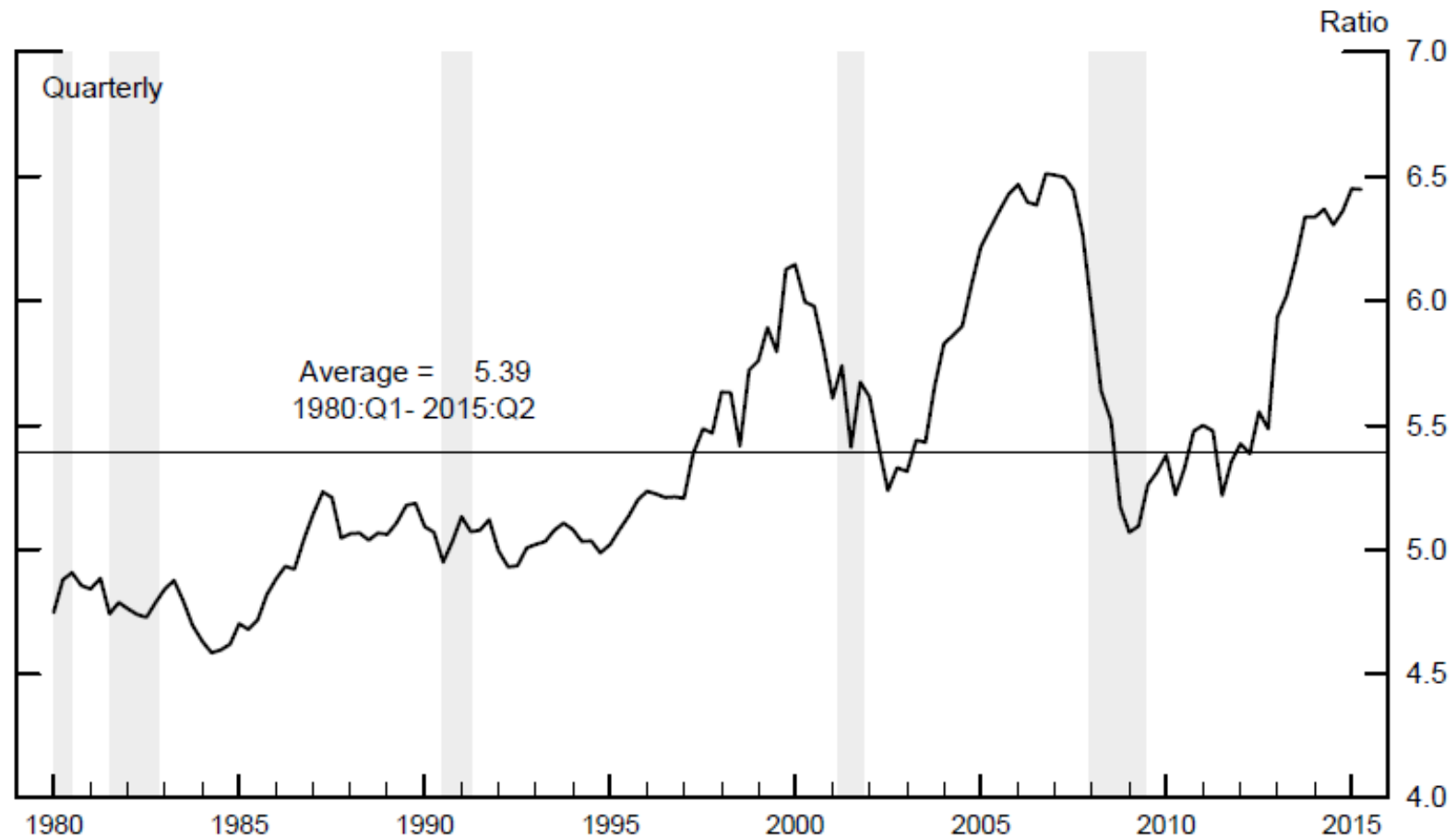
Household Net Worth

		2008	2009	2010	2011	2012	2013	2014
	Important indices							
1	Total stock market index	-38.6	25.7	15.3	-0.9	13.9	30.9	10.4
2	House price index	-16.0	-2.7	-3.5	-2.1	8.6	11.6	4.9
3	Total net worth	56,590	58,391	62,575	63,840	69,922	79,371	83,426
4	Real estate	25,923	24,298	24,089	24,102	26,220	29,377	31,045
5	Corporate equity	10,316	13,203	15,517	14,983	17,128	22,218	23,612
6	Other net wealth	20,351	20,890	22,969	24,755	26,573	27,776	28,768
7	Change in net worth	-10,248	1,801	4,184	1,265	6,082	9,449	4,055
8	Household saving	1,432	663	976	1,492	1,323	1,221	1,077
9	Capital gains	-11,683	662	2,345	-330	4,499	8,149	2,874
10	Real estate	-4,462	-1,634	-199	8	2,081	3,049	1,544
11	Corporate equity	-6,847	2,846	2,431	-272	2,372	4,816	1,293
12	Other net wealth	-374	-551	113	-66	47	284	37
13	Other volume changes	26	461	857	114	265	110	124

Source: Financial Accounts of the United States, September 18, 2015.



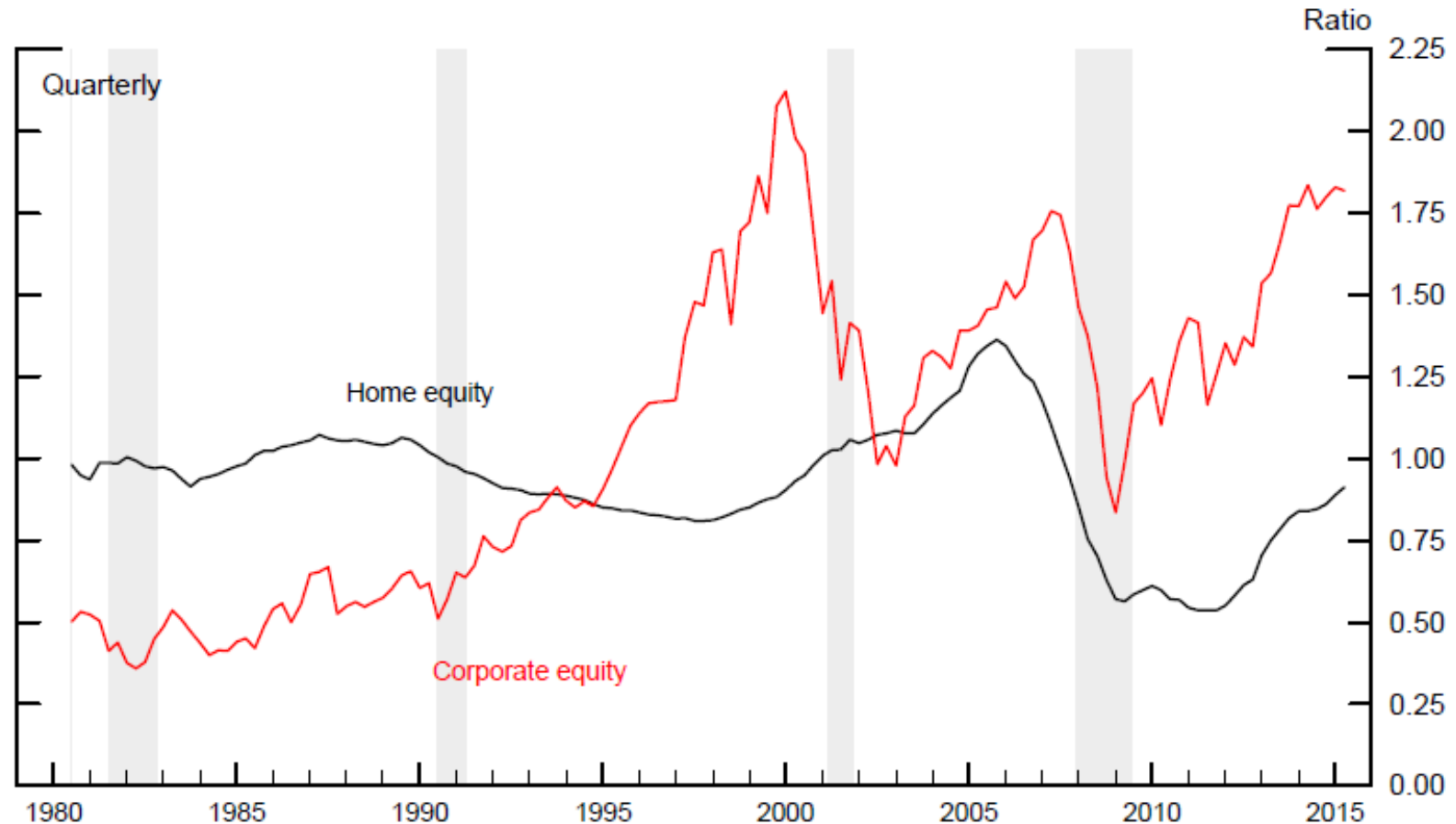
Household Net Worth Relative to Disposable Personal Income



Source: Financial Accounts of the United States, September 18, 2015.



