



2020 Capital Markets Fact Book

September 2020



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Introduction

Capital markets recognize and drive capital to the best ideas and enterprises. Coupled with the free flow of capital, innovation is an integral component to a country for supporting job creation, economic development and prosperity. Markets facilitate the transfer of funds from those who seek a return on their assets to those who need capital and credit to expand.

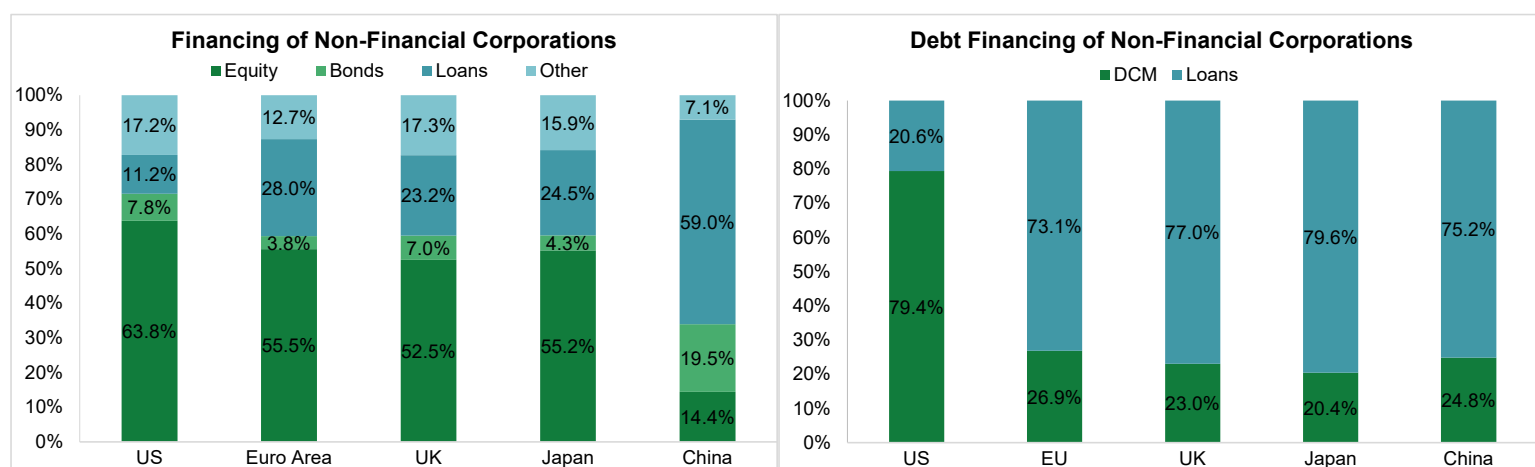
Clients benefiting from healthy capital markets include not just individual investors but also institutional investors, governments and corporations. Capital, raised through equity and debt, can be used to grow businesses, finance investments in new plant, equipment and technology and fund infrastructure projects. This creates jobs and flows money into the economy. Additionally, individuals and businesses can invest in securities to generate wealth.

Capital Markets Fuel Economies

In the U.S., capital markets provided 72% of funding for economic activity, in terms of equity and debt financing of non-financial corporations. Capital markets enable debt issuance, which is a more efficient, stable and less restrictive form of borrowing for corporations. The use of debt capital markets to fuel economic growth is more prevalent in the U.S, at 79% of the total, whereas bank lending is more dominant in other regions, around 21% on average.

On the equities side, companies need capital for various business purposes – to invest in growth, fund mergers and acquisitions, etc. – and firms have several ways they can generate capital, including issuing IPOs. IPOs allow businesses to grow, innovate and better serve their customers.

In short, U.S. capital markets are the bedrock of our nation's economy.



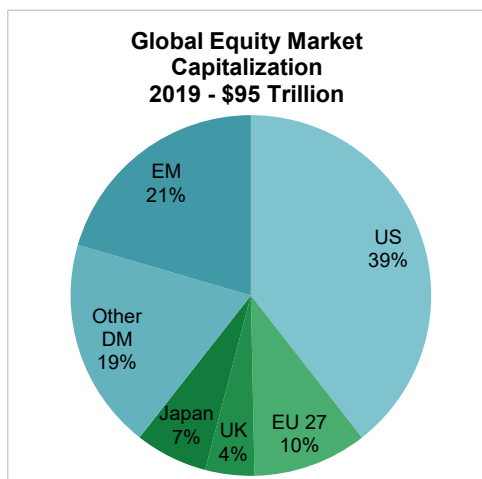
Source: OECD, Federal Reserve, ECB, Bank of Japan, National Bureau of Statistics of China

Note: As of 2019, EU 2018, China 2016; Euro Area = 19 EU-member states using the Euro; other financing (ex-China) = insurance reserves, trade credits and trade advances; other financing (China) = other, direct investments; economic activity defined as financing of non-financial corporations; EU = 27 EU-member states; DCM = debt capital markets = corporate bonds only

US Capital Markets Are the Largest in the World

The U.S. capital markets are largest in the world and continue to be among the deepest, most liquid and most efficient.

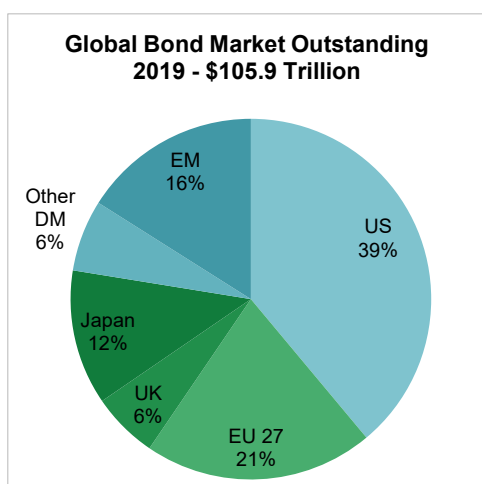
Equities: U.S. equity markets represent 39.4% of the \$95.0 trillion in global equity market cap, or \$37.5 trillion; this is 3.9x the next largest market, the EU (excluding the U.K.).



Source: World Federation of Exchanges, SIFMA estimates

Note: For listed domestic companies; EM = emerging markets, DM = developed markets

Fixed Income: U.S. fixed income markets comprise 38.9% of the \$105.9 trillion securities outstanding across the globe, or \$41.2 trillion; this is 1.9x the next largest market, the EU (excluding the U.K.).



Source: Bank for International Settlements, SIFMA estimates

Note: EM = emerging markets, DM = developed markets

Highlights

US Capital Markets

In 2019, the securities industry raised \$2.1 trillion of capital for businesses through debt and equity issuance activity in the United States, a 13.0% decrease from the previous year.

Equity issuance, including common and preferred shares, totaled \$228.1 billion in 2019, a 2.9% increase year-over-year. Initial public offering (IPO) volume, excluding closed-end funds, was \$48.8 billion in 2019, down 2.1% from \$49.9 billion in 2018. Follow-on, or secondary, issuance totaled \$145.3 billion in 2019, down 6.0% from 2018.

Issuance of corporate debt, asset-backed securities and non-agency mortgage-backed securities totaled \$1.8 trillion in 2019, down 14.6% from 2018. Non-convertible corporate debt issuance increased by 6.2% to \$1.4 trillion in 2019, while convertible corporate debt decreased 98.0% to \$0.8 billion. Non-agency mortgage-backed securities issuance fell 56.7% to \$116.9 billion in 2019, while asset-backed securities issuance volume fell 40.0% to \$310.2 billion.

U.S. long-term municipal bond issuance totaled \$426.0 billion in 2019 a 22.8% increase from \$346.8 billion in 2018. Of the total, 57.8% was issued in form of revenue bonds, 37.7% in general obligation bonds and the remainder in private placements.

U.S. merger and acquisition announced deals totaled \$1.9 trillion in 2019, a 5.9% increase from \$1.8 trillion in 2018, while the value of completed M&A deals decreased by 8.5% to \$1.7 trillion.

The U.S. stock markets recorded double-digit increases in 2019: the Dow Jones Industrial Average rose by 22.3%, ending the year at 28,538.44, the Standard & Poor's 500 Index was up 28.9% to close 2019 at 3,230.78; and the NASDAQ Composite Index increased by 35.2% to 8,972.60.

In 2019, the average daily volume for NYSE-listed stocks was \$137.9 billion and 3.6 billion shares, down 7.9% and 2.1%, respectively, year-over-year. For NASDAQ-listed stocks the average daily volume was \$108.6 billion and 2.1 billion shares, down 10.3% and 4.5%, respectively, year-over-year.

Global Capital Markets

Global long-term bond market issuance increased by 19.7% to \$21.0 trillion in 2019 while the global equity issuance decreased by 0.9% to \$540.5 billion.

Global bond markets outstanding value increased by 5.4% to \$105.9 trillion while global equity market capitalization increased by 23.8% year-over-year to \$95.0 trillion in 2019.

U.S. gross activity (purchases and sales) in foreign securities increased to \$36.9 trillion in 2019, up 9.3% from 2018. Foreign gross activity in U.S. securities increased by 12.7% to \$82.1 trillion in 2019.

Investor Participation

Federal Reserve Board data showed the value of U.S households' liquid assets increased by 16.9% to \$49.5 trillion in 2019 from \$42.4 trillion in 2018. Of total liquid assets held by U.S. households, 41.6% was in equities, 25.7% in bank deposits and CDs and 17.9% in mutual funds, with the remaining 15.7% split between U.S. Treasury securities; agency & GSE securities; municipal bonds; money market funds; and corporate bonds.

Savings & Investment

Total value of U.S. retirement assets increased by 10.8% to \$39.0 trillion in 2019, according to Federal Reserve Flow of Funds accounts. Total pension assets rose 7.8% to \$28.0 trillion while assets held in individual retirement accounts increased by 19.2% to \$11.0 trillion.

US Securities Industry

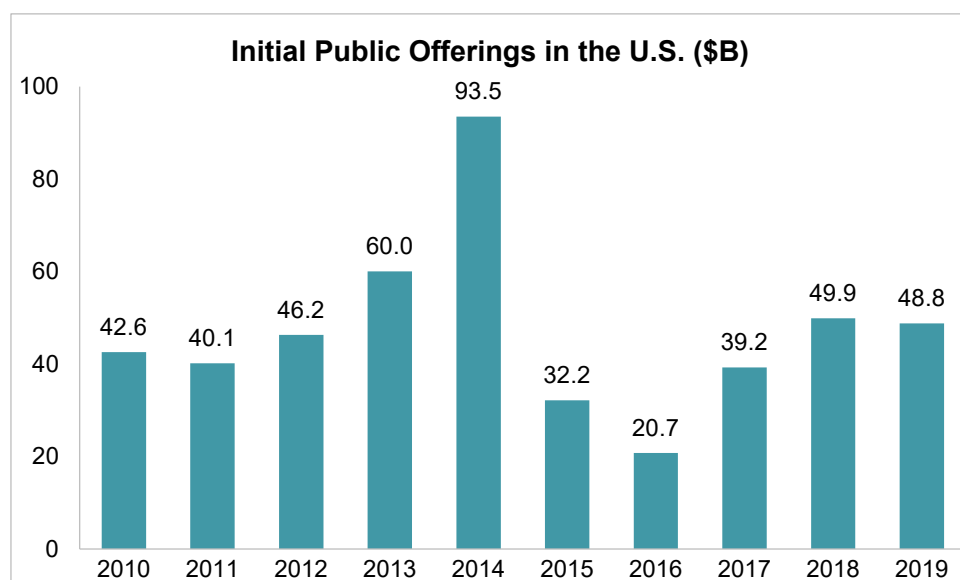
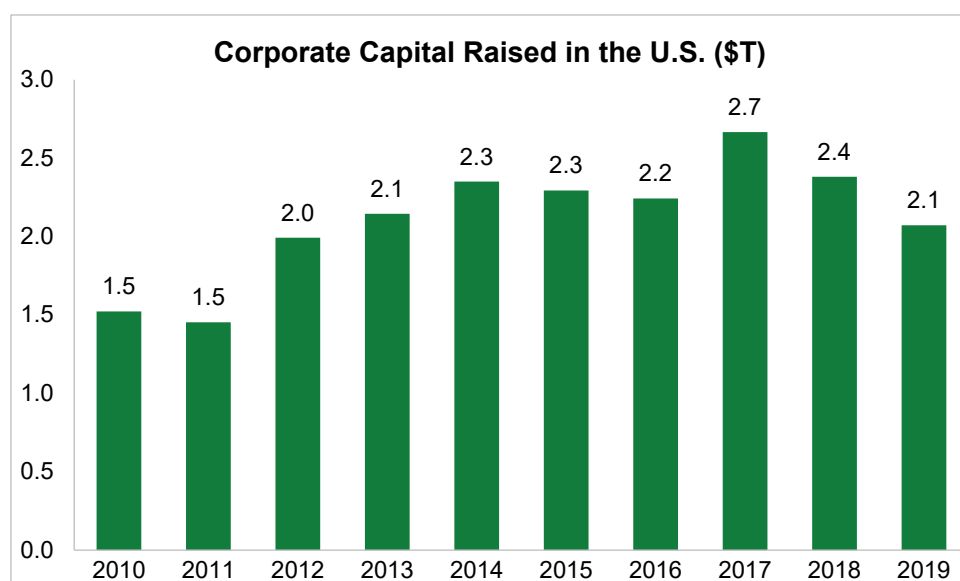
The number of FINRA-registered broker-dealers decreased by 2.5% to 3,417 in 2019.

Pre-tax net income (profits) for NYSE member broker-dealers rose to \$28.1 billion in 2019, up 2.8% from \$27.3 billion in 2018. Gross revenues totaled \$250.4 billion in 2019, up 9.8% from the previous year, while total expenses rose by 10.7% to \$222.3 billion.

National securities industry employment, as reported by the U.S. Department of Labor, reached 971,000 jobs in 2019, an increase of 0.9% from 962,200 year-over-year.

US Capital Markets

US Corporate Capital Raised Initial Public Offerings - Charts



Source: Bloomberg, Dealogic, Refinitiv

Note: Corporate capital includes underwritten, privately placed, and medium-term notes; U.S. IPOs include rank eligible deals, exclude BDCs, SPACs, ETFs, CLEFs and rights offers.

