



# U.S. Financial Accounts: Uses and Improvements

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#### Household Net Worth

#### "Americans Are Richer and Behaving Responsibly for Once

They owe less on their mortgages, and their bank accounts are flush with cash. In the last year, unemployment dropped, stocks reached record highs, and gas prices plunged. Americans got richer, so what did we do to celebrate? We paid down our mortgages.

As the net worth of U.S. households rose 5.2 percent last year, to \$82.9 trillion, new Federal Reserve data show the value of outstanding mortgages fell slightly in the same period. Homeowners now own 54.5 percent of their real estate, up from less than 40 percent three years earlier. Meanwhile, most other kinds of debt are up only slightly. The Fed's measure of consumer credit rose \$218.4 billion last year, to \$3.3 trillion. The strongest growth in debt is confined to two areas—student loans and auto loans—which accounted for more than 80 percent of the rise."

Bloomberg Business, March 12, 2015



#### **Discussion Outline**

- History and scope
- Integrated macroeconomic accounts
- Uses of the Financial Accounts
  - 1. Household balance sheet
  - 2. Debt growth
  - 3. Nonbank financial institutions
- Recent improvements
  - 1. Pension entitlements
  - 2. Mortgage charge-offs
  - 3. Consumer credit detail
- Enhanced Financial Accounts





### History of FA

#### Tables first published

- Annual flow statistics: 1955
- Quarterly flow statistics: 1959 (Unadj.); 1962 (SA)
- Outstandings (levels) tables: early 1960s (A); early 1990s (Q)
- Balance sheets, reconciliation tables, and supplemental tables
- Integrated Macroeconomic Accounts: 2004

#### Availability

- Annual data: 1945-2014
- Quarterly data: 1952:Q4-2014:Q4
- Integrated accounts: 1960-2013 (A), 1960:Q1-2014:Q4 (Q)
- Z.1 published about 10 weeks following the end of a quarter



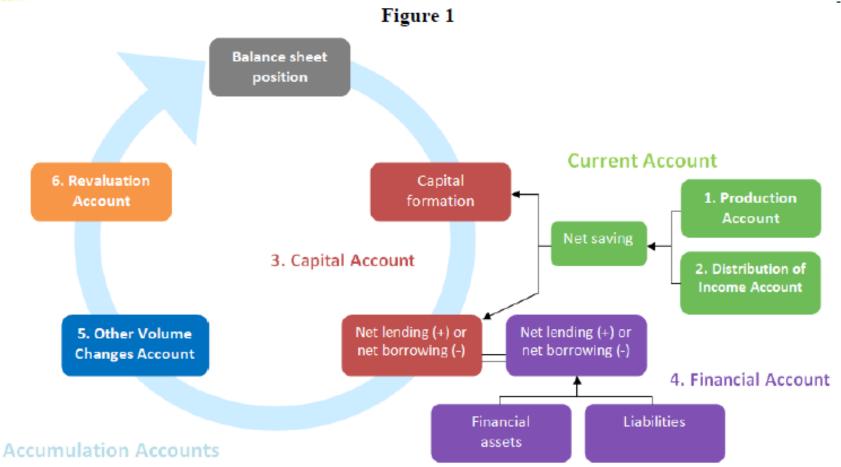


### History of Integrated Accounts in U.S.

- Joint between the Bureau of Economic Analysis (BEA) and the Federal Reserve Board (FRB)
- Based on SNA format; consistent with SNA2008
- First version released at NBER Conference April 2004 (annual data 1985-2002)
- Annual data for 1960-2013 and quarterly data for 1960q1-2014q4
- Tables at <a href="http://www.bea.gov/national/nipaweb/Ni\_FedBeaSna/Index.asp">http://www.bea.gov/national/nipaweb/Ni\_FedBeaSna/Index.asp</a>
  Data at <a href="http://federalreserve.gov/datadownload/default.htm">http://federalreserve.gov/datadownload/default.htm</a>
  Documentation (FOF Guide) at <a href="http://www.federalreserve.gov/apps/fof">http://www.federalreserve.gov/apps/fof</a>
  Articles
  - 1. Cagetti, Marco, Elizabeth Ball Holmquist, Lisa Lynn, Susan Hume McIntosh, and David Wasshausen (2012). "The Integrated Macroeconomic Accounts of the United States," Finance and Economics Discussion Series 2012-81. Board of Governors of the Federal Reserve System (U.S.).
  - 2. Teplin, Albert, Charles Mead, Brent Moulton, Rochelle Antoniewicz, Susan McIntosh, Michael Palumbo, and Genevieve Solomon (2005). "Integrated Macroeconomic Accounts for the United States: Draft SNA-USA," BEA Papers 0025. Bureau of Economic Analysis.

