US Flow of Funds

Yardeni Research, Inc.

December 7, 2017

Dr. Edward Yardeni
516-972-7683
eyardeni@yardeni.com

Debbie Johnson
480-663-1333
djohnson@yardeni.com

Mali Quintana
480-664-1333
aquintana@yardeni.com

Please visit our sites at
www.yardeni.com
blog.yardeni.com

thinking outside the box
## Table Of Contents

- Total Debt 1
- Nonfinancial Debt 2-3
- Financial Debt 4-6
- Total Borrowing 7
- Nonfinancial Borrowing 8
- Borrowing 9
- Nonfinancial Borrowing 10
- Corporate Finance 11-12
- New Issues of Corporate Securities 13
- Corporate Finance 14-20
- Mortgage Finance 21-22
- Consumer Finance 23-24
- US Households: Assets 25
- US Household Ratios 26
- US Households: Real Estate & Debt 27-29
- Public Finance 30-34
- Rest of World 35
- International Finance 36
Figure 1.

Total Debt

DEBT
(trillion dollars, ratio scale)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 2.

US DEBT
(as a percent of nominal GDP)

Debt/GDP

Source: Federal Reserve Board Financial Accounts of the United States.
Nonfinancial Debt

Figure 3.

US DEBT OF NONFINANCIAL DOMESTIC SECTORS
(trillion dollars, nsa)

Nonfinancial Debt
- Total* (48.4)
- Total Less Treasury (32.1)
- Treasury (16.3)

* Includes mortgage, consumer, business, and US Treasury debt.

Source: Federal Reserve Board Financial Accounts of the United States.

Figure 4.

US DEBT OF NONFINANCIAL DOMESTIC SECTORS
(as a percent of nominal GDP)

Nonfinancial Debt / GDP
- Total*
- Total Less Treasury
- Treasury

* Includes mortgage, consumer, business, and government debt.

Source: Federal Reserve Board Financial Accounts of the United States.
Figure 5.

DEBT OF NONFINANCIAL DOMESTIC SECTORS
(trillion dollars, nsa, ratio scale)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 6.

DEBT OF NONFINANCIAL DOMESTIC SECTORS
(as a percent of nominal GDP)

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 7.

DEBT OF FINANCIAL SECTORS
(as a percent of total debt)

Source: Federal Reserve Board.

Figure 8.

DEBT OF FINANCIAL SECTORS
(trillion dollars, nsa, ratio scale)

* Sum of government sponsored enterprises, agency & GSE-backed mortgage pools, and ABS issuers.

Source: Flow of Funds.
Figure 9.

DEBT OF FINANCIAL SECTORS
(percent)

Total Securitized Debt* / Financial Debt (59.9)

* Sum of GSE, agency & GSE-backed mortgage pools, and ABS issuers.
Source: Flow of Funds.

Figure 10.

CREDIT MARKET DEBT OWED BY FINANCIAL SECTORS*
(trillion dollars, nsa, ratio scale)

- Agency & GSE-backed Mortgage Pool Securities (2.1)
- GSE Issues (6.7)
- Corporate Bonds Issued by Financial Sector (4.6)

* As a result of two accounting rules, FAS 166 and 167, the assets and liabilities of some special purpose entities (SPEs) have been moved onto the balance sheets of the US chartered commercial bank, government-sponsored enterprise finance company sectors. The consolidated assets and liabilities were removed from the agency and GSE-backed mortgage pool sector and the issuers of asset-backed securities (ABS) sector.
Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 11.

CORPORATE BONDS OUTSTANDING
(trillion dollars, nsa)

Financial Sector

- ABS Issuers (1.1)
- Commercial Banking (0.2)

Source: Federal Reserve Board, Flow of Funds Accounts.
**Total Borrowing**

*Figure 12.*

BORROWING*
(trillion dollars)

Debt (y/y change)
- **Total (2.4)**
- **Nonfinancial (1.8)**
- **Financial (0.3)**

* Yearly change in debt.

Source: Federal Reserve Board, Flow of Funds Accounts.

---

*Figure 13.*

BORROWING*
(as a percent of nominal GDP)

Debt (y/y change)
- **Total**
- **Nonfinancial**
- **Financial**

* Yearly change in debt divided by 4-quarter moving average of nominal GDP.

Source: Federal Reserve Board, Flow of Funds Accounts.
**Figure 14.**

BORROWING OF NONFINANCIAL DOMESTIC SECTORS*

(Trillion dollars)

- **Debt (y/y change)**
  - Total (1.8)
  - Nonfederal** (1.2)
  - US Treasury (0.6)

* Yearly change in debt.
** Nonfederal equals Total minus US Treasury.
Source: Federal Reserve Board, Flow of Funds Accounts.