US Corporate Issuance, Fixed Income – Value

	\$ Billions				
	Corporate Debt	Convertible Debt	ABS	Non-Agency MBS	Total Fixed Income
2005	750.8	31.7	473.7	1,434.3	2,690.6
2006	1,058.3	67.6	658.2	1,491.8	3,276.0
2007	1,139.0	83.7	827.6	1,028.7	3,079.0
2008	710.7	46.8	215.2	70.0	1,042.7
2009	941.7	36.9	177.9	83.5	1,239.9
2010	1,054.0	31.6	125.9	91.3	1,302.8
2011	1,021.4	22.8	151.0	71.6	1,266.8
2012	1,369.4	21.9	259.0	76.0	1,726.2
2013	1,375.3	41.1	304.1	138.2	1,858.7
2014	1,437.6	39.6	393.4	174.5	2,045.0
2015	1,490.0	21.5	333.4	199.3	2,044.1
2016	1,525.2	24.5	325.4	164.0	2,039.1
2017	1,642.2	29.2	550.3	224.0	2,445.7
2018	1,333.1	39.4	516.9	269.9	2,159.3
2019	1,415.8	0.8	310.2	116.9	1,843.7
Average	1,217.6	35.9	374.8	375.6	2,004.0
Y/Y % Change	6.2%	-98.0%	-40.0%	-56.7%	-14.6%
5-Year CAGR	-1.0%	-54.3%	-4.6%	-7.7%	-2.1%
10-Year CAGR	4.2%	-31.9%	5.7%	3.4%	4.0%

Sources: Bloomberg, Refinitiv

Note: Corporate debt includes public and private, investment grade and high yield bonds.

US Corporate Issuance, Fixed Income – Number of Issues

	Number of Issues				
	Corporate Debt	Convertible Debt	ABS	Non-Agency MBS	Total Fixed Income
2005	2,157	163	814	1,865	4,999
2006	2,281	228	1,098	1,946	5,553
2007	1,986	251	1,448	1,297	4,982
2008	946	185	313	134	1,578
2009	1,259	186	289	174	1,908
2010	1,532	167	318	210	2,227
2011	1,312	164	313	159	1,948
2012	1,742	187	503	211	2,643
2013	1,653	196	626	339	2,814
2014	1,553	129	738	389	2,809
2015	1,307	98	733	443	2,581
2016	1,395	117	740	345	2,597
2017	1,665	101	1,166	402	3,334
2018	1,247	119	711	440	2,517
2019	1,389	7	553	160	2,109
Average	1,562	153	691	568	2,973
Y/Y % Change	11.4%	-94.1%	-22.2%	-63.6%	-16.2%
5-Year CAGR	1.2%	-44.2%	-5.6%	-16.3%	-5.6%
10-Year CAGR	1.0%	-28.0%	6.7%	-0.8%	1.0%

Sources: Bloomberg, Refinitiv

Note: Corporate debt includes public and private, investment grade and high yield bonds.

US Corporate Issuance, Equity – Value

	\$ Billions				
			Total		
	IPOs	Follow-Ons	Common Stock	Preferred Stock	Total Equity
2005	40.7	124.6	165.3	20.8	186.2
2006	46.4	106.9	153.3	40.9	194.2
2007	52.3	111.7	164.0	62.9	226.9
2008	26.7	174.9	201.6	54.7	256.4
2009	27.0	230.8	257.9	7.0	264.9
2010	42.6	169.4	212.0	6.2	218.2
2011	40.1	139.3	179.4	5.5	184.9
2012	46.2	183.7	230.0	34.6	264.6
2013	60.0	194.8	254.8	30.2	285.0
2014	93.5	171.9	265.4	38.5	304.0
2015	32.2	184.5	216.7	32.1	248.8
2016	20.7	157.3	178.0	24.8	202.8
2017	39.2	155.0	194.2	26.1	220.3
2018	49.9	154.6	204.5	17.2	221.6
2019	48.8	145.3	194.1	34.0	228.1
Average	44.4	160.3	204.8	29.0	233.8
Y/Y % Change	-2.1%	-6.0%	-5.1%	98.0%	2.9%
5-Year CAGR	-12.2%	-3.3%	-6.1%	-2.5%	-5.6%
10-Year CAGR	6.1%	-4.5%	-2.8%	17.1%	-1.5%

Source: Dealogic

Note: Includes rank eligible deals, excludes BDCs, SPACs, ETFs, CLEFs and rights offers.

US Corporate Issuance, Equity – Number of Issues

	Number of Deals				
			Total Common Stock	Preferred Stock	Total Equity
	IPOs	Follow-Ons			
2005	209	496	705	73	778
2006	206	517	723	93	816
2007	215	465	680	90	770
2008	33	267	300	43	343
2009	63	653	716	14	730
2010	157	599	756	23	779
2011	124	502	626	37	663
2012	131	575	706	118	824
2013	215	782	997	103	1,100
2014	275	724	999	77	1,076
2015	153	701	854	47	901
2016	98	617	715	77	792
2017	154	730	884	91	975
2018	185	685	870	46	916
2019	151	653	804	82	886
Average	158	598	756	68	823
Y/Y % Change	-18.4%	-4.7%	-7.6%	78.3%	-3.3%
5-Year CAGR	-11.3%	-2.0%	-4.3%	1.3%	-3.8%
10-Year CAGR	9.1%	0.0%	1.2%	19.3%	2.0%

Source: Dealogic

Note: Includes rank eligible deals, excludes BDCs, SPACs, ETFs, CLEFs and rights offers.

US Private Placements – Value

	\$ Billions		
	Debt	Equity	Total
2005	462.5	18.8	481.3
2006	411.2	17.0	428.2
2007	488.9	33.6	522.5
2008	110.5	53.1	163.6
2009	156.9	8.2	165.0
2010	138.6	27.2	165.8
2011	111.9	25.5	137.5
2012	132.5	13.4	146.0
2013	129.3	45.4	174.8
2014	129.9	7.8	137.7
2015	129.6	12.0	141.6
2016	131.1	19.2	150.3
2017	217.3	14.2	231.4
2018	210.5	12.3	222.8
2019	282.9	20.3	303.2
Average	216.2	21.9	238.1
Y/Y % Change	34.4%	65.5%	36.1%
5-Year CAGR	16.8%	21.2%	17.1%
10-Year CAGR	6.1%	9.5%	6.3%

Source: Refinitiv

Note: Includes private placements in the U.S. from all issuers.

US Private Placements – Number of Issues

	Number of Deals		
	Debt	Equity	Total
2005	2,374	575	2,949
2006	2,094	726	2,820
2007	1,644	968	2,612
2008	465	855	1,320
2009	490	523	1,013
2010	521	651	1,172
2011	468	546	1,014
2012	484	346	830
2013	535	206	741
2014	486	126	612
2015	474	192	666
2016	455	248	703
2017	590	102	692
2018	572	42	614
2019	647	57	704
Average	820	411	1,231
Y/Y % Change	13.1%	35.7%	14.7%
5-Year CAGR	5.9%	-14.7%	2.8%
10-Year CAGR	2.8%	-19.9%	-3.6%

Source: Refinitiv

Note: Includes private placements in the U.S. from all issuers.

US Long-Term Municipal Bond Issuance – Value

	\$ Billion							
	Revenue Competitive	Revenue Negotiated	Total Revenue	General Obligation Competitive	General Obligation Negotiated	Total General Obligation	Private Placements	Total Municipal
2005	20.5	240.4	261.0	55.4	89.0	144.4	1.8	407.1
2006	20.8	245.6	266.5	48.5	67.0	115.6	5.8	387.9
2007	21.7	270.7	292.4	51.0	80.8	131.8	5.0	429.2
2008	15.5	260.5	276.0	37.8	72.4	110.2	3.2	389.3
2009	11.8	239.3	251.1	46.1	108.7	110.3	3.7	365.1
2010	24.2	253.7	277.9	49.0	98.0	146.9	8.4	433.3
2011	18.7	161.4	180.1	40.8	64.2	105.1	9.9	295.1
2012	26.4	208.1	234.6	47.7	87.5	135.3	12.8	382.7
2013	18.1	170.1	188.2	51.3	73.3	124.6	22.7	335.4
2014	20.5	161.3	181.8	51.4	81.5	132.9	24.5	339.1
2015	23.3	200.2	223.5	64.0	89.9	153.8	27.8	405.1
2016	29.4	219.0	248.4	69.3	106.1	175.5	28.1	451.9
2017	29.4	218.3	247.6	68.9	91.9	160.8	40.6	449.0
2018	23.9	175.5	199.4	58.1	62.9	120.9	26.4	346.8
2019	27.2	218.8	246.0	71.8	88.7	160.6	19.4	426.0
Average	22.1	216.2	238.3	54.1	84.1	135.2	16.0	389.5
Y/Y % Change	13.7%	24.7%	23.4%	23.7%	41.2%	32.8%	-26.7%	22.8%
5-Year CAGR	5.8%	6.3%	6.2%	6.9%	1.7%	3.9%	-4.6%	4.7%
10-Year CAGR	8.7%	-0.9%	-0.2%	4.5%	-2.0%	3.8%	18.0%	1.6%

Source: Refinitiv

Note: Includes securities issued by a state, territory, municipality, county, or certain non-profit organizations; excludes securities with maturities under 13 months.

US Long-Term Municipal Bond Issuance – Number of Issues

	Number of Deals							
	Revenue Competitive	Revenue Negotiated	Total Revenue	General Obligation Competitive	General Obligation Negotiated	Total General Obligation	Private Placements	Total Municipal
2005	734	5,335	6,069	3,324	4,295	7,619	179	13,867
2006	663	5,221	5,884	3,124	3,363	6,487	300	12,671
2007	622	5,339	5,961	2,983	3,242	6,225	405	12,591
2008	482	4,240	4,722	2,870	2,825	5,695	364	10,781
2009	515	3,727	4,242	3,125	3,992	110	332	4,684
2010	791	4,430	5,221	3,437	4,770	8,207	377	13,805
2011	552	3,009	3,561	2,943	3,667	6,610	414	10,585
2012	760	3,542	4,302	3,530	4,731	8,261	588	13,151
2013	548	3,012	3,560	3,274	3,741	7,015	930	11,505
2014	559	2,820	3,379	3,260	3,528	6,788	977	11,144
2015	662	3,575	4,237	3,779	4,064	7,843	1,222	13,302
2016	790	3,647	4,437	3,847	3,987	7,834	1,285	13,556
2017	549	3,350	3,899	3,468	3,220	6,688	1,474	12,061
2018	515	2,759	3,274	3,202	2,073	5,275	1,060	9,609
2019	609	3,334	3,943	3,476	3,175	6,651	979	11,573
Average	623	3,823	4,446	3,309	3,645	6,487	726	11,659
Y/Y % Change	18.3%	20.8%	20.4%	8.6%	53.2%	26.1%	-7.6%	20.4%
5-Year CAGR	1.7%	3.4%	3.1%	1.3%	-2.1%	-0.4%	0.0%	0.8%
10-Year CAGR	1.7%	-1.1%	-0.7%	1.1%	-2.3%	50.7%	11.4%	9.5%

Source: Refinitiv

Note: Includes securities issued by a state, territory, municipality, county, or certain non-profit organizations; excludes securities with maturities under 13 months.

US Long-Term Municipal Bond Issuance – Number of Issuers

	Number		Unique Issuer as % of Total Issues
	Total Issues	Unique Issuers	
2005	13,867	8,910	64.3%
2006	12,671	8,069	63.7%
2007	12,591	7,921	62.9%
2008	10,781	6,849	63.5%
2009	11,691	7,358	62.9%
2010	13,805	8,234	59.6%
2011	10,585	7,143	67.5%
2012	13,151	8,838	67.2%
2013	11,505	7,663	66.6%
2014	11,144	7,396	66.4%
2015	13,302	8,583	64.5%
2016	13,556	8,889	65.6%
2017	12,061	7,574	62.8%
2018	9,609	6,299	65.6%
2019	11,573	7,417	64.1%
Average	12,126	7,810	64.5%
Y/Y % Change	20.4%	17.7%	-2.2%
5-Year CAGR	0.8%	0.1%	-0.7%
10-Year CAGR	-0.1%	0.1%	0.2%

Source: Refinitiv

Note: Includes securities issued by a state, territory, municipality, county, or certain non-profit organizations; excludes securities with maturities under 13 months.

Bank Qualified US Municipal Bond Issuance

	# Deals	Issuance (\$ Millions)	Average Deal Size (\$ Millions)
2005	5,013	18,402.6	3.7
2006	4,706	17,317.4	3.7
2007	4,469	16,233.0	3.6
2008	4,169	15,267.6	3.7
2009	5,992	33,028.6	5.5
2010	6,714	36,824.0	5.5
2011	5,157	18,836.9	3.7
2012	6,353	25,122.9	4.0
2013	5,248	20,252.9	3.9
2014	4,943	20,020.2	4.1
2015	5,422	22,670.7	4.2
2016	5,358	22,838.8	4.3
2017	4,217	17,662.0	4.2
2018	3,070	11,961.4	3.9
2019	3,700	14,892.4	4.0
Average	4,969	20,755.4	4.1
Y/Y % Change	20.5%	24.5%	3.3%
5-Year CAGR	-5.6%	-5.7%	-0.1%
10-Year CAGR	-4.7%	-7.7%	-3.1%

Source: Refinitiv

Note: "Bank qualified" municipal bonds are defined as short-term and long-term municipal bonds under the Tax Reform Act of 1986 (265b) where, when purchased by a commercial bank for its portfolio, the bank may deduct a portion of interest cost of carry for the position.