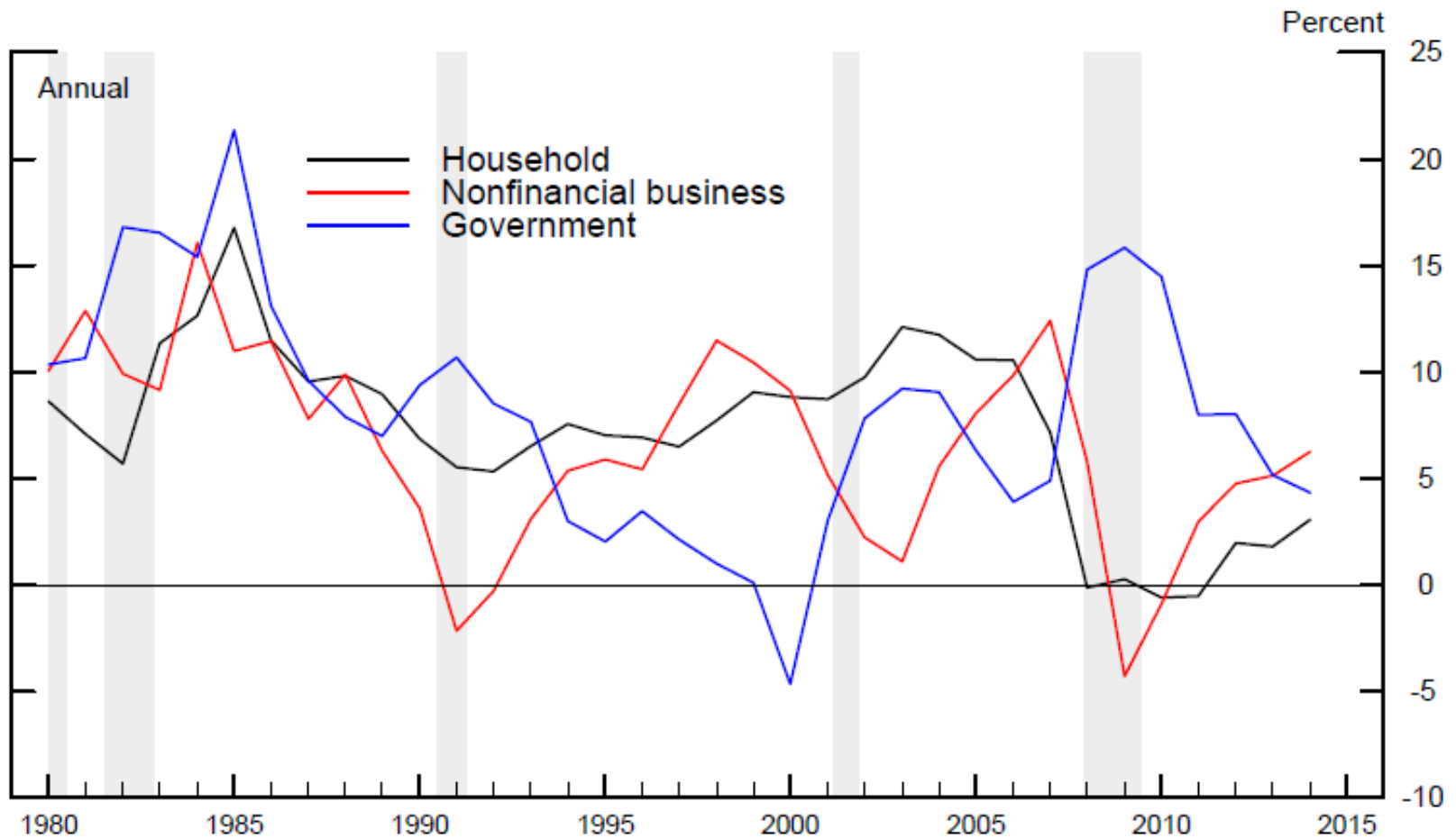
Corporate and Home Equity Relative to Disposable Personal Income



Source: Financial Accounts of the United States, September 18, 2015.



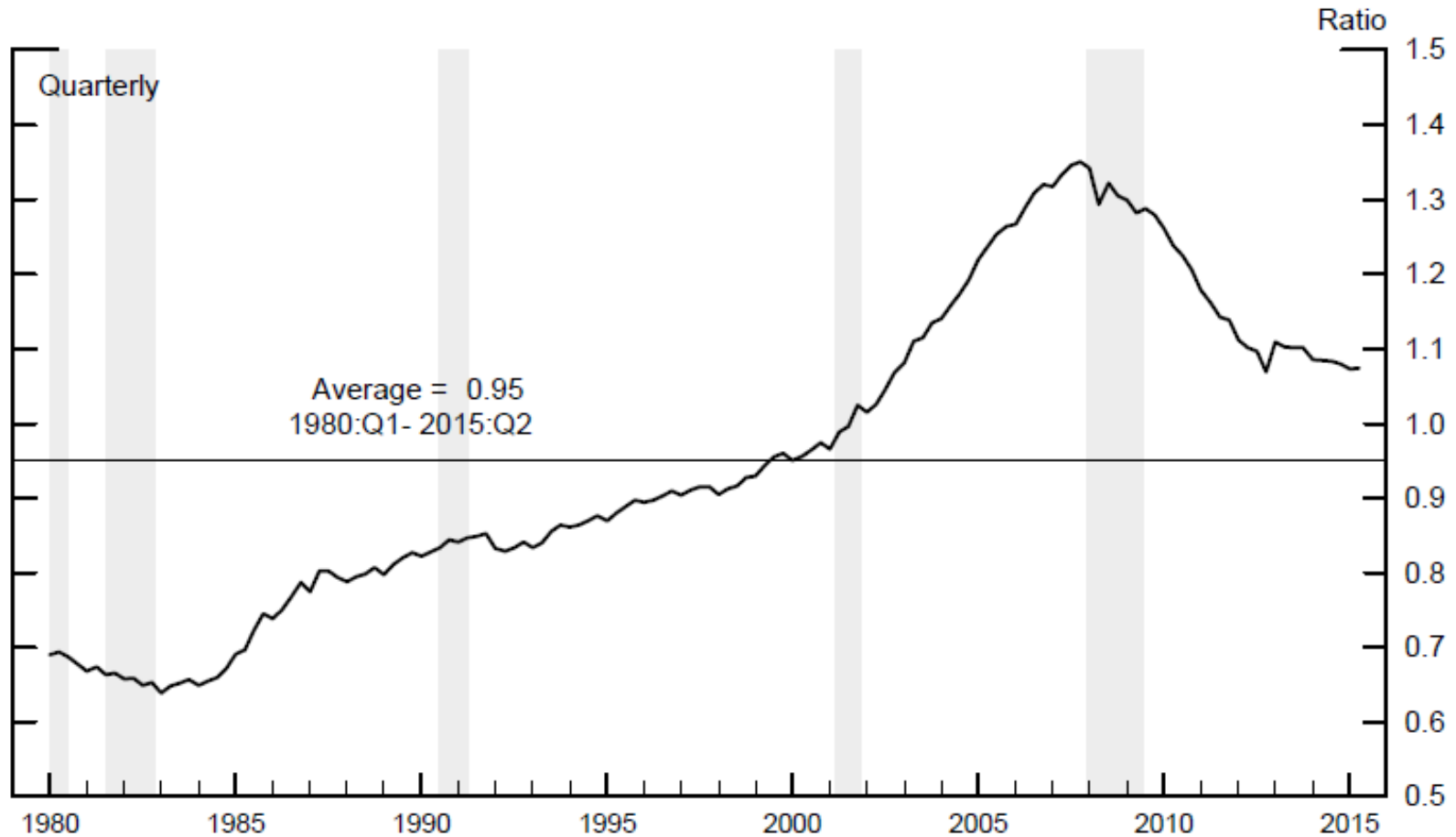
Debt Growth of Domestic Nonfinancial Sectors



Source: Financial Accounts of the United States, September 18, 2015.



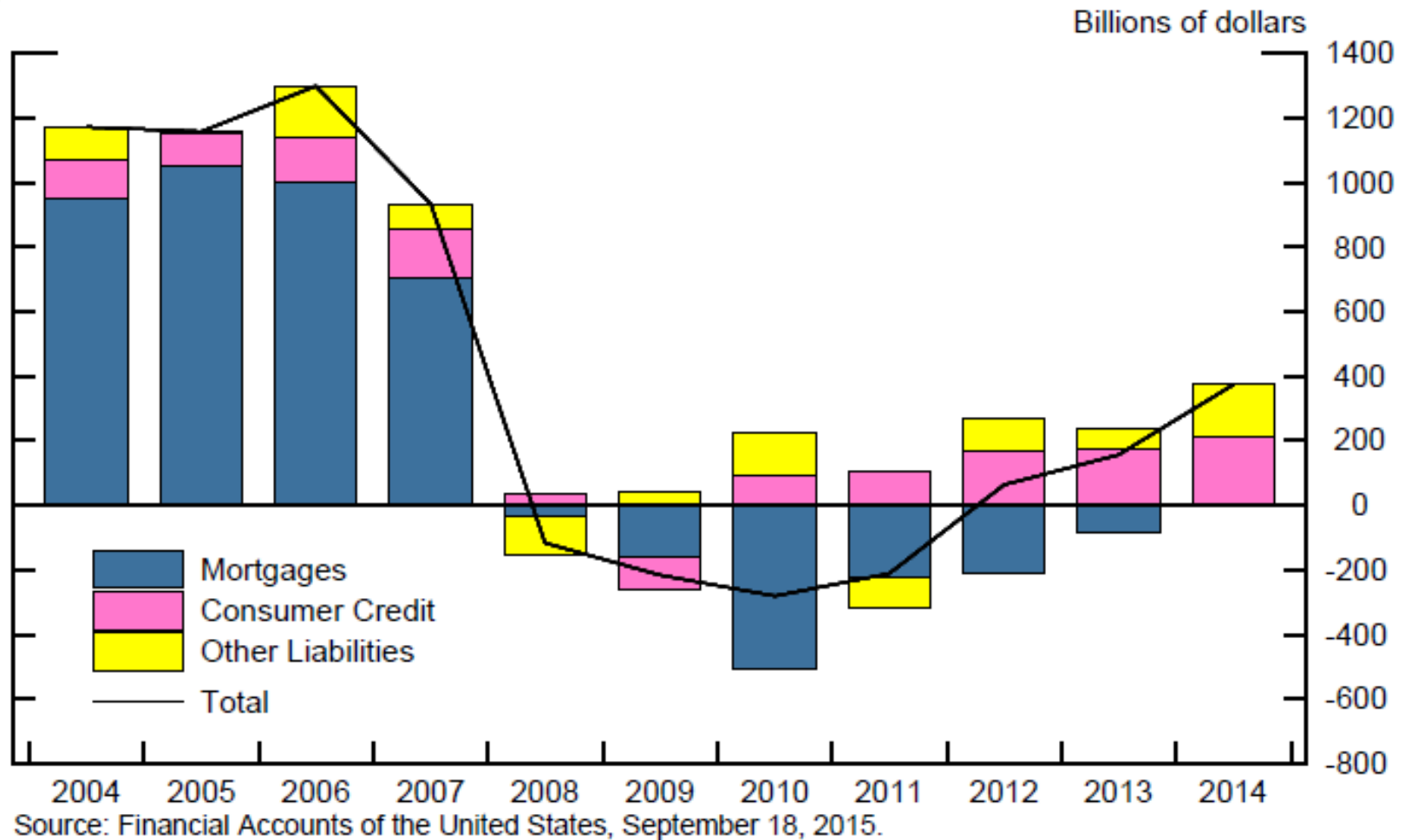
Household Liabilities Relative to Disposable Personal Income



Source: Financial Accounts of the United States, September 18, 2015.