---

**Figure 15.**

BORROWING OF NONFINANCIAL DOMESTIC SECTORS*

(As a percent of nominal GDP)

- **Debt (y/y change)**
  - US Treasury (3.1)
  - Nonfederal** (6.2)

* Yearly change in debt divided by 4-quarter moving average of nominal GDP.
** Nonfederal equals total nonfinancial minus US Treasury.
Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 16.
BORROWING BY NONFINANCIAL SECTORS
(billion dollars, 4-quarter sum)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 17.
BORROWING BY FINANCIAL SECTORS
(billion dollars, 4-quarter sum)

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 18.

BORROWING BY NONFINANCIAL SECTORS
(trillion dollars, saar)

- Households Plus Business (1.3)
- US Treasury (1.7)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 19.

BORROWING BY NONFINANCIAL SECTORS
(as a percent of nominal GDP)

- Households Plus Business / GDP
- US Treasury / GDP

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 20.

**CORPORATE CASH FLOW**
(ratio scale, billion dollars, saar)

- Corporate Cash Flow* (2375.1)
- Economic Depreciation** (1635.3)
- Tax-Reported Depreciation*** (1537.5)

* After-tax retained earnings plus tax-reported depreciation.
** Corporate capital consumption allowances.
*** Corporate capital consumption allowances with capital consumption adjustment.

Source: US Department of Commerce, Bureau of Economic Analysis.

Figure 21.

**INVENTORY VALUATION ADJUSTMENT***
(billion dollars, saar)

**CAPITAL CONSUMPTION ADJUSTMENT***
(billion dollars, saar)

* These two adjustments restate the historical cost basis used in profits tax accounting for inventory withdrawals and depreciation to the current cost measures used in GDP.

Source: Bureau of Economic Analysis.
Figure 22.
NONFINANCIAL CORPORATIONS: CASH FLOW*
(billion dollars, saar)

* After-tax operating retained earnings plus tax-return-based depreciation.
Source: US Department of Commerce, Bureau of Economic Analysis.

Figure 23.
FINANCIAL CORPORATIONS: CASH FLOW*
(billion dollars, saar)

* Corporate cash flow minus nonfinancial corporate cash flow.
Source: US Department of Commerce, Bureau of Economic Analysis.
Figure 24.

NEW US CORPORATE SECURITY ISSUES (billion dollars, 12-month sum)

Bonds + Stocks

Bonds

NEW US CORPORATE SECURITY ISSUES (billion)

Stocks

Source: Federal Reserve Board.
Figure 25.

CORPORATE NET NEW ISSUES
(billion dollars, 4-quarter sum)

Nonfinancial & Financial Corporate Issues
- Bonds & Equities (246.1)

Source: Federal Reserve Board, Flow of Funds Accounts.

yardeni.com

Figure 26.

CORPORATE NET NEW ISSUES
(billion dollars, 4-quarter sum)

Nonfinancial & Financial Corporate Issues
- Bonds (286.3)
- Equities (-40.2)

Source: Federal Reserve Board, Flow of Funds Accounts.

yardeni.com
Figure 27.

CORPORATE NET ISSUES & BANK BORROWING: NONFINANCIAL CORPORATIONS
(billion dollars, 4-quarter sum)

Nonfinancial Corporations
- Bonds (232.3)
- Equities (-387.9)
- Bank Loans (15.6)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 28.

CORPORATE NET NEW ISSUES: FINANCIAL CORPORATIONS
(billion dollars, 4-quarter sum)

Financial Corporations
- Total Bonds (54.0)
- ABS Bonds* (-69.0)
- Equities (347.7)

* ABS = Asset-backed securities.

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 29.

**CORPORATE EQUITIES NET ISSUES** (billion dollars, 4-quarter sum)

* Equity Net Issues
  - US Nonfinancial & Financial Issues
  - Foreign Issues*

* Net purchases of foreign issues by US residents.
Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 30.

**CORPORATE EQUITIES: NET PURCHASES BY HOUSEHOLDS*** (billion dollars, 4-quarter sum)

Households' Equity Purchases:
Directly Held by Households (81.2)

* Includes not only households, but also nonprofit organizations, as well as domestic hedge funds, private equity funds, and personal trusts.
Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 31.