US Equity and Debt Outstanding

	\$ Billions							
	ABS	Corporate Bonds	Corporate Equities	Federal Agencies Securities	Money Markets	Mortgage-Related Securities	Municipal Bonds	Treasury Securities
2005	1,281.4	4,648.6	21,532.9	2,616.0	1,644.2	7,218.1	3,099.0	4,170.0
2006	1,656.9	4,891.3	24,834.6	2,634.0	1,958.4	8,389.9	3,285.4	4,328.0
2007	1,963.5	5,327.5	26,201.1	2,906.2	1,788.9	9,386.0	3,550.5	4,522.6
2008	1,829.5	5,505.4	16,265.5	3,210.6	1,599.8	9,467.4	3,666.1	5,783.6
2009	1,712.1	6,094.6	20,650.7	2,727.5	1,138.0	9,352.5	3,850.8	7,260.6
2010	1,507.8	6,732.1	24,079.1	2,538.8	1,057.6	9,258.4	3,965.4	8,853.0
2011	1,359.0	6,845.5	23,335.9	2,326.9	969.3	9,075.5	3,927.9	9,928.4
2012	1,280.3	7,254.0	26,814.4	2,095.8	952.3	8,838.1	3,927.0	11,046.1
2013	1,285.7	7,680.5	34,425.2	2,056.9	951.6	8,742.6	3,860.6	11,854.4
2014	1,349.4	8,046.7	37,967.6	2,028.7	930.4	8,842.0	3,814.2	12,504.8
2015	1,376.6	8,296.0	37,132.3	1,995.4	941.5	8,894.8	3,830.0	13,191.6
2016	1,391.8	8,698.6	40,203.5	1,971.7	884.9	9,023.4	3,876.4	13,908.2
2017	1,457.9	9,017.9	48,055.8	1,934.7	965.9	9,304.5	3,890.0	14,468.8
2018	1,615.6	9,233.2	43,915.5	1,841.6	996.0	9,732.3	3,835.1	15,608.0
2019	1,620.7	9,597.8	54,623.7	1,825.9	1,045.2	10,055.0	3,854.5	16,673.3
Average	1,512.6	7,191.3	32,002.5	2,314.0	1,188.3	9,038.7	3,748.9	10,273.4
Y/Y % Change	0.3%	3.9%	24.4%	-0.9%	4.9%	3.3%	0.5%	6.8%
5-Year CAGR	3.3%	3.0%	8.0%	-1.8%	2.1%	2.5%	0.1%	4.8%
10-Year CAGR	0.7%	3.6%	8.5%	-3.2%	-0.1%	0.8%	-0.3%	6.5%

Sources: Bloomberg, Federal Agencies, Refinitiv, SIFMA, The Federal Reserve, U.S. Department of Treasury

Note: Corporate equities include both listed on exchanges and closely held common and preferred shares issued by domestic corporations and U.S. purchases of shares issued by foreign corporations; mortgage-related securities include GNMA, FNMA, and FHLMC mortgage-backed securities and CMOs and private-label MBS/CMOs; Treasury securities include only interest bearing marketable public debt.

US Stock Market Capitalization

	\$ Billions		
	NYSE	NASDAQ	Total
2005	13,310.6	3,604.0	16,914.6
2006	15,421.2	3,865.0	19,286.2
2007	15,650.8	4,013.7	19,664.5
2008	9,208.9	2,249.0	11,457.9
2009	11,837.8	3,239.5	15,077.3
2010	13,394.1	3,889.4	17,283.5
2011	11,795.6	3,845.1	15,640.7
2012	14,085.9	4,582.4	18,668.3
2013	17,949.9	6,085.0	24,034.9
2014	19,351.4	6,979.2	26,330.6
2015	17,786.8	7,280.8	25,067.5
2016	19,573.1	7,779.1	27,352.2
2017	22,081.4	10,039.3	32,120.7
2018	20,679.5	9,756.8	30,436.3
2019	24,480.2	13,002.0	37,482.2
Average	16,440.5	6,014.0	22,454.5
Y/Y % Change	18.4%	33.3%	23.1%
5-Year CAGR	4.8%	13.3%	7.3%
10-Year CAGR	7.5%	14.9%	9.5%

Source: World Federation of Exchanges

Note: Includes market capitalization of domestic companies only.

US Stock Market Indices

	Value (At Year-End)		
	Dow Jones Industrial Average	S&P 500	NASDAQ Composite
2005	10,717.50	1,248.29	2,205.32
2006	12,463.15	1,418.30	2,415.29
2007	13,264.82	1,468.36	2,652.28
2008	8,776.39	903.25	1,577.03
2009	10,428.05	1,115.10	2,269.15
2010	11,577.51	1,257.64	2,652.87
2011	12,217.56	1,257.60	2,605.15
2012	13,104.12	1,426.19	3,019.51
2013	16,576.66	1,848.36	4,176.59
2014	17,823.07	2,058.90	4,736.05
2015	17,425.03	2,043.94	5,007.41
2016	19,762.60	2,238.83	5,383.12
2017	24,719.22	2,673.61	6,903.39
2018	23,327.46	2,506.85	6,635.28
2019	28,538.44	3,230.78	8,972.60
Average	16,048.1	1,779.7	4,080.7
Y/Y % Change	22.3%	28.9%	35.2%
5-Year CAGR	9.9%	9.4%	13.6%
10-Year CAGR	10.6%	11.2%	14.7%

Source: Bloomberg

US Interest Rates and Bond Yields

	Annual Average %								
	3-Month T-Bills	2-Year Treasury Bonds	10-Year Treasury Bonds	30-Year Treasury Bonds	Aaa Corporates (Moody's)	Baa Corporates (Moody's)	20-Year High Grade Municipal Bonds (S&P)	Bank Prime Rate	Effective Federal Funds Rate
2005	3.15%	4.41%	4.29%	4.56%	5.23%	6.06%	4.29%	6.19%	3.21%
2006	4.73%	4.82%	4.80%	4.91%	5.59%	6.48%	4.42%	7.96%	4.96%
2007	4.36%	3.05%	4.63%	4.84%	5.56%	6.48%	4.42%	8.05%	5.03%
2008	1.37%	0.76%	3.66%	4.28%	5.63%	7.44%	4.80%	5.07%	1.94%
2009	0.15%	1.14%	3.26%	4.08%	5.31%	7.29%	4.64%	3.25%	0.16%
2010	0.14%	0.61%	3.22%	4.25%	4.94%	6.04%	4.16%	3.25%	0.18%
2011	0.05%	0.45%	2.78%	3.91%	4.64%	5.66%	4.29%	3.25%	0.10%
2012	0.09%	0.28%	1.80%	2.92%	3.67%	4.94%	3.25%	3.25%	0.14%
2013	0.06%	0.31%	2.35%	3.45%	4.23%	5.10%	3.96%	3.25%	0.11%
2014	0.03%	0.46%	2.54%	3.34%	4.16%	4.85%	3.78%	3.25%	0.09%
2015	0.05%	0.69%	2.14%	2.84%	3.89%	5.00%	3.48%	3.26%	0.13%
2016	0.32%	0.83%	1.84%	2.59%	3.66%	4.71%	3.07%	3.51%	0.39%
2017	0.95%	1.40%	2.33%	2.89%	3.74%	4.44%	3.36%	4.10%	1.00%
2018	1.97%	2.53%	2.91%	3.11%	3.93%	4.80%	3.53%	4.90%	1.83%
2019	2.11%	1.97%	2.14%	2.58%	3.39%	4.37%	3.38%	5.29%	2.16%
Average	1.30%	1.58%	2.98%	3.64%	4.51%	5.58%	3.92%	4.52%	1.43%
Y/Y % Change	6.8%	-22.1%	-26.4%	-17.1%	-13.8%	-8.9%	-4.2%	7.9%	18.1%
5-Year CAGR	130.0%	33.6%	-3.4%	-5.0%	-4.0%	-2.1%	-2.2%	10.2%	89.3%
10-Year CAGR	30.2%	5.6%	-4.1%	-4.5%	-4.4%	-5.0%	-3.1%	5.0%	29.8%

Source: Federal Reserve Board, U.S. Government Publishing Office, St. Louis Federal Reserve Bank, S&P

Note: 30-Year Treasury Bond rate was discontinued on February 18, 2002 and reintroduced on February 9, 2006; data from 2005 is the Long-Term Average Rate that was published by Treasury as an alternative.

US Mergers and Acquisitions – Announced and Completed

Announced			Completed		
	Value (\$ Billions)	# of Deals		Value (\$ Billions)	# of Deals
2005	1,186.4	8,224	2005	976.7	8,214
2006	1,538.5	10,236	2006	1,423.7	10,265
2007	1,560.4	10,697	2007	1,783.4	10,696
2008	1,020.0	8,821	2008	1,144.6	9,067
2009	803.3	7,426	2009	794.7	7,315
2010	899.7	10,140	2010	822.2	10,148
2011	998.0	10,583	2011	992.0	10,562
2012	976.1	12,345	2012	1,040.4	12,228
2013	1,122.2	10,167	2013	1,026.9	10,223
2014	1,508.1	10,798	2014	1,248.1	10,632
2015	2,072.4	10,571	2015	1,762.4	10,509
2016	1,735.4	9,648	2016	1,695.9	9,774
2017	1,396.6	10,271	2017	1,619.7	10,390
2018	1,762.6	8,369	2018	1,908.1	8,327
2019	1,866.8	9,879	2019	1,746.5	9,870
Average	1,363.1	9,878	Average	1,332.4	9,881
Y/Y % Change	5.9%	18.0%	Y/Y % Change	-8.5%	18.5%
5-Year CAGR	4.4%	-1.8%	5-Year CAGR	7.0%	-1.5%
10-Year CAGR	8.8%	2.9%	10-Year CAGR	8.2%	3.0%

Source: Dealogic

US Bond Market Average Daily Trading Volume

	\$ Billions						
	Municipal Bonds	Treasury Securities	Agency MBS	Non-Agency MBS	ABS	Corporate Bonds	Federal Agency Securities
2005	16.9	554.5	251.8	-	-	16.6	78.8
2006	23.1	524.7	254.6	-	-	16.9	74.4
2007	25.1	570.2	320.1	-	-	16.4	83.0
2008	19.4	553.1	344.9	-	-	14.3	104.5
2009	12.5	407.9	299.9	-	-	19.9	77.7
2010	13.3	528.2	320.6	-	-	20.5	11.2
2011	11.3	567.8	243.3	4.4	1.5	20.6	9.6
2012	11.3	518.9	280.4	4.5	1.5	22.6	9.7
2013	11.2	545.4	222.8	4.1	1.3	24.7	6.6
2014	9.9	505.0	178.0	3.7	1.5	26.7	5.3
2015	8.6	490.0	193.0	3.1	1.4	27.9	4.5
2016	10.6	519.1	206.6	2.9	1.3	29.6	5.4
2017	10.8	505.2	209.1	2.5	1.4	30.6	4.1
2018	11.6	547.8	218.1	2.4	1.4	31.2	3.5
2019	11.5	593.6	247.6	2.7	1.5	33.9	4.1
Average	13.8	528.8	252.7	3.4	1.4	23.5	32.2
Y/Y % Change	-1.0%	8.4%	13.5%	13.0%	7.5%	8.6%	18.3%
5-Year CAGR	3.1%	3.3%	6.8%	-5.7%	0.7%	4.9%	-5.1%
10-Year CAGR	-0.8%	3.8%	-1.9%	N/A	N/A	5.5%	-25.5%

Source: Federal Reserve Bank of New York, Municipal Securities Rulemaking Board, FINRA TRACE

Notes:

Municipal	Annual daily average figures are sourced from daily reporting volumes and not from MSRB's Yearbook.
Treasury	Trading volumes are the U.S. primary dealer trading volumes.
Agency MBS	Full year 2011 and year to date 2011 average figures are only sourced from FINRA daily volumes. Annual figures are sourced from daily volumes.
Non-Agency MBS	Non-Agency MBS trading figures include CMBS; daily figures include 144A trades but do not include certain subcategories in which there are <5 trades per day. New issue transactions are sometimes included.
ABS	ABS figures do not include CMBS, but do include CDO and Other trading volumes; daily figures include 144A trades but do not include certain subcategories in which there are <5 trades per day. New issue transactions are sometimes included.
Corporate	Figures include public and 144A trades.

Municipal Bond Average Daily Trading – Dollar Volume

	\$ Millions		
	Retail	Institutional	Total
2008	1,209.1	20,587.0	21,796.1
2009	1,107.2	13,937.9	15,045.1
2010	1,101.3	13,778.8	14,880.1
2011	1,084.6	11,953.7	13,038.3
2012	1,028.5	11,771.8	12,800.3
2013	1,119.6	11,260.6	12,380.2
2014	928.3	10,076.6	11,004.9
2015	979.2	8,616.8	9,596.0
2016	991.8	10,066.4	11,058.2
2017	1,047.3	9,712.5	10,759.8
2018	1,083.8	10,572.2	11,656.0
2019	893.6	10,602.6	11,496.2
Average	1,047.9	11,911.4	12,959.3
Y/Y % Change	-17.5%	0.3%	-1.4%
5-Year CAGR	-0.8%	1.0%	0.9%
10-Year CAGR	-2.1%	-2.7%	-2.7%

Source: Municipal Securities Rulemaking Board

Note: Institutional trades defined as trade sizes greater than \$100,000.