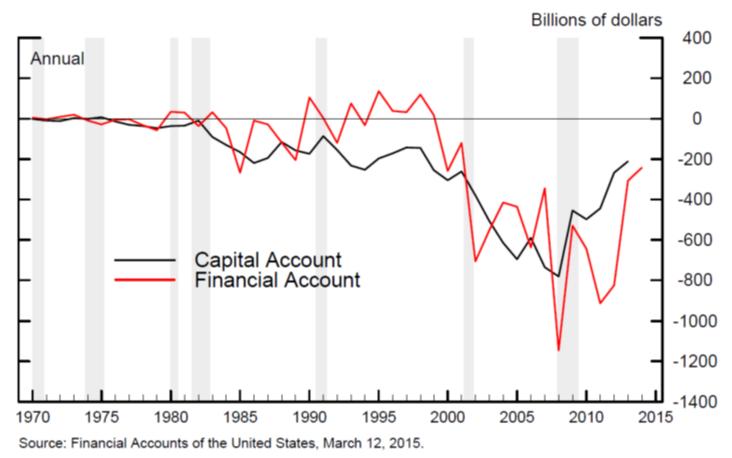


### Sequence of Accounts





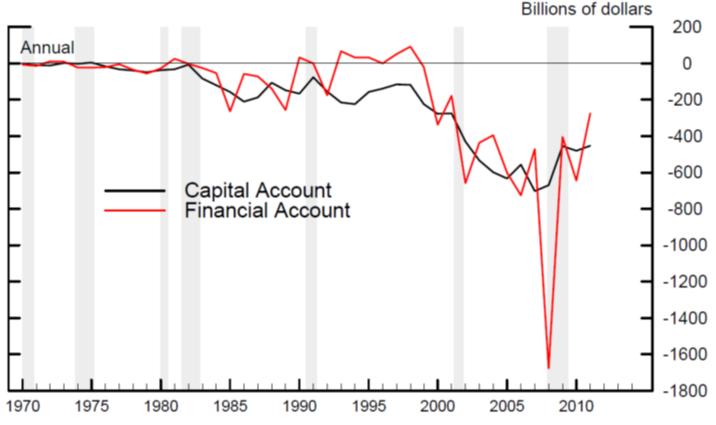
### Net Lending (+) or Net Borrowing(-)







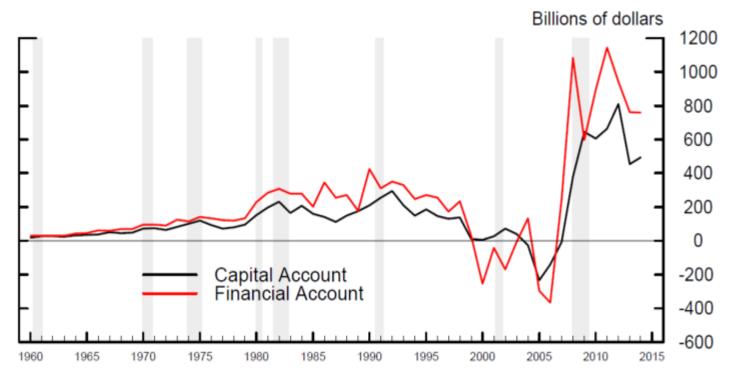
# Net Lending (+) or Net Borrowing(-): June 2012



Source: Financial Accounts of the United States, June 7, 2012.



