4.1.1 Change in Real Gross Domestic Product

As Of: 2013 Q4

Source: BEA, Haver Analytics

Note: Annual changes are Q4/Q4.
4.1.2 Change in Real Personal Consumption Expenditures

As Of: 2013 Q4

Percent

Source: BEA, Haver Analytics

Note: Annual changes are Q4/Q4.
4.1.3 Private Housing Starts

Source: Census Bureau, Haver Analytics

Note: Seasonally adjusted at an annualized rate. Gray bar signifies NBER recession.
4.1.4 Net Change in Nonfarm Payroll Employment

Thousands of Jobs

As Of: Mar-2014

Thousands of Jobs

Monthly Change

3-Month Moving Average

Source: BLS, Haver Analytics

Note: Gray bar signifies NBER recession.
As Of: Mar-2014

Percent

Source: BLS, Haver Analytics  Note: Gray bars signify NBER recessions.
4.1.6 Labor Force Participation Rate

Source: BLS, Haver Analytics

Note: Gray bars signify NBER recessions.
4.1.7 Long-Term Unemployment

Source: BLS, Haver Analytics

Note: Long-term unemployment as a percent of total unemployment. Gray bars signify NBER recessions.
4.2.1 Debt to Assets for Nonfinancial Corporations

As Of: 2013 Q4

Source: Flow of Funds, Haver Analytics

Note: Gray bars signify NBER recessions.
4.2.2 Bank Business Lending Standards and Demand

As Of: Jan-2014

Reporting Stronger Demand from Large and Medium-Sized Firms

Reporting Tighter Standards for Large and Medium-Sized Firms

Source: SLOOS, Haver Analytics

Note: Gray bars signify NBER recessions.
4.2.3 Nonfinancial Corporate Bond Default Rate

As Of: 2013 Q4

Percent

Source: Moody's Investors Service

Note: Default rates are annual rates calculated on a quarterly basis. Gray bars signify NBER recessions.
4.2.4 Noncurrent Commercial and Industrial Loans

As Of: 2013 Q4

Percent

Percent

Source: FDIC, Haver Analytics

Note: Percent of total C&I loans. Gray bars signify NBER recessions.
As Of: 2013 Q4  
Percent of Total Assets  

- Accounts Receivable  
- Other Assets  
- Cash and Securities  
- Nonresidential Real Estate  
- Residential Real Estate  

Source: Flow of Funds, Haver Analytics
4.2.6 Net Borrowing by Nonfinancial Noncorporate Businesses

Billions of US$

As Of: 2013 Q4

Billions of US$

Source: Federal Reserve, Haver Analytics

Note: Seasonally adjusted at an annual rate. Gray bars signify NBER recessions.
4.2.7 Bank Business Lending Standards and Demand

As Of: Jan-2014

- Reporting Stronger Demand from Small Firms
- Reporting Tighter Standards for Small Firms

Source: SLOOS, Haver Analytics

Note: Data includes firms with annual sales of less than $50 million. Gray bars signify NBER recessions.
4.2.8 Small Businesses' Difficulty Obtaining Credit

As Of: 2014 Q1

Net Percent Reporting Credit Harder to Obtain

Source: NFIB, Haver Analytics

Note: Percent of firms reporting credit was harder to obtain minus those reporting easier to get over the past three months. Gray bars signify NBER recessions.
4.2.9 Household Debt as a Percent of Disposable Personal Income

As Of: 2013 Q4

Percent

Source: BEA, Flow of Funds, Haver Analytics

Note: Other Household Debt includes debts of both households and nonprofits.
4.2.10 Private Nonfinancial Debt

Percent of Nominal GDP  As Of: 2013 Q4  Percent of Nominal GDP

Source: BEA, Flow of Funds, Haver Analytics

Note: Other Household Debt includes debts of both households and nonprofits.
4.2.11 Household Debt Service Ratio

As Of: 2013 Q4

Note: Ratio of debt service payments to disposable personal income. Seasonally adjusted. Gray bars signify NBER recessions.
4.2.12 Share of Household Debt by Delinquency Status

Percent

As Of: 2013 Q4

Percent

<table>
<thead>
<tr>
<th>Percent</th>
<th>Derogatory</th>
<th>120+ Days Late</th>
<th>90 Days Late</th>
<th>60 Days Late</th>
<th>30 Days Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>120+ Days Late</td>
<td>90 Days Late</td>
<td>60 Days Late</td>
<td>30 Days Late</td>
<td></td>
</tr>
</tbody>
</table>

Note: Derogatory loans are loans for which there are reports of a repossession, charge off to bad debt, or foreclosure.
4.2.13 Household and Nonprofit Balance Sheets

As Of: 2013 Q4

Trillions of US$

Net Worth

Other Assets primarily include life insurance reserves, pension entitlements, and noncorporate equities. Other Debt primarily include security credit, trade payables, and unpaid life insurance premiums.

Source: Flow of Funds, Haver Analytics
4.2.14 Owners’ Equity as Share of Household Real Estate

As Of: 2013 Q4

Source: Flow of Funds, Haver Analytics

Note: Gray bars signify NBER recessions.
4.2.15 Components of Consumer Credit

As Of: 2013 Q4

Billions of US$


Credit Card Debt

Auto Loans

Other Household Debt

Student Loans

Source: FRBNY Consumer Credit Panel/Equifax, Haver Analytics

Note: Gray bar signifies NBER recession.
4.2.16 Applications for Credit

Source: FRBNY Consumer Credit Panel/Equifax, Haver Analytics

Note: Number of Equifax inquiries within 6 months. Gray bars signify NBER recessions.
4.2.17 90+ Day Delinquency Rate by Loan Type

As Of: 2013 Q4

Percent

Credit Card Loans

Student Loans

Mortgage Loans

Auto Loans

HELOC

Source: FRBNY Consumer Credit Panel/Equifax, Haver Analytics

Note: Student loan delinquency rates in 2012 Q3 are inflated by the reposting of a large number of delinquent loans by a single servicer. Gray bar signifies NBER recession.
4.3.1 Federal Unified Budget Surplus/Deficit

Percent of GDP

As Of: Apr-2014

Percent of GDP

Note: Negative values denote a deficit. Data for fiscal years. Years after 2013 are projected.