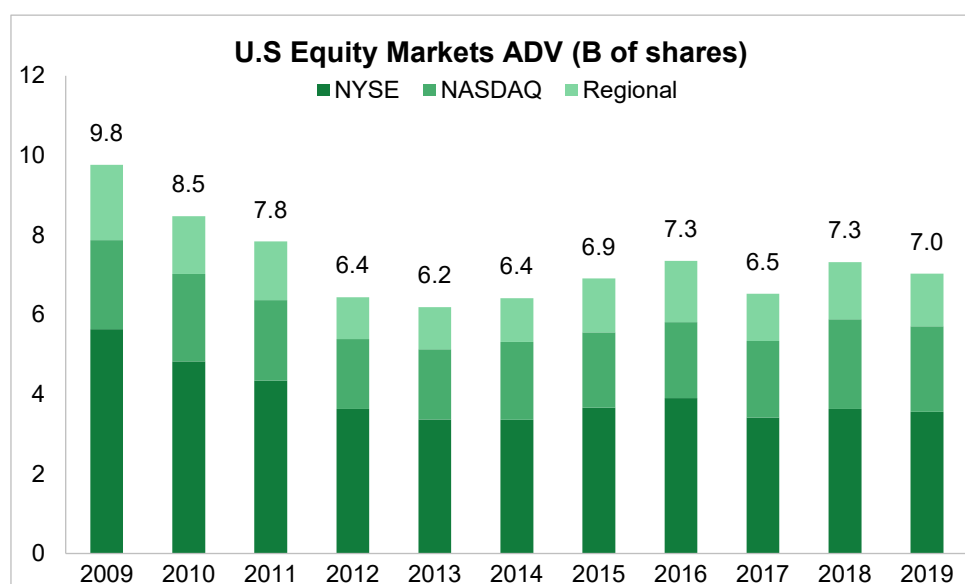
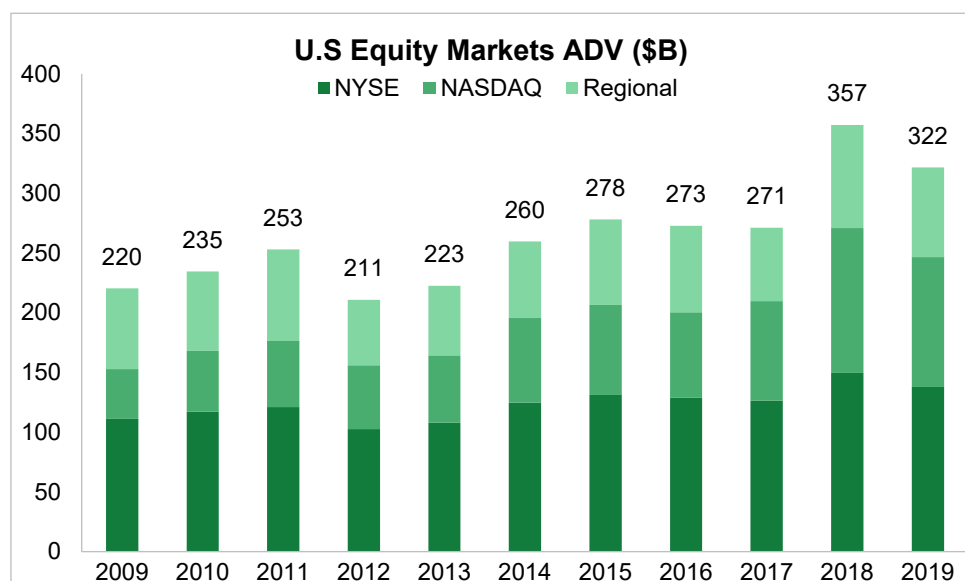
Municipal Bond Average Daily Trading – Number of Trades

	Number of Trades		
	Retail	Institutional	Total
2008	32,854	10,533	43,387
2009	33,304	7,805	41,109
2010	33,941	7,716	41,657
2011	34,030	7,226	41,256
2012	31,148	7,396	38,544
2013	35,008	7,180	42,188
2014	28,764	6,596	35,360
2015	29,921	6,814	36,735
2016	29,691	7,273	36,964
2017	31,721	7,503	39,224
2018	32,742	7,672	40,414
2019	27,249	7,410	34,659
Average	31,698	7,594	39,291
Y/Y % Change	-16.8%	-3.4%	-14.2%
5-Year CAGR	-1.1%	2.4%	-0.4%
10-Year CAGR	-2.0%	-0.5%	-1.7%

Source: Municipal Securities Rulemaking Board

Note: Institutional trades defined as trade sizes greater than \$100,000.

US Equity Markets Average Daily Trading Volume – Charts



Source: Cboe Exchange, Inc.

Trading Activity of NYSE- and NASDAQ-listed Stocks

NYSE-listed stocks					NASDAQ-listed stocks				
	Annual Share Volume (Millions)	Annual Value of Shares Traded (\$ Billions)	Average Daily Share Volume (Millions)	Average Daily Dollar Volume (\$ Billions)		Annual Share Volume (Millions)	Annual Value of Shares Traded (\$ Billions)	Average Daily Share Volume (Millions)	Average Daily Dollar Volume (\$ Billions)
2005					2005	448,175	9,965	1,778.5	39.5
2006					2006	502,486	11,676	2,001.9	46.5
2007					2007	537,263	15,116	2,132.0	60.0
2008					2008	580,909	15,105	2,296.1	59.7
2009	1,420,980	27,997.2	5,638.8	111.1	2009	563,398	10,512	2,235.7	41.7
2010	1,216,841	29,563.7	4,828.7	117.3	2010	552,466	12,811	2,192.3	50.8
2011	1,094,332	30,543.8	4,342.6	121.2	2011	509,523	13,920	2,021.9	55.2
2012	908,892	25,663.6	3,635.6	102.7	2012	437,352	13,373	1,749.4	53.5
2013	848,098	27,227.2	3,365.5	108.0	2013	444,114	14,223	1,762.4	56.4
2014	847,594	31,475.1	3,363.5	124.9	2014	492,188	17,852	1,953.1	70.8
2015	923,306	33,055.9	3,663.9	131.2	2015	477,058	19,010	1,893.1	75.4
2016	984,312	32,510.2	3,906.0	129.0	2016	480,484	18,015	1,906.7	71.5
2017	858,465	31,738.4	3,420.2	126.4	2017	481,993	20,935	1,920.3	83.4
2018	912,322	37,583.6	3,634.7	149.7	2018	565,173	30,407	2,251.7	121.1
2019	896,773	34,756	3,558.6	137.9	2019	541,092	27,375	2,147.2	108.6
Average	991,992	31,101.4	3,941.6	123.6	Average	507,578	16,686.2	2,016.2	66.3
Y/Y % Change	-1.7%	-7.5%	-2.1%	-7.9%	Y/Y % Change	-4.3%	-10.0%	-4.6%	-10.3%
5-Year CAGR	1.1%	2.0%	1.1%	2.0%	5-Year CAGR	1.9%	8.9%	1.9%	8.9%
10-Year CAGR	-4.5%	2.2%	-4.5%	2.2%	10-Year CAGR	-0.4%	10.0%	-0.4%	10.0%

Source: Cboe Exchange, Inc., NASDAQ

Note: Trading activity of NYSE- and NASDAQ-listed stocks; NYSE data available from 2009.

Futures Contracts Traded on US Exchanges

Millions										
	Agriculture	Currency	Energy	Equity Index	Individual Equity	Interest Rates	Precious Metals	Non-Precious Metals	Other	Total
2005	116.4	84.8	140.5	406.8	5.5	870.5	23.4	4.0	1.0	1,652.9
2006	157.5	114.0	190.9	500.4	7.8	1,034.6	34.3	3.3	1.2	2,043.9
2007	193.3	143.0	240.9	676.9	7.9	1,333.1	44.1	3.8	1.5	2,644.6
2008	215.4	155.8	285.9	904.9	3.7	1,213.1	56.2	4.6	13.0	2,852.5
2009	196.6	156.3	313.1	744.7	2.7	854.6	48.8	6.4	4.8	2,328.1
2010	239.5	229.0	350.6	740.6	4.8	1,123.0	63.8	10.4	3.1	2,764.8
2011	265.9	231.6	374.1	813.9	3.6	1,277.6	76.3	12.6	1.0	3,056.5
2012	280.7	210.7	428.3	650.8	6.4	1,008.3	63.7	16.2	0.9	2,666.0
2013	264.5	208.9	627.4	663.0	6.7	1,202.0	68.6	17.2	0.9	3,059.3
2014	273.9	186.0	553.8	675.0	8.0	1,401.9	60.2	14.7	1.1	3,174.8
2015	315.8	212.0	619.7	667.3	8.8	1,312.5	61.3	17.3	1.5	3,216.3
2016	333.4	205.4	746.6	731.0	9.7	1,440.4	82.9	21.9	1.7	3,573.0
2017	342.0	220.0	778.8	639.6	12.2	1,524.8	103.8	27.4	2.7	3,651.4
2018	382.4	243.8	751.1	816.6	5.9	1,900.5	113.6	33.1	2.9	4,249.9
2019	383.1	211.8	694.9	814.2	6.3	1,919.3	124.6	24.4	2.7	4,181.3
Average	264.0	187.5	473.1	696.4	6.7	1,294.4	68.4	14.5	2.7	3,007.7
Y/Y % Change	0.2%	-13.1%	-7.5%	-0.3%	5.3%	1.0%	9.7%	-26.1%	-8.2%	-1.6%
5-Year CAGR	6.9%	2.6%	4.6%	3.8%	-4.8%	6.5%	15.7%	10.7%	18.9%	5.7%
10-Year CAGR	6.9%	3.1%	8.3%	0.9%	8.6%	8.4%	9.8%	14.3%	-5.8%	6.0%

Source: Futures Industry Association

Options Contracts Traded on US Exchanges

Millions										
	Agriculture	Currency	Energy	Equity Index	Individual Equity	Interest Rates	Precious Metals	Non-Precious Metals	Other	Total
2005	26.2	3.4	33.8	227.3	1,292.2	284.5	4.0	0.1	0.7	1,872.3
2006	35.3	3.5	54.5	338.0	1,717.7	374.2	5.6	0.1	0.6	2,529.4
2007	43.4	6.5	71.1	522.1	2,379.1	417.7	4.9	0.0	1.5	3,446.4
2008	56.7	11.2	79.1	336.7	3,284.8	326.4	6.1	0.0	0.5	4,101.5
2009	43.3	6.2	64.5	276.1	3,367.0	223.9	5.8	0.0	0.3	3,987.1
2010	56.0	11.9	71.3	328.3	3,610.4	268.7	9.4	0.0	0.3	4,356.5
2011	68.1	10.9	74.2	398.7	4,224.6	274.0	12.4	0.0	0.2	5,063.2
2012	70.6	11.0	84.3	381.6	3,681.8	227.8	11.5	0.0	0.2	4,468.9
2013	61.9	16.3	119.5	1,930.2	2,273.8	285.9	13.1	0.1	0.1	4,700.8
2014	69.0	18.8	104.6	2,054.2	2,342.9	364.9	10.8	0.0	0.1	4,965.5
2015	75.1	24.7	117.4	2,105.3	2,180.3	388.2	9.1	0.1	0.1	4,900.2
2016	76.0	23.5	126.3	2,251.0	1,975.5	454.3	11.7	0.1	0.1	4,918.6
2017	70.5	26.7	131.6	2,269.1	2,092.1	531.2	11.8	0.2	0.1	5,133.3
2018	79.2	27.8	117.0	2,781.9	2,565.7	607.7	14.4	0.4	0.1	6,194.1
2019	77.6	20.4	89.7	2,422.9	2,641.0	696.4	19.2	0.7	0.2	5,967.9
Average	60.6	14.9	89.3	1,241.6	2,641.9	381.7	10.0	0.1	0.3	4,440.4
Y/Y % Change	-2.0%	-26.6%	-23.4%	-12.9%	2.9%	14.6%	33.4%	97.7%	85.3%	-3.7%
5-Year CAGR	2.4%	1.6%	-3.0%	3.4%	2.4%	13.8%	12.3%	70.6%	3.7%	3.7%
10-Year CAGR	6.0%	12.7%	3.3%	24.3%	-2.4%	12.0%	12.7%	44.2%	-7.2%	4.1%

Source: Futures Industry Association

US Mutual Fund Assets

	\$ Billions				
	Equity	Hybrid	Bond	Money Market	Total
2005	4,884.9	621.5	1,355.5	2,026.8	8,888.7
2006	5,831.6	731.5	1,493.7	2,338.5	10,395.2
2007	6,412.6	821.5	1,675.6	3,085.5	11,995.2
2008	3,654.6	562.3	1,569.7	3,832.2	9,618.7
2009	4,871.5	717.6	2,204.0	3,315.9	11,109.0
2010	5,596.2	842.2	2,589.2	2,803.5	11,831.1
2011	5,212.8	884.0	2,842.7	2,690.9	11,630.4
2012	5,938.8	1,032.5	3,389.2	2,693.2	13,053.6
2013	7,762.6	1,284.7	3,283.9	2,717.8	15,049.0
2014	8,314.0	1,379.2	3,458.8	2,724.6	15,876.6
2015	8,149.6	1,341.5	3,412.1	2,754.7	15,657.9
2016	8,577.3	1,399.9	3,648.2	2,728.1	16,353.5
2017	10,305.2	1,547.1	4,065.3	2,847.3	18,764.9
2018	9,227.7	1,384.0	4,061.0	3,037.0	17,709.7
2019	11,376.2	1,579.0	4,704.3	3,632.0	21,291.5
Average	7,074.4	1,075.2	2,916.9	2,881.9	13,948.3
Y/Y % Change	23.3%	14.1%	15.8%	19.6%	20.2%
5-Year CAGR	6.5%	2.7%	6.3%	5.9%	6.0%
10-Year CAGR	8.9%	8.2%	7.9%	0.9%	6.7%

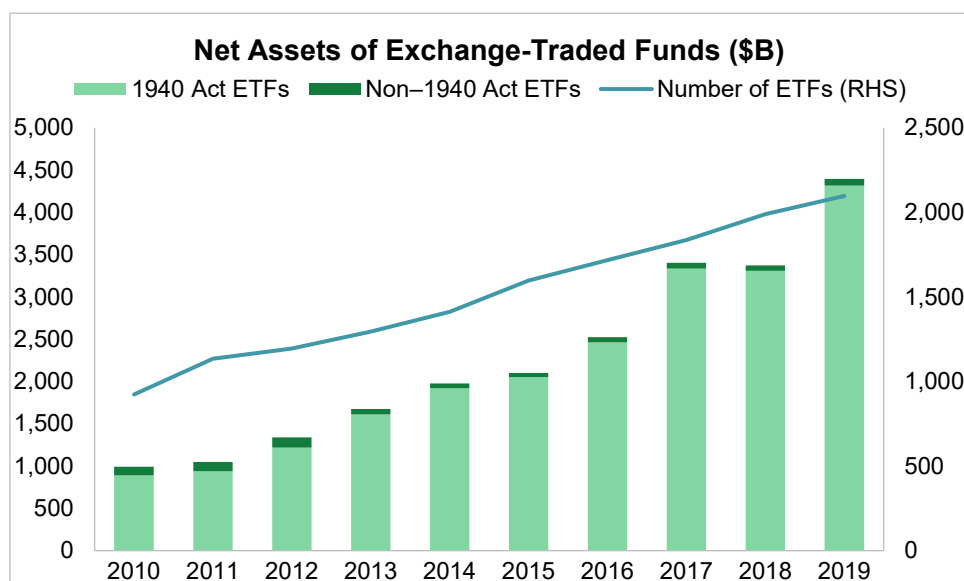
Source: Investment Company Institute

US Mutual Fund Net New Cash Flow

	\$ Billions				
	Equity	Hybrid	Bond	Money Market	Total
2005	123.8	42.8	25.3	62.1	254.0
2006	147.2	19.9	59.7	245.2	472.0
2007	73.2	40.4	110.6	654.5	878.7
2008	-216.5	-25.5	31.2	637.2	426.4
2009	2.2	19.8	371.4	-539.1	-145.7
2010	-24.4	35.6	232.4	-524.7	-281.1
2011	-129.5	39.7	118.0	-124.0	-95.8
2012	-152.7	46.3	306.5	-0.3	199.8
2013	159.5	74.7	-71.2	15.1	178.1
2014	25.5	30.4	43.9	6.3	106.1
2015	-75.6	-19.0	-24.9	21.4	-98.1
2016	-258.0	-41.9	106.9	-30.3	-223.3
2017	-159.2	-28.5	259.7	107.0	179.0
2018	-256.6	-91.3	2.1	159.0	-186.8
2019	-361.9	-49.3	312.3	553.0	454.1
Average	-73.5	6.3	125.6	82.8	141.2
Y/Y % Change	-41.0%	46.0%	14771.4%	247.8%	343.1%