# Net Lending(+) or Net Borrowing(-), by Households and Nonprofits

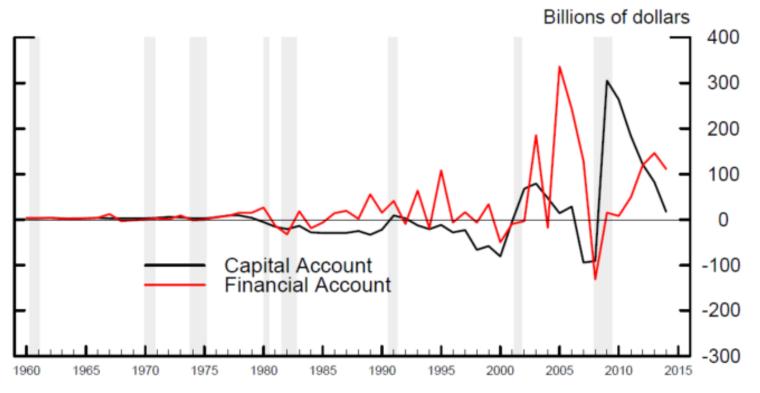


Source: Financial Accounts of the United States, March 12, 2015.





# Net Lending(+) or Net Borrowing(-), by Financial Corporations



Source: Financial Accounts of the United States, March 12, 2015.



# Project to Develop Financial Business Subsectors

- 22 financial subsectors in the Financial Accounts; balance sheet, transactions, revaluations, and OCVA (institution-based)
- Sectoral problems aligning with the current and capital accounts from BEA (industry-based)
- BEA has developed 5 subsectors with annual data beginning in 2001; NAICS was used throughout this period.
- Still in research stage. Hope to publish by end of year
- Will present at BEA Advisory meeting on May 8, 2015.



#### **BEA Financial Subsectors**

- Depository institutions: U.S.-chartered, foreign banking offices in U.S., and credit unions; we also include banks in U.S.-affiliated areas in FAs
- Insurance companies: property-casualty insurance companies and life insurance companies
- Pension funds: private, federal government, and state and local government plans
- Federal Reserve banks: similar to Monetary Authority sector in FAs; does not include Federal Reserve Board
- Remaining non-depository institutions





#### Uses of the Financial Accounts

- Measure the acquisition of physical and financial assets throughout the U.S. economy
- Track the sources of funds used to acquire the assets
- Record the net volume of transactions in financial instruments
- Provide a means of analyzing the development of instruments and the behavior of sectors over business cycles
- Record the role of financial intermediaries in transferring funds between sectors
- Only source to provide household sector balance sheet quarterly



### Projection

- Household net worth important to forecast of consumption component of GDP; life-cycle theory of consumption
- Forecast based on expected movements in real estate, equity markets, and the personal savings rate
- Simplified framework rather than trying to forecast a condensed version of the entire Financial Accounts



#### Household Net Worth

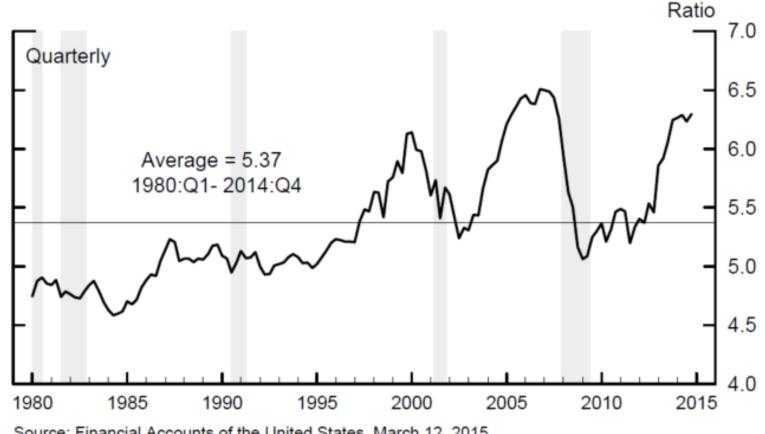
		2008	2009	2010	2011	2012	2013	2014
	Important indices							
1	Total stock market index	-38.6	25.7	15.3	-0.9	13.9	30.9	10.4
2	House price index	-16.1	-2.8	-3.4	-2.1	8.6	11.6	4.5
3	Total net worth	56,509	58,251	62,448	63,668	69,509	78,844	82,912
4	Real estate	25,918	24,266	24,068	24,221	26,292	29,466	30,991
5	Corporate equity	10,266	13,132	15,445	14,906	17,018	22,031	23,725
6	Other net wealth	20,325	20,852	22,934	24,541	26,199	27,348	28,195
7	Change in net worth	-10,241	1,742	4,197	1,220	5,841	9,335	4,068
8	Household saving	1,382	679	1,006	1,310	1,185	1,109	1,152
9	Capital gains	-11,627	587	2,326	-195	4,421	8,217	2,851
10	Real estate	-4,487	-1,660	-188	148	2,032	3,054	1,393
11	Corporate equity	-6,803	2,793	2,423	-245	2,376	4,896	1,665
12	Other net wealth	-337	-547	91	-97	13	267	-207
13	Other volume changes	26	461	860	117	239	40	86