Source: CBO, Haver Analytics
4.3.2 Projected Spending in Major Budget Categories

Percent of GDP

As Of: Apr-2014

Percent of GDP

- **Social Security**
- **Major Health Care Programs**
- **Net Interest**
- **Defense Discretionary Spending**
- **Nondefense Discretionary Spending**

Note: Other mandatory spending is all mandatory spending other than that for major health care programs, Social Security, and net interest.

Source: CBO, Haver Analytics
4.3.3 Federal Debt Held by the Public as a Percent of GDP

Percent of GDP

As Of: Apr-2014

Percent of GDP

Source: CBO, Haver Analytics

Note: Data for fiscal years. Years after 2013 are projected.
4.3.4 Interest Outlays and Average Maturity of U.S. Public Debt

Source: BEA, OMB, Haver Analytics

Note: Gray bars signify NBER recessions.
A.1 Treasury Bill Yields: 2011 vs. 2013

Change in Bills Rate from Reference Date

Note: Horizontal axis refers to the number of days prior to the debt ceiling agreement. 2013 debt ceiling agreement date is 10/17/13. 2011 debt ceiling agreement date is 8/1/11.

Source: Bloomberg, L.P.
Note: Horizontal axis refers to the number of days prior to the debt ceiling agreement. 2013 debt ceiling agreement date is 10/17/13. 2011 debt ceiling agreement date is 8/1/11.
4.3.5 State and Local Government Tax Revenues

Trillions of US$

As Of: 2013 Q4

Trillions of US$

1999  2001  2003  2005  2007  2009  2011  2013

Note: Revenues measures includes revenues from property, individual income, corporate income, and sales taxes. Gray bars signify NBER recessions. Revenue shown represents the trailing 4 quarters.

Source: Census Bureau
4.3.6 Growth of State and Local Government Employment

Percent Change

As Of: 2014 Q1

Percent Change

Source: BLS, Haver Analytics

Note: Gray bars signify NBER recessions.
4.3.7 Municipal Bond Issuance

Billions of US$  As Of: 2013  Billions of US$

Refunding
New Capital

Source: Thomson Reuters, SIFMA
Note: Excludes maturities of 13 months or less and private placements.
4.3.8 Municipal Bond Spreads

Source: Thomson Reuters MMD

Note: Spreads to 10-year Treasury.
B.1 Weekly Municipal Bond Fund Flows and Yields

Municipal Bond Flow – ETFs & Mutual Funds (left axis)

Puerto Rico bond sale

Downgrade of Puerto Rico

Detroit files for Chapter 9

Illinois passes pension reform law

Municipal Index: Effective Yield (right axis)

Illinois downgraded

Puerto Rico bond sale

Source: EPFR, Bank of America

Merrill Lynch, Haver Analytics
4.4.1 Real GDP Growth

As Of: Apr-2014

Percent

Advanced Economies

Emerging Economies

Source: IMF, Haver Analytics

Note: Year-over-year percent change.
Data after April 2014 is projected.
4.4.2 Advanced Economies Real GDP Growth

As Of: Apr-2014

Note: Year-over-year percent change. Data after April 2014 are projected.

Source: IMF, Haver Analytics
4.4.3 Euro Area Real GDP Growth

As Of: Apr-2014

Percent

Note: Year-over-year percent change. Data after April 2014 are projected.

Source: IMF, Haver Analytics
4.4.4 Peripheral Europe: Gross Public Debt

As Of: Apr-2014

Percent of GDP

Greece
Italy
Portugal
Ireland
Spain

Source: IMF, Haver Analytics
Note: Data after April 2014 are projected.
4.4.5 Peripheral Merchandise Exports

Billions of EUR

As Of: Nov-2013

Billions of EUR

Source: IMF, Federal Reserve, Haver Analytics

Note: Seasonally adjusted, 3-month annualized rolling sum. Peripheral Europe includes Ireland, Italy, Spain, Greece, and Portugal.
4.4.6 Euro Zone: Consumer Price Inflation

Percent

As Of: Mar-2014

Percent

Note: Year-over-year percent change.

Source: Statistical Office of the European Communities, Haver Analytics
4.4.7 Japan: Consumer Price Inflation

As Of: Feb-2014

Source: Ministry of Internal Affairs and Communications, Haver Analytics  
Note: Year-over-year percent change.
As Of: Apr-2014

Note: Year-over-year percent change.

Data after April 2014 are projected.

Source: IMF, Haver Analytics
4.4.9 EME Contributions to Global Growth

As Of: Apr-2014

Percent

Emerging Economies
Advanced Economies

Source: IMF, Haver Analytics
Note: Data after April 2014 is projected.
4.4.10 China Real GDP Growth

As Of: 2014 Q1

Source: China National Bureau of Statistics, Haver Analytics

Note: Quarterly data. Percent change from the same quarter of the previous year.
4.4.11 China: Credit to the Private Sector

Source: China National Bureau of Statistics, BIS, Haver Analytics

Note: Rolling 4-quarter sum of GDP.
4.4.12 China: Annual Increases in Credit and GDP

As Of: 2013

Trillions of Renminbi

Incremental Increase in Nominal GDP

Note: Additional sources of credit include the following components of "total social financing" as reported by the People's Bank of China: trust loans, entrusted lending, undiscounted bankers' acceptances, and net new corporate bond issuance.

