SIFMA U.S. Capital Markets Deck

PRESENTED BY

SIFMA RESEARCH

September 6, 2018

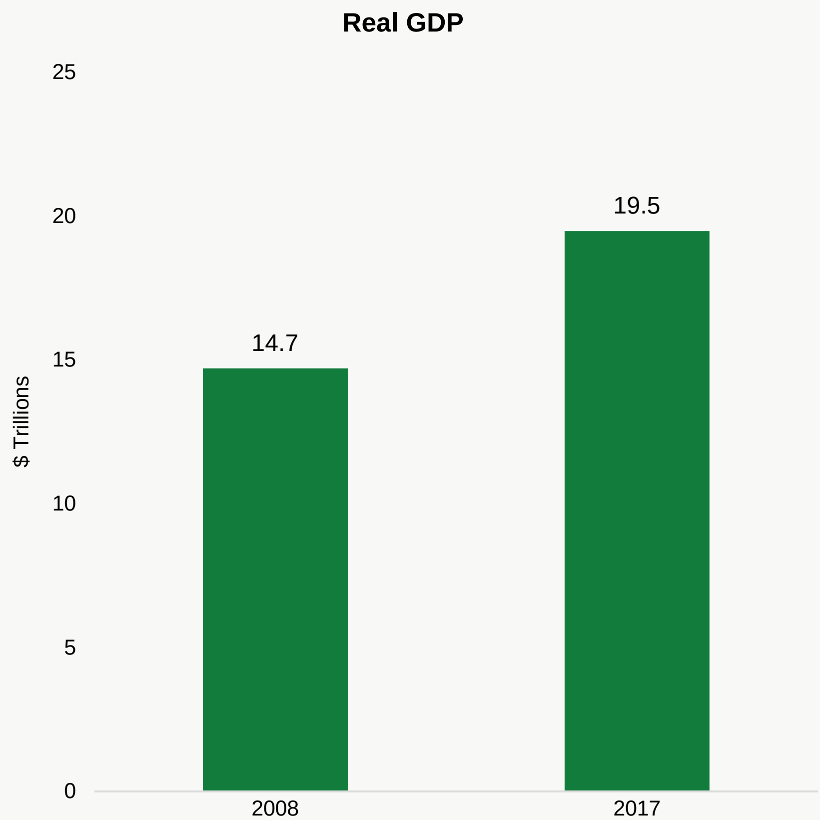
Introduction

The United States has the largest and deepest capital markets in the world. According to the Federal Reserve, capital markets provide almost 80% of debt financing for businesses in the U.S. The securities industry facilitates access to those markets, creating investor opportunity, capital formation, job creation and economic growth.

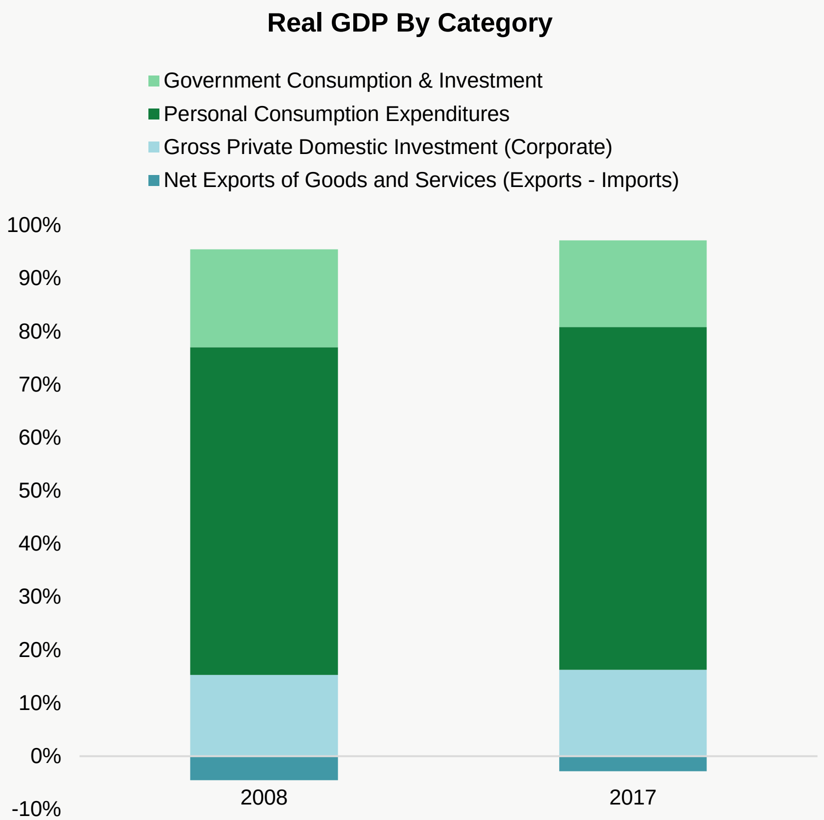
- U.S. stock market capitalization – the total value of publicly traded domestic companies – was $32.1 trillion as of end-2017. Over 150 companies conducted initial public offerings in the U.S. in 2017, raising $36.5 billion in new capital – creating new value for the companies, their employees and their investors.
- The $9.0 trillion U.S. corporate bond market is the largest in the world: nearly 1,200 companies issued $1.7 trillion in corporate bonds to fund their operations and growth in 2017.
- U.S. municipal issuers raised $448.0 billion in 2017 to finance important community infrastructure projects including schools, airports, roads and bridges.
- The size of U.S. Treasury market outstanding was $14.5 trillion in 2017. The U.S. Treasury issued $6.6 trillion in bills and $2.2 billion in coupon securities in 2017.

U.S. ECONOMY

Gross Domestic Product (GDP)



Source: Bureau of Economic Analysis

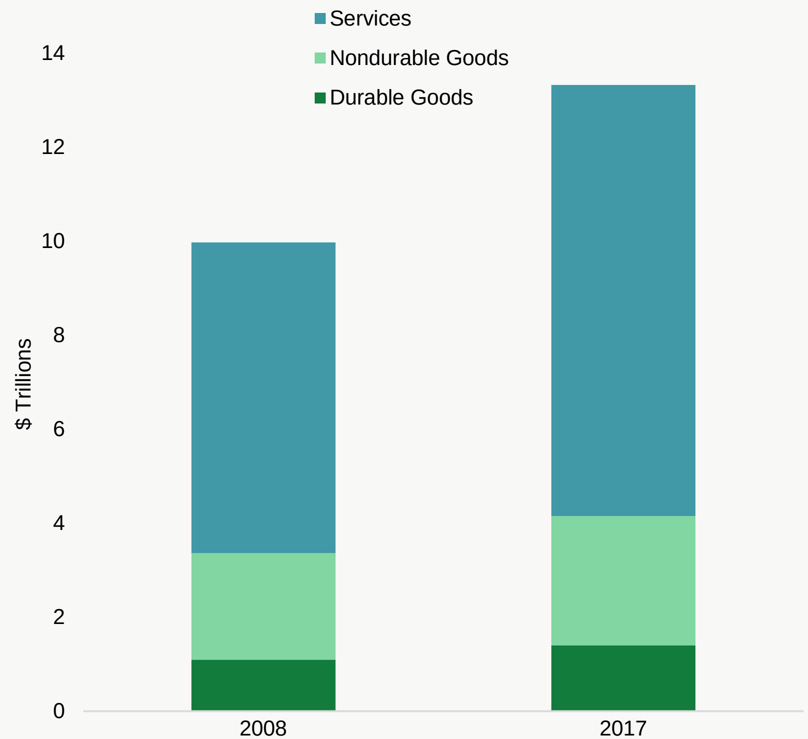


Source: Bureau of Economic Analysis

U.S. ECONOMY

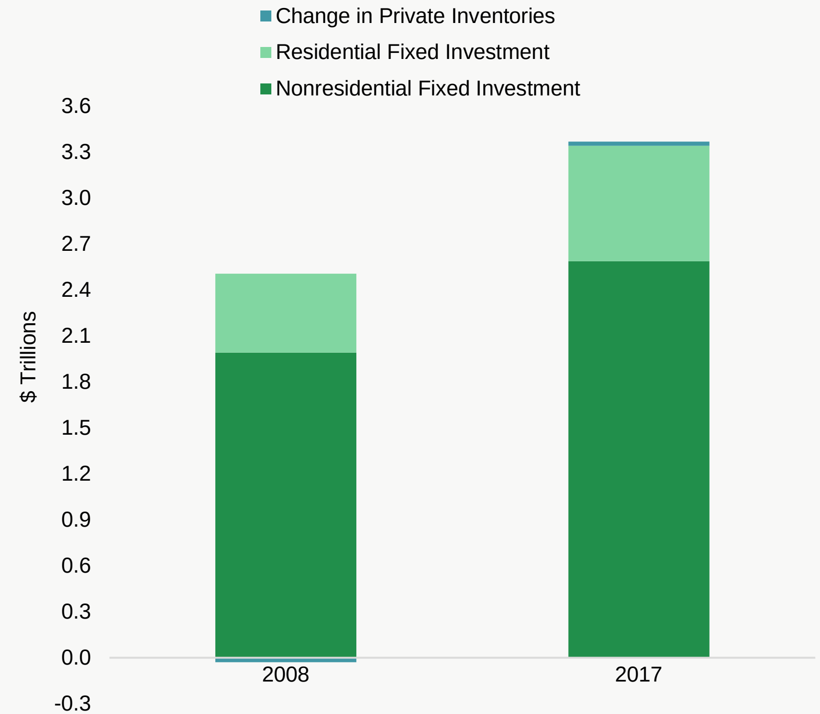
GDP Detail

Real GDP By Category
Personal Consumption



Source: Bureau of Economic Analysis

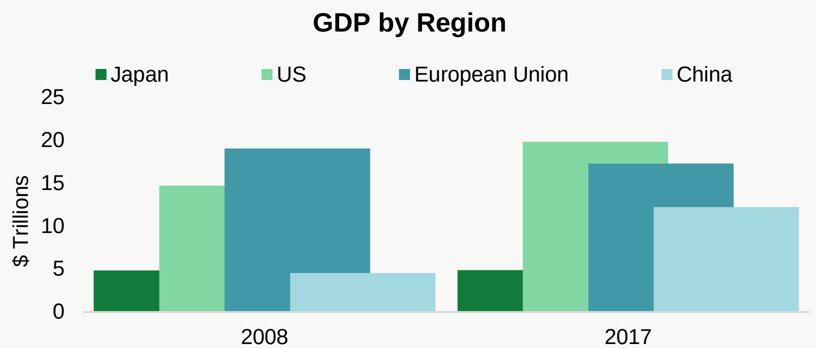
Real GDP By Category
Private Domestic Investment (Corporate)