Source: Investment Company Institute

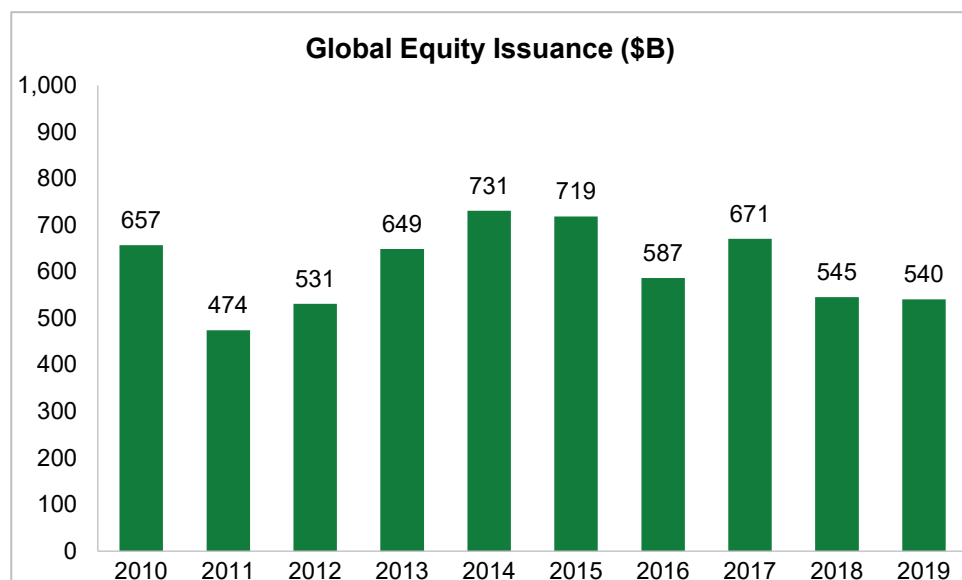
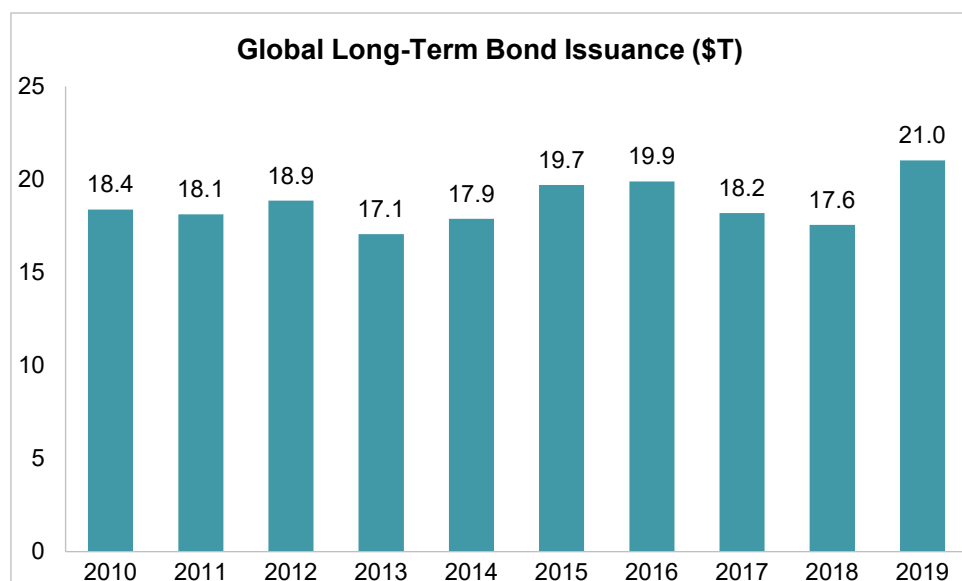
Net Assets and Number of Exchange-Traded Funds (ETFs) - Chart



Source: Investment Company Institute

Global Capital Markets

Global Bond and Equity Issuance - Charts



Sources: Bloomberg, Refinitiv, Dealogic

Note: Long-term is defined as a security with maturity of 13 months or longer at issuance; global equity issuance includes non-convertible IPOs and follow-on equity deals, excludes preferred shares, rights issued, closed-end funds, business development companies, and special purpose acquisition companies.

Global Long-Term Bond Issuance

\$ Billions												
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other Developed Markets	Emerging Markets	Total
2005	125.5	213.1	159.1	3,115.4	11.6	2,532.0	19.3	633.0	4,921.5	398.2	1,169.6	13,298.3
2006	184.9	266.9	179.6	3,248.0	14.1	2,415.3	12.3	927.5	5,235.3	458.6	1,355.2	14,297.8
2007	165.1	316.1	787.6	3,393.2	13.2	2,590.0	26.6	1,048.8	5,392.0	415.4	1,508.1	15,656.0
2008	175.6	382.2	524.5	3,420.9	10.6	2,430.2	21.0	1,117.6	4,477.5	384.0	889.3	13,833.3
2009	273.7	440.2	524.6	4,337.3	25.1	3,232.0	26.9	1,181.4	6,128.1	450.5	1,258.8	17,878.5
2010	308.3	472.9	704.8	3,654.4	29.8	3,579.4	36.0	674.2	6,724.4	469.9	1,718.8	18,373.0
2011	324.7	554.5	900.2	3,682.3	32.8	4,004.9	33.2	731.8	5,654.9	520.3	1,685.8	18,125.2
2012	334.7	518.3	791.1	3,679.2	45.8	4,219.5	41.2	732.9	6,065.9	536.9	1,884.6	18,850.2
2013	299.1	573.1	976.0	3,544.7	37.5	3,677.1	44.3	646.9	5,059.1	529.4	1,677.3	17,064.4
2014	307.5	545.3	1,594.8	3,607.6	53.3	3,439.9	40.1	647.1	5,280.7	552.0	1,810.7	17,878.9
2015	238.2	494.1	2,423.7	2,895.3	43.4	3,174.2	32.4	487.4	7,804.9	555.4	1,556.1	19,705.1
2016	286.8	500.0	3,563.4	2,847.9	62.2	3,384.0	49.4	483.9	6,261.3	542.5	1,897.4	19,878.8
2017	285.7	564.1	2,745.9	2,895.0	63.3	3,188.3	37.8	461.5	5,640.5	540.8	1,768.3	18,191.3
2018	237.7	517.6	2,858.2	2,709.5	45.2	2,980.1	52.4	532.9	5,496.4	540.3	1,580.1	17,550.6
2019	203.0	525.3	3,664.7	2,845.0	88.6	3,081.6	50.2	396.3	7,300.2	558.2	2,301.6	21,014.6
Average	250.0	458.9	1,493.2	3,325.0	38.4	3,195.2	34.9	713.5	5,829.5	496.8	1,604.1	17,439.7
Y/Y % Change	-14.6%	1.5%	28.2%	5.0%	95.9%	3.4%	-4.3%	-25.6%	32.8%	3.3%	45.7%	19.7%
5-Year CAGR	-8.0%	-0.7%	18.1%	-4.6%	10.7%	-2.2%	4.6%	-9.3%	6.7%	0.2%	4.9%	3.3%
10-Year CAGR	-2.9%	1.8%	21.5%	-4.1%	13.4%	-0.5%	6.4%	-10.3%	1.8%	2.2%	6.2%	1.6%

Sources: Bloomberg, Refinitiv

Note: Long-term is defined as a security with maturity of 13 months or longer at issuance; includes corporate, municipal and sovereign issuance.

Global Equity Issuance

\$ Billions												
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other Developed Markets	Emerging Markets	Total
2005	16.9	22.9	0.0	104.6	29.8	43.8	5.0	43.0	146.8	11.0	46.1	469.9
2006	29.3	20.9	8.0	109.8	43.3	56.2	8.0	74.2	144.2	14.2	58.7	566.9
2007	20.9	28.4	3.9	109.8	46.7	19.4	10.2	81.0	153.1	19.2	119.3	611.8
2008	16.8	18.2	2.1	28.3	12.8	8.4	1.7	21.8	189.3	3.7	43.7	346.6
2009	22.3	32.0	30.2	34.0	50.4	58.8	4.2	28.8	241.4	16.2	56.8	575.0
2010	20.3	38.7	73.1	50.9	78.3	56.0	8.2	26.4	188.6	8.2	108.1	657.0
2011	10.9	28.6	42.1	56.1	44.7	17.8	10.2	25.9	174.1	4.6	59.2	474.3
2012	10.5	29.0	40.2	47.0	51.0	22.4	6.1	20.0	226.8	7.5	70.6	531.1
2013	21.3	25.7	29.7	95.2	41.2	42.8	9.2	41.8	251.2	15.7	74.9	648.7
2014	27.5	33.2	66.1	114.7	56.8	31.0	4.5	56.1	261.8	10.3	68.8	730.8
2015	20.2	27.6	111.0	122.2	70.0	35.3	1.3	54.9	214.7	9.7	51.9	718.7
2016	14.1	33.7	159.1	62.9	35.3	20.9	2.6	28.5	176.5	7.4	45.7	586.6
2017	13.1	26.8	114.7	95.6	31.5	44.9	4.4	37.7	191.8	16.5	93.9	670.9
2018	10.9	16.2	49.7	59.5	57.0	46.7	3.7	31.7	203.8	10.1	56.0	545.1
2019	17.8	13.5	47.9	49.8	51.5	20.0	5.3	31.8	191.7	12.0	99.0	540.5
Average	18.2	26.3	51.8	76.0	46.7	35.0	5.6	40.2	197.0	11.1	70.2	578.3
Y/Y % Change	63.4%	-16.6%	-3.6%	-16.3%	-9.6%	-57.1%	42.8%	0.5%	-5.9%	18.9%	76.9%	-0.9%
5-Year CAGR	-8.3%	-16.5%	-6.2%	-15.4%	-1.9%	-8.4%	3.2%	-10.7%	-6.0%	3.1%	7.6%	-5.9%
10-Year CAGR	-2.2%	-8.3%	4.7%	3.9%	0.2%	-10.2%	2.4%	1.0%	-2.3%	-3.0%	5.7%	-0.6%

Source: Dealogic

Note: Includes rank eligible, non-convertible IPOs and follow-on equity deals, excludes preferred shares, rights issued, closed-end funds, business development companies, and special purpose acquisition companies; by exchange nationality.

International Security Offerings by All Issuers - Market Value

	\$ Billions						
	Straight Debt	Convertible Debt	Total Debt	Common Stock	Preferred Stock	Total Equity	Total
2005	2,224.6	28.1	2,252.7	114.0	4.3	118.3	2,371.0
2006	3,160.2	47.2	3,207.3	207.9	13.2	221.2	3,428.5
2007	2,982.0	90.0	3,072.0	386.1	21.7	407.8	3,479.8
2008	1,802.4	53.8	1,856.2	272.8	10.9	283.8	2,140.0
2009	2,566.5	55.6	2,622.0	395.8	13.7	409.4	3,031.5
2010	2,337.0	51.9	2,388.9	365.1	6.6	371.8	2,760.7
2011	2,268.7	36.4	2,305.1	235.6	10.5	246.2	2,551.3
2012	2,698.2	44.0	2,742.2	238.5	15.6	254.0	2,996.2
2013	2,739.4	54.4	2,793.7	308.4	8.3	316.7	3,110.4
2014	3,078.7	55.5	3,134.2	351.9	15.6	367.5	3,501.7
2015	2,539.8	38.4	2,578.2	394.8	14.3	409.1	2,987.4
2016	2,645.7	42.3	2,688.0	225.5	7.3	232.8	2,920.7
2017	3,171.8	35.6	3,207.3	345.6	24.1	369.7	3,577.0
2018	2,733.3	31.7	2,764.9	293.1	8.2	301.4	3,066.3
2019	3,018.4	70.3	3,088.7	286.0	5.9	292.0	3,380.7
Average	2,664.4	49.0	2,713.4	294.8	12.0	306.8	3,020.2
Y/Y % Change	10.4%	121.9%	11.7%	-2.4%	-27.6%	-3.1%	10.3%
5-Year CAGR	-0.4%	4.9%	-0.3%	-4.1%	-17.5%	-4.5%	-0.7%
10-Year CAGR	1.6%	2.4%	1.7%	-3.2%	-8.0%	-3.3%	1.1%

Source: Refinitiv

Note: Securities issued by an entity outside of its domestic market.

International Security Offerings by All Issuers - Number of Issues

	Number of Issues						
	Straight Debt	Convertible Debt	Total Debt	Common Stock	Preferred Stock	Total Equity	Total
2005	5,698	178	5,876	485	10	495	6,371
2006	6,831	242	7,073	906	33	939	8,012
2007	6,299	316	6,615	1,781	46	1,827	8,442
2008	3,504	132	3,636	862	48	910	4,546
2009	3,575	201	3,776	1,513	64	1,577	5,353
2010	4,596	444	5,040	1,821	44	1,865	6,905
2011	4,153	429	4,582	1,442	57	1,499	6,081
2012	5,135	271	5,406	1,591	99	1,690	7,096
2013	5,121	304	5,425	1,907	91	1,998	7,423
2014	5,688	245	5,933	2,059	95	2,154	8,087
2015	4,691	122	4,813	2,201	60	2,261	7,074
2016	4,919	111	5,030	2,055	37	2,092	7,122
2017	5,716	102	5,818	2,586	56	2,642	8,460
2018	4,999	152	5,151	2,304	42	2,346	7,497
2019	5,301	245	5,546	2,401	24	2,425	7,971
Average	5,082	233	5,315	1,728	54	1,781	7,096
Y/Y % Change	6.0%	61.2%	7.7%	4.2%	-42.9%	3.4%	6.3%
5-Year CAGR	-1.4%	0.0%	-1.3%	3.1%	-24.1%	2.4%	-0.3%
10-Year CAGR	4.0%	2.0%	3.9%	4.7%	-9.3%	4.4%	4.1%

Source: Refinitiv

Note: Securities issued by an entity outside of its domestic market.