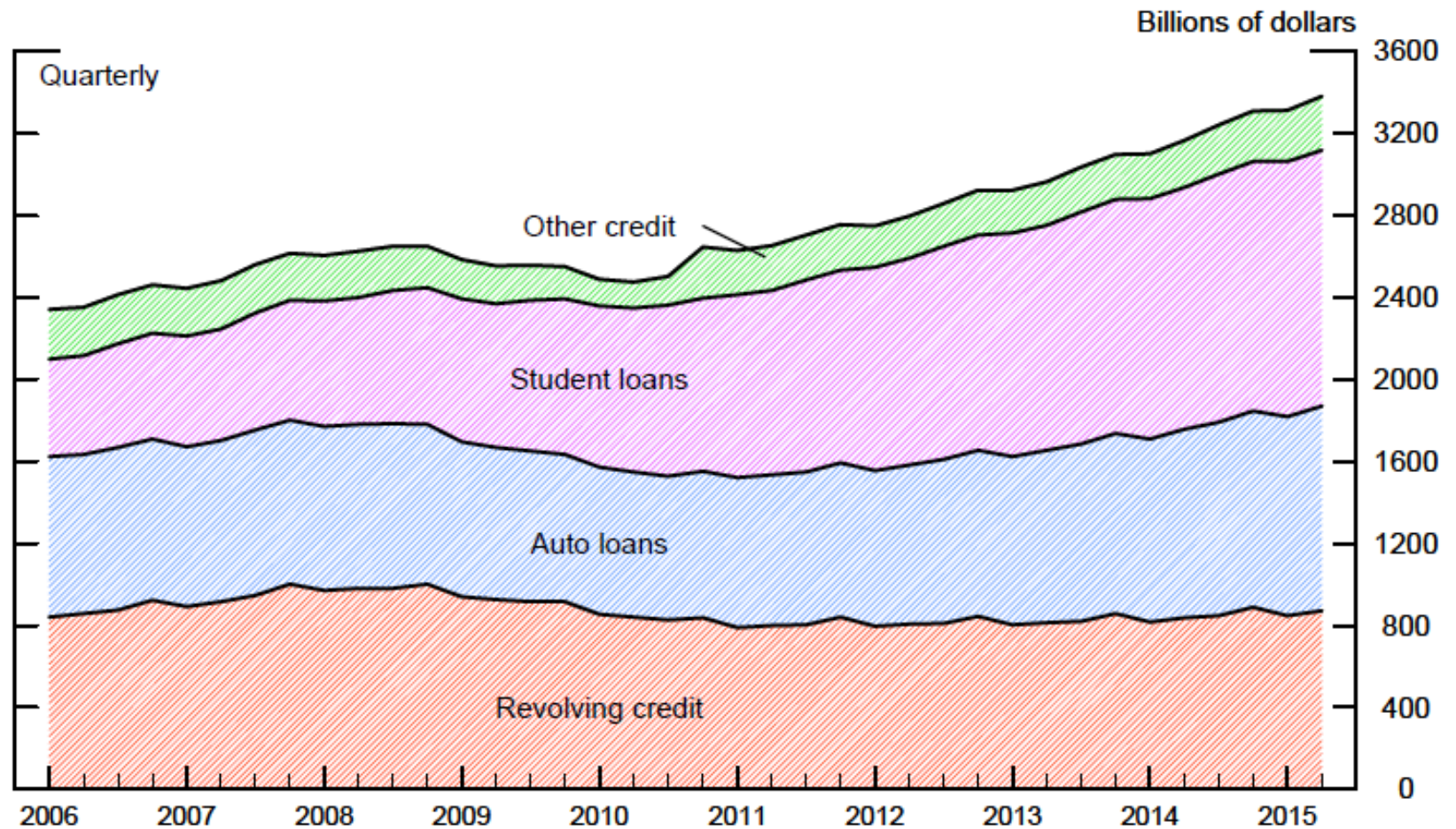


Changes in Household Liabilities





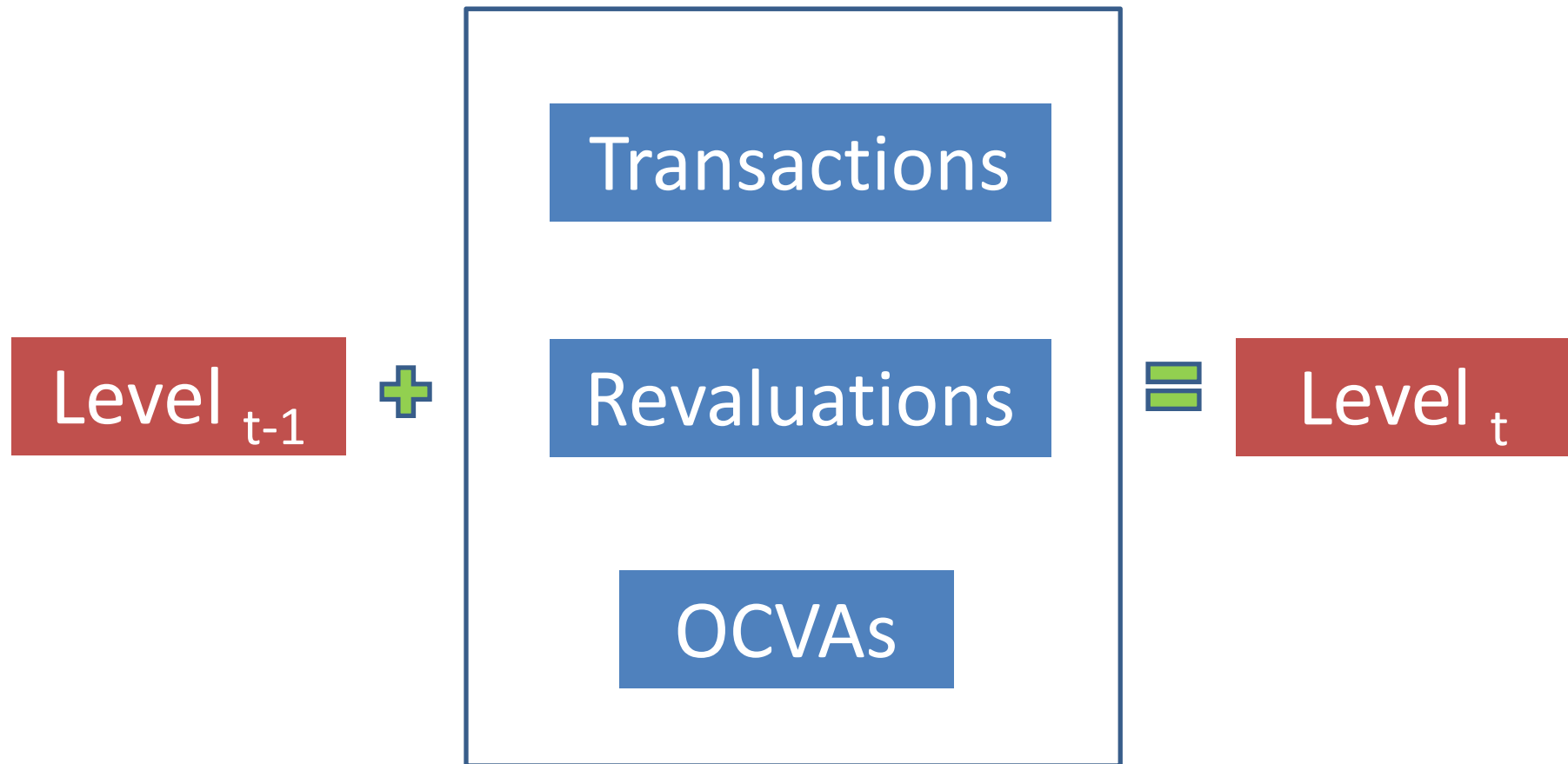
Consumer Credit



Source: Financial Accounts of the United States, September 18, 2015.