Source: Bureau of Economic Analysis

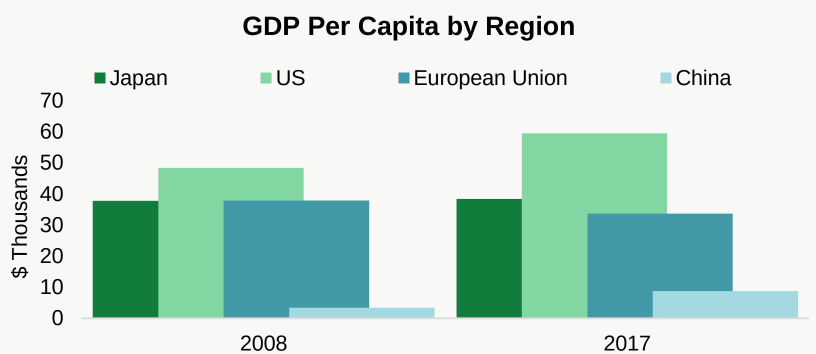
GDP in Perspective

- In 2008, total U.S. GDP was more than three times as large as both Japan's and China's GDP and 22.7% smaller than the European Union's GDP. In 2017, total U.S. GDP reached more than four times that of Japan, 1.62 times large as China's GDP and 14.8% larger than the European Union's GDP.



Note: European Union includes the 28 member states
Source: World Bank

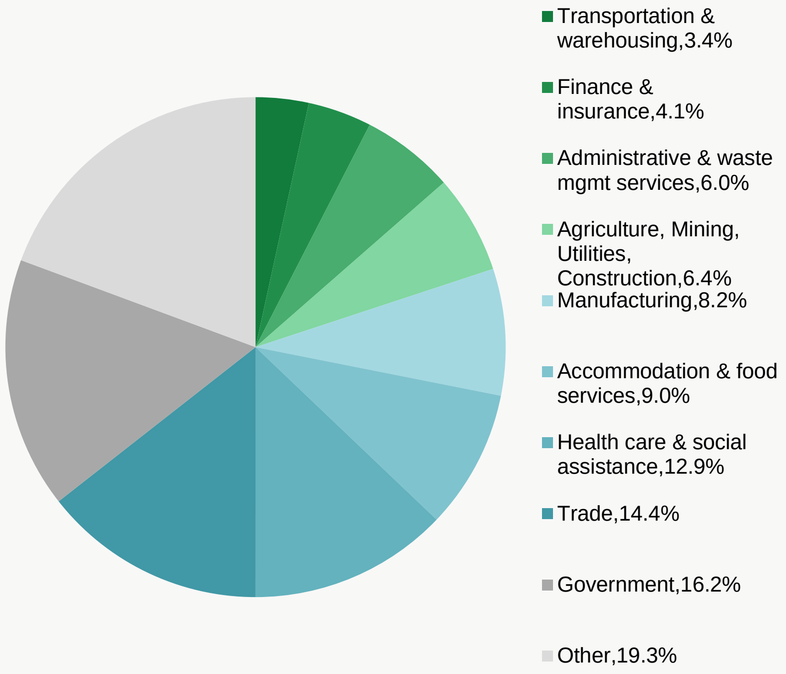
- In 2008, US GDP per capita was 127.6% larger than the European Union and Japan, and over 14 times that of China. In 2017, US GDP per capita was 154.9% larger than Japan, 176.6% larger than European Union's GDP, and almost 7 times that of China.



Note: European Union includes the 28 member states
Source: World Bank

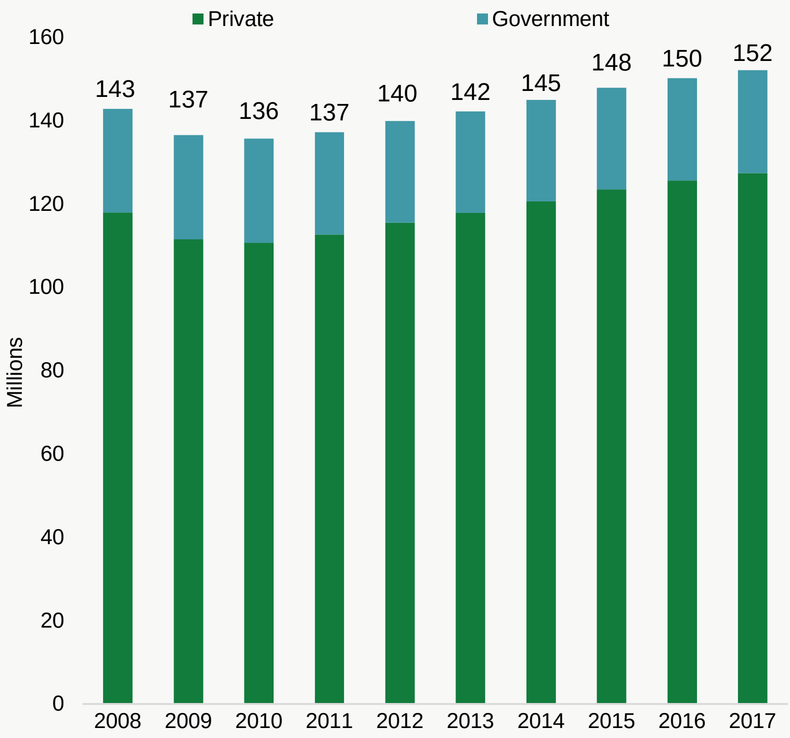
U.S. Employment

U.S. Employment by Industry - 2017



Source: Bureau of Economic Analysis

U.S. Employment
(millions of jobs)

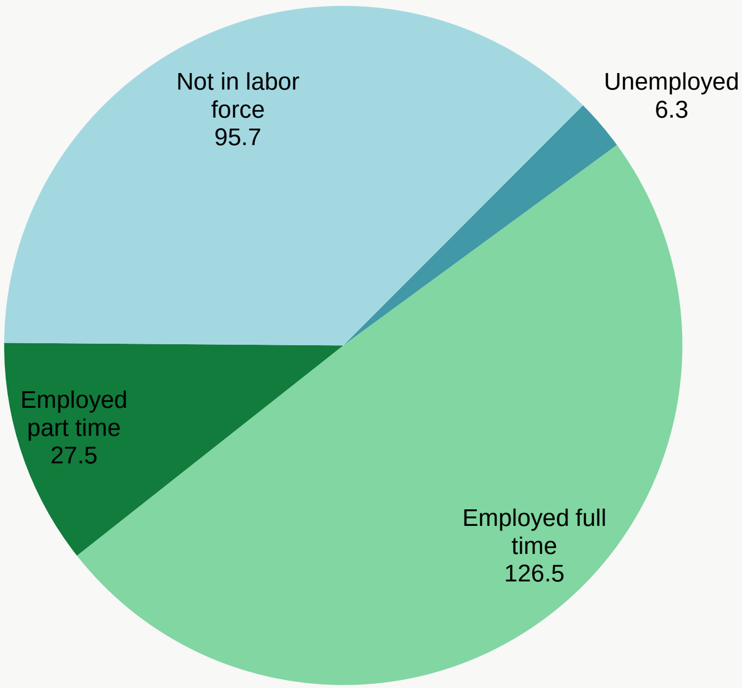


Source: Bureau of Economic Analysis

U.S. ECONOMY

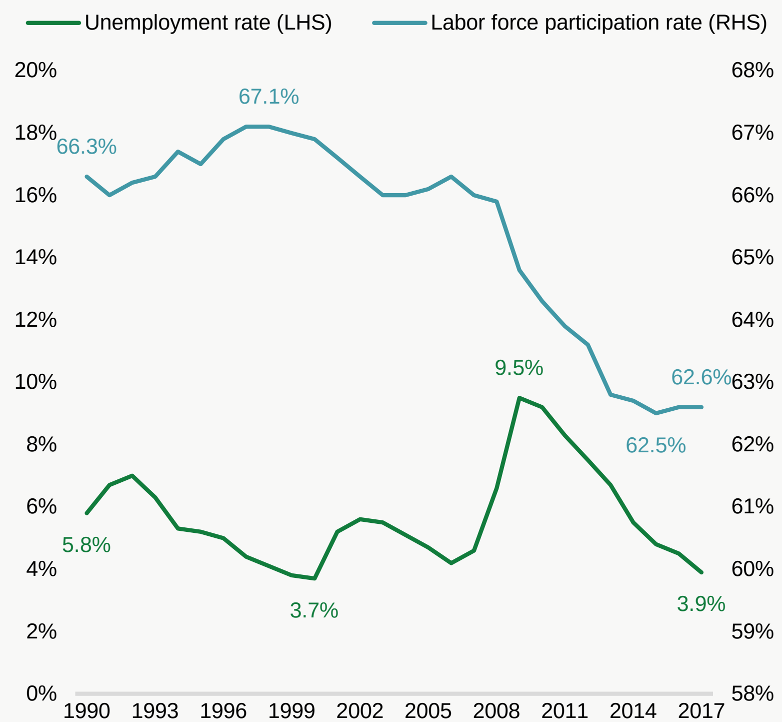
U.S. Employment

U.S. Employment Statistics - 2017
(millions)