5.1.2 Slope of the Treasury Yield Curve

Basis Points

As Of: 31-Mar-2014

Source: U.S. Department of Treasury
5.1.3 Implied Volatility

Note: MOVE is the yield curve weighted index of the normalized implied volatility on 1-month Treasury options. SMOVE is the yield curve weighted index of the normalized implied volatility on 1-month swaptions.

Source: Bank of America Merrill Lynch, Haver Analytics
5.1.4 Agency MBS and Treasury Yields

As Of: 31-Mar-2014

Percent

Fannie Mae
30-Year MBS
10-Year Treasury

Source: Bloomberg, L.P.
5.1.5 Outstanding Agency MBS by Holders

- Federal Reserve (25.2%)
- Depository Institutions (23.3%)
- Mutual Funds (14.3%)
- Federal Reserve (25.2%)
- Depository Institutions (23.3%)
- Mutual Funds (14.3%)

Source: Fannie Mae, Freddie Mac, SIFMA, Federal Reserve, FSOC calculations

As Of: 2013 Q4

Note: Other includes security brokers and dealers, households, nonfinancial corporations, and ABS issuers.
5.1.6 U.S. Corporate Bond Option-Adjusted Spreads

Basis Points

As Of: 31-Mar-2014

Basis Points

Jan:12 Jul:12 Jan:13 Jul:13 Jan:14

High Yield (right axis)

Investment Grade (left axis)

Source: Bloomberg, L.P.
5.1.7 U.S. Corporate Bond Issuance

As Of: 2013

Billions of US$

Source: Thomson Reuters, SIFMA

Note: Includes all non-convertible corporate debt, medium term notes, and Yankee bonds, but excludes all issues with maturities of one year or less and CDs.
5.1.8 Institutional Loans Issuance and Market Size

Billions of US$  As Of: 2013  Billions of US$

Source: S&P LCD

Outstanding

Gross Issuance
Net Issuance

2004  2007  2010  2013
5.1.9 CLO and Leveraged Loan Spreads

Basis Points

As Of: 31-Mar-2014

Basis Points

Source: JP Morgan, S&P LCD

Note: Spreads relative to 3-month LIBOR.
5.1.10 Annual CLO Issuance

Billions of US$

As Of: 2013

Billions of US$

Source: S&P LCD
C.1 Bid-Ask Spreads on U.S. Treasury Notes

Note: The chart plots 21-day moving average bid-ask spreads for the most recently issued 2-, 5-, and 10-year U.S. Treasury notes. The spread is calculated by subtracting the best bid price from the best ask price in the limit order book and then averaging over the trading day. They are calculated from January 2, 2013 to December 31, 2013.

Source: Unattributed BrokerTec data, FRBNY calculations
C.2 Price Impact of Trades Increases during the Selloff

Source: Unattributed BrokerTec data, FRBNY calculations

Note: The chart plots price impact coefficients for the most recently issued 2-, 5-, and 10-year U.S. Treasury notes. The coefficients are calculated on a weekly basis from univariate regressions of 5-minute price changes on net order flow (buyer-initiated volume – seller-initiated volume) over the same interval from January 2, 2013 to December 31, 2013. Grey bar signifies 2013 selloff.

Source: Unattributed BrokerTec data, FRBNY calculations
Note: The chart plots the 21-day moving average quoted depth for most recently issued 2-, 5-, and 10-year U.S. Treasury notes. The quoted depth is calculated by taking the average of the first tier bid depth and first tier ask depth of the limit order book and then averaging over the trading day. They are calculated from January 2, 2013 to December 31, 2013.
C.4 Change in Broker-Dealers’ Long Vs. Short Positions

As Of: 08-Jan-2014


Source: Federal Reserve, FRBNY calculations
C.5 Broker-Dealers’ VaR and Net Leverage

Billions of US$  As Of: 2013 Q4  Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Total VaR</th>
<th>Net Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>2006</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>2008</td>
<td>1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>2010</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>0.7</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Notes: VaR includes Bank of America, Bear Stearns, Citibank, Goldman Sachs, JP Morgan, Lehman, Merrill Lynch, and Morgan Stanley. Net leverage is total financial assets over equity capital.

Source: Flow of Funds, Bloomberg, L.P.
C.6 Capital Constrained Broker- Dealers Are Associated with Less Selling

| Measure of Broker-Dealer Constraint prior to the Selloff:                        |  
|--------------------------------------------------------------------------------|--------
| • VaR Gap (May 1, 2013)                                                        | -60%   |
| • Basel III Common Equity Tier 1 Ratio Surplus (March 31, 2013)                  | -83%   |
| • Q1 Tier 1 Capital Ratio (March 31, 2013)                                      | -74%   |
| • Q1 Tier 1 Leverage Ratio (March 31, 2013)                                     | -6%    |

Note: The table shows pairwise correlations between broker-dealers’ changes in net positions in U.S. Treasury securities, agency debt securities, agency mortgage-backed securities, and corporate securities in the 10-week period spanning the May-July run-up in yields, and dealers’ constraints shortly before the selloff. To calculate the ratio requirement for the Basel III Common Equity Tier 1 Ratio, we include the 4.5% minimum requirement; 2.5% capital conservation buffer; and the Global Systemically Important Bank (G-SIBs) additional loss absorbency buckets proposed by the Financial Stability Board in November 2012.