Source: Financial Accounts of the United States, March 12, 2015.





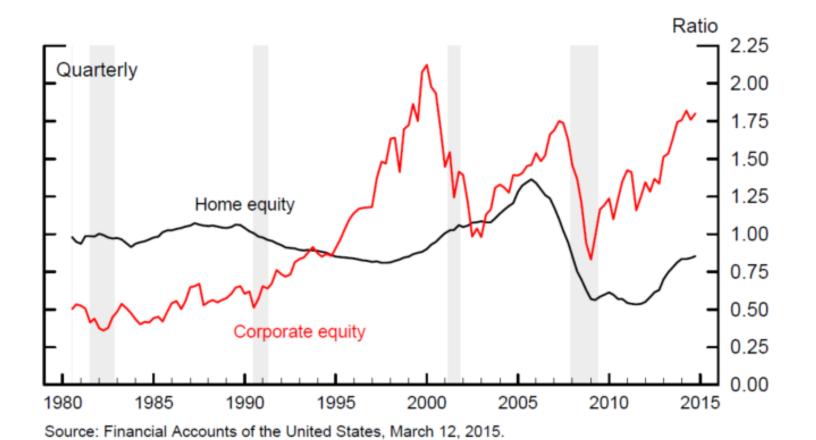
# Household Net Worth Relative to Disposable Personal Income



Source: Financial Accounts of the United States, March 12, 2015.



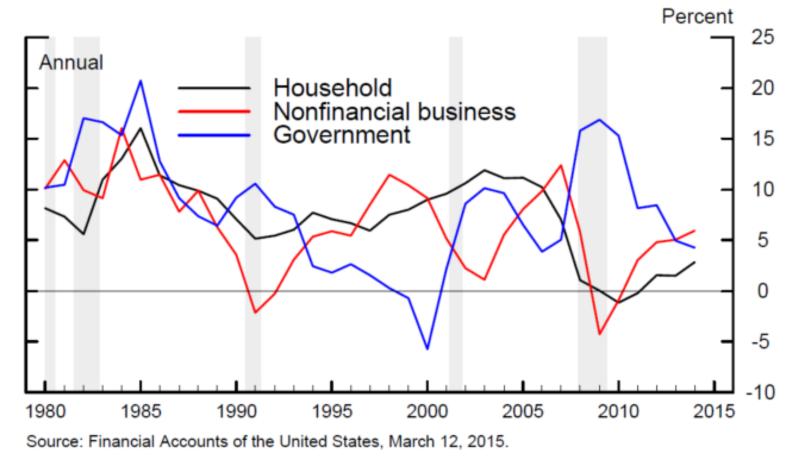
# Corporate and Home Equity Relative to Disposable Personal Income