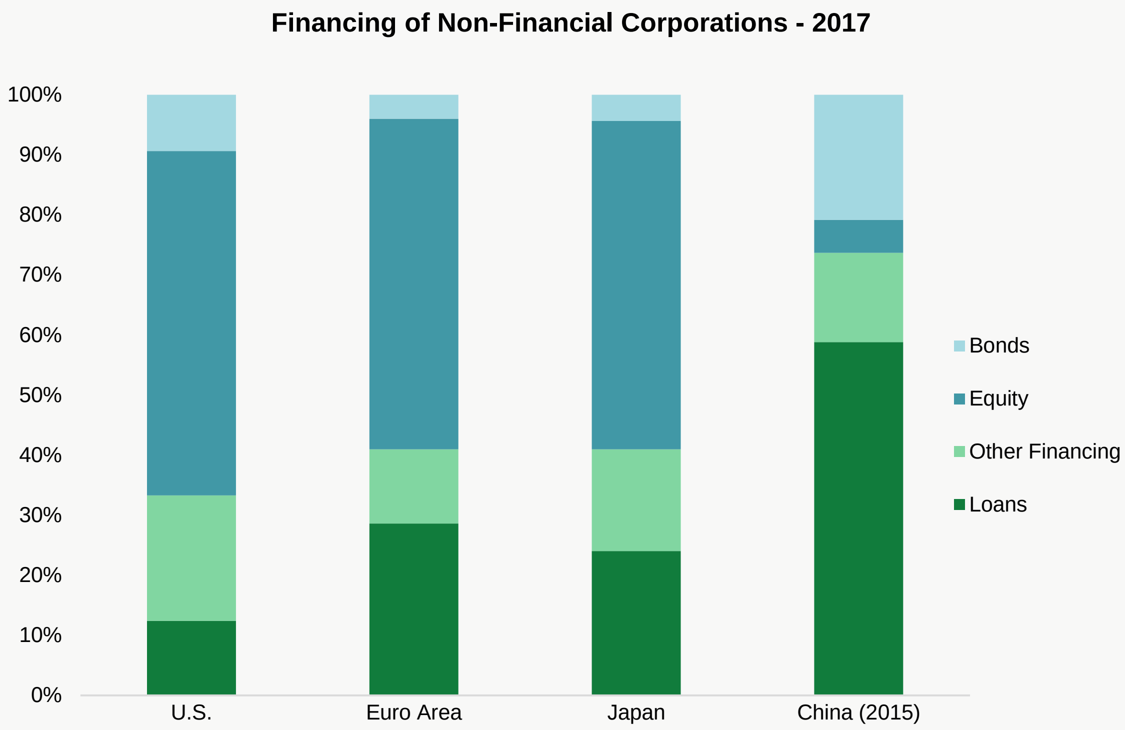
Note: Data based on civilian population of 16 years or over
Source: Bureau of Labor Statistics

U.S. Unemployment and Labor Participation



Note: Data based on civilian population of 16 years or over
Source: Bureau of Labor Statistics

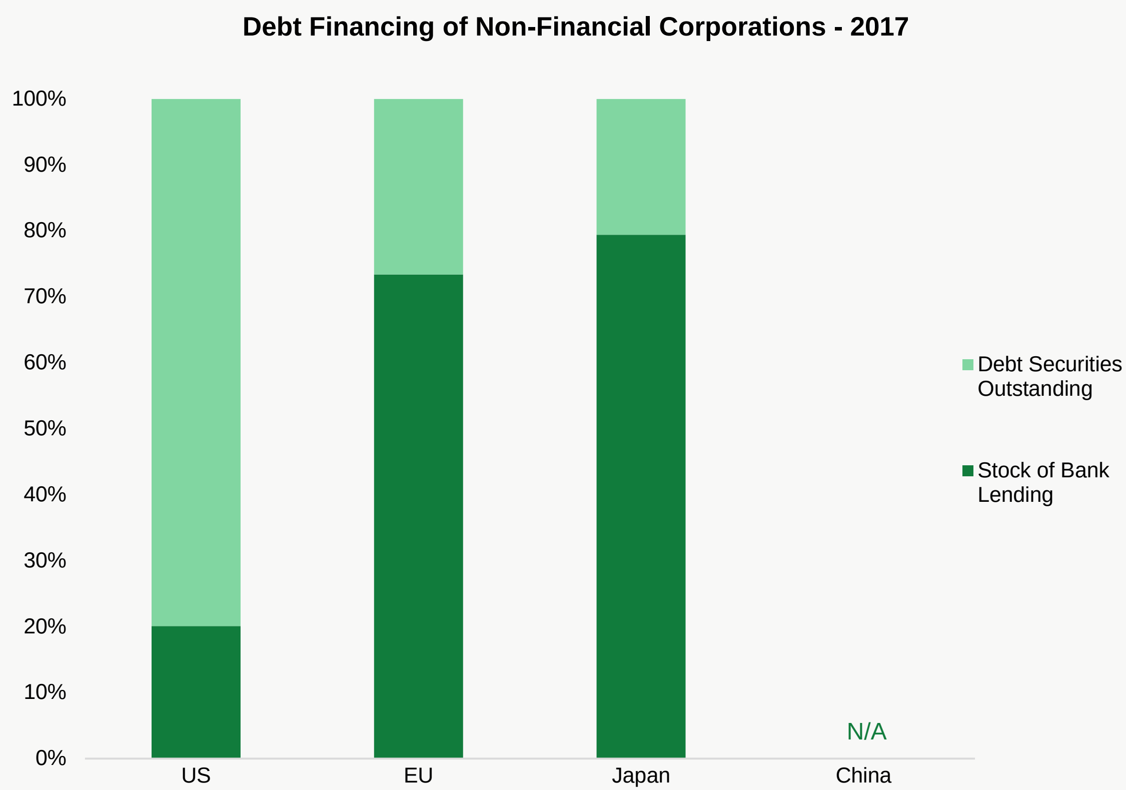
Corporate Finance in Perspective



Note: Euro Area includes the 19 EU-member states that have adopted the Euro currency; Other financing includes insurance reserves, trade credits and trade advances.
Sources: Organization for Economic Co-operation and Development (OECD), European Central Bank (ECB), Bank of Japan, National Bureau of Statistics of China.

- U.S. companies rely on the capital markets for a greater portion of total funding than do companies in the Euro Area, Japan or China, which rely more on bank funding.

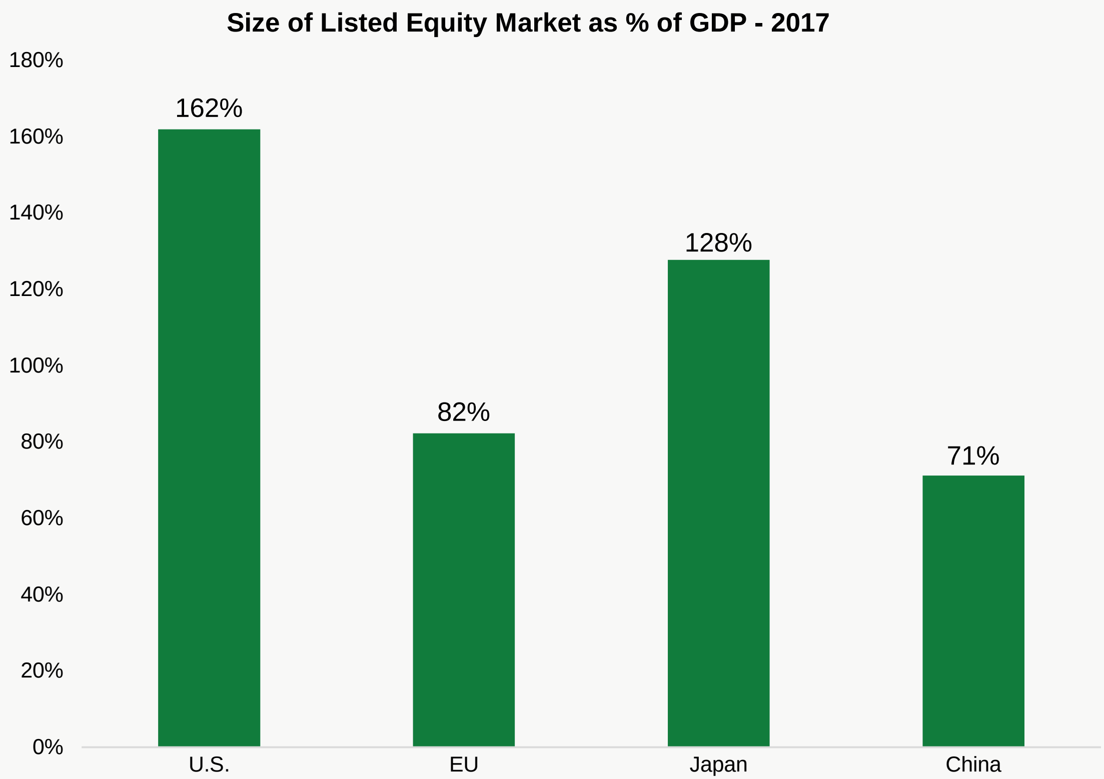
Corporate Debt in Perspective



Note: EU includes the 28 EU-member states; data for China not available
Sources: Bank of Japan, European Central Bank, Federal Reserve

- U.S. companies rely more on the debt capital markets for credit financing than do those in the European Union or Japan, which rely more on bank loans for funding.