Source: Federal Reserve, FRBNY calculations
5.1.11 Publically Held Federal Debt Outstanding

Trillions of US$

As Of: Mar-2014

Trillions of US$

Source: U.S. Department of Treasury, Haver Analytics
5.1.12 Foreign Holders of U.S. Federal Debt

Source: U.S. Department of Treasury, Haver Analytics
5.1.13 Euro Area 10-Year Yield Spreads to German Debt

As Of: 31-Mar-2014

Percent

Percent

United Kingdom (left axis)
Italy (left axis)
Spain (left axis)
Portugal (left axis)
Ireland (left axis)
Greece (right axis)

Note: Ireland did not issue 10-year debt between 10/12/2011 and 3/14/2013.

Source: Bloomberg, L.P.
5.1.14 Emerging Market Bond Spreads

Basis Points

As Of: 31-Mar-2014

Basis Points

Latin America
Europe
Asia

Source: JP Morgan, Haver Analytics

Note: JP Morgan EMBI+ Sovereign Spreads indices for each region.
5.1.15 EM Assets and U.S. Treasuries: Performance Since May 1, 2013

Change in Basis Points

As Of: 31-Mar-2014

Index

Note: Index = -100 for May-1-2013. EM 5Y is GDP-weighted average of interest rate swaps for: Malaysia, Korea, Indonesia, Philippines, Thailand, Brazil, Chile, Colombia, Mexico, Peru, Czech Republic, Hungary, Poland, South Africa, Turkey. EM Currencies is a GDP-Weighted average of FX spot rates for: Indonesia, India, Brazil, Chile, Colombia, Mexico, Peru, Czech Republic, Poland, South Africa, Turkey.
5.1.16 Cumulative Changes in 5-year Government Yields

Basis Points

As Of: 31-Mar-2014

Basis Points

2010 2011 2012 2013 2014

US

EM

Note: EM includes GDP-weighted average of Brazil, Chile, Czech Republic, Hungary, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, South Africa, South Korea, Thailand, and Turkey.

Source: Bloomberg, L.P., IMF
5.1.17 Gross Capital Flows to EMEs

Billions of US$  As Of: 2013 Q3  Billions of US$

Source: Haver Analytics
5.1.18 EME Gross Global Bond Issuance

Billions of US$  As Of: 2013  Billions of US$

Public  Private  Sovereign

Source: Dealogic

Note: Public includes issuance by state-owned enterprises.
5.1.19 EME Corporate Debt Securities Outstanding

As Of: 2013 Q4

Source: BIS, IMF, Haver Analytics

Note: Debt expressed as percentage of EME GDP.
Note: U.S. Dollar Trade Weighted Index is a weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of major U.S. trading partners.
5.1.21 Currency Implied Volatility

As Of: 31-Mar-2014

Source: Bloomberg, L.P.
Note: 1-Jul-2008 = 100. Other Important Trading Partners (OITP) is a weighted average of the FX values of the dollar against a subset of currencies in the broad index that do not circulate widely outside the country of issue.
5.1.23 Change in Exchange Rates (April 2013-March 2014)

Percent

As Of: Mar-2014

Percent

Argentina  Brazil  China  India  Indonesia  Korea  Mexico  Russia  South Africa  Turkey

Source: JP Morgan, Haver Analytics

Note: Change in exchange rate is a change in country's JP Morgan Broad Nominal Effective Exchange Rate Index.
D.1 Advanced Economy Base Money

Source: Bank of Japan, Federal Reserve, European Central Bank
D.2 Central Bank Assets

As Of: Mar-2014

Source: Haver Analytics
D.3 Market Volatility

As Of: 31-Mar-2014

Note: The MOVE Index is a measure of implied volatility on 1-month Treasury options. The EM-VXY Index is a measure of aggregate volatility in currency markets.

Source: Bloomberg, L.P.
5.1.24 Selected Equities Indices

As Of: 31-Mar-2014

S&P 500
MSCI EM
Euro Stoxx 50
Nikkei 225

Note: 01-Jul-2008 = 100.

Source: Haver Analytics
5.1.25 S&P 500 Key Ratios

As Of: 31-Mar-2014

Source: Bloomberg, L.P.
### 5.1.26 Returns in Selected Equities Indices

<table>
<thead>
<tr>
<th></th>
<th>Change from 1-Apr-2013 to 31-Mar-2014</th>
<th>Change from 5-Year Low to 31-Mar-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Economies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. (S&amp;P)</td>
<td>20%</td>
<td>131%</td>
</tr>
<tr>
<td>Euro (Euro Stoxx)</td>
<td>22%</td>
<td>67%</td>
</tr>
<tr>
<td>Japan (Nikkei)</td>
<td>22%</td>
<td>82%</td>
</tr>
<tr>
<td>U.K. (FTSE)</td>
<td>3%</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Selected Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany (DAX)</td>
<td>23%</td>
<td>131%</td>
</tr>
<tr>
<td>France (CAC)</td>
<td>18%</td>
<td>58%</td>
</tr>
<tr>
<td>Italy (FTSEMIB)</td>
<td>41%</td>
<td>75%</td>
</tr>
<tr>
<td>Spain (IBEX)</td>
<td>31%</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Emerging Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil (Bovespa)</td>
<td>-10%</td>
<td>20%</td>
</tr>
<tr>
<td>Russia (RTS)</td>
<td>-15%</td>
<td>79%</td>
</tr>
<tr>
<td>India (Sensex)</td>
<td>19%</td>
<td>126%</td>
</tr>
<tr>
<td>China (Shanghai SE)</td>
<td>-9%</td>
<td>4%</td>
</tr>
<tr>
<td>Hong Kong (Hang Seng)</td>
<td>-1%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: Capital IQ
5.1.27 Market Volatility

Source: Capital IQ
5.1.28 Commodities

As Of: 31-Mar-2014

Index

Agriculture (S&P GSCI Agricultural Spot Index)
Industrial Metals (S&P GSCI Industrial Metals Spot Index)
Crude Oil
Natural Gas

Source: Energy Information Administration, S&P, Haver Analytics

Note: 01-Jul-2008 = 100.
5.1.30 Monthly Originations by Purchase and Refinance

Billions of US$  As Of: Dec-2013  Percent

30Y Mortgage Rates  (right axis)

Refinance  (left axis)

Purchase  (left axis)

Source: CoreLogic, FHLMC
5.1.31 Mortgages with Negative Equity

Billions of US$  As Of: 2013 Q4  Percent

Source: CoreLogic

As Of: 2013 Q4
5.1.32 Mortgage Delinquency and Foreclosure

As Of: 2013 Q4

Percent


Note: Percent of all mortgages.