NET PURCHASES OF US CORPORATE EQUITIES: PENSION FUNDS
(billion dollars, 4-quarter sum)

Pension Funds
- Private (-122.2)
- State & Local (-126.5)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 32.

NET PURCHASES OF US CORPORATE EQUITIES: LIFE INSURANCE COMPANIES
(billion dollars, 4-quarter sum)

Life Insurance

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 33.

NET PURCHASES OF CORPORATE AND FOREIGN BONDS
(billion dollars, 4-quarter sum)

- Rest of the World (354.3)
- Institutional Investors* (110.4)

* Life insurance companies and private pension funds.
Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 34.

NET PURCHASES OF CORPORATE AND FOREIGN BONDS
(billion dollars, 4-quarter sum)

- Funding Corporations (1.8)
- Brokers and Dealers (5.5)

Source: Federal Reserve Board, Flow of Funds Accounts.
**Figure 35.**

Nonfinancial Corporations: Total Liquid Assets

(billion dollars, ratio scale, nsa)

Source: Federal Reserve Board, Flow of Funds Accounts.

**Figure 36.**

Nonfinancial Corporations Debt

(as a ratio of nonfinancial corporate business cash flow*)

* Profits before tax ex profit tax accruals and dividends plus capital consumption adjustment and depreciation charges plus foreign earnings retained abroad and inventory valuation adjustment.

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 37.

NONFINANCIAL CORPORATIONS: LIQUID ASSETS / SHORT-TERM DEBT
(percent)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 38.

NONFINANCIAL CORPORATIONS: SHORT-TERM DEBT / CREDIT MARKET DEBT
(percent)

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 39.

HOME MORTGAGE BORROWING
(billion dollars, 4-quarter sum)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 40.

HOME MORTGAGE LENDING
(billion dollars, 4-quarter sum)

* ABS = Asset-Backed Securities.
** GSE = Government Sponsored Enterprises including FNMA.

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 41.

COMMERCIAL MORTGAGE LENDING
(billion dollars, 4-quarter sum)

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 42.
CONSUMER CREDIT*
(billion dollars, 12-month change)

Total** (200.0)

* Includes home equity loans but not auto leases.
** From 1990 on includes noninstallment credit.
Source: Board of Governors of the Federal Reserve System.

Figure 43.
CONSUMER CREDIT: REVOLVING CREDIT PER HOUSEHOLD
(thousand dollars, 12-month change)

Source: Board of Governors of the Federal Reserve System.
CONSUMER CREDIT
(as a percent of Disposable Personal Income)

- Consumer Credit (22.9)
- Includes auto leases** (24.1)
- Total includes auto leases and home equity loans (26.4)

* From 1990 on includes noninstallment credit.
** At finance company subsidiaries of bank holding companies, but not of retailers and banks.
Source: Board of Governors of the Federal Reserve System.

HOME EQUITY LOANS
(billion dollars, sa)

- Total Home Equity Loans* (579.0)
- US Chartered Depository Institutions (quarterly) (467.8)
- At Commercial Banks (weekly) (379.1)

* Loans made under home equity lines of credit and home equity loans secured by junior liens. Excludes home equity loans held by mortgage companies and individuals.
Source: Board of Governors of the Federal Reserve System.
US Households: Assets

Figure 46.

US HOUSEHOLDS: NET WORTH, ASSETS, & LIABILITIES
(trillion dollars, ratio scale)

Source: Federal Reserve Board Financial Accounts of the United States.

Figure 47.

US HOUSEHOLDS: SELECTED ASSETS
(trillion dollars)

Source: Federal Reserve Board Financial Accounts of the United States.
US Household Ratios

Figure 48.
US HOUSEHOLDS: NET WORTH
(as a ratio of disposable personal income)

Net Worth (6.7)

Source: Federal Reserve Board Financial Accounts of the United States and Bureau of Economic Analysis.

Figure 49.
MEASURES OF CONSUMER LIQUIDITY
(as a percent of disposable personal income)

Consumer Credit Plus Auto Leases Plus Home Equity Loans at Banks (30.2)
Consumer Credit Plus Auto Leases (27.6)
Consumer Credit (26.2)

Source: Board of Governors of the Federal Reserve System.
**HOUSEHOLD REAL ESTATE VALUE & HOME MORTGAGES**
(trillion dollars, nsa, ratio scale)

- **Household Real Estate***
- **Owners' Equity** ****
- **Home Mortgages**

**Source:** Federal Reserve Board Financial Accounts of the United States.

---

**HOUSEHOLD MORTGAGE DEBT**
(as a percent of value of household real estate***)

**Source:** Federal Reserve Board Flow of Funds Accounts.

---

* Total market value of real estate held by households. All types of owner-occupied housing including farm houses and mobile homes, as well as second homes that are not rented, vacant homes for sale, and vacant land.