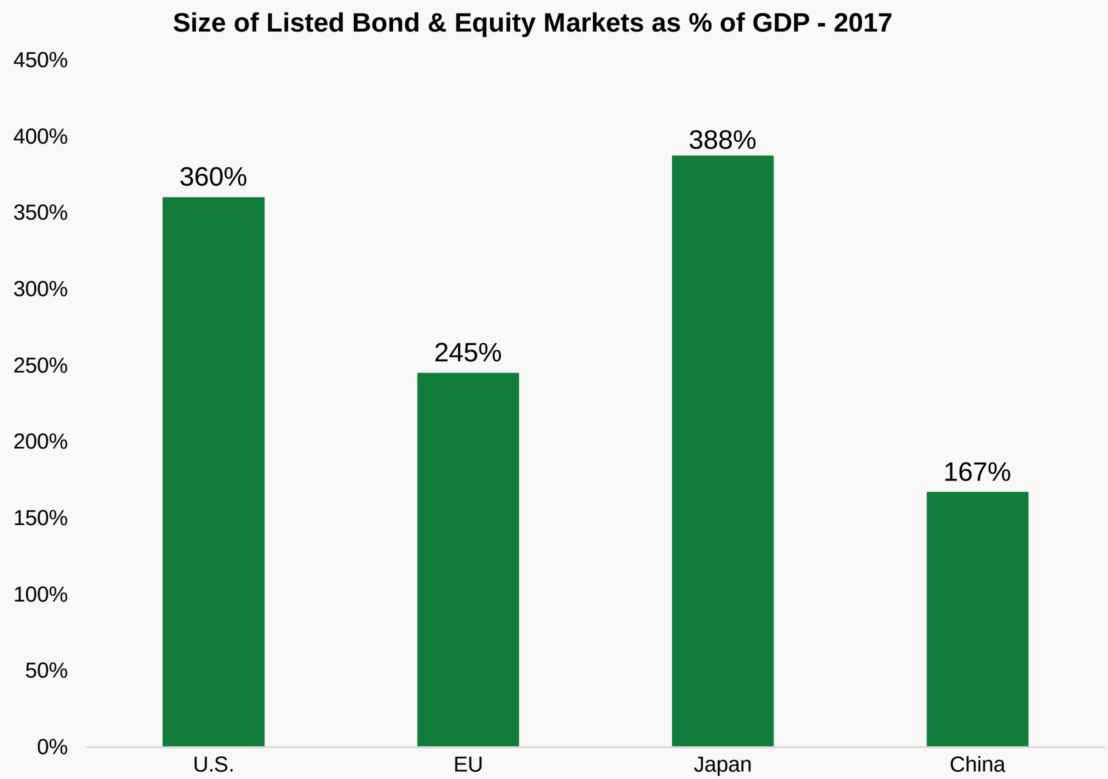
Equities as % of GDP



Note: Includes only non-financial corporate equities; EU includes the 28 EU-member states; China excludes Hong Kong
Sources: OECD, Bank of Japan, ECB, World Bank, World Federation of Exchanges

- By absolute size, the U.S. has the largest equity market cap at $32 trillion, followed by the European Union ($14.2 trillion), China ($8.7 trillion) and Japan ($6.2 trillion).
- As a percentage of GDP, the US equity market is the largest (162%), followed by Japan (128%), China (71%) and the European Union (82%).

Bonds & Equities as % of GDP

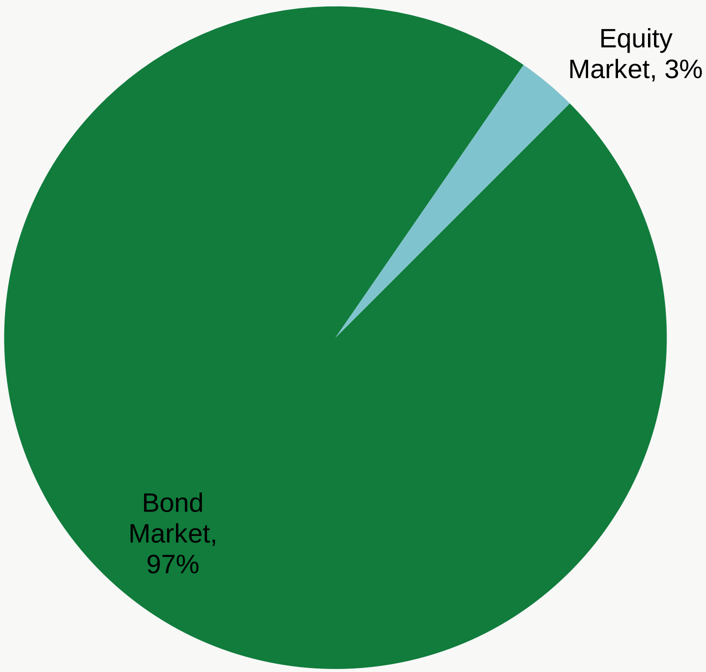


Note: Includes both bonds and equities from non financial and financial entities; EU includes the 28 EU-member states; China excludes Hong Kong
Sources: BIS, World Bank, World Federation of Exchanges

- As a percentage of GDP, the US bond and equity markets represents 360% of GDP, slightly less than Japan (388%)

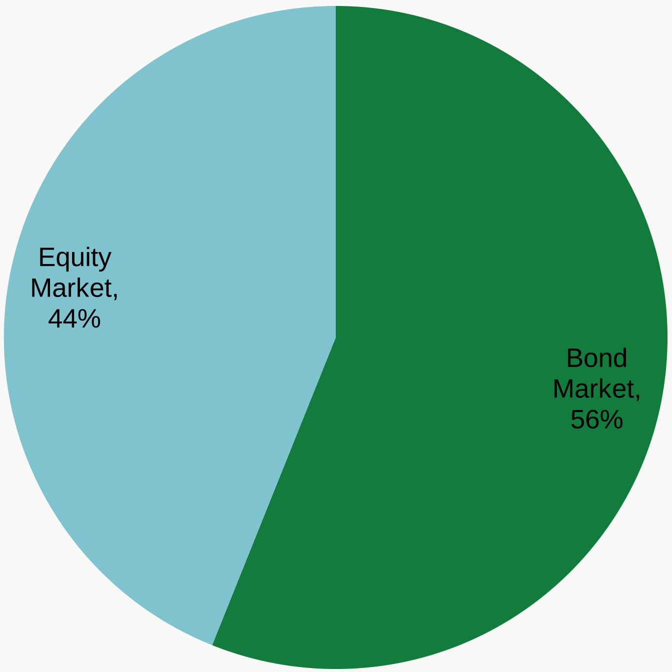
U.S. Capital Markets

U.S. Capital Markets Issuance
Equity vs Bonds - 2017



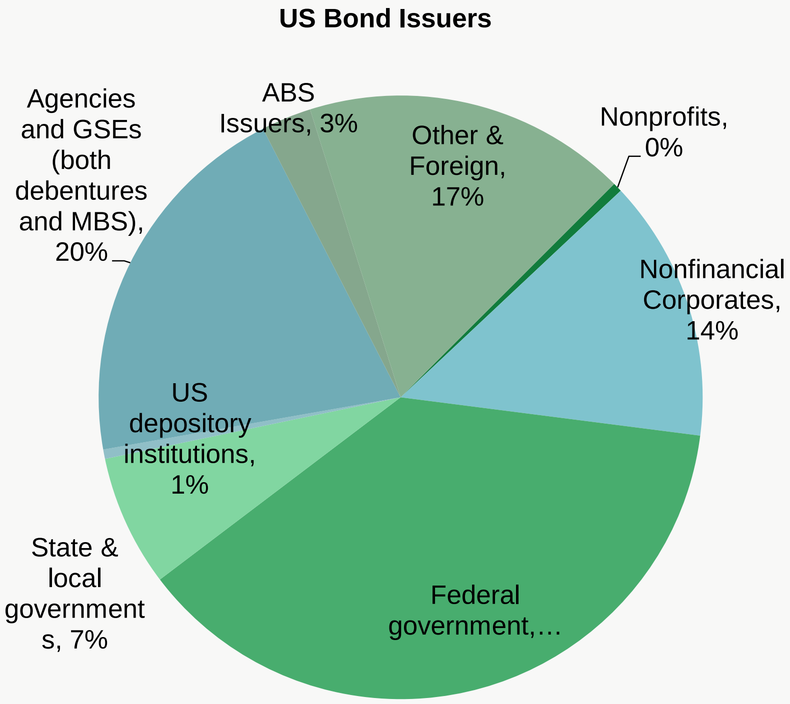
Source: Bloomberg, Dealogic, Thomson Reuters, US Agencies, US Treasury, SIFMA

U.S. Capital Markets Outstanding
Equity vs Bonds - 2017

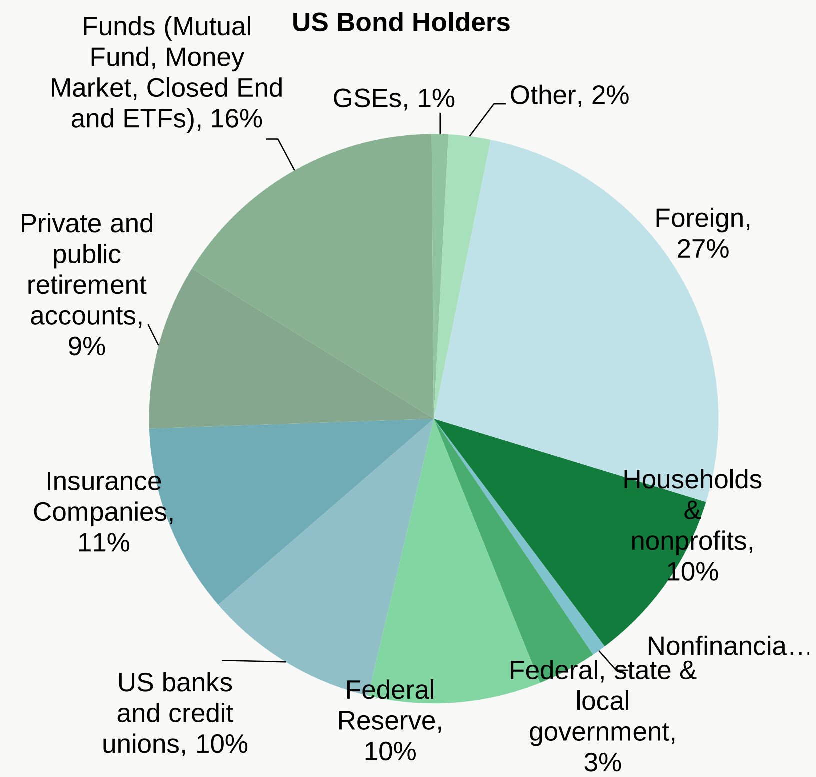


Note: Equities include only listed equities
Source: NYSE, NASDAQ, Federal Reserve, Bloomberg, U.S. Agencies, U.S. Treasury, SIFMA