International Security Offerings by US Issuers - Market Value

	\$ Billions						
	Straight Debt	Convertible Debt	Total Debt	Common Stock	Preferred Stock	Total Equity	Total
2005	188.2	0.0	188.2	1.5	0.0	1.5	189.7
2006	342.2	0.1	342.4	6.6	4.6	11.3	353.6
2007	335.7	1.2	336.8	4.7	2.4	7.1	343.9
2008	190.1	0.0	190.2	20.0	2.4	22.4	212.6
2009	235.9	0.2	236.1	1.8	1.1	2.9	239.0
2010	316.1	0.0	316.1	1.9	0.0	1.9	318.0
2011	250.3	0.9	251.2	0.9	1.8	2.7	253.9
2012	421.4	4.0	425.5	2.2	1.8	4.0	429.5
2013	450.4	4.8	455.2	1.7	1.7	3.4	458.5
2014	587.0	4.1	591.1	1.7	0.1	1.9	593.0
2015	624.1	1.9	626.0	1.2	3.4	4.7	630.7
2016	606.1	0.5	606.6	1.2	0.1	1.3	607.9
2017	745.3	0.4	745.6	3.5	0.8	4.4	750.0
2018	558.9	1.4	560.4	1.8	3.4	5.3	565.6
2019	683.4	33.7	717.1	1.4	3.1	4.5	721.6
Average	435.7	3.6	439.2	3.5	1.8	5.3	444.5
Y/Y % Change	22.3%	2234.4%	28.0%	-23.9%	-8.2%	-13.7%	27.6%
5-Year CAGR	3.1%	52.4%	3.9%	-4.1%	86.0%	19.5%	4.0%
10-Year CAGR	11.2%	63.9%	11.8%	-2.7%	10.8%	4.4%	11.7%

Source: Refinitiv

Note: Securities issued by a U.S. entity outside of the U.S. market

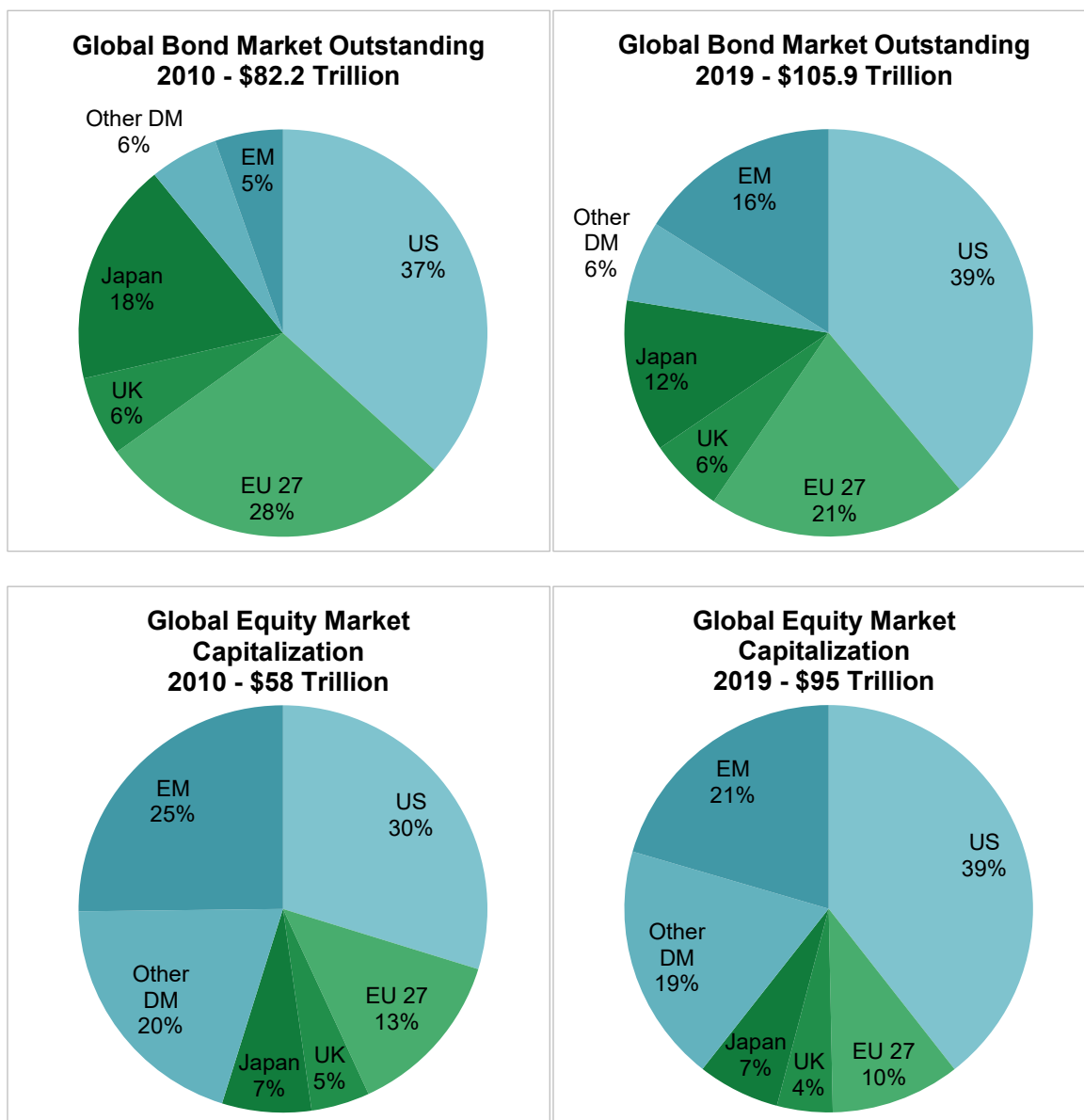
International Security Offerings by US Issuers - Number of Issues

	# of Issues						
	Straight Debt	Convertible Debt	Total Debt	Common Stock	Preferred Stock	Total Equity	Total
2005	504	1	505	25	2	27	532
2006	767	6	773	25	1	26	799
2007	700	9	709	39	10	49	758
2008	460	7	467	13	7	20	487
2009	399	5	404	34	8	42	446
2010	696	7	703	40	8	48	751
2011	563	39	602	31	3	34	636
2012	831	81	912	29	17	46	958
2013	872	70	942	35	33	68	1,010
2014	1,063	51	1,114	28	41	69	1,183
2015	1,007	8	1,015	23	24	47	1,062
2016	1,088	3	1,091	25	14	39	1,130
2017	1,278	3	1,281	36	3	39	1,320
2018	1,022	9	1,031	50	6	56	1,087
2019	1,067	98	1,165	48	11	59	1,224
Average	821	26	848	32	13	45	892
Y/Y % Change	4.4%	988.9%	13.0%	-4.0%	83.3%	5.4%	12.6%
5-Year CAGR	0.1%	14.0%	0.9%	11.4%	-23.1%	-3.1%	0.7%
10-Year CAGR	10.3%	34.7%	11.2%	3.5%	3.2%	3.5%	10.6%

Source: Refinitiv

Note: Securities issued by a U.S. entity outside of the U.S. market

Global Bond Market Outstanding and Global Equity Market Capitalization - Charts



Sources: Bank of International Settlements (BIS), World Federation of Exchanges

Note: Market capitalization of listed domestic companies.

Global Bond Market Outstanding - Value

\$ Billions												
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other Developed Markets	Emerging Markets	Total
2005	770.0	1,253.3	912.3	13,190.4	95.0	9,162.1	114.4	3,156.0	22,133.4	193.6	844.7	51,825.1
2006	957.3	1,327.4	1,198.3	15,894.0	99.0	9,090.3	140.3	3,989.8	23,865.4	244.0	920.0	57,726.0
2007	1,251.4	1,542.9	1,704.5	19,311.6	104.3	9,852.1	166.3	4,706.8	26,128.1	309.1	1,099.7	66,176.9
2008	1,141.9	1,369.7	2,228.0	20,255.0	102.7	12,329.9	167.6	4,099.6	28,012.9	318.2	1,033.1	71,058.5
2009	1,523.7	1,671.6	2,577.9	24,099.4	151.1	12,268.5	185.0	5,280.9	29,118.8	433.8	1,179.3	78,489.8
2010	1,742.9	1,866.6	3,065.3	23,322.0	183.8	14,604.1	219.0	5,210.2	30,194.2	458.9	1,358.6	82,225.6
2011	1,872.6	1,963.4	3,528.4	23,465.3	211.2	15,809.1	240.9	5,587.2	31,009.3	466.3	1,368.2	85,521.9
2012	2,037.5	2,173.1	4,294.1	24,307.1	250.5	14,251.5	294.8	5,928.8	32,257.9	545.0	1,533.7	87,873.9
2013	1,879.5	2,241.4	4,960.8	24,998.9	304.0	11,907.1	331.4	5,851.0	33,266.0	529.0	1,525.8	87,795.0
2014	1,916.9	2,205.7	5,835.3	22,075.9	343.5	10,556.1	349.3	6,169.5	34,288.5	468.9	1,566.0	85,775.7
2015	1,819.1	2,767.5	7,752.6	19,872.7	372.5	10,636.9	322.3	5,891.5	35,324.0	418.9	1,636.2	86,814.0
2016	1,817.1	2,943.5	9,408.8	19,381.3	404.5	11,246.9	326.4	5,430.0	36,724.3	431.5	1,771.4	89,885.6
2017	1,990.1	3,268.1	11,757.0	22,130.8	472.5	11,930.4	412.2	6,030.2	37,900.6	456.1	2,064.9	98,413.0
2018	1,884.6	3,144.4	12,906.9	21,440.7	510.2	12,474.2	441.1	5,755.5	39,454.5	430.2	2,073.3	100,515.5
2019	1,958.7	3,361.3	14,725.9	21,796.6	532.4	12,824.5	492.9	6,288.3	41,232.3	448.7	2,252.8	105,914.4
Average	1,637.6	2,206.7	5,790.4	21,036.1	275.8	11,929.6	280.3	5,291.7	32,060.7	410.2	1,481.8	82,400.7
Y/Y % Change	3.9%	6.9%	14.1%	1.7%	4.3%	2.8%	11.7%	9.3%	4.5%	4.3%	8.7%	5.4%
5-Year CAGR	0.4%	8.8%	20.3%	-0.3%	9.2%	4.0%	7.1%	0.4%	3.8%	-0.9%	7.5%	4.3%
10-Year CAGR	2.5%	7.2%	19.0%	-1.0%	13.4%	0.4%	10.3%	1.8%	3.5%	0.3%	6.7%	3.0%

Source: Bank of International Settlements (BIS)

Global Bond Market Outstanding - Share of Total

	Percentages											
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other		Total
										Developed Markets	Emerging Markets	
2005	1.5%	2.4%	1.8%	25.5%	0.2%	17.7%	0.2%	6.1%	42.7%	0.4%	1.6%	100.0%
2006	1.7%	2.3%	2.1%	27.5%	0.2%	15.7%	0.2%	6.9%	41.3%	0.4%	1.6%	100.0%
2007	1.9%	2.3%	2.6%	29.2%	0.2%	14.9%	0.3%	7.1%	39.5%	0.5%	1.7%	100.0%
2008	1.6%	1.9%	3.1%	28.5%	0.1%	17.4%	0.2%	5.8%	39.4%	0.4%	1.5%	100.0%
2009	1.9%	2.1%	3.3%	30.7%	0.2%	15.6%	0.2%	6.7%	37.1%	0.6%	1.5%	100.0%
2010	2.1%	2.3%	3.7%	28.4%	0.2%	17.8%	0.3%	6.3%	36.7%	0.6%	1.7%	100.0%
2011	2.2%	2.3%	4.1%	27.4%	0.2%	18.5%	0.3%	6.5%	36.3%	0.5%	1.6%	100.0%
2012	2.3%	2.5%	4.9%	27.7%	0.3%	16.2%	0.3%	6.7%	36.7%	0.6%	1.7%	100.0%
2013	2.1%	2.6%	5.7%	28.5%	0.3%	13.6%	0.4%	6.7%	37.9%	0.6%	1.7%	100.0%
2014	2.2%	2.6%	6.8%	25.7%	0.4%	12.3%	0.4%	7.2%	40.0%	0.5%	1.8%	100.0%
2015	2.1%	3.2%	8.9%	22.9%	0.4%	12.3%	0.4%	6.8%	40.7%	0.5%	1.9%	100.0%
2016	2.0%	3.3%	10.5%	21.6%	0.5%	12.5%	0.4%	6.0%	40.9%	0.5%	2.0%	100.0%
2017	2.0%	3.3%	11.9%	22.5%	0.5%	12.1%	0.4%	6.1%	38.5%	0.5%	2.1%	100.0%
2018	1.9%	3.1%	12.8%	21.3%	0.5%	12.4%	0.4%	5.7%	39.3%	0.4%	2.1%	100.0%
2019	1.8%	3.2%	13.9%	20.6%	0.5%	12.1%	0.5%	5.9%	38.9%	0.4%	2.1%	100.0%
Average	2.0%	2.6%	6.4%	25.9%	0.3%	14.7%	0.3%	6.4%	39.1%	0.5%	1.8%	
Y/Y Change	-0.03%	0.05%	1.1%	-0.8%	0.0%	-0.3%	0.03%	0.2%	-0.3%	0.0%	0.1%	

Source: Bank of International Settlements (BIS)