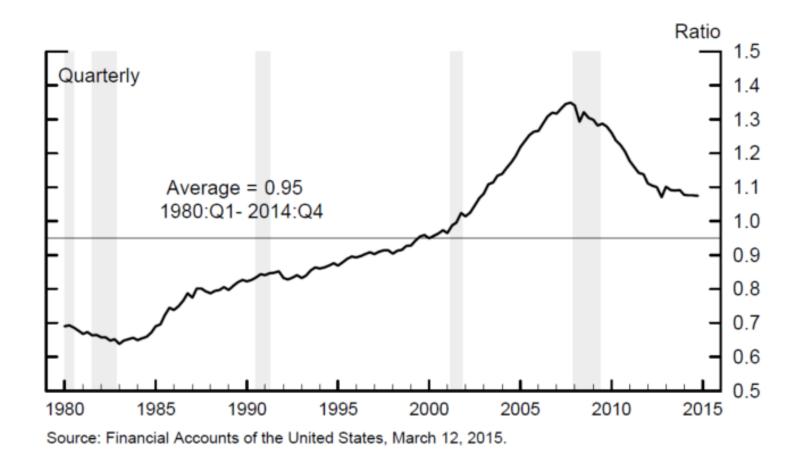


# Debt Growth of Domestic Nonfinancial Sectors



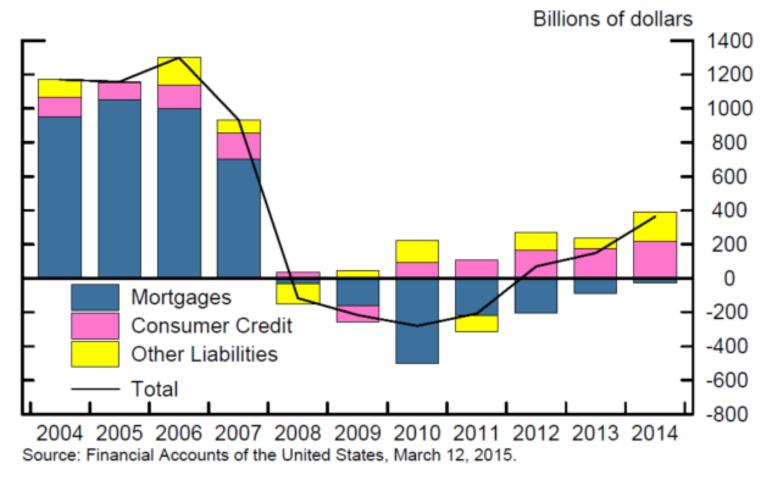


# Household Liabilities Relative to Disposable Personal Income



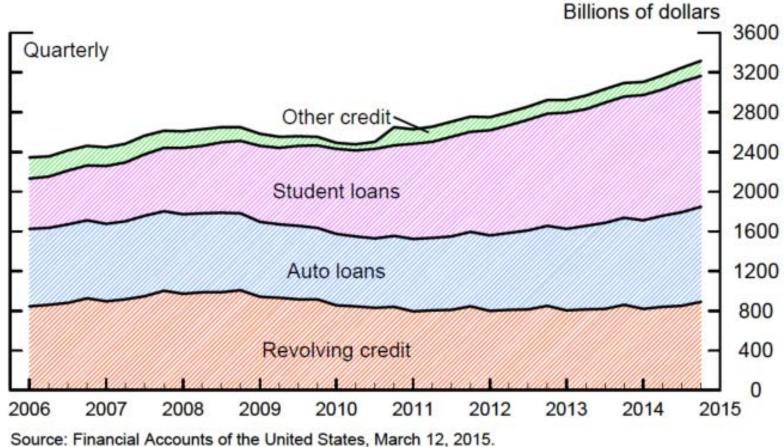


### Changes in Household Liabilities





#### Consumer Credit





#### Nonbank Financial Sector

- Vice chairman Stanley Fischer speech on 3/27/2015 on "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
- Reforms: Financial Stability Oversight council (FSOC), SEC new rules for money market mutual funds, securitizers must retain at least 5% of the credit risk of assets
- FSOC designated 4 U.S. nonbank financial institutions as systemically important; subject to consolidated supervision by the FRB
- Data issues: hedge funds, derivative market, limited information on leverage and maturity transformation