U.S. Bond Issuers and Holders

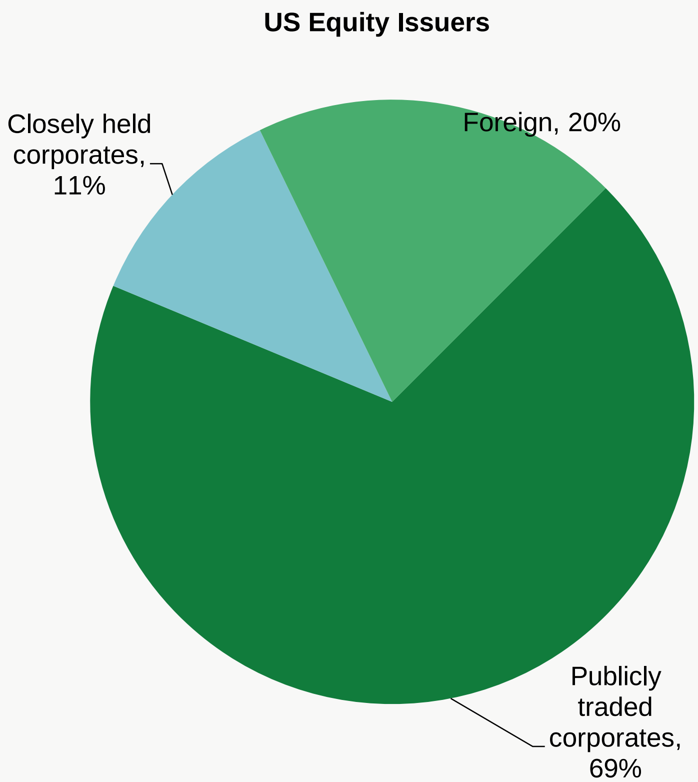


Note: Other and foreign includes foreign issuers, holding corporations, funding corporations, broker-dealers, finance companies, and REITs
Source: Federal Reserve

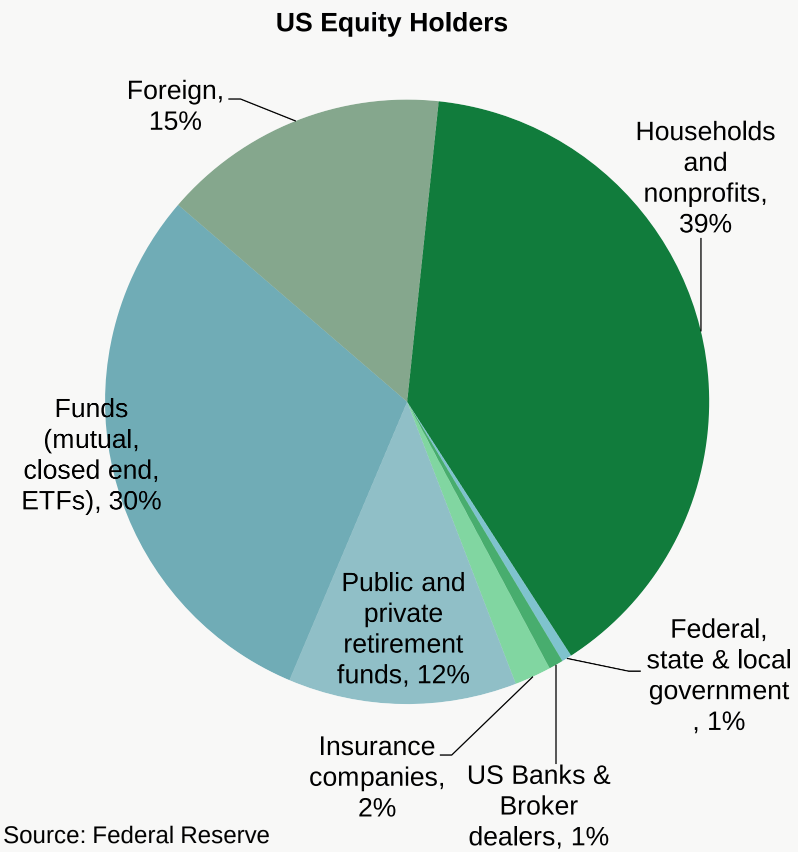


Note: Other includes finance companies, REITs, broker dealers, holding companies, and funding corporations
Source: Federal Reserve

U.S. Equity Issuers and Holders

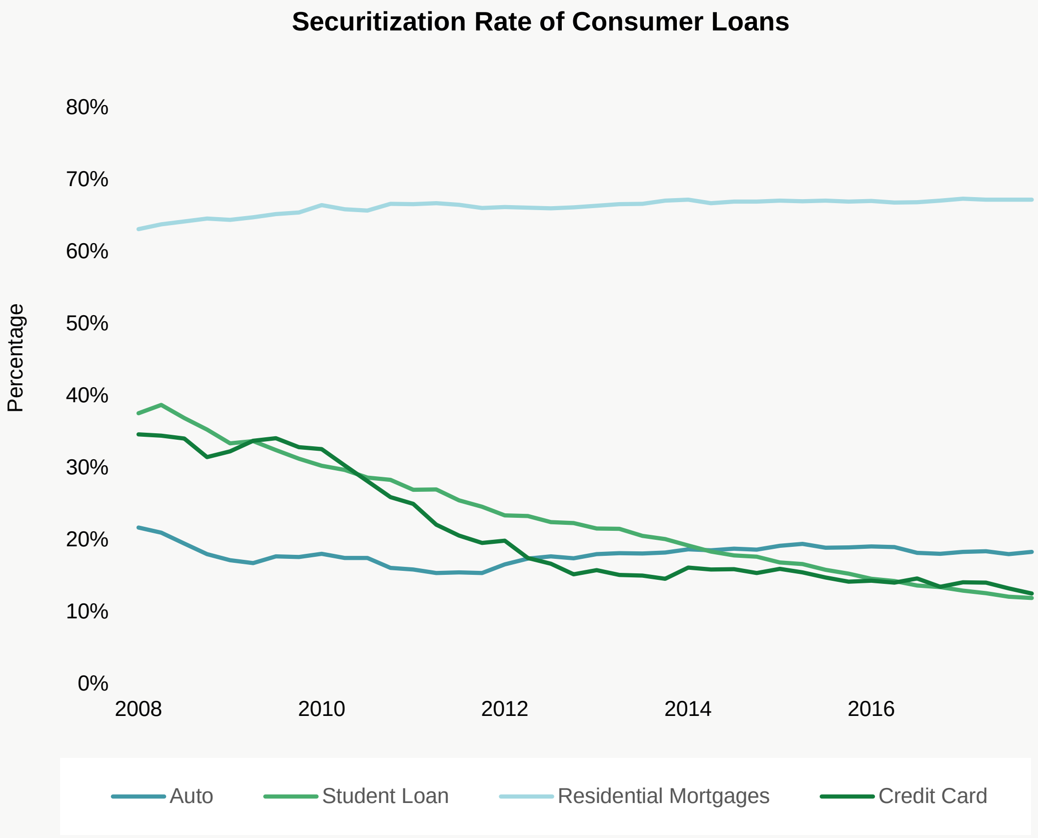


Source: Federal Reserve



Source: Federal Reserve

Securitization

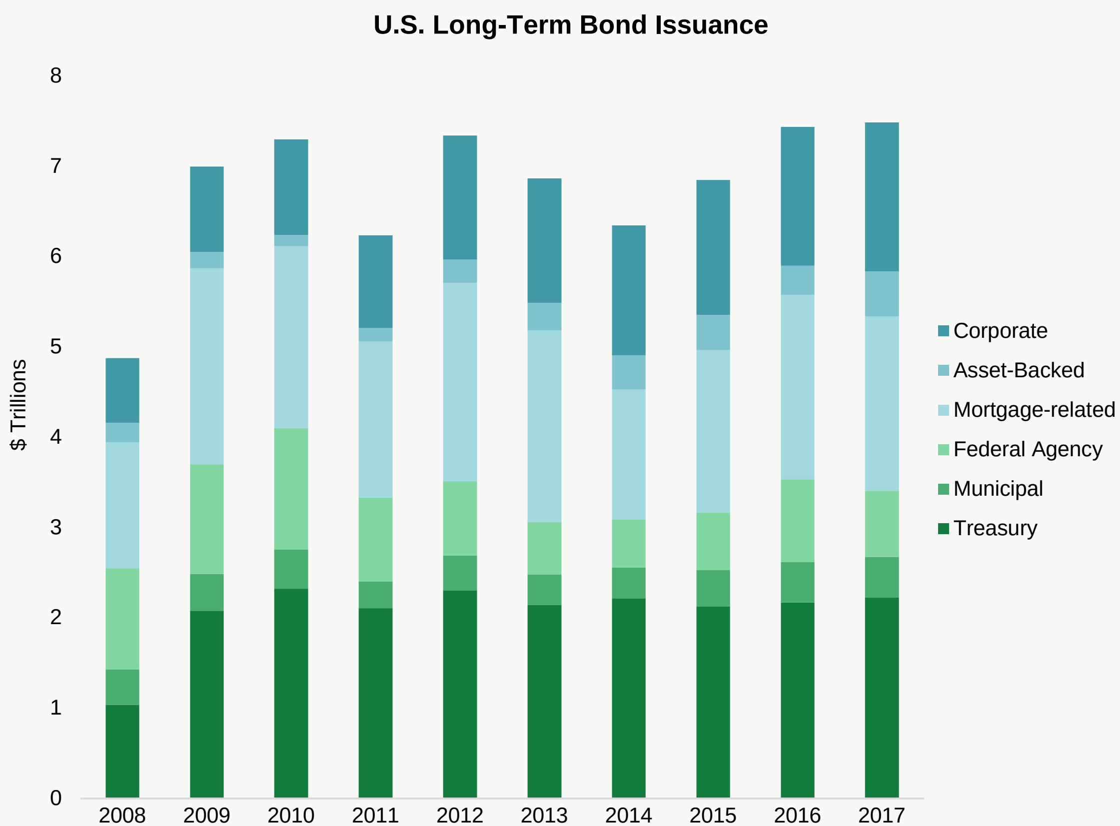


- Securitization plays an important role in the availability of consumer credit. Residential mortgages, credit cards, auto loans, student loans and other loans use the securitization market to make such loans widely available.
- As of the end of 2017, 67.2% of residential mortgages, 18.3% of autos, 12.5% of credit cards, and 11.9% of outstanding student loans are held in a securitization.