Source: Mortgage Bankers Association, Haver Analytics

Mortgage Foreclosure Inventory

Mortgage Payments Past-Due 90+ Days

Percent
5.1.33 Purchase Origination Volume by Credit Score

Source: CoreLogic

Note: Includes first lien purchases only.
5.1.34 Servicing Growth: Banks vs. Nonbanks

Source: Inside Mortgage Finance
5.1.35 Mortgage Originations by Program

As Of: 2013 Q3

Source: Inside Mortgage Finance
5.1.36 Issuance of RMBS

Source: Thomson Reuters, Dealogic, Fannie Mae, Freddie Mac, SIFMA
5.1.37 GSE Net Income

Billions of US$  
As Of: 2013 Q4  
Billions of US$

Fannie Mae  
Freddie Mac

Source: SNL Financial
5.1.38 Commercial Property Price Indices

As Of: Jan-2014

Moody’s/RCA CPPI – National

Moody’s/RCA CPPI – Major Markets

Note: Mar-2008 = 100.

Source: Real Capital Analytics, Moody’s Investors Service
5.1.39 CMBS New Issuance

As Of: 2013

Source: Commercial Mortgage Alert
5.1.40 CMBS Senior Debt Spreads

Non-Agency AAA CMBS Spread

Source: Barclays

Note: Spread of Non-Agency 3.0 AAA 5-Year CMBS to Swaps.
5.2.1 Composition of Bank Short-Term Funding

Source: FDIC, Federal Reserve, Haver Analytics
5.2.2 Commercial Paper Outstanding

As Of: Mar-2014

Trillions of US$

Source: Federal Reserve, Haver Analytics
5.2.3 Commercial Paper Outstanding

Billions of US$

As Of: 26-Mar-2014

Billions of US$

Source: Federal Reserve

Note: Does not include ABCP. Domestic includes CP issued in the U.S. by entities with foreign parents.
5.2.4 U.S. MMF Holdings of European Entities’ CP, CD, and Repos

Billions of US$

As Of: Mar-2014

Billions of US$

Unsecured CD and CP issued by European Entities

Repo with European Counterparties

ABCP issued by European Entities

Source: SEC Form N-MFP filings, OFR Calculations

Note: Assets valued at amortized cost.
Note: Premium for borrowing U.S. dollars is the negative of the 3 month Euro-U.S. Dollar FX Swap.
5.2.6 Value of the Repo Market

Source: FRBNY

Note: Limited data were provided by clearing banks prior to April 2008. These figures are estimates based on the data provided. Gray bar signifies NBER recession.
5.2.7 Primary Dealer Repo Agreements

As Of: 26-Mar-2014

Source: FRBNY
5.2.8 Collateral in Tri-Party Repo

Source: FRBNY

Note: Other = CDO, International, Money Market, Municipal Debt, and Whole Loans.
5.2.9 Share of Securities Lending by Lender Type

Percent of Lending

As Of: 31-Jan-2014

Percent of Lending

Data is based on a survey of agent based lenders.

Source: Markit Group Limited

Note: Data is based on a survey of agent based lenders.
5.2.10 Value of Securities on Loan

<table>
<thead>
<tr>
<th>Trillions of US$</th>
<th>As Of: 30-Jan-2014</th>
<th>Trillions of US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>4.0</td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td>3.5</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>2.0</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>1.0</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>0.5</td>
<td></td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Markit Group Limited

Global Market (including U.S.)

U.S. Market

Note: Data is based on a survey of agent based lenders.
5.2.11 Composition of Securities Lending by Security Type

As Of: 30-Jan-2014

Percent of Lending

Government Bonds
Equities
Corporate Bonds
ETFs
ADRs

Note: Data is based on a survey of agent based lenders.

Source: Markit Group Limited
5.2.12 Securities Lending Cash Reinvestment

As Of: 2013 Q4

Trillions of US$

Days

Source: The Risk Management Association

Note: WAM = Weighted Average Maturity. Data is based on a survey of agent based lenders.
5.3.1 Aggregate BHC Pre-Tax Income

Billions of US$

As Of: 2013

Billions of US$

Noninterest Income
Net Interest Income
Total Pre-Tax Income

Provisions
Noninterest Expense
Realized Gains/Losses on Investments

Source: FR Y-9C
5.3.2 Return on Average Assets for BHCs > $10B

Source: FR Y-9C
5.3.3 Annualized Net Interest Margin

As Of: 2013 Q4

Note: For domestic BHCs and commercial banks.

Source: FRB NY Quarterly Trends Report
5.3.6 Maturity Gap at Large Banks

As Of: 2013 Q4

Note: Banks with assets over $50 billion. Approximations based on midpoint of Call Report ranges. Liquid deposits assumed to have 1-year maturity.
5.3.7 Maturity Gap at Small Banks

Source: Federal Reserve

As Of: 2013 Q4

Note: Banks with assets under $50 billion. Approximations based on midpoint of Call Report ranges. Liquid deposits assumed to have 1-year maturity.
5.3.8 KBW Bank Index and Implied Volatility

As Of: 31-Mar-2014

Source: Bloomberg, L.P.
5.3.9 Average P/B and P/E Ratios of 6 Large Complex BHCs

As Of: 31-Mar-2014

Note: Market-cap weighted average of BAC, C, GS, JPM, MS, WFC.