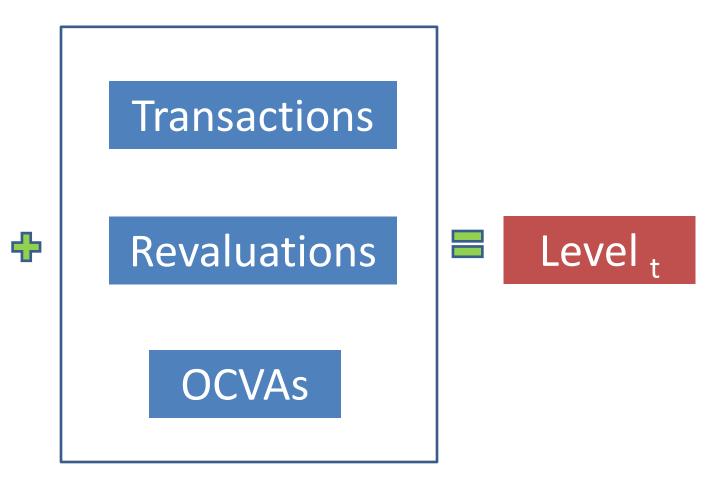


### Recent Improvements

- Online Guide: release highlights, FEDS notes, international data submissions
- Reorganization of tables, more supplemental tables and memo items
- Close gaps with international standards
- Continued collaboration with other statistical agencies
- Splitting flow into transaction, revaluation, and other volume changes.
- Pension funds on an accrual basis