Bonds

A Closer Look

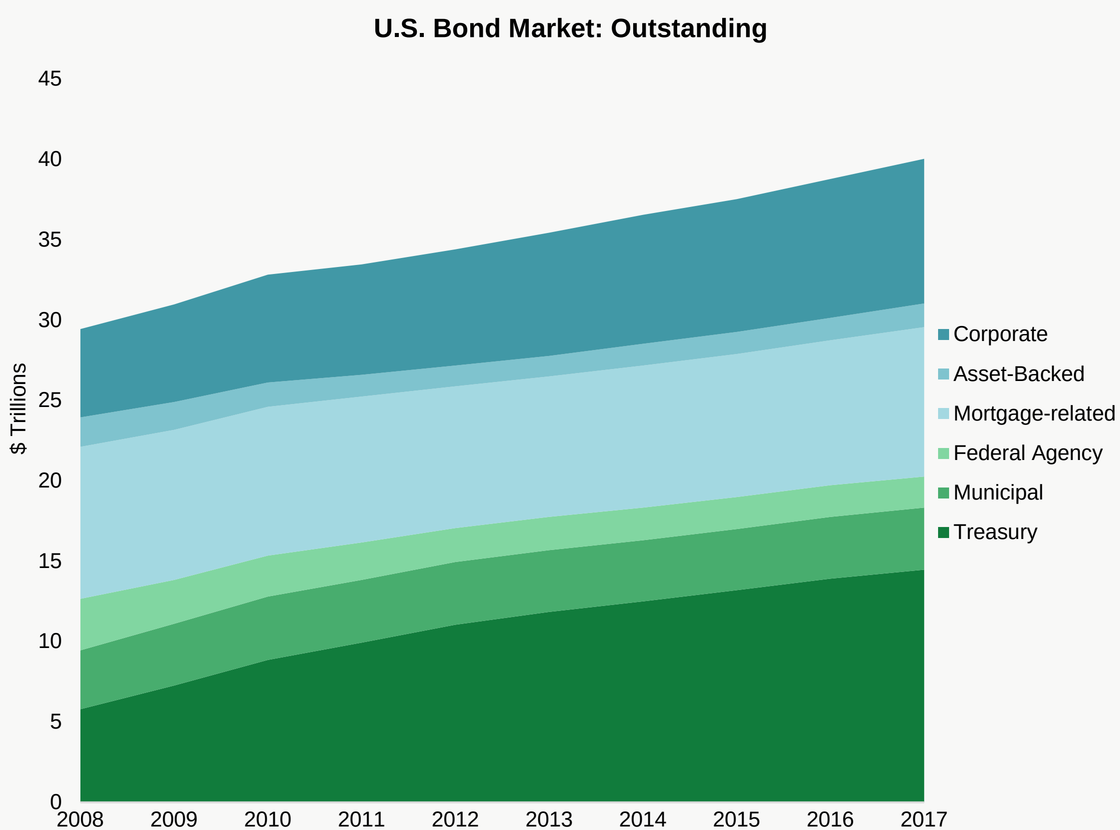
U.S. Bond Markets: Issuance



Source: Thomson Reuters, Bloomberg, Dealogic, US Treasury, US Agencies, SIFMA

- Between 2008 and 2017:
  - Treasury issuance increased to 29.7% of total U.S. bond issuance from 21.3%
  - Corporate issuance increased to 22.0% of total U.S. bond issuance from 14.7%
  - Federal agency issuance decreased from 23.0% to 9.8% as Fannie Mae and Freddie Mac began reducing their balance sheets by mandate

U.S. Bond Markets: Outstanding

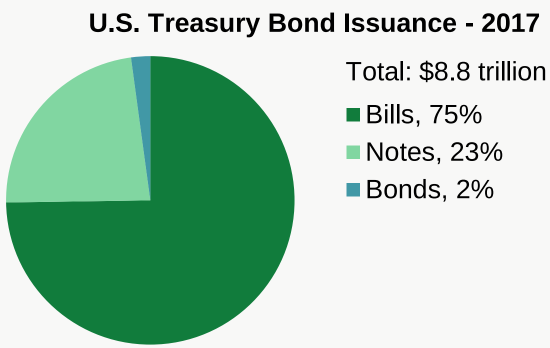


Source: Bloomberg, Thomson Reuters, US Treasury, US Agencies, Federal Reserve, SIFMA

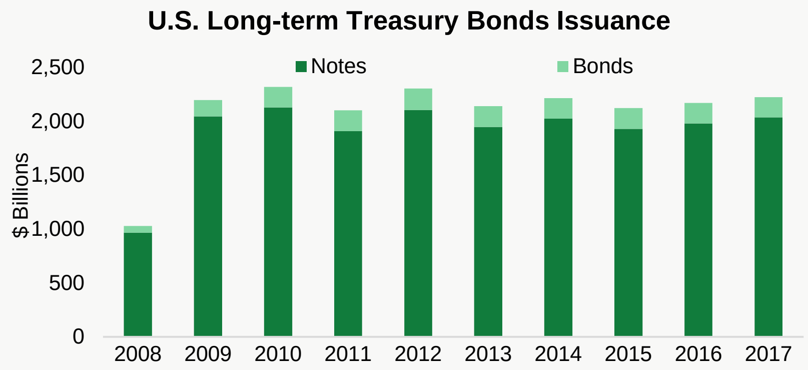
- The total value of outstanding bonds in the U.S. was $37.1 trillion at the end of 2017, 35.6% larger than at end-2008.
- Municipals, corporates and Treasuries increased in dollar volume outstanding between 2008 and 2017, with Treasuries doubling, corporates growing 63.5% and municipals growing by 5.5%.

Treasuries: A Closer Look

- The U.S. Treasury issues different maturities of debt:
  - Short Term or Bills (up to one year) and
  - Long-Term or Notes (one year to 10 years) and Bonds (over 10 years).
- In 2017, the U.S. Treasury issued $2.2 trillion in new long-term marketable securities, over twice the $1.0 trillion issued in 2008.
- The U.S. Treasury marketable bond market outstanding was $14.5 trillion as of end-2017, up almost three-fold from $5.8 trillion at end-2008.



Source: Thomson Reuters



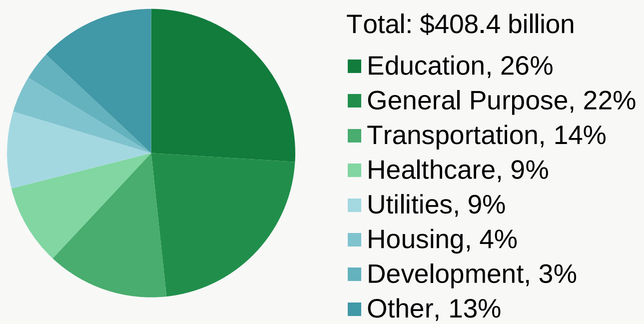
Source: Thomson Reuters

U.S. CAPITAL MARKETS

Municipals: A Closer Look

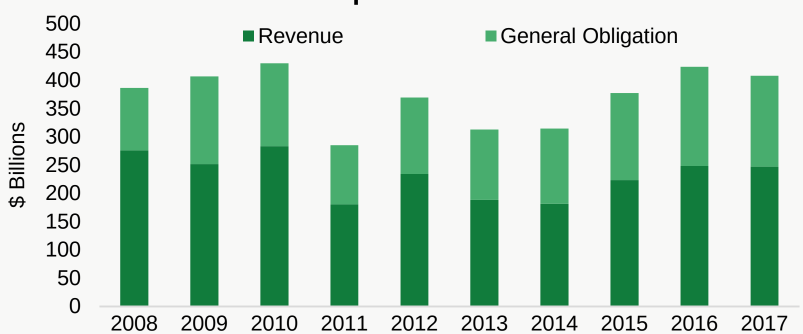
- Municipal bonds are issued by state and local governments, agencies and authorities. There are over 31,000 different municipal bond issuers with bonds outstanding.
- In 2017, $448.0 billion in long-term municipal securities were issued, 15.1% above the $389.3 billion in 2008.
- The municipal bond market outstanding was $3.9 trillion as of end-2017, up 5.5% from end-2008.