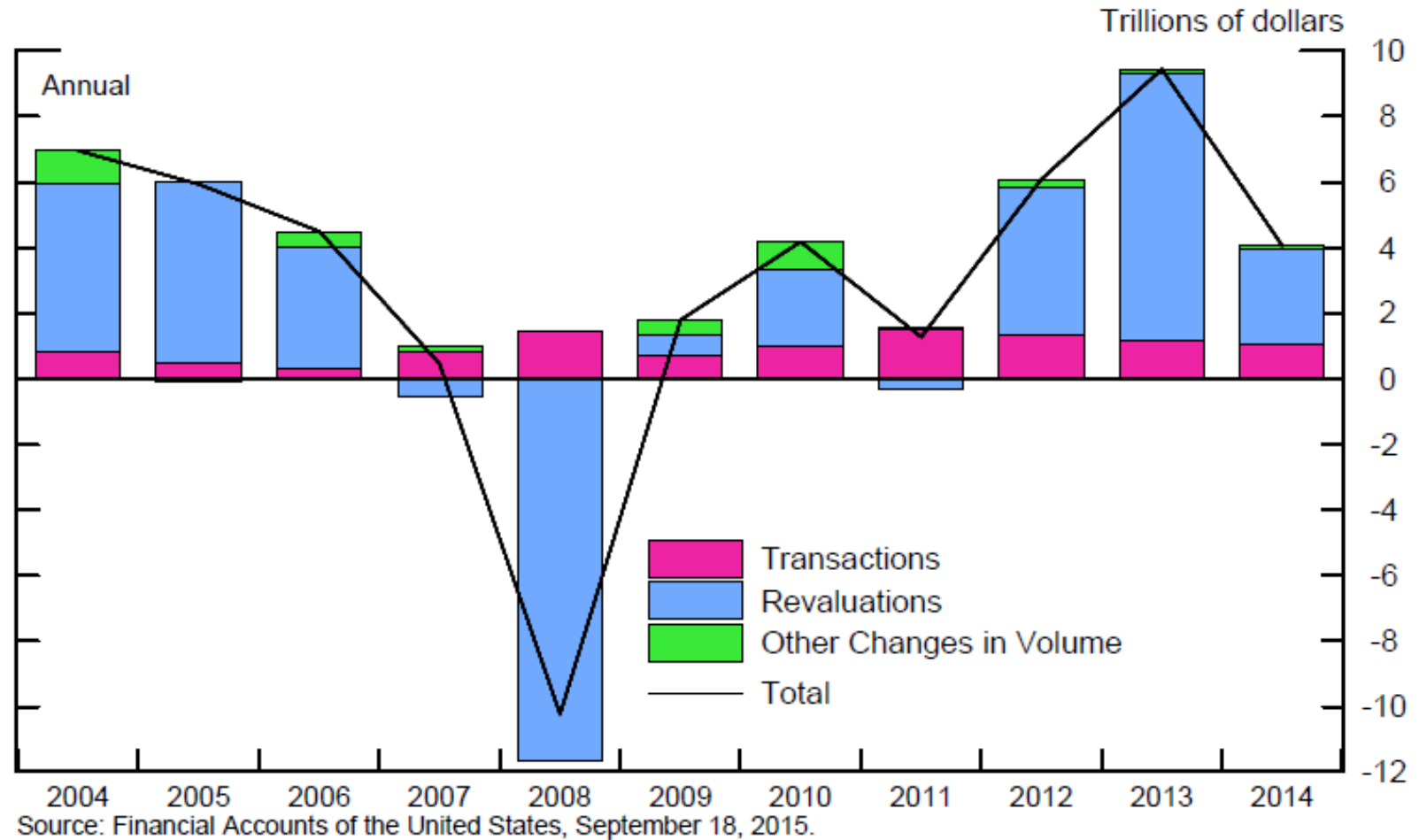


Economic Flows





Change in Household Net Worth



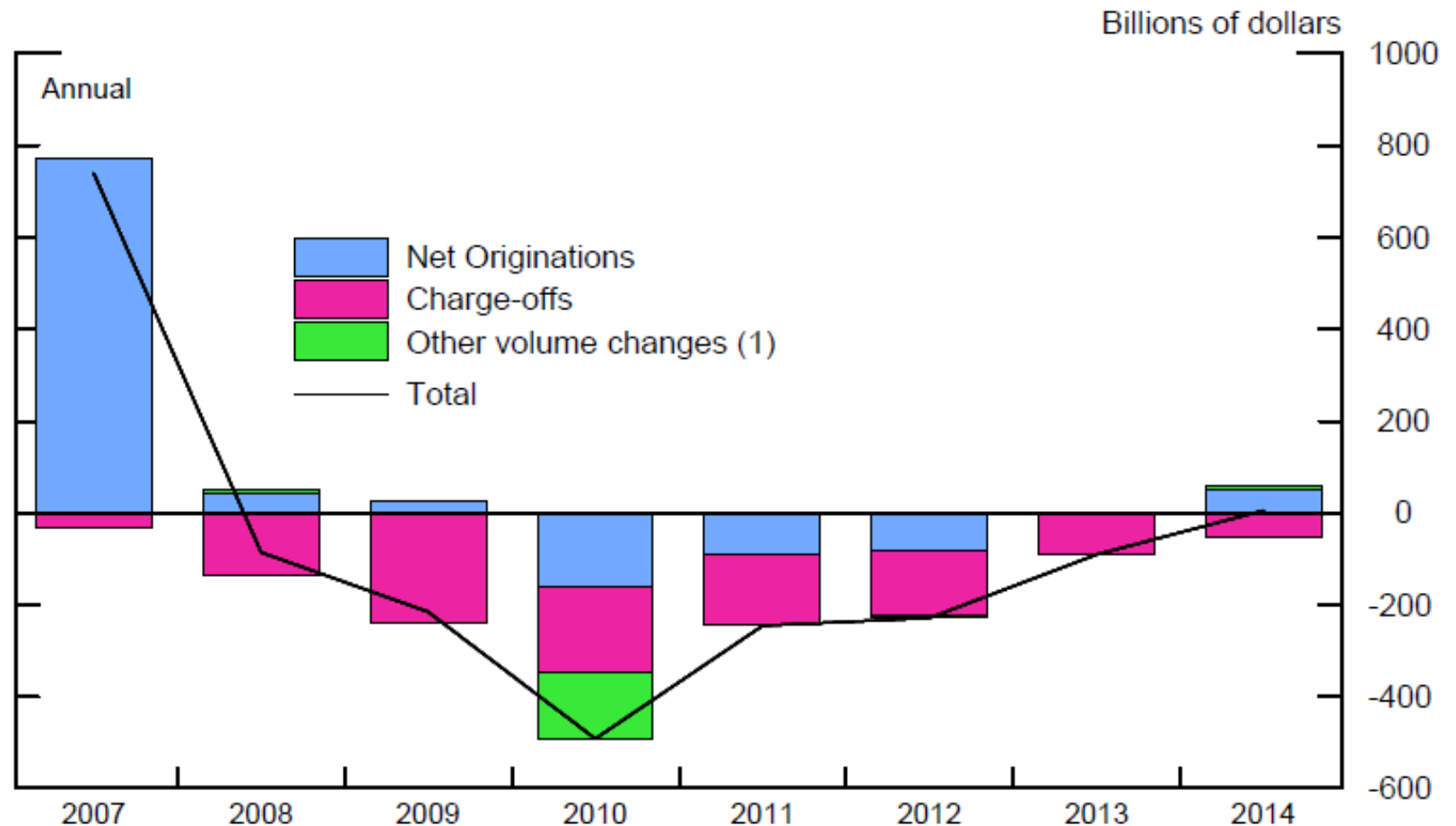


Home Mortgage Charge-offs

- Home mortgage debt declined \$1.3 trillion since the 2008 peak, with 75% of decline due to charge-offs
- **Previous treatment:** Charge-offs a negative component of aggregate mortgage borrowing (transaction)
- **New treatment:** Charge-offs excluded from aggregate borrowing; now included in other changes in volume
 - Increases reported mortgage debt transactions
 - Reduces personal saving
 - Mortgage debt outstanding and household net worth unchanged



Change in Residential Mortgage Debt



Source: Financial Accounts of the United States, September 18, 2015.

(1) Other volume changes in 2010:Q4 due to change in data source for finance companies.

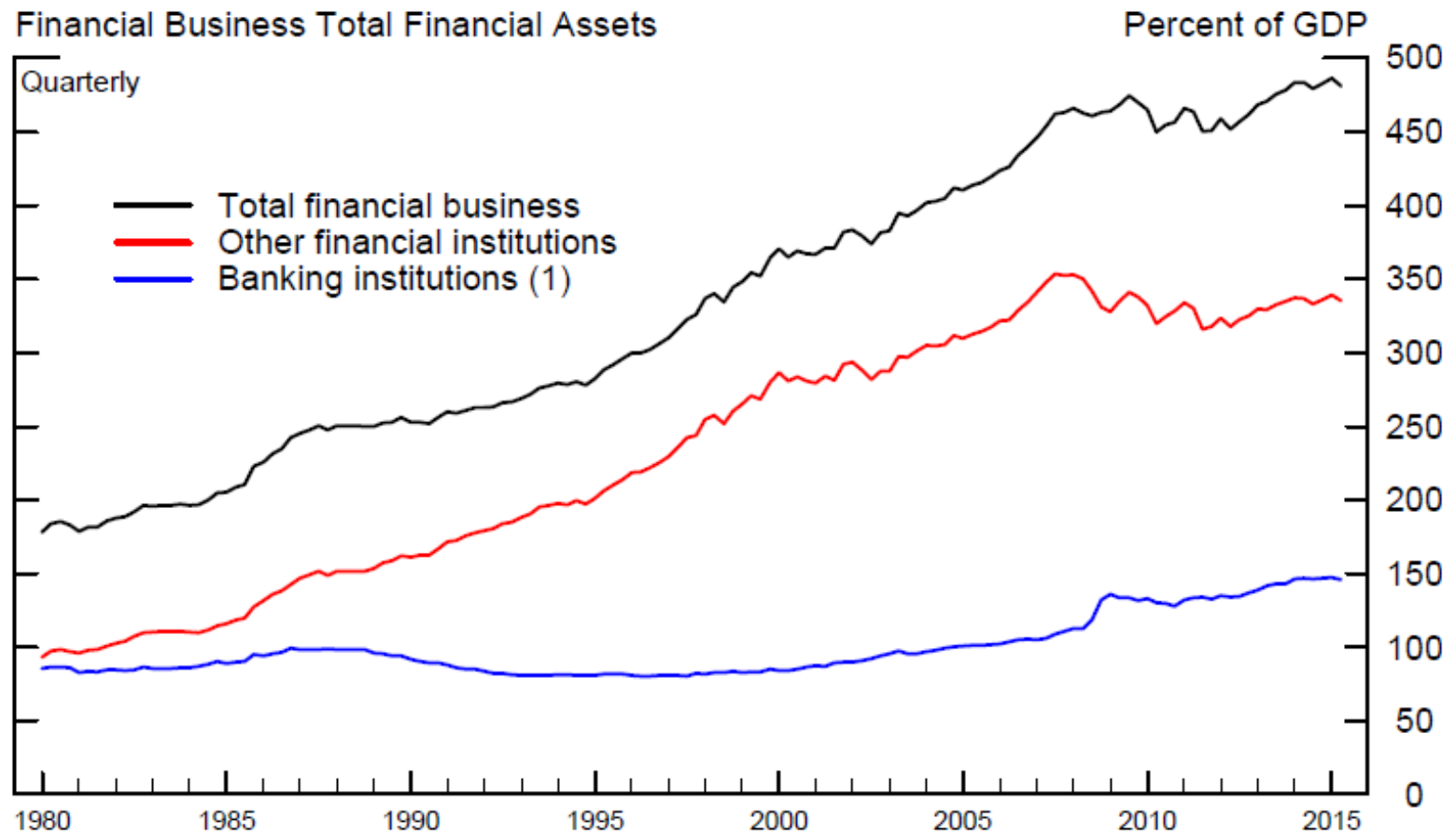


Importance of the Financial Sector

- Financial crisis highlighted the importance understanding linkages between the financial sector and the real economy
- The G-20 Data Gaps Initiative emphasized the need for quality data on financial business subsectors, especially non-bank financial institutions
- Vice chairman Stanley Fischer stressed on 3/27/2015 the “The Importance of the Nonbank Financial Sector” at a conference with the Bundesbank and German Ministry of Finance, Frankfurt
- 1980 nonbanks 40% of domestic financial sectors; late 1990s nonbanks were 2/3 of the total; percentage remained stable
- U.S. Financial Accounts record financial transactions and positions for 27 different financial business subsectors



Financial Business Sector



Source: Financial Accounts of the United States, September 18, 2015.