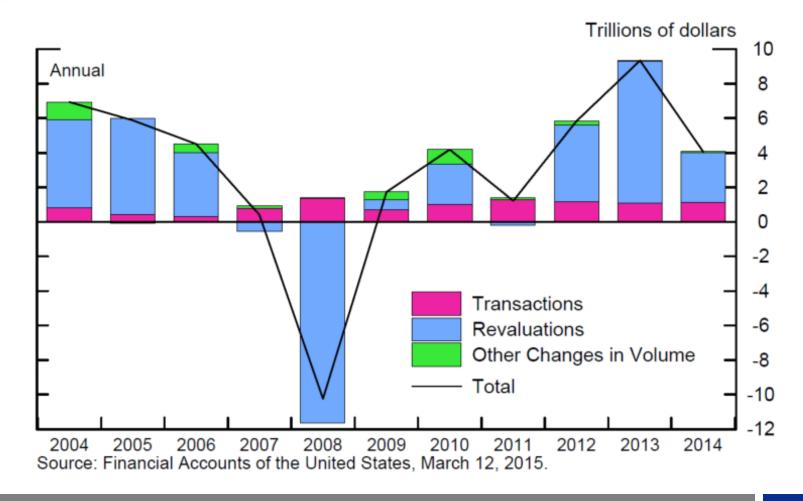
#### **Economic Flows**



Level <sub>t-1</sub>



# Changes in Household and Nonprofit Net Worth







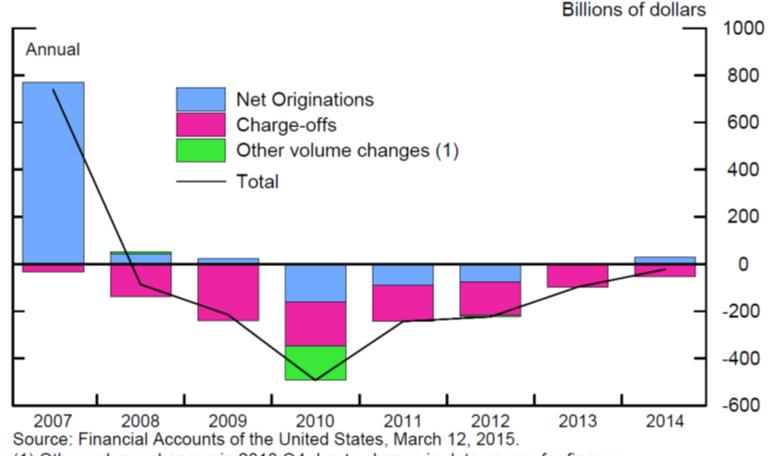
### Home Mortgage Charge-offs

- 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





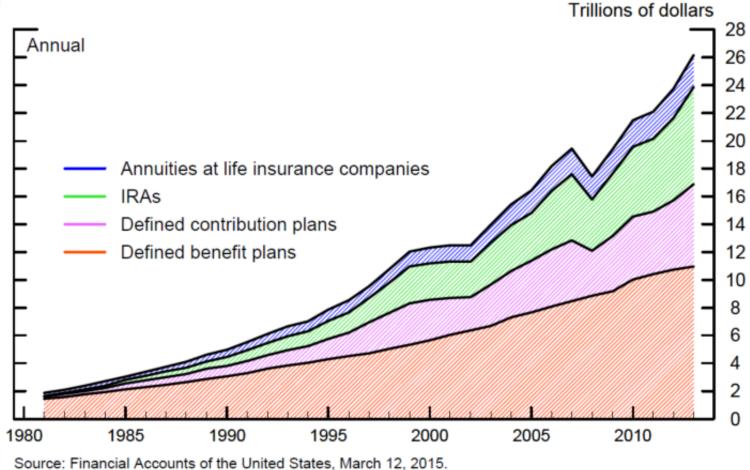
### Change in Residential Mortgage Debt



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

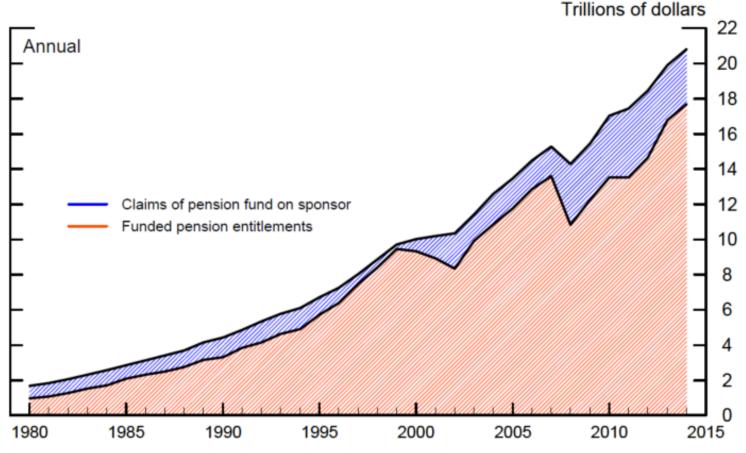


#### Household Retirement Assets





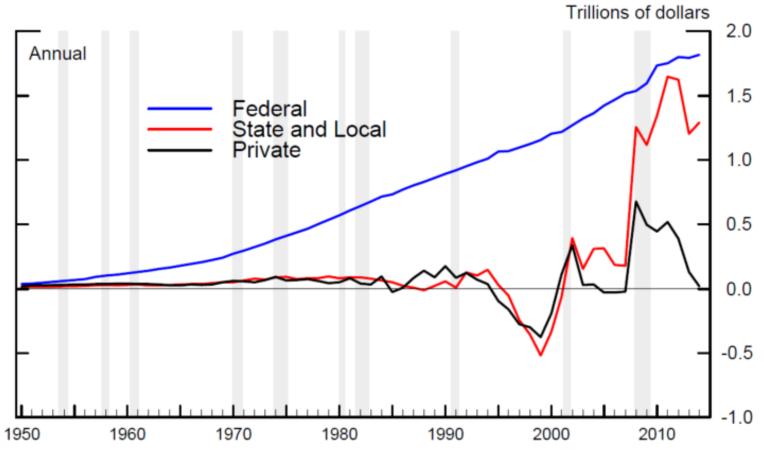
# Pension Entitlements of the Household Sector



Source: Financial Accounts of the United States, March 12, 2015.



# Claims of Pension Funds on Sponsors



Source: Financial Accounts of the United States, March 12, 2015.





#### **Enhanced Financial Accounts**

- 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
- FEDS Note: "Enhanced Financial Accounts," by Josh Gallin and Paul Smith, August 1, 2014



# Additional Detail on Financial Instruments

- Treasury securities split into bills and other
- Corporate bonds split into structured products and other; also holdings by domestic and foreign
- Split federal funds from repurchase agreements
- Detail on consumer credit
- Credit-risk ratings of fixed-income securities
- Social security table
- Different measures of government debt
- 529 educational plans



# Holdings and Activities Currently Not Well Described

- Securities lending and the investment of cash collateral pools
- Hedge funds and other private funds
- Nonprofit organizations
- Holding companies other than those that own a depository institution
- Derivatives credit default and interest-rate swaps
- Employee stock options
- Net national wealth table



# Data at Higher Frequencies and Lower Levels of Aggregation

- Monthly money-market mutual fund data
- Weekly commercial paper data
- Mutual fund data by type of fund
- Nonfinancial corporate business sector by industry
- Rest of world borrowing and lending by region
- Distributional work using the Survey of Consumer Finances



# Improved Data Dissemination and Communication

- Online Guide
- Release highlights
- FEDS notes
- International data submissions with SDMX
- New website being developed
- Enhanced data download capabilities
- Possible conference in 2016 with users on the EFA