Global Equity Markets Capitalization - Market Value

	\$ Billions											
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other Developed Markets	Other Emerging Markets	Total
2005	804.0	1,482.2	401.9	7,135.8	1,055.0	7,537.2	257.3	3,058.2	17,000.9	2,935.2	3,367.3	45,035.0
2006	1,095.9	1,700.7	1,145.5	9,796.9	1,715.0	4,797.6	384.3	3,781.4	19,569.0	3,593.5	4,796.0	52,375.6
2007	1,298.3	2,186.6	4,478.9	11,755.1	2,654.4	4,543.1	539.2	3,846.5	19,922.3	4,167.0	8,173.2	63,564.4
2008	683.9	1,033.7	1,778.8	5,754.1	1,328.8	3,263.3	265.0	1,868.2	11,590.3	2,379.3	3,725.8	33,670.9
2009	1,261.9	1,677.4	3,573.2	7,717.4	2,305.1	3,444.4	481.2	2,796.4	15,077.3	3,811.9	8,250.9	50,397.2
2010	1,454.5	2,171.2	4,027.8	7,747.3	2,711.3	4,099.6	647.2	2,686.9	17,283.5	4,617.6	10,592.1	58,038.9
2011	1,198.2	1,912.9	3,412.1	6,443.8	2,258.0	3,540.8	598.3	2,932.2	15,640.7	3,908.2	8,970.4	50,815.6
2012	1,386.9	2,060.0	3,697.4	7,328.9	2,831.9	3,681.0	765.1	3,291.6	18,668.3	4,497.0	8,464.7	56,672.8
2013	1,366.0	2,113.8	3,949.1	9,248.5	3,100.8	4,781.5	744.4	3,946.9	24,034.9	5,346.2	8,286.4	66,918.4
2014	1,288.8	2,095.4	6,004.9	8,431.6	3,233.0	8,756.0	752.8	3,570.9	26,330.6	5,315.0	8,415.7	74,194.7
2015	1,187.2	1,593.5	8,188.0	7,580.0	3,184.9	9,716.8	640.0	3,878.8	25,067.5	5,203.7	7,253.0	73,493.3
2016	1,316.9	2,041.5	7,320.7	7,669.6	3,193.2	5,061.5	649.5	3,467.4	45,667.9	5,274.7	8,202.5	89,865.5
2017	1,508.6	2,367.1	8,711.3	9,787.6	4,350.5	6,222.8	787.3	4,455.4	32,120.7	6,436.3	10,945.6	87,693.1
2018	1,262.8	1,937.9	6,324.9	8,136.0	3,819.2	5,296.8	687.3	3,638.0	30,436.3	5,664.1	9,568.8	76,772.0
2019	1,487.6	2,409.1	8,515.5	9,733.6	4,899.2	6,191.1	697.3	4,182.9	37,482.2	8,505.6	10,936.8	95,041.0
Average	1,240.1	1,918.9	4,768.7	8,284.4	2,842.7	5,395.6	593.1	3,426.8	23,726.2	4,777.0	7,996.6	64,969.9
Y/Y % Change	17.8%	24.3%	34.6%	19.6%	28.3%	16.9%	1.5%	15.0%	23.1%	50.2%	14.3%	23.8%
5-Year CAGR	2.9%	2.8%	7.2%	2.9%	8.7%	-6.7%	-1.5%	3.2%	7.3%	9.9%	5.4%	5.1%
10-Year CAGR	1.7%	3.7%	9.1%	2.3%	7.8%	6.0%	3.8%	4.1%	9.5%	8.4%	2.9%	6.5%

Source: World Federation of Exchanges

Note: Market capitalization of listed domestic companies.

Global Equity Markets Capitalization - Share of Total

	Percentages											Total
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	United States	Other Developed Markets	Other Emerging Markets	
2005	1.8%	3.3%	0.9%	15.8%	2.3%	16.7%	0.6%	6.8%	37.8%	6.5%	7.5%	100.0%
2006	2.1%	3.2%	2.2%	18.7%	3.3%	9.2%	0.7%	7.2%	37.4%	6.9%	9.2%	100.0%
2007	2.0%	3.4%	7.0%	18.5%	4.2%	7.1%	0.8%	6.1%	31.3%	6.6%	12.9%	100.0%
2008	2.0%	3.1%	5.3%	17.1%	3.9%	9.7%	0.8%	5.5%	34.4%	7.1%	11.1%	100.0%
2009	2.5%	3.3%	7.1%	15.3%	4.6%	6.8%	1.0%	5.5%	29.9%	7.6%	16.4%	100.0%
2010	2.5%	3.7%	6.9%	13.3%	4.7%	7.1%	1.1%	4.6%	29.8%	8.0%	18.2%	100.0%
2011	2.4%	3.8%	6.7%	12.7%	4.4%	7.0%	1.2%	5.8%	30.8%	7.7%	17.7%	100.0%
2012	2.4%	3.6%	6.5%	12.9%	5.0%	6.5%	1.3%	5.8%	32.9%	7.9%	14.9%	100.0%
2013	2.0%	3.2%	5.9%	13.8%	4.6%	7.1%	1.1%	5.9%	35.9%	8.0%	12.4%	100.0%
2014	1.7%	2.8%	8.1%	11.4%	4.4%	11.8%	1.0%	4.8%	35.5%	7.2%	11.3%	100.0%
2015	1.6%	2.2%	11.1%	10.3%	4.3%	13.2%	0.9%	5.3%	34.1%	7.1%	9.9%	100.0%
2016	1.5%	2.3%	8.1%	8.5%	3.6%	5.6%	0.7%	3.9%	50.8%	5.9%	9.1%	100.0%
2017	1.7%	2.7%	9.9%	11.2%	5.0%	7.1%	0.9%	5.1%	36.6%	7.3%	12.5%	100.0%
2018	1.6%	2.5%	8.2%	10.6%	5.0%	6.9%	0.9%	4.7%	39.6%	7.4%	12.5%	100.0%
2019	1.6%	2.5%	9.0%	10.2%	5.2%	6.5%	0.7%	4.4%	39.4%	8.9%	11.5%	100.0%
Average	2.0%	3.0%	6.9%	13.4%	4.3%	8.6%	0.9%	5.4%	35.8%	7.3%	12.5%	
Y/Y Change	-0.1%	0.0%	0.7%	-0.4%	0.2%	-0.4%	-0.2%	-0.3%	-0.2%	1.6%	-1.0%	

Source: World Federation of Exchanges

Note: Market capitalization of listed domestic companies.

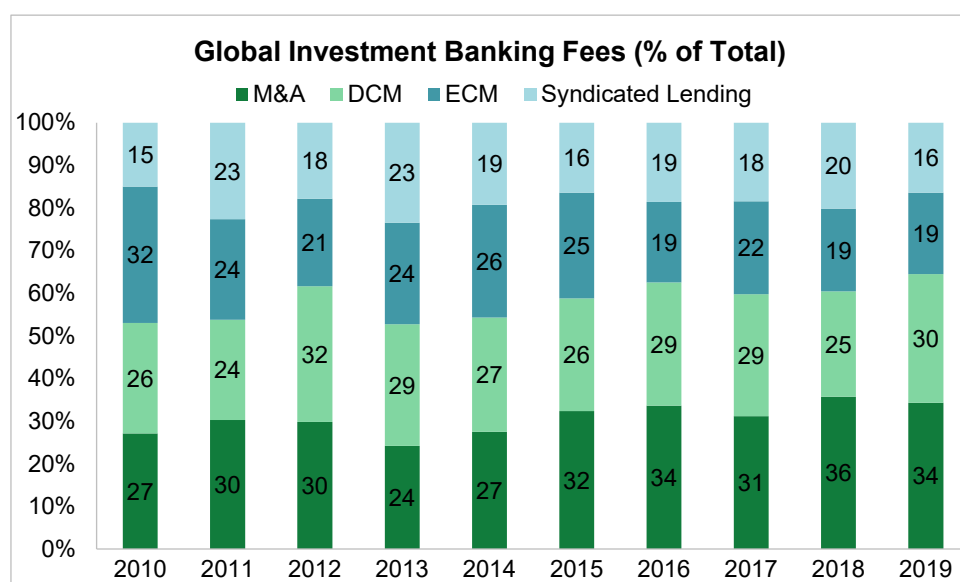
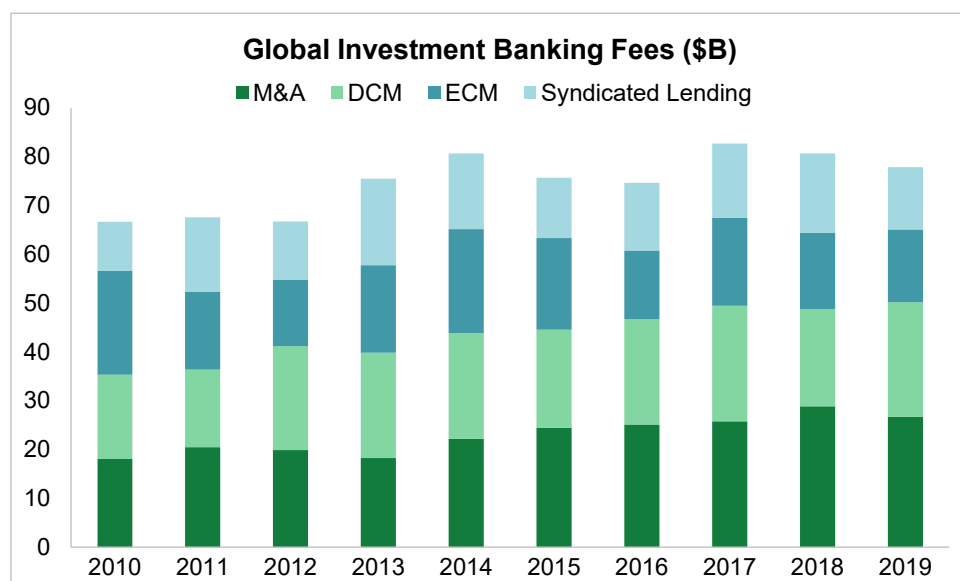
Global Derivatives Market Outstanding - Notional Principal

		\$ Billions	
	Exchange	Over-the-	
	Traded	Counter	Total
		(OTC)	
2005	52,488.3	299,261.6	351,749.8
2006	62,951.7	418,132.4	481,084.1
2007	71,532.4	585,925.9	657,458.4
2008	52,963.5	598,141.0	651,104.5
2009	67,417.0	603,893.3	671,310.3
2010	62,310.5	601,042.8	663,353.4
2011	53,693.0	647,807.0	701,500.0
2012	49,033.3	635,681.0	684,714.3
2013	57,459.6	710,092.3	767,551.9
2014	57,594.3	627,786.0	685,380.3
2015	63,485.9	492,536.2	556,022.0
2016	67,244.9	482,421.1	549,665.9
2017	80,984.1	531,911.1	612,895.1
2018	94,849.7	544,383.3	639,233.0
2019	95,812.8	558,504.9	654,317.7
Average	65,988.1	555,834.6	621,822.7
Y/Y % Change	1.0%	2.6%	2.4%
5-Year CAGR	10.7%	-2.3%	-0.9%
10-Year CAGR	3.6%	-0.8%	-0.3%

Source: Bank for International Settlements (BIS)

Note: Includes interest rate, foreign exchange, equity linked, commodity contracts, credit derivatives, and credit default swaps.

Global Investment Banking Net Revenues by Product - Charts



Source: Dealogic Investment Banking Revenue Analytics

Note: Includes M&A, debt capital markets, equity capital markets, and syndicated lending net revenues.

Global Investment Banking Net Revenues by Region

	\$ Billions					Average	Y/Y % Change
	2015	2016	2017	2018	2019		
United States	36.6	36.3	41.0	39.9	39.6	38.7	-0.8%
United Kingdom	4.1	3.9	4.2	4.4	3.7	4.1	-15.8%
Europe (ex UK)	13.8	12.3	14.1	14.7	12.9	13.5	-12.6%
Japan	3.3	3.1	3.5	3.3	3.0	3.2	-10.5%
BRICs (Brazil, Russia, India, China)	7.9	9.9	10.0	8.2	9.4	9.1	14.5%
Canada & Australia	5.8	5.3	5.3	5.8	4.9	5.4	-14.7%
Asia Pacific (ex Japan, China, Australia, India)	2.2	2.2	2.4	2.3	2.3	2.3	-2.8%
Latin America (ex Brazil)	0.7	0.7	1.0	0.6	0.6	0.7	-3.2%
Other	1.3	1.0	1.2	1.2	1.4	1.2	11.4%
Total	75.7	74.6	82.7	80.6	77.8	78.3	-3.5%

Source: Dealogic Investment Banking Revenue Analytics

Note: Includes M&A, debt capital markets, equity capital markets, and syndicated lending net revenues.

Global Mergers and Acquisitions – Announced and Completed

Announced			Completed		
	Value (\$ Billions)	# of Deals		Value (\$ Billions)	# of Deals
2005	2,951.4	31,971	2005	2,590.9	31,603
2006	3,913.2	37,579	2006	3,590.5	37,523
2007	4,611.7	43,479	2007	4,744.5	43,272
2008	3,171.4	42,343	2008	3,567.0	43,110
2009	2,298.8	37,546	2009	2,369.5	37,075
2010	2,722.7	42,245	2010	2,489.8	41,867
2011	2,767.7	45,392	2011	2,910.0	45,369
2012	2,659.7	43,819	2012	2,557.5	43,764
2013	2,786.7	38,163	2013	2,748.4	38,355
2014	3,624.2	41,352	2014	3,053.3	40,995
2015	4,547.3	40,399	2015	4,128.2	40,293
2016	3,768.5	38,630	2016	3,902.9	39,047
2017	3,561.7	40,532	2017	3,680.0	40,832
2018	4,119.9	35,911	2018	4,305.2	35,892
2019	4,030.6	36,730	2019	3,771.0	36,285
Average	3,435.7	39,739	Average	3,360.6	39,685
Y/Y % Change	-2.2%	2.3%	Y/Y % Change	-12.4%	1.1%
5-Year CAGR	2.1%	-2.3%	5-Year CAGR	4.3%	-2.4%
10-Year CAGR	5.8%	-0.2%	10-Year CAGR	4.8%	-0.2%

Source: Dealogic

US Holdings of Foreign Securities

	\$ Billions		
	Stocks	Bonds	Total
2005	3,317.7	1,121.7	4,439.4
2006	4,329.0	1,400.7	5,729.7
2007	5,248.0	1,734.6	6,982.5
2008	2,748.4	1,341.9	4,090.3
2009	3,995.3	1,693.0	5,688.3
2010	4,900.2	1,903.1	6,803.3
2011	4,501.4	2,107.5	6,609.0
2012	5,321.9	2,366.7	7,688.6
2013	6,472.9	2,383.8	8,856.7
2014	6,770.6	2,592.3	9,362.9
2015	6,756.2	2,424.1	9,180.2
2016	7,146.3	2,531.1	9,677.4
2017	9,118.1	2,982.0	12,100.1
2018	7,996.5	2,998.6	10,995.1
2019	9,513.5	3,336.7	12,850.2
Average	5,875.7	2,194.5	8,070.3
Y/Y % Change	19.0%	11.3%	16.9%
5-Year CAGR	7.0%	5.2%	6.5%
10-Year CAGR	9.1%	7.0%	8.5%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Holding of foreign corporate equities, investment shares, and bonds by U.S residents; includes American Depository Receipts (ADR).