Source: Bloomberg, L.P.
5.3.10 CDS Spreads of 6 Large Complex BHCs

As Of: 31-Mar-2014

Source: Markit Group Limited

Note: Equal-weighted average of BAC, C, GS, JPM, MS, WFC.
5.3.11 Systemic Risk Measures

Source: Bloomberg L.P., OFR calculations

Note: Sample consists of BAC, C, JPM, WFC, GS, and MS. Measures are standardized by their historical volatility.
### 5.3.12 Change in Tier 1 Common Ratios for Aggregate U.S. BHCs

<table>
<thead>
<tr>
<th>Percent of RWA</th>
<th>As Of: 2013 Q4</th>
<th>Percent of RWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Common (4Q12)</td>
<td>11.44</td>
<td>Tier 1 Common (4Q13)</td>
</tr>
<tr>
<td>RWA Change Impact</td>
<td>(.81)</td>
<td>Retained Earnings</td>
</tr>
<tr>
<td>Net Issuance of Stock</td>
<td>(.09)</td>
<td>Other Adjustments</td>
</tr>
</tbody>
</table>

Source: FR Y-9C
5.3.13 Consolidated BHC Liquidity Ratio

As Of: 2013

Liquidity Ratio is the sum of Cash & Due From, FFS, Repos, U.S. Treasuries, U.S. Gov. Agencies and U.S. Gov. Sponsored Agencies divided by Total Assets. All top-tier BHCs included.

Source: FR Y-9C, SNL Financial, FSOC calculations

Note: Liquidity Ratio is the sum of Cash & Due From, FFS, Repos, U.S. Treasuries, U.S. Gov. Agencies and U.S. Gov. Sponsored Agencies divided by Total Assets. All top-tier BHCs included.
5.3.14 Nonperforming Loans (30-89 Days)

Source: SNL Financial
5.3.15 Nonperforming Loans (90+ Days and Nonaccrual)

As Of: 2013 Q4

Percent

Percent

Residential

CRE

Total NPLs

Credit Card

Other Consumer

C&I


Source: SNL Financial
5.3.16 Credit Quality

Source: FRBNY Quarterly Trends Report

Note: For domestic BHCs and commercial banks.
5.3.17 Loan Loss Reserves

As of: 2013 Q4

As a Percent of Non-Performing Loans (left axis)

As a Percent of Annualized Net Charge-Offs (right axis)

Source: FRBNY Quarterly Trends Report, FSOC Calculations

Note: For domestic BHCs and commercial banks.
5.3.18 Initial and Stressed Tier 1 Common Capital Ratios

As Of: 20-Mar-2014

Note: 2013 aggregate ratios are for 18 participants. 2014 aggregate ratios are for 30 participants. Stress ratios using severely adverse supervisory scenario.

Source: Federal Reserve
5.3.19 Federal Reserve's Actions in CCAR 2014

<table>
<thead>
<tr>
<th>Non-Objection to Capital Plan</th>
<th>Objection to Capital Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ally Financial</td>
<td>JPMorgan Chase</td>
</tr>
<tr>
<td>American Express</td>
<td>KeyCorp</td>
</tr>
<tr>
<td>Bank of America*</td>
<td>M&amp;T Bank</td>
</tr>
<tr>
<td>Bank of New York Mellon</td>
<td>Morgan Stanley</td>
</tr>
<tr>
<td>BB&amp;T</td>
<td>Northern Trust</td>
</tr>
<tr>
<td>BBVA Compass</td>
<td>PNC Financial</td>
</tr>
<tr>
<td>BMO Financial</td>
<td>Regions Financial</td>
</tr>
<tr>
<td>Capital One</td>
<td>State Street</td>
</tr>
<tr>
<td>Comerica</td>
<td>SunTrust</td>
</tr>
<tr>
<td>Discover Financial</td>
<td>U.S. Bancorp</td>
</tr>
<tr>
<td>Fifth Third Bancorp</td>
<td>UnionBanCal</td>
</tr>
<tr>
<td>Goldman Sachs*</td>
<td>Wells Fargo</td>
</tr>
<tr>
<td>Huntington Bancshares</td>
<td></td>
</tr>
</tbody>
</table>

Note: Firms in blue are first-time CCAR participants. *Bank of America and Goldman Sachs resubmitted their capital plans after receiving results of DFAST. Bank of America is resubmitting its capital plan after incorrectly reporting regulatory capital.

Source: Federal Reserve
Number of Institutions

Assets of Failed Institutions as a Percent of Nominal GDP

Source: BEA, FDIC, Haver Analytics

Note: No FDIC-insured institutions failed during 2005 and 2006.
## 5.3.21 Commercial Bank and Thrift Pre-Tax Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Noninterest Income</th>
<th>Net Interest Income</th>
<th>Total Pre-Tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
<td></td>
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<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Includes all FDIC-insured commercial banks and thrifts.