(1) Banking institutions include the central bank, private depository institutions, and bank holding companies.



What is Shadow Banking?

- Paul McCulley of PIMCO coined the term at Jackson Hole in 2007. Began in 1970s with development of MMMF, who are like banks but not regulated. Shadow banking is “the whole alphabet soup of levered up non-bank investment conduits, vehicles, and structures.”
- In 2009, economist Paul Krugman described the run on the shadow banking system as the “core of what happened to cause the crisis.”
- In April 2012, Federal Reserve Chairman Ben Bernanke defined important components of shadow banking as including securitization vehicles, asset-backed commercial paper conduits, MMMF, markets for repos, investment banks, and mortgage companies.



FSB definition of Shadow Banking

- At the November 2010 Seoul Summit, G-20 leaders highlighted the need to strengthen regulation and supervision of shadow banking. Requested FSB to develop recommendations and collect data.
- **Broad definition:** credit intermediation involving entities and activities outside the regular banking system
- **Narrower definition:** raise systemic risk concerns, in particular by maturity/liquidity transformation, leverage and flawed credit risk transfer, and/or regulatory arbitrage concerns.
- 2015 new activity-based “**economic function**” measure of shadow banking introduced; reduces the FSB broad estimate by 75% for the 26 jurisdictions being measured

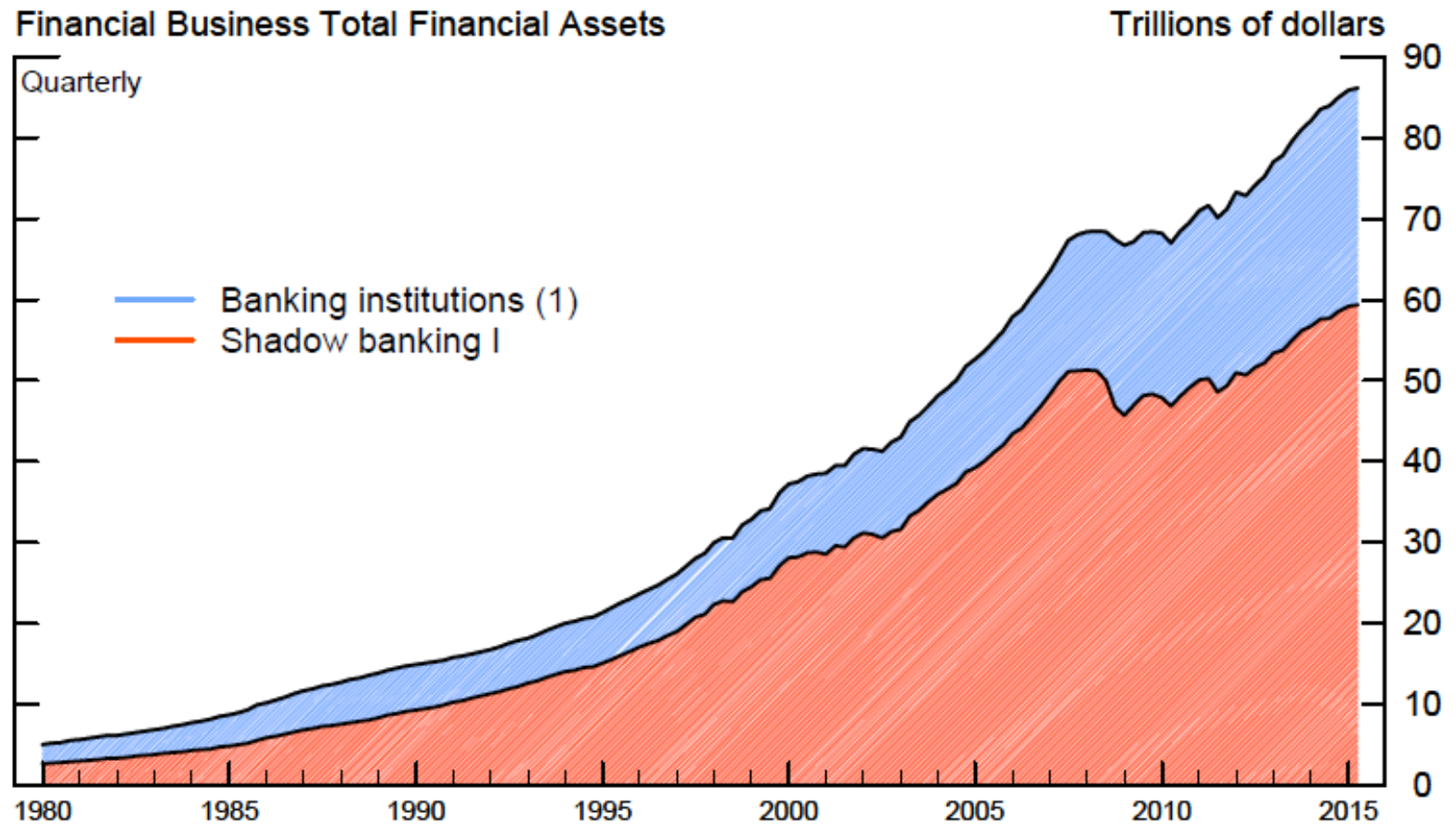


U.S. Shadow Banking

	<u>2015:Q2 \$ trillions</u>
Total Domestic Financial Business	86.2
- Monetary authority	
- Depository institutions	
- Holding companies	
Shadow Banking I	59.4
- Insurance companies and pension funds	
- GSEs and Agency- and GSE-backed mortgage pools	
Shadow Banking II	25.5
- Equity funds (equity holdings of mutual funds, closed-end funds, and ETFs)	
- Equity REITs	
Shadow Banking III (divide into the economic functions)	15.8



Shadow Banking I

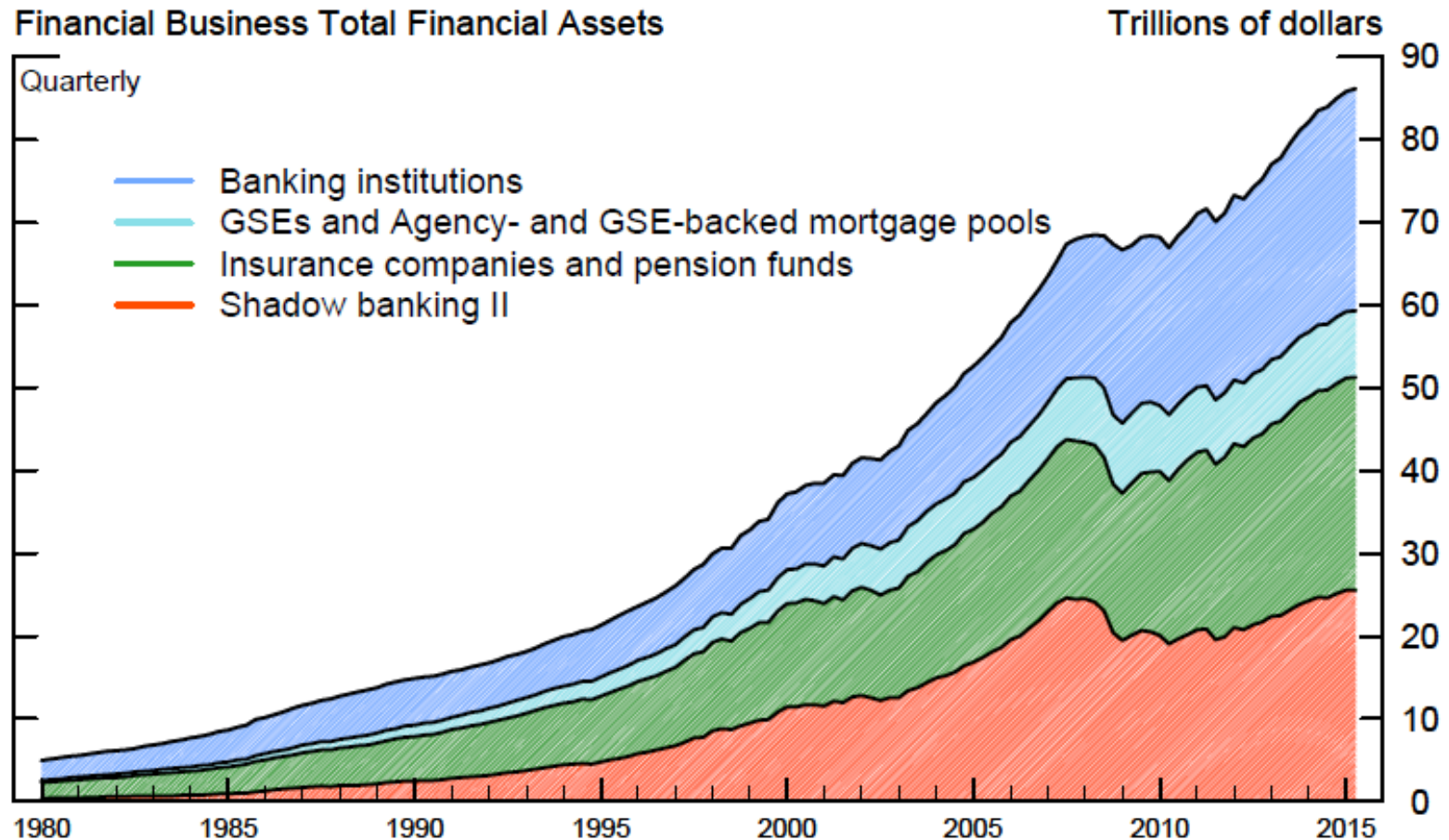


Source: Financial Accounts of the United States, September 18, 2015.