** Value of household real estate minus home mortgages.

---

* Home mortgages plus owners' equity in household real estate.

---


Yardeni Research, Inc.

www.yardeni.com
**US Households: Real Estate & Debt**

**Figure 52.**

US HOUSEHOLDS: HOME MORTGAGE DEBT*  
(as a percent of total liabilities)

*Includes home equity loans and second mortgages.  
Source: Federal Reserve Board Financial Accounts of the United States.

**Figure 53.**

REAL ESTATE  
(trillion dollars, nsa)

- Owners' Equity in Household Real Estate (14.1)  
- Home Mortgages* (10.0)

OWNERS' EQUITY  
(as a percent of household real estate)

*Includes home equity loans and second mortgages.  
Source: Federal Reserve Board Flow of Funds Accounts.
As a ratio of disposable personal income excluding personal current transfer payments and other labor income

Figure 54.
MARKET VALUE OWNER-OCCUPIED HOUSEHOLD REAL ESTATE

As a ratio of disposable personal income

Figure 55.
HOME MORTGAGES OUTSTANDING*

As a ratio of disposable personal income excluding personal current transfer payments and other labor income

* Includes home equity loans and second mortgages.
Source: Federal Reserve Board Flow of Funds Accounts and US Department of Commerce, Bureau of Economic Analysis.
Figure 56.

TOTAL PUBLIC DEBT OUTSTANDING (trillion dollars, nsa)

- Statutory Debt Limit
- Subject to Debt Limit
- Publicly Held Treasury Securities Outstanding
- Debt of Nonfinancial Domestic Sectors: US Treasury Debt


Figure 57.

US FEDERAL GOVERNMENT BUDGET BALANCE (billion dollars, 12-month sum)

Source: US Treasury Department.
Public Finance

Figure 58.

US FEDERAL GOVERNMENT OUTLAYS & RECEIPTS
(trillion dollars, 12-month sum, ratio scale)

Outlays (4.0)  
Receipts (3.3)

Source: US Treasury Department.

Figure 59.

US FEDERAL GOVERNMENT EXPENDITURES & RECEIPTS
(as a percent of nominal GDP)

Expenditures (21.7)  
Receipts (18.5)

Note: Shaded areas denote recessions according to the National Bureau of Economic Research.  
Source: US Department of Commerce, Bureau of Economic Analysis.
Source: US Treasury Department, Summary of Receipts by Source, and Outlays by Function of the US Government, Table 9.
US TREASURY SECURITIES
(billion dollars, 4-quarter sum)

Net Purchases:
- Household Sector (-29.6)
- Rest of the World (345.0)

Source: Federal Reserve Board, Flow of Funds Accounts.

Figure 62.

***** Chart Not Available *****

Task: FOFTREAS1_BB

KEEP command attempted on missing data

12-07-2017 - 12:10:49
**Figure 63.**

**NET ISSUES OF MUNICIPAL SECURITIES**
(billion dollars, 4-quarter sum)

State & Local Governments (-32.8)

Source: Federal Reserve Board, Flow of Funds Accounts.

**Figure 64.**

**STATE & LOCAL GOVERNMENT EMPLOYEE RETIREMENT FUNDS**
(billion dollars, 4-quarter sum)

Net Acquisition of Financial Assets (224.8)

Source: Federal Reserve Board, Flow of Funds Accounts.
**Figure 65.**

REST OF THE WORLD
(billion dollars, saar)

- **Foreign Direct Investment in US (305.1)**
- **US Direct Investment Abroad (448.3)**

Source: Federal Reserve Board, Flow of Funds Accounts.

---

**Figure 66.**

REST OF THE WORLD
(billion dollars, 4-quarter sum, saar)

- **Foreign Direct Investment in US (284.4)**
- **US Direct Investment Abroad (384.7)**

Source: Federal Reserve Board, Flow of Funds Accounts.
Figure 67.

**US CAPITAL INFLOWS**
(billion dollars)

US Treasury Bills, Notes, & Bonds
Purchased by Foreigners
(12-month sum) (113.9)

Source: US Treasury.

Figure 68.

**US CAPITAL INFLOWS**
(12-month sum, billion dollars)

US Treasuries Purchased by Foreigners
- **Notes & Bonds** (142.0)
- **Bills** (-28.1)

Source: US Treasury.