Source: FDIC
5.3.22 Risk-Weighted Assets and Return on Assets

As Of: 2013 Q4

Percent

Return on Assets (left axis)
Risk-Weighted Assets as a Percent of Total Assets (right axis)

Source: FDIC, Haver Analytics

Note: All FDIC-insured institutions.
5.3.23 U.S. Branches and Agencies of Foreign Banks: Assets

As Of: 2013 Q4

<table>
<thead>
<tr>
<th>Trillions of US$</th>
<th>As Of: 2013 Q4</th>
<th>Trillions of US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Assets</td>
<td></td>
<td>Non C&amp;I Loans</td>
</tr>
<tr>
<td>Securities Purchased with Repurchase Agreements &amp; Fed Funds Sold</td>
<td></td>
<td>C&amp;I Loans</td>
</tr>
<tr>
<td>Net Due From Related Depository Institutions</td>
<td></td>
<td>Cash and Balances</td>
</tr>
<tr>
<td>Reserve Balances</td>
<td></td>
<td>Due from Depository Institutions (excluding Reserve Balances)</td>
</tr>
</tbody>
</table>

Source: Federal Reserve, Haver Analytics

Note: Other assets includes government securities, asset-backed securities, and other trading assets.
5.3.24 U.S. Branches and Agencies of Foreign Banks: Liabilities

As Of: 2013 Q4

Trillions of US$

- Other Liabilities
- Securities Sold with Repurchase Agreements & Fed Funds Purchased
- Deposits & Credit Balances
- Net Due to Related Depository Insitutions

Source: Federal Reserve, Haver Analytics

Note: Other liabilities includes transaction accounts, non-transaction accounts, and other borrowed money.
5.3.25 Federally Insured Credit Union Income

Billions of US$

As Of: 2013 Q4

- Net Interest Income
- Noninterest Income
- Provisions
- Realized Gains/Losses on Investments

Source: NCUA
5.3.26 Credit Union Deposits

As Of: 2013 Q4

Source: NCUA

Money Market and IRA Deposit Share (left axis)

Interest Sensitive Deposit Share (right axis)

Source: NCUA
5.3.27 Credit Union Long-Term Assets

As Of: 2013 Q4

Percent

Source: NCUA

Note: Percent of net long-term assets.
5.3.28 Credit Union Investments by Maturity

Source: NCUA

As Of: Dec-2013

Percent

Percent

>10 Years
5-10 Years
3-5 Years
1-3 Years
<1 Year

<1 Year
1-3 Years
3-5 Years
5-10 Years
>10 Years

Dec:06
Dec:12
Dec:13
5.3.29 Credit Union Unrealized Gains on AFS and HTM Securities

Source: NCUA

Note: AFS=Available for Sale and HTM=Held to Maturity.
5.4.1 Broker-Dealer Revenues

As Of: 2013

Billions of US$

Source: FINRA
5.4.2 Broker-Dealer Assets and Leverage

Trillions of US$

As Of: 2013

Leverage Ratio

Total Assets (left axis)

Leverage (right axis)

Source: FINRA

Note: Leverage is the ratio of total assets to equity.
5.4.3 Primary Dealer Securities

Billions of US$  As Of: 26-Mar-2014  Billions of US$

Primary Dealer Net Outright Corporate Securities
Primary Dealer Net Outright Federal Agency Securities and Agency MBS
Primary Dealer Net Outright U.S. Government Securities

Note: Corporate securities includes corporate bonds, commercial paper, non-agency residential MBS, and other CMBS.

Source: FRBNY
5.4.4 Life and Other Insurance: Capital and Net Income

Billions of US$  As Of: 2013  Billions of US$

Net Income (left axis)

Capital (right axis)

Source: NAIC

Note: Includes accident and health.
5.4.5 Property and Casualty Insurance: Capital and Net Income

Billions of US$  As Of: 2013  Billions of US$

As Of: 2013

Source: NAIC
5.4.6 Life Insurers: Impact of Low Rate Environment

As Of: 2013

Investment Yield (left axis)
Required Interest Rate (left axis)
Investment Yield Minus Required Interest Rate (right axis)

Source: NAIC, SNL Financial
5.4.7 Consumer Loans Outstanding

As Of: Mar-2014

Trillions of US$

Commercial Banks

Finance Companies

Source: Federal Reserve, Haver Analytics

Note: Loans owned and securitized. Series break in December 2010 for consumer loans outstanding at finance companies due to change in data collection methodology. Gray bars signify NBER recessions.
5.4.8 Business Loans Outstanding

As Of: Mar-2014

Trillions of US$

2001 2003 2005 2007 2009 2011 2013

Commercial Banks

Finance Companies

Note: Loans owned and securitized. Series break in December 2010 for business loans outstanding at finance companies due to change in data collection methodology. Gray bars signify NBER recessions.

Source: Federal Reserve, Haver Analytics
5.4.9 ABS Issuance

Billions of US$

As Of: 2013

Billions of US$
5.4.10 Selected ABS Spreads

Auto Fixed
BBB 3-Year
(left axis)

Credit Card Fixed
BBB 3-Year
(left axis)

Credit Card Fixed
AAA 3-Year
(right axis)

Auto Fixed
AAA 3-Year
(right axis)

As Of: 27-Mar-2014

Source: Barclays

Note: Spreads to Treasury securities.
5.4.11 Total Agency REIT Assets and Leverage

Billions of US$

As Of: 2013 Q4

Note: Data for 12 largest publically traded agency MBS REITs. Assets to equity ratio is weighted by market capitalization.