(1) Banking institutions include the central bank, private depository institutions, bank holding companies, funding vehicles, and monetary authority lending facilities.

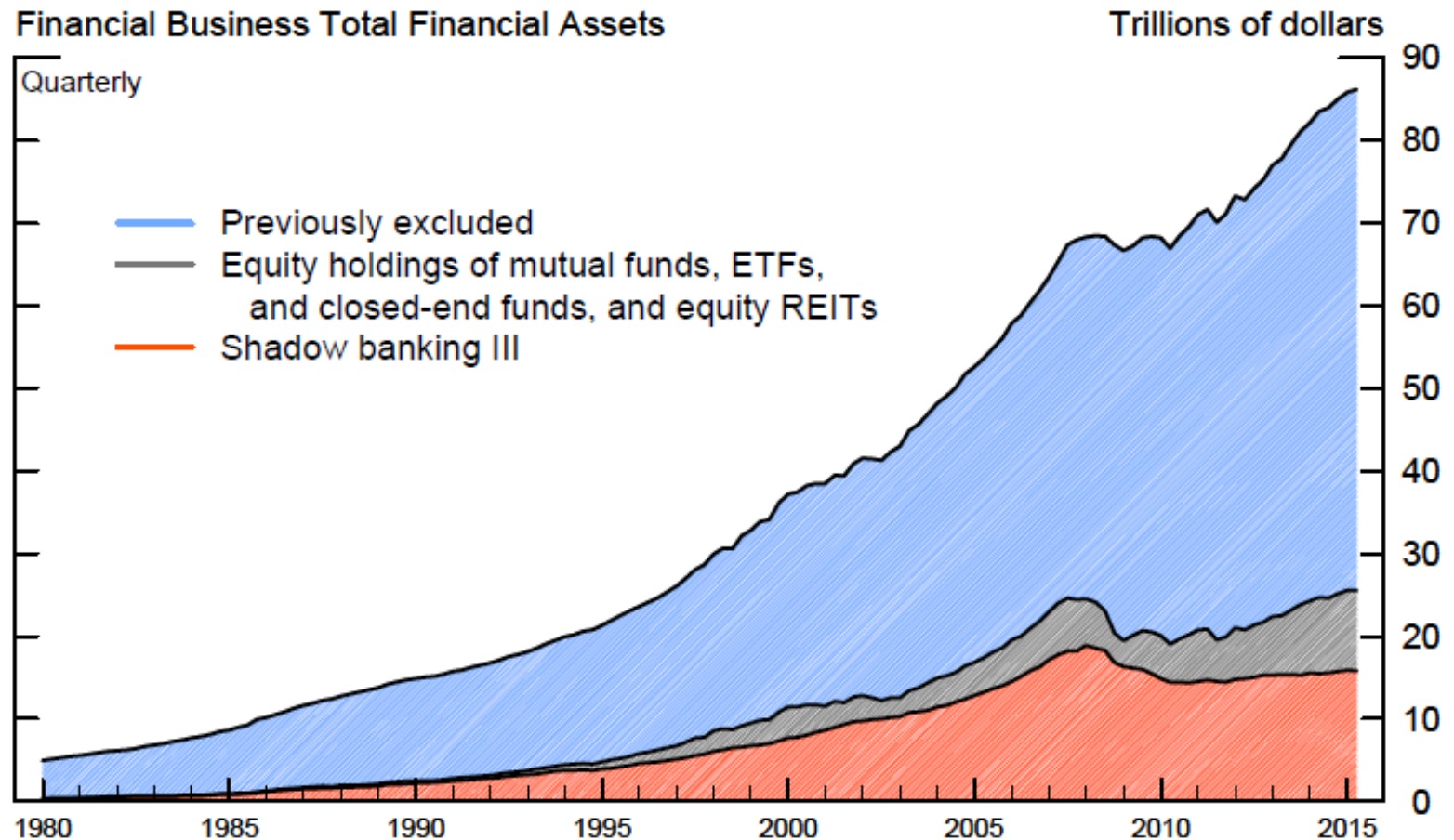


Shadow Banking II





Shadow Banking III



Source: Financial Accounts of the United States, September 18, 2015.



Shadow Banking by FSB

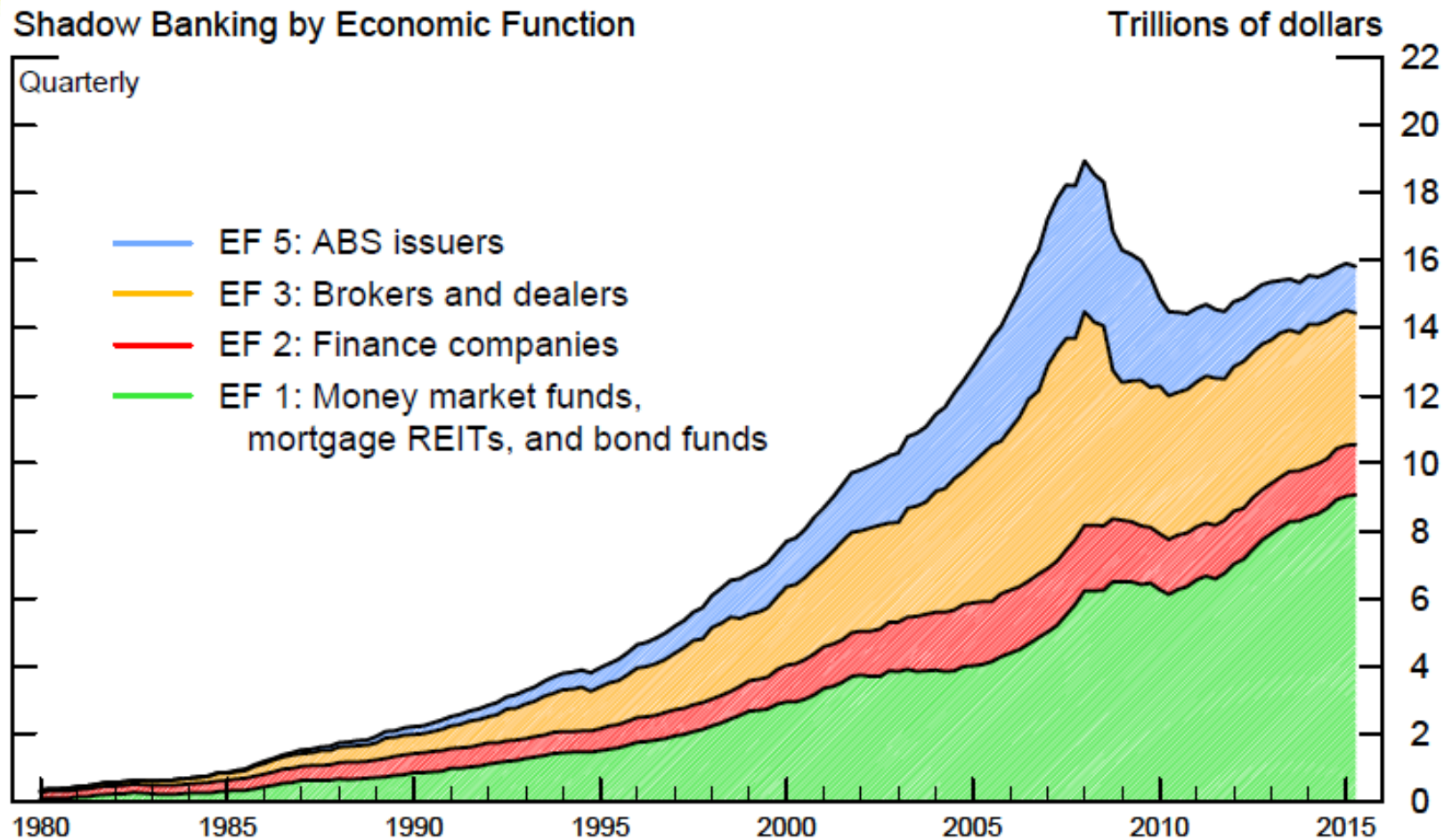
Economic Function

FSB: Entities by Economic Function	Financial Accounts: Sectors
1. Entities that are susceptible to runs	Money market funds, mortgage REITs, and bond funds
2. Lending dependent on short-term funding	Finance companies
3. Market intermediation dependent on short-term funding or secured funding of client assets	Security brokers and dealers and securities lending
4. Facilitating credit creation	None
5. Securitization-based intermediation	Issuers of asset-backed securities



FSB Economic Functions

Shadow Banking by Economic Function



Source: Financial Accounts of the United States, September 18, 2015.



FRB Work on Alternative Views to Shadow Banking

Other FRB work on shadow banking focuses on:

1. The intersection of shadow banking and the nonfinancial economy

“Shadow Banking and the Funding of the Nonfinancial Sector” by Josh Gallin
(May 16, 2013)

<http://www.federalreserve.gov/pubs/feds/2013/201350/>

2. Unregulated financial markets that are vulnerable to runs in periods of stress

“The Runnables” by Jack Bao, Josh David, and Song Han
(September 3, 2015)

<http://www.federalreserve.gov/econresdata/notes/feds-notes/2015/the-runnables-20150903.htm>