U.S. Municipal Bonds Issuance - 2017



Source: Thomson Reuters

U.S. Municipal Bonds Issuance

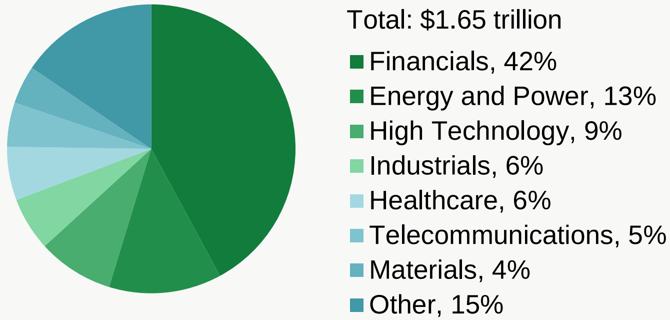


Source: Thomson Reuters

Corporates: A Closer Look

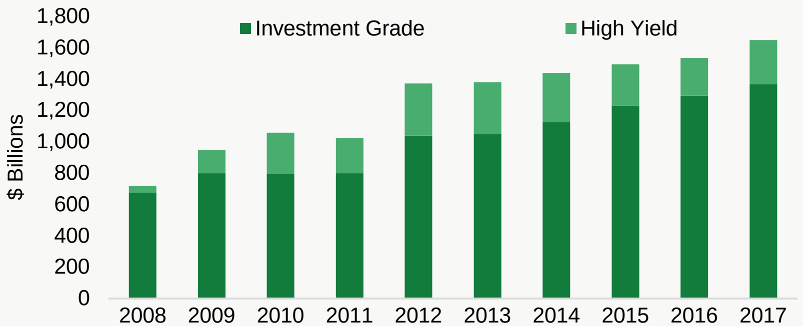
- Corporate bonds can be divided into investment grade (IG) and high yield (HY) based on their credit rating. IG bonds have ratings of BBB to AAA, while HY bonds have credit rating at or below BB. Bonds that have not been rated are also counted as HY.
- In 2017, $1.65 trillion of corporate bonds were issued, more than double the $760.4 billion in 2008.
- The size of the corporate bond market outstanding was $9.0 trillion at end-2017, up 63.5% from $5.5 trillion in 2008.

U.S. Corporate Bonds Issuance - 2017



Source: Thomson Reuters

U.S. Corporate Bonds Issuance

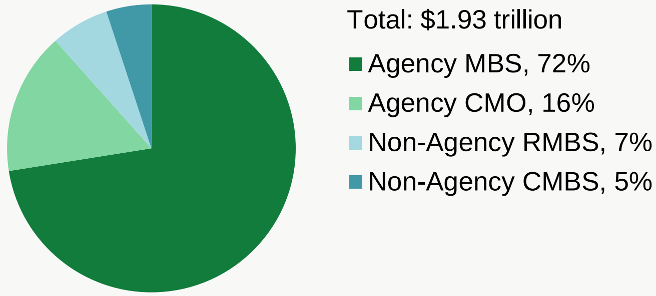


Source: Thomson Reuters

Mortgage-Related: A Closer Look

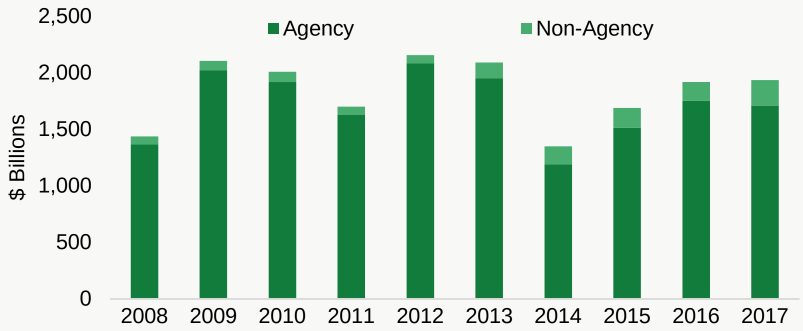
- The mortgage-related securities market is comprised of:
  - Agency mortgage-backed securities (MBS) and collateralized mortgage obligations (CMOs)
  - Non-agency commercial residential mortgage-backed securities (CMBS) and residential mortgage-backed securities (RMBS).
- In 2017, mortgage-related securities issuance totaled $1.9 trillion, 38.5% higher than the $1.4 trillion in 2008.
- The mortgage-related market had $9.3 trillion outstanding at end-2017, down 1.7% from $9.5 trillion in 2008.

U.S. Mortgage-Related Issuance - 2017



Sources: US Federal Agencies, Bloomberg, Dealogic, Thomson Reuters

U.S. Mortgage-Related Issuance

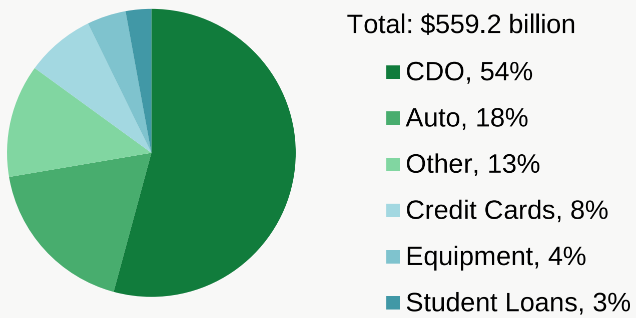


Sources: US Federal Agencies, Bloomberg, Dealogic, Thomson Reuters

Asset-Backed: A Closer Look

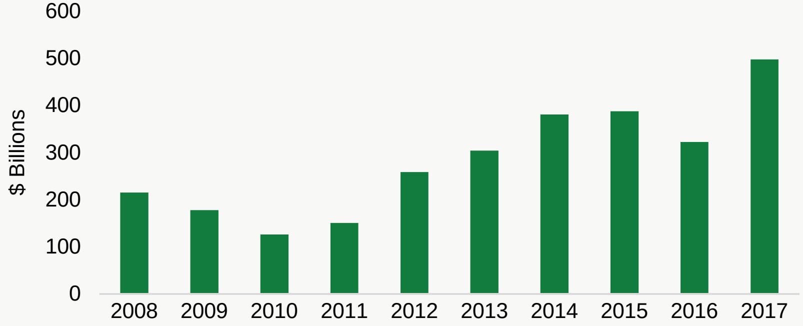
- Asset-backed securities are backed by cash flows of non-mortgage collateral such as auto loans, credit card balances or student loans.
- In 2017, $498.2 billion of asset-backed securities were issued, up 131.5% from 2008.
- The asset-backed market had $1.5 trillion outstanding as of the end-2017, down 19.6% from 2008.

U.S. Asset-Backed Issuance - 2017



Sources: Bloomberg, Dealogic, Thomson Reuters

U.S. Asset-Backed Issuance

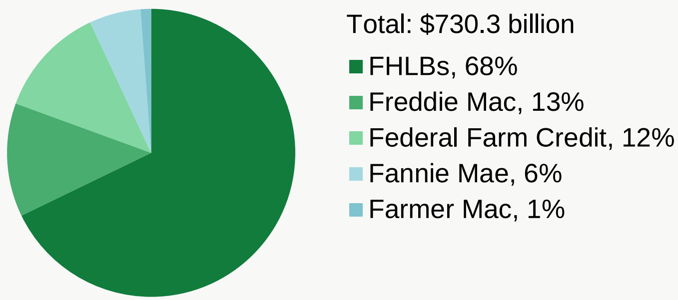


Sources: Bloomberg, Dealogic, Thomson Reuters

Agencies: A Closer Look

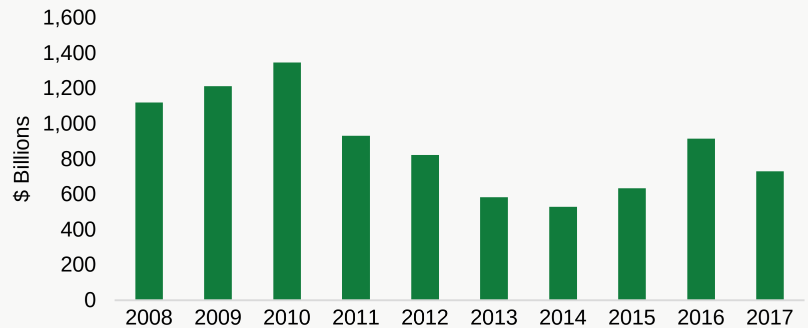
- Agency bonds are debt securities issued by U.S. federal agencies or government-sponsored enterprises (GSEs). The largest three agency issuers are Federal Home Loan Mortgage Corporation (Freddie Mac), Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Banks (FHLBs).
- In 2017, $730.3 billion in agency securities were issued, down 34.9% from the $1.1 trillion in 2008.
- The agency bond market had $1.9 trillion outstanding at end-2017, down 39.6% from $3.2 trillion in 2008.
- Both issuance and outstanding volumes have generally declined over the years due to Fannie Mae's and Freddie Mac's mandate to reduce balance sheet size, as well as their shifting reliance on the credit risk transfer market.

U.S. Long-Term Agency Bond Issuance - 2017



Sources: US Federal Agencies, Bloomberg, Dealogic, Thomson Reuters

U.S. Long-Term Agency Bond Issuance



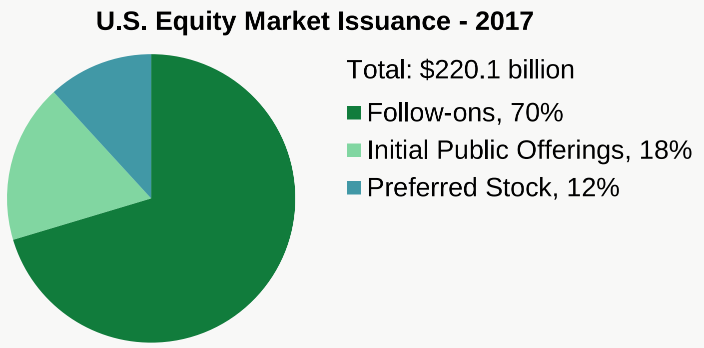
Sources: US Federal Agencies, Bloomberg, Dealogic, Thomson Reuters

Equities

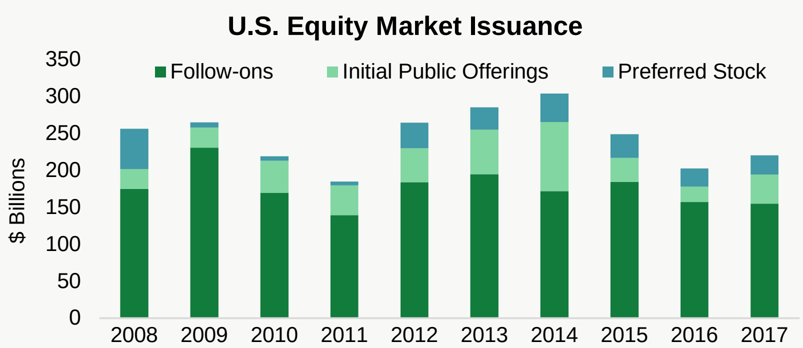
A Closer Look

Equities: A Closer Look

- Most of the equity issued in the U.S. is in the form of common stock, which represents ownership in a corporation, with the balance issued in preferred stock, which combines features of debt and equity. Common stock can be divided further into Initial Public Offerings (IPOs) – the first sale of stock to the public and secondary offerings – every subsequent stock issuance.
- In 2017, stock offerings raised $220.1 billion, down 14.1% from $256.3 billion in 2008.
- As of end-2017, U.S. domestic equity market capitalization stood at $32.1 trillion, almost triple the $11.6 trillion in 2008.