Source: Bloomberg, L.P.
5.4.12 Agency REITs: Return on Assets

Percent
As Of: 2013 Q3
Basis Points

2Y/10Y Treasury Spread (right axis)

Average ROA* (left axis)

Source: Bloomberg, L.P.
Note: *Weighted by market capitalization.
F.1 Interest Rate on Government Bonds and Discount Rate

Source: IMF, Federal Reserve
F.2 Real Effective Exchange Rate Returns

As Of: Dec-2008

Source: BIS, Federal Reserve

5.5.1 MMF Assets by Fund Type

As Of: Feb-2014

Trillions of US$

Source: SEC
5.5.2 Liquidity of Prime MMFs

Percent of Total Assets  As Of: Feb-2014  Percent of Total Assets

Source: SEC

Note: Weighted by fund size.
5.5.3 Weighted Average Life of MMFs

As Of: Feb-2014

Source: SEC

Note: Weighted by fund size
5.5.4 Growth in Assets of the Investment Company Industry

Trillions of US$

Source: ICI Factbook 2013, Flow of Funds, ICI, Haver Analytics

Note: Other = Unit Investment Trusts and Closed-End Funds.
5.5.5 Monthly Bond Mutual Fund Flows

Billions of US$

As Of: Feb-2014

Billions of US$

Source: ICI, Haver Analytics
5.5.6 Monthly Equity Mutual Fund Flows

Billions of US$  As Of: Feb-2014  Billions of US$


Source: ICI, Haver Analytics
5.5.7 Bank Loan Mutual Funds: Annual Flows

Billions of US$  As Of: 2013  Billions of US$

2005 2006 2007 2008 2009 2010 2011 2012 2013

Source: Morningstar, Inc.
5.5.9 Public and Private Pension Funding Level

Source: Public Fund Survey, Milliman
5.5.10 U.S. Private Equity AUM

<table>
<thead>
<tr>
<th>Year</th>
<th>Existing Investments</th>
<th>Undeployed Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>0.2 trillions</td>
<td>0.1 trillions</td>
</tr>
<tr>
<td>2003</td>
<td>0.3 trillions</td>
<td>0.2 trillions</td>
</tr>
<tr>
<td>2005</td>
<td>0.6 trillions</td>
<td>0.3 trillions</td>
</tr>
<tr>
<td>2007</td>
<td>1.0 trillions</td>
<td>0.4 trillions</td>
</tr>
<tr>
<td>2009</td>
<td>1.4 trillions</td>
<td>0.5 trillions</td>
</tr>
<tr>
<td>2011</td>
<td>1.8 trillions</td>
<td>0.6 trillions</td>
</tr>
<tr>
<td>2013</td>
<td>2.0 trillions</td>
<td>0.7 trillions</td>
</tr>
</tbody>
</table>

Source: Preqin
5.5.12 Hedge Fund Assets and Net Asset Flows

Trillions of US$  As Of: 2013  Thousands of Funds

- Estimated Assets (left axis)
- Net Asset Flows (left axis)

Number of Funds (right axis)

Source: Hedge Fund Research, Inc.
5.5.13 Change in Hedge Fund AUM

Source: Hedge Fund Research, Inc.
5.5.14 Hedge Fund Net Asset Flows by AUM

Billions of US$

As Of: 2013

Billions of US$

Source: Hedge Fund Research, Inc.
5.5.15 U.S.-Listed ETP AUM and Count

Trillions of US$

As Of: 2013

Thousands of Funds

Source: Morningstar, Inc.
5.6.1 Global OTC Derivatives Market

Source: BIS, Haver Analytics
Note: Notional values.
5.6.2 Credit Derivatives Outstanding

Source: DTCC

Note: Gross notional includes the notional from the perspective of both swap counterparties.
5.6.3 Growth of Credit Derivative Central Clearing

Source: DTCC

As Of: Feb-2014

Percent

Uncleared

Cleared

Source: DTCC
5.6.4 Interest Rate Swap Futures: Volume and Open Interest

As Of: 31-Mar-2014

Thousands

Source: CME Group, Eris Exchange

Note: Number of contracts. Notional contract value is $100,000/contract.
Note: Level 3 assets as a percent of total assets. Level 3 assets are assets whose fair value cannot be determined by using observable inputs.
7.3.2 Connectedness

Note: Connectedness measures illiquidity concentration; it depends on whether an institution’s illiquid assets are also widely held in the system. Lower connectedness implies smaller fire-sale externalities when banks suffer shocks.


Source: FRBNY
7.3.3 Moody’s Systemic Support Uplift

Notches

As Of: Mar-2014

Notches

Source: Moody’s Analytics, FRBNY calculations

Note: Uplift is defined as the difference between Moody’s long-term issuer rating and Moody’s bank financial strength rating, which provides an estimate of the effect of implicit guarantees and external support.
7.3.4 Fitch Support Rating Floors

As Of: Mar-2014

Note: Support Rating Floors (SRFs) reflect Fitch’s view about the likelihood an entity will receive extraordinary government support in case of need.

Source: Fitch Ratings
7.7.1 Destination of U.S. Exports of Goods and Services

As Of: 2013 Q4

Note: Sum of exports from 2013 Q1 to 2013 Q4 as a percent of total U.S. exports.

Source: BEA, Haver Analytics
### 7.7.2 Country Exposures of All U.S. Banks

**As Of: Sep-2013**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Exposure (Billions of US$)</th>
<th>Cross-Border Claims (Billions of US$)</th>
<th>Foreign Office Claims (Billions of US$)</th>
<th>Total Exposure Relative to Tier 1 Capital (Percent)</th>
<th>Memo: Unused Commitments (Billions of US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1686</td>
<td>955</td>
<td>513</td>
<td>150%</td>
<td>246</td>
</tr>
<tr>
<td><strong>- Euro area</strong></td>
<td>906</td>
<td>701</td>
<td>76</td>
<td>80%</td>
<td>134</td>
</tr>
<tr>
<td>Japan</td>
<td>377</td>
<td>134</td>
<td>225</td>
<td>33%</td>
<td>31</td>
</tr>
<tr>
<td>Total EME</td>
<td>786</td>
<td>387</td>
<td>378</td>
<td>70%</td>
<td>87</td>
</tr>
<tr>
<td><strong>- China</strong></td>
<td>88</td>
<td>53</td>
<td>33</td>
<td>8%</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: FFIEC Country Exposure Report

Note: EME exposures exclude financial centers. Euro area does not include data for Cyprus, Estonia, Latvia, Malta, or Slovenia, which are not publicly available.