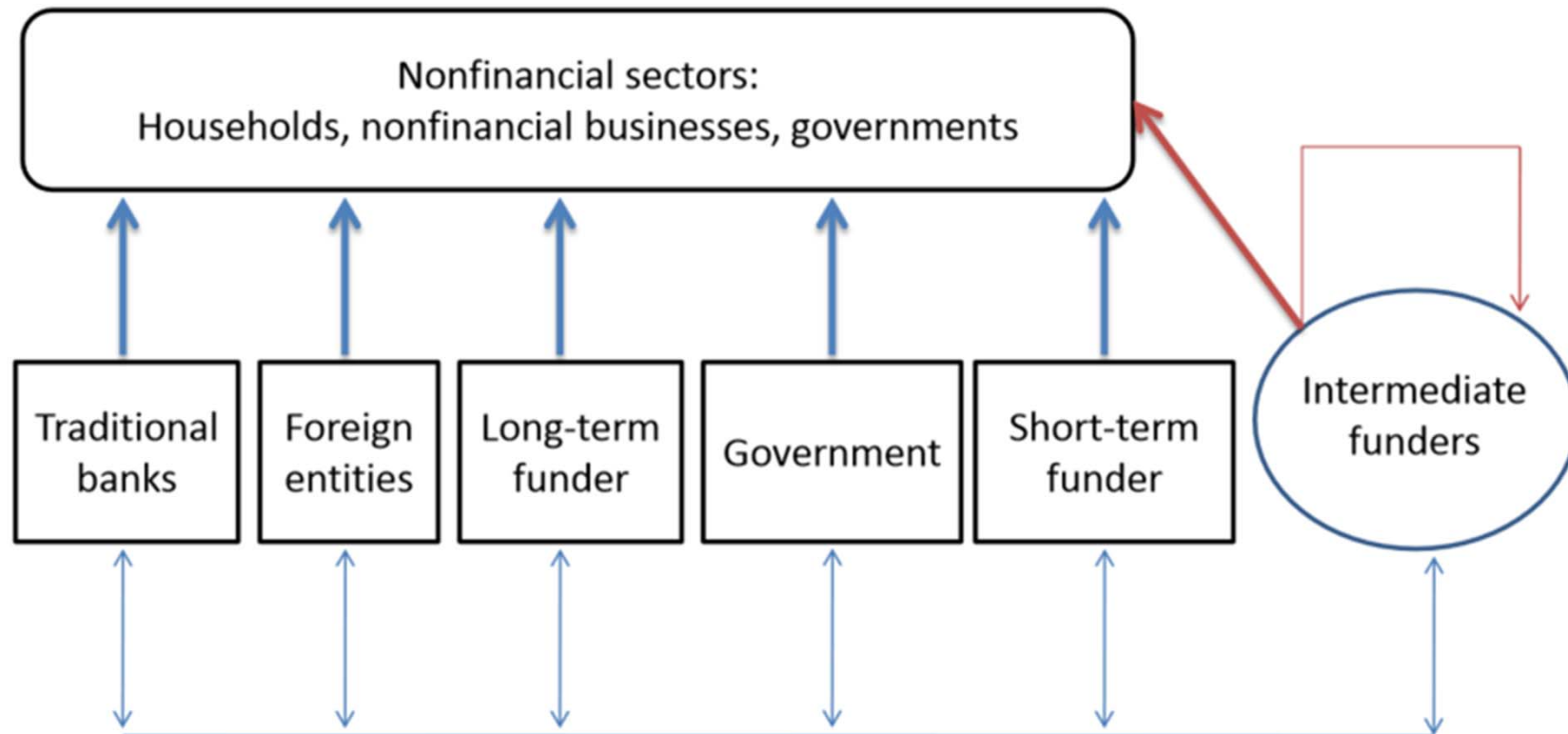


Shadow Banking and Funding of the Nonfinancial Sectors

- **Goal:** Identify the financial link between shadow banking and the nonfinancial sectors; must have a “runnable” link in the intermediation chain
- “Runnable” is defined as short-term funding, where the borrower is not insured by the FDIC and has no access to the Federal Reserve Discount Window
- Short-term funders are defined by their activities rather than their entity type
- Runnables include repo, commercial paper, and money-fund shares



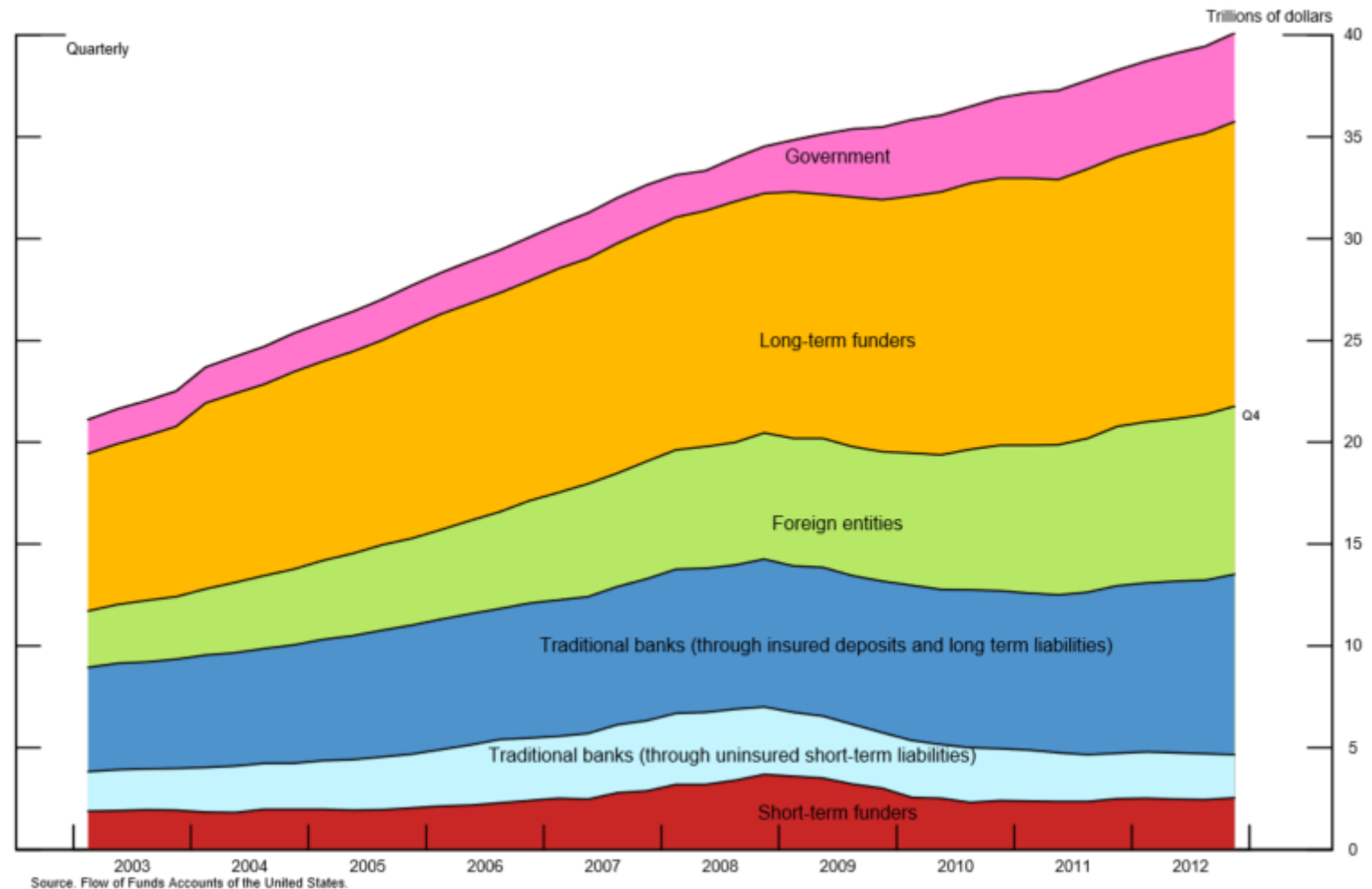
Terminal and Intermediate Funders



Source: Joshua Gallin (2013). "Shadow Banking and the Funding of the Nonfinancial Sector," Finance and Economics Discussion Series 2013-50. Board of Governors of the Federal Reserve System (U.S.).



Debt of the Nonfinancial Sector, by Terminal Funder



Source: Joshua Gallin (2013). "Shadow Banking and the Funding of the Nonfinancial Sector," Finance and Economics Discussion Series 2013-50. Board of Governors of the Federal Reserve System (U.S.).



Results

- In the lead-up to financial crisis of 2008, domestic shadow banking was a significant but not the dominant supplier of funding to nonfinancial sectors.
- Funding from the shadow banking system dropped significantly after 2008, having had an enormous effect on the change nonfinancial-sector debt and thus, presumably on real activity
- Nonfinancial sector debt increased a cumulative 15 % from 2006:Q4-2008:Q4; short-term funders contributed 4-1/4 percentage points (largest contributor)
- Growth rate of nonfinancial-sector debt halved to about 7 % in the two years following the crisis; short-term funders subtracted 3-3/4 percentage points from the cumulative growth rate over this period
- Government entities stepped into provide a significant portion of debt previously supplied by short-term funders.



Runnable Liabilities

- **Goal:** describe a measure of runnable liabilities as a tool in monitoring run vulnerability
- Definition of runnables:
 1. “pay-on-demand” transactions which embed defaultable promises made by private agents or state and local governments without explicit insurance from the federal government.
 2. Term to maturity is short or the claimholder of the long-term debt has a put option that can be exercised on short notice
 3. Aggregate measure of runnables; sum of amount outstanding of runnable components along the intermediation chain