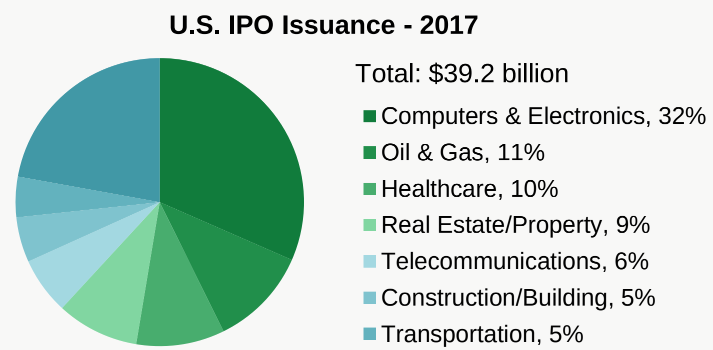
Source: Dealogic



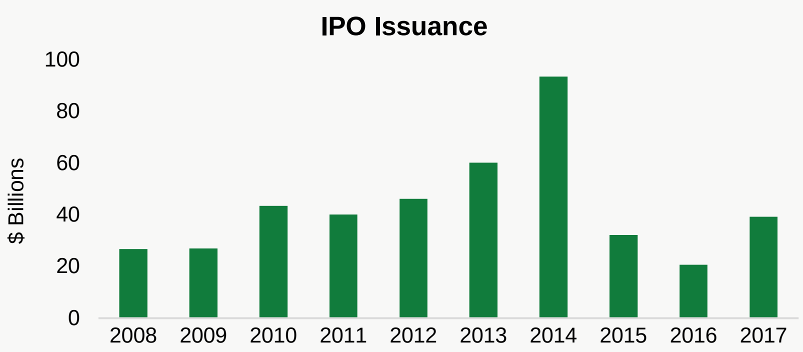
Source: Dealogic
Note: Excludes BDCs, SPACs, closed-end funds, and rights offers

IPOs: A Closer Look

- IPOs can be divided into “true” IPOs, which are offered by companies going public, and IPOs offered by closed-end mutual funds, business development companies and special purpose acquisition companies.
- In 2017, $39.2 billion was raised in “true” IPOs, up 46.9% from $26.7 billion in 2008.

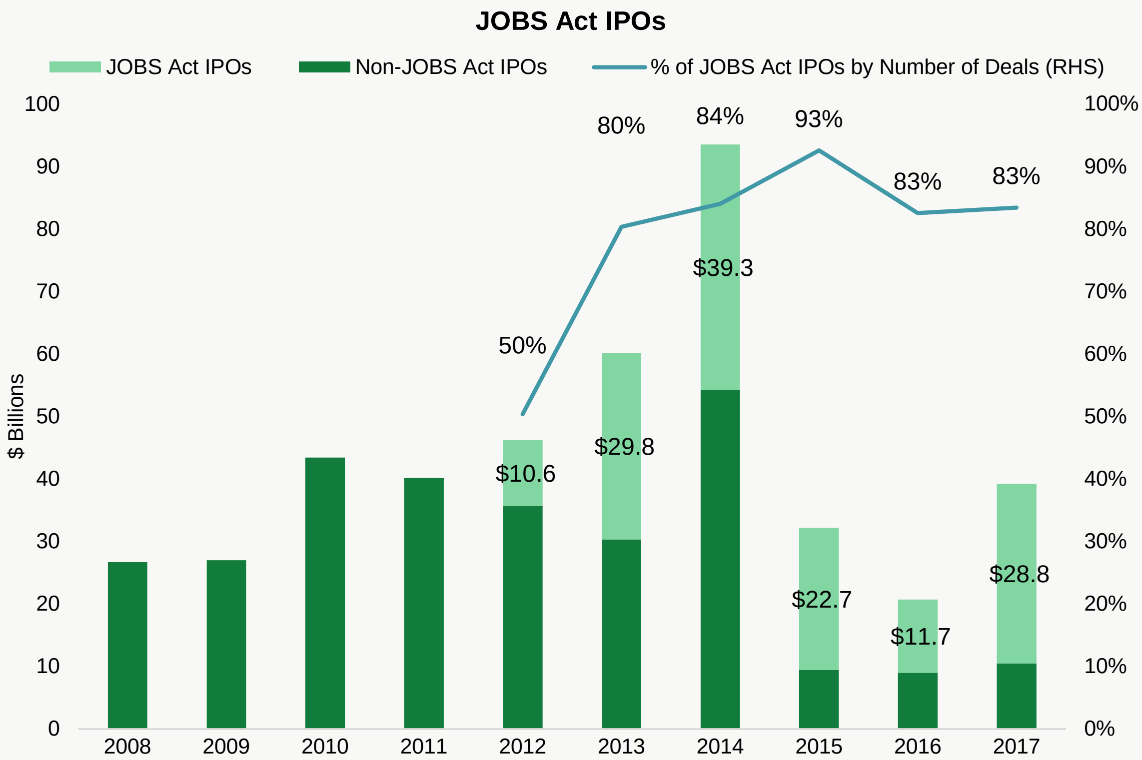


Source: Thomson Reuters
Note: Excludes BDCs, SPACs, and closed-end funds



Source: Thomson Reuters
Note: Excludes BDCs, SPACs, and closed-end funds

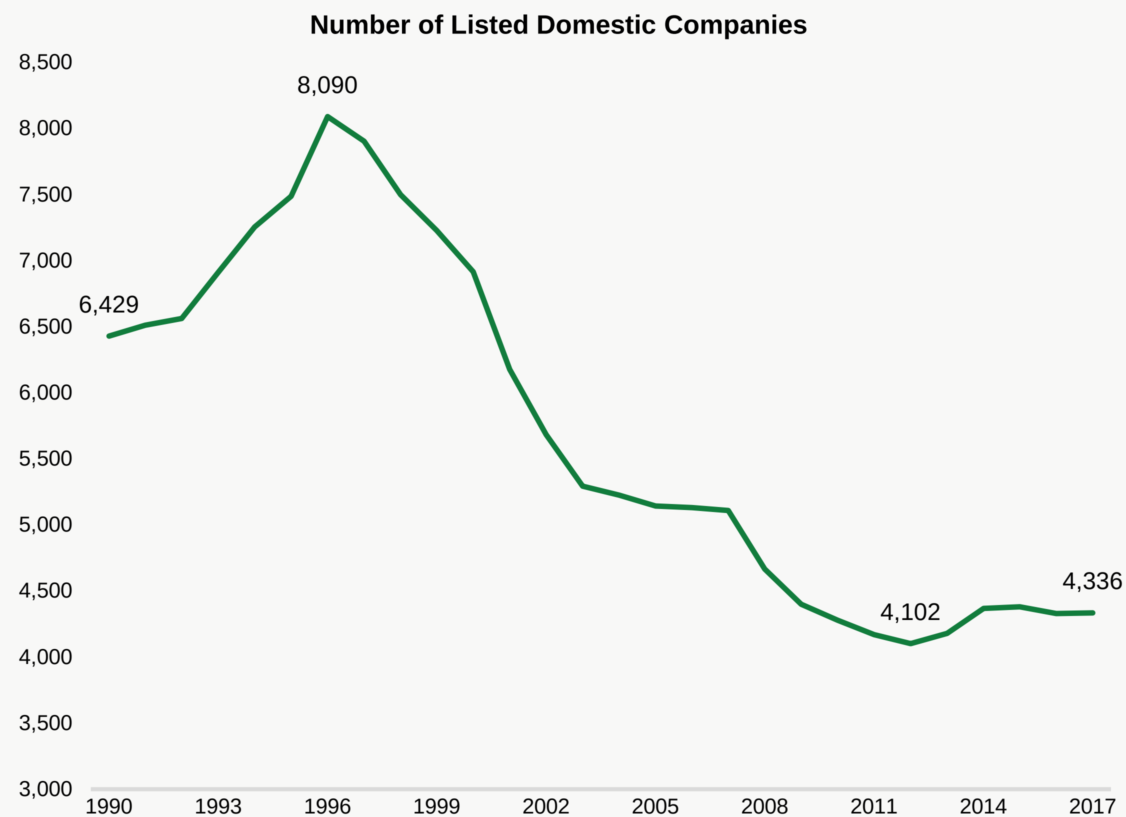
IPOs: A Closer Look



Note: Excludes business development companies, special purpose acquisition companies, and closed-end funds
Sources: Dealogic

- In April 2012, the Jumpstart Our Business Startups Act (JOBS Act) was signed; a law intended to encourage funding of small businesses in the United States by extending the amount of time that certain new public companies have to begin compliance with registration requirements.
- JOBS Act IPOs are those of firms with total annual gross revenues of less than $1 billion in its most recently completed fiscal year and that issued less than $1 billion in nonconvertible debt securities over a rolling 36-months.

Publicly Traded Companies



Sources: World Bank

- The number of listed domestic companies fell to 4,336 in 2017, a 46.4% decline from the peak of 8,090 companies in 1996.

The report is subject to the Terms of Use applicable to SIFMA's website, available here: http://www.sifma.org/legal/

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate on legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit http://www.sifma.org.

TO VIEW MORE STATISTICS AND REPORTS FROM SIFMA RESEARCH, VISIT HTTP://WWW.SIFMA.ORG/RESEARCH.