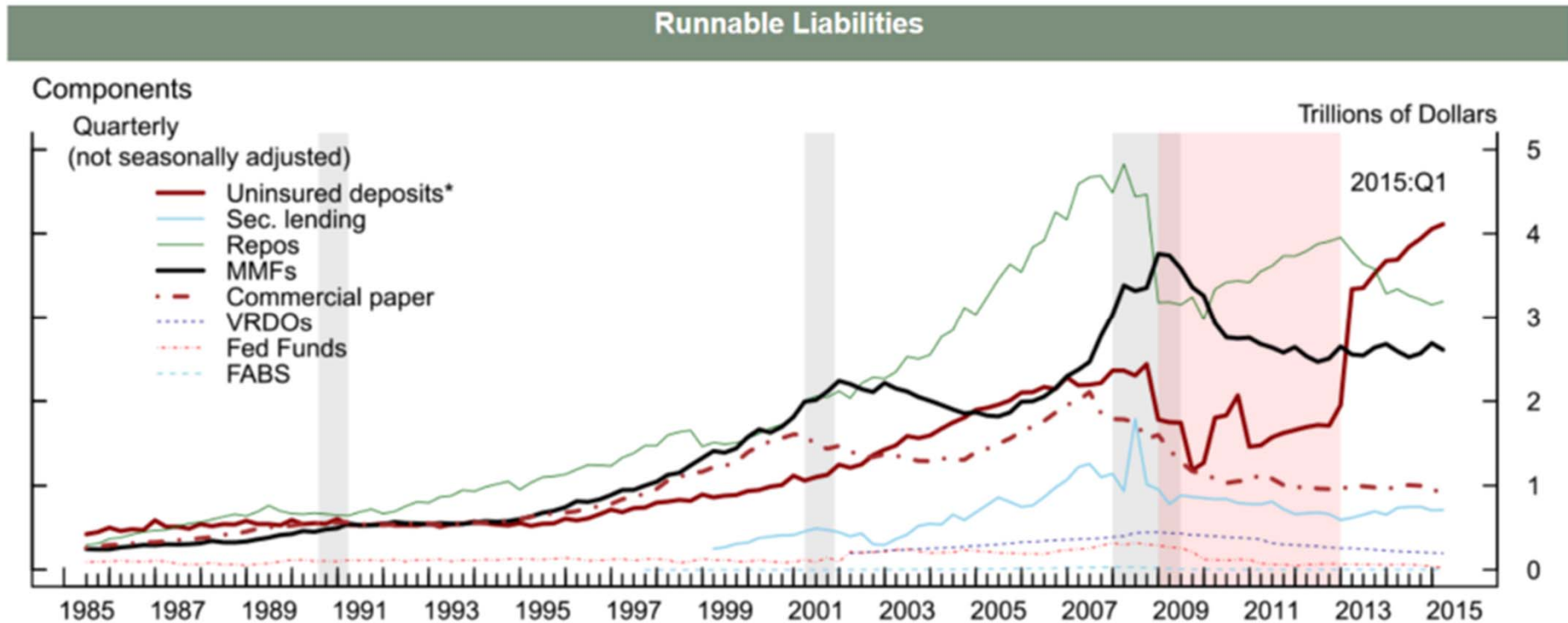


What Are Runnables?

Instrument	Source
1. Repos and Federal funds	Financial Accts., Call Report
2. Money market mutual funds	Financial Accounts
3. Uninsured bank deposits	Call Report
4. Securities lending	Risk Management Association
5. Commercial paper	Financial Accounts
6. Variable-rate demand obligations	SIFMA
7. Funding agreement-backed securities	Bloomberg



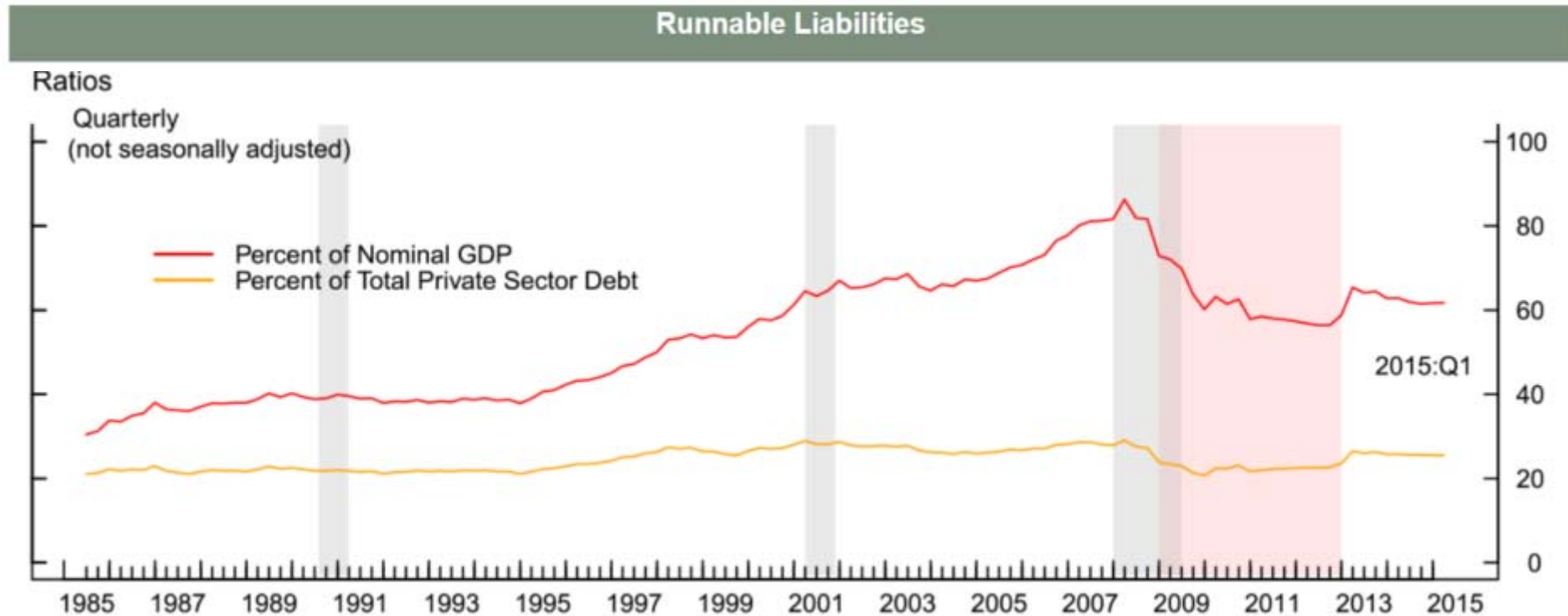
Runnable Liabilities



Source: Jack Bao, Josh David, and Song Han (2015). "The Runnables," FEDS Notes, September 3, 2015.



Runnable Liabilities



Source: Jack Bao, Josh David, and Song Han (2015). "The Runnables," FEDS Notes, September 3, 2015.



Future Data Improvements

- More detailed reports on money market funds and mutual funds from SEC
- Form PF – hedge funds and private equity funds from SEC
- Bilateral repo transactions pilot program (FSB)
- Improvements in securities lending data
- Improvements in derivatives data



Enhanced Financial Accounts

Launched August 28, 2015!

- Maintain basic framework
- More detail, dimensionality, and scope
 - Additional detail on financial instruments
 - Information on holdings and activities currently not well described
 - Higher frequency data, supplementary data, and data for lower levels of aggregation
 - Improved data dissemination and communication
- Joint work with other government agencies



Financial Accounts Guide



Financial Accounts Guide



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This interactive documentation serves as a guide to the data compiled and published as part of the "Financial Accounts of the United States" (Z.1) data release. The Z.1 includes flow of funds, balance sheet, and integrated macroeconomic account data. This comprehensive documentation system is designed to help a user understand the links between series and underlying source data by providing the capability to search or browse the vast amount of information underlying the Z.1.

The two options below offer different ways to view the structure of these accounts. Option 1 allows a user to search series mnemonics, or names, and descriptions. Expand the "Tips" to see the syntax that can be used to create different searches and filter search results. Option 2 displays a list of all tables published in the Z.1 data release and some international data submissions tables, linking the user to information associated with each table.

Related information

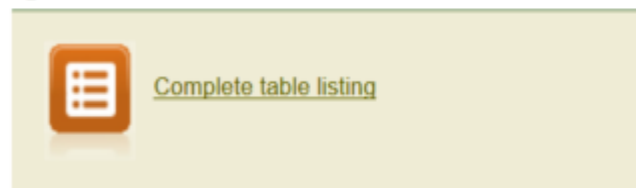
- [Z.1 Statistical Release](#)
- [Data Download Program](#)
- [FEDS Notes](#)

Option 1: Search

[Advanced search](#)

[+ Tips on how to search](#)

Option 2: Browse tables



<http://www.federalreserve.gov/apps/fof/>

Enhanced Financial Accounts (EFA)

The Enhanced Financial Accounts initiative is an ambitious and long-term effort to augment the *Financial Accounts of the United States* with a more detailed picture of financial intermediation and interconnections. As part of this initiative, we are providing supplementary information that offers finer detail, new types of activities, higher-frequency data, and more-disaggregated data, even if such data are not available for all sectors or easily incorporated into the existing structure of the *Financial Accounts*. To accomplish the ambitious goals of the EFA project over the coming years, we actively solicit feedback and suggestions from the users of the *Financial Accounts*, using the link to the right.

We welcome feedback

- Please submit questions, suggestions, or ideas for future EFA projects:

[Ask Us](#)

More Information about the EFA Initiative

[Enhanced Financial Accounts](#) -- FEDS Note by Josh Gallin and Paul Smith (August 2014)

[Launching the Enhanced Financial Accounts](#) -- FEDS Note by Paul Smith (August 2015)

[Off-Balance Sheet Items of Depository Institutions in the Enhanced Financial Accounts](#) -- FEDS Note by Ralf Meisenzahl (August 2015)

Preliminary EFA Projects

These projects are preliminary and subject to change, and are not currently incorporated into the structure of the *Financial Accounts*. They are intended to provide additional, supplemental information to the data included in the *Financial Accounts*.

[Depository Institutions: Consolidated Balance Sheet](#)

[Depository Institutions: Off-Balance-Sheet Items](#)

[Syndicated Loan Portfolios of Financial Institutions](#)



EFA Project - Depository Institutions: Off-Balance-Sheet Items

This table provides an overview of off-balance-sheet items of U.S.-Chartered Depository Institutions. Off-balance-sheet items are contingent assets or liabilities such as unused commitments, letters of credit, and derivatives. These items may expose institutions to credit risk, liquidity risk, or counterparty risk, which is not reflected on the sector's balance sheet reported on [table L.111](#) in the Financial Accounts. This additional information on U.S.-Chartered Depository Institutions aims to provide a more comprehensive picture of the activities and potential risks facing the sector. This information is reported on a consolidated basis, including the foreign operations of U.S.-chartered depository institutions, so it is not strictly comparable to the balance sheet data reported on [table L.111](#), which includes only U.S. operations. Rather, it is on the same basis as the consolidated balance sheet reported [here](#).

Tables

Depository Institutions: Off-Balance-Sheet Items: [PDF](#) | [HTML](#)

Historical Data

Depository Institutions: Off-Balance-Sheet Items: [CSV](#) | [HTML](#)

Documentation

Data on unused commitments and derivatives are from regulatory filings, Call Reports, schedule RC-L (Derivatives and Off-Balance-Sheet Items). Data before 2012:Q1 for savings institutions are compiled from regulatory reports filed with the Office of Thrift Supervision. The data are available beginning with 1990:Q1.

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[Ask Us](#)

Related Information

- [FEDS Note: Off-Balance Sheet Items of Depository Institutions in the Enhanced Financial Accounts](#)