US Gross Activity in Foreign Securities

	\$ Billions		
	Stocks	Bonds	Total
2005	4,605.0	2,955.1	7,560.1
2006	7,375.9	3,888.1	11,264.0
2007	10,522.2	6,062.7	16,584.9
2008	10,860.9	4,465.8	15,326.8
2009	6,396.3	3,991.9	10,388.2
2010	7,404.1	7,320.3	14,724.4
2011	8,000.5	7,054.9	15,055.4
2012	6,909.5	7,824.3	14,733.8
2013	7,850.7	8,609.6	16,460.3
2014	8,892.2	9,287.3	18,179.4
2015	9,694.7	11,501.0	21,195.7
2016	8,805.5	11,104.5	19,910.0
2017	9,798.2	17,387.2	27,185.3
2018	11,907.8	21,865.7	33,773.5
2019	11,052.6	25,856.5	36,909.1
Average	8,671.7	9,945.0	18,616.7
Y/Y % Change	-7.2%	18.3%	9.3%
5-Year CAGR	4.4%	22.7%	15.2%
10-Year CAGR	5.6%	20.5%	13.5%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Gross activity = purchases + sales.

US Net Purchases of Foreign Securities

	\$ Billions		
	Stocks	Bonds	Total
2005	126.9	38.5	165.4
2006	106.3	149.7	256.0
2007	94.8	150.3	245.1
2008	-20.2	-42.5	-62.7
2009	59.6	123.9	183.5
2010	59.9	75.4	135.3
2011	69.8	88.8	158.6
2012	41.3	1.4	42.7
2013	174.0	76.4	250.4
2014	107.7	-94.0	13.8
2015	114.0	-251.3	-137.3
2016	55.8	-233.2	-177.4
2017	106.3	-217.8	-111.5
2018	-44.0	-291.7	-335.6
2019	-52.6	-113.5	-166.1
Average	66.7	-36.0	30.7
Y/Y % Change	-19.5%	61.1%	50.5%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Net purchases = purchases - sales.

US Gross Activity in Foreign Equities by Region/Country

	\$ Billions								
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	All Countries
2005	109.8	238.6	8.1	463.0	205.0	549.9	60.1	1,706.2	4,605.0
2006	154.6	318.3	13.5	661.8	423.4	784.0	92.1	2,416.0	7,375.9
2007	208.4	447.1	11.7	974.8	655.1	910.4	128.4	3,453.1	10,522.2
2008	230.7	613.3	11.6	1,092.0	648.9	784.7	150.2	3,520.8	10,860.9
2009	157.4	425.9	19.5	627.1	508.5	366.5	86.0	1,992.1	6,396.3
2010	153.7	490.8	22.5	673.2	612.4	374.2	89.6	2,289.6	7,404.1
2011	135.2	581.3	25.1	724.4	638.2	390.7	104.6	2,552.0	8,000.5
2012	106.2	487.1	17.1	657.1	545.3	304.7	99.7	2,274.4	6,909.5
2013	111.0	526.4	26.2	634.7	719.3	504.9	116.8	2,456.1	7,850.7
2014	97.7	750.8	28.0	751.6	707.1	361.6	137.8	2,760.2	8,892.2
2015	115.1	846.2	46.4	861.9	728.3	390.0	171.7	2,616.6	9,694.7
2016	110.3	679.5	30.5	1,013.1	614.7	417.3	180.3	2,510.4	8,805.5
2017	114.5	744.2	32.9	1,149.3	705.4	459.0	188.2	2,811.3	9,798.2
2018	127.0	878.5	51.8	1,369.8	886.4	565.4	249.1	3,768.8	11,907.8
2019	129.6	813.5	53.0	1,204.3	832.4	441.7	231.6	3,344.3	11,052.6
Average	137.4	589.4	26.5	857.2	628.7	507.0	139.1	2,698.1	8,671.7
Y/Y % Change	2.0%	-7.4%	2.4%	-12.1%	-6.1%	-21.9%	-7.0%	-11.3%	-7.2%
5-Year CAGR	5.8%	1.6%	13.6%	9.9%	3.3%	4.1%	10.9%	3.9%	4.4%
10-Year CAGR	-1.9%	6.7%	10.5%	6.7%	5.1%	1.9%	10.4%	5.3%	5.6%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Gross activity = purchases + sales; China includes Mainland only.

US Net Purchases of Foreign Equities by Region/Country

	\$ Billions								
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	All Countries
2005	4.6	3.2	4.9	15.6	7.9	40.0	3.0	27.3	126.9
2006	6.0	7.6	5.2	6.8	21.2	2.1	5.5	59.7	106.3
2007	2.3	5.6	-0.6	1.4	-6.7	1.7	4.0	66.8	94.8
2008	0.8	2.2	0.3	-16.5	-12.1	-21.7	-5.6	1.7	-20.2
2009	5.9	7.2	-2.4	-11.7	9.5	2.5	-0.8	24.0	59.6
2010	0.2	2.8	-0.6	-6.9	26.0	13.0	-2.2	-3.8	59.9
2011	-0.3	1.4	5.4	12.1	0.2	-4.1	2.2	3.0	69.8
2012	0.1	0.8	-1.2	2.0	15.6	9.2	-4.6	13.1	41.3
2013	4.0	6.4	-4.0	30.3	6.7	32.9	-5.0	96.8	174.0
2014	7.9	9.9	0.2	6.3	15.3	1.2	5.8	47.8	107.7
2015	4.6	7.7	2.5	6.0	20.8	-2.4	4.5	40.9	114.0
2016	7.4	3.2	0.2	5.8	1.8	-14.2	0.0	23.3	55.8
2017	-1.2	-17.3	-0.4	-0.5	29.2	2.5	0.8	95.1	106.3
2018	-0.2	-35.6	-3.2	14.6	25.6	-10.0	-8.4	-2.5	-44.0
2019	-2.0	-28.8	-1.5	-16.9	29.9	-1.2	-1.2	14.7	-52.6
Average	2.7	-1.6	0.3	3.2	12.7	3.4	-0.1	33.8	66.7
Y/Y % Change	-769.8%	19.1%	51.8%	-215.8%	17.0%	88.2%	85.5%	682.1%	-19.5%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Net purchases = purchases - sales; China includes Mainland only.

Foreign Holdings of US Securities

\$ Billions					
	Stocks	Corporate Bonds	Treasury	Agency Debentures and MBS	Total
2005	2,117.8	1,803.8	1,984.4	1,006.1	6,912.1
2006	2,558.4	2,353.3	2,126.2	1,258.2	8,296.2
2007	2,954.0	2,775.0	2,376.4	1,576.8	9,682.3
2008	1,929.9	2,383.9	3,253.0	1,402.2	8,968.9
2009	2,657.4	2,483.5	3,670.6	1,150.0	9,961.5
2010	3,213.5	2,523.1	4,458.8	1,095.8	11,291.2
2011	3,397.2	2,491.0	5,004.4	1,078.2	11,970.8
2012	3,953.0	2,617.6	5,571.5	1,001.2	13,143.2
2013	5,205.4	2,732.9	5,792.6	883.8	14,614.7
2014	5,920.6	2,928.0	6,158.0	899.6	15,906.2
2015	5,500.9	3,083.3	6,146.2	916.5	15,647.0
2016	5,782.7	3,431.7	6,002.8	991.6	16,208.8
2017	7,019.4	3,881.7	6,211.3	1,012.2	18,124.6
2018	6,510.6	3,609.8	6,264.9	1,077.9	17,463.1
2019	8,246.5	4,001.1	6,695.3	1,180.5	20,123.5
Average	4,464.5	2,873.3	4,781.1	1,102.0	13,220.9
Y/Y % Change	26.7%	10.8%	6.9%	9.5%	15.2%
5-Year CAGR	6.9%	6.4%	1.7%	5.6%	4.8%
10-Year CAGR	12.0%	4.9%	6.2%	0.3%	7.3%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Corporate bonds include ABS and MBS securities.

Foreign Gross Activity in US Securities

\$ Billions					
	Stocks	Corporate Bonds	Treasuries	Agencies	Total
2005	9,378.1	2,176.4	19,741.0	1,973.4	33,269.0
2006	13,585.9	2,841.8	21,699.3	2,850.0	40,977.0
2007	21,082.7	3,429.2	30,021.6	3,864.7	58,398.1
2008	24,030.8	2,838.1	28,924.7	5,209.1	61,002.6
2009	13,155.0	2,414.1	22,628.9	2,086.3	40,284.3
2010	13,384.6	1,951.7	31,653.7	2,095.9	49,086.0
2011	15,413.4	2,032.3	35,439.6	2,167.2	55,052.4
2012	14,706.1	1,759.7	29,075.0	2,890.1	48,430.8
2013	15,435.8	1,856.7	35,386.7	2,671.9	55,351.1
2014	17,861.9	2,145.2	33,243.8	2,143.0	55,393.9
2015	22,233.5	2,232.8	32,490.6	2,616.6	59,573.5
2016	23,065.8	2,298.8	30,510.3	3,260.2	59,135.1
2017	26,592.2	2,967.9	29,511.7	3,475.6	62,547.5
2018	36,291.1	2,776.4	30,100.6	3,633.4	72,801.5
2019	37,137.9	3,477.2	36,611.8	4,850.6	82,077.4
Average	20,223.7	2,479.9	29,802.6	3,052.5	55,558.7
Y/Y % Change	2.3%	25.2%	21.6%	33.5%	12.7%
5-Year CAGR	15.8%	10.1%	1.9%	17.7%	8.2%
10-Year CAGR	10.9%	3.7%	4.9%	8.8%	7.4%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Gross activity = purchases + sales.

Foreign Net Purchases of US Securities

\$ Billions					
	Stocks	Corporate Bonds	Treasuries	Agencies	Total
2005	82.0	369.4	335.2	219.0	1,005.5
2006	150.4	509.8	194.7	286.2	1,141.1
2007	195.6	392.1	199.0	218.6	1,005.3
2008	44.8	93.3	315.3	-37.7	415.7
2009	152.7	-39.7	538.3	-9.9	641.5
2010	109.8	-11.4	703.5	109.3	911.1
2011	24.7	-42.6	421.0	81.9	485.0
2012	107.8	-22.8	417.4	131.7	634.1
2013	-43.0	9.3	43.6	72.4	82.3
2014	-15.4	23.3	178.1	75.8	261.8
2015	-114.7	134.7	-15.0	158.2	163.2
2016	-6.3	125.0	-311.8	266.3	73.1
2017	119.4	132.3	25.0	136.4	413.1
2018	-129.8	56.9	8.8	230.5	166.3
2019	-3.1	15.8	-132.5	299.9	180.0
Average	45.0	116.4	194.7	149.2	505.3
Y/Y % Change	97.6%	-72.3%	-1610.1%	30.1%	8.2%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Net purchases = purchases - sales.

Foreign Gross Activity in US Equities by Region/Country

	\$ Billions								
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	All Countries
2005	27.8	223.8	5.7	1,225.9	26.7	99.6	39.6	2,175.8	9,378.1
2006	39.3	243.0	11.1	1,921.1	37.3	87.1	52.2	2,416.3	13,585.9
2007	61.0	411.1	17.4	3,804.3	118.4	103.5	63.3	3,640.4	21,082.7
2008	74.7	765.4	32.1	5,517.5	128.7	104.4	105.5	3,689.5	24,030.8
2009	45.5	619.1	34.5	2,713.7	63.9	127.5	78.7	1,749.6	13,155.0
2010	53.6	731.5	38.0	2,394.0	73.8	132.7	79.8	1,843.2	13,384.6
2011	64.5	974.4	34.0	2,543.0	89.5	166.1	91.8	2,593.0	15,413.4
2012	62.4	1,176.5	44.1	2,457.6	88.0	154.7	99.1	2,388.4	14,706.1
2013	82.8	793.6	49.0	2,018.2	160.1	179.9	132.2	3,101.2	15,435.8
2014	89.2	867.2	46.8	1,852.9	207.0	158.7	126.2	3,589.9	17,861.9
2015	80.3	833.9	50.4	1,834.3	183.8	133.3	147.2	5,360.1	22,233.5
2016	72.5	985.1	32.6	2,126.1	185.1	124.5	145.6	6,637.3	23,065.8
2017	85.9	1,173.2	45.5	2,031.4	234.6	155.7	211.8	8,295.3	26,592.2
2018	98.6	1,549.7	110.5	3,203.8	377.2	193.1	380.4	12,978.0	36,291.1
2019	104.0	1,487.0	106.0	3,940.4	362.4	193.4	417.2	11,675.1	37,137.9
Average	69.5	855.6	43.8	2,639.0	155.8	140.9	144.7	4,808.9	20,223.7
Y/Y % Change	5.5%	-4.0%	-4.1%	23.0%	-3.9%	0.2%	9.7%	-10.0%	2.3%
5-Year CAGR	3.1%	11.4%	17.7%	16.3%	11.9%	4.0%	27.0%	26.6%	15.8%
10-Year CAGR	8.6%	9.2%	11.9%	3.8%	18.9%	4.3%	18.2%	20.9%	10.9%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Gross activity = purchases + sales; China includes Mainland only.

Foreign Net Purchases of US Equities by Region/Country

	\$ Billions								
	Australia	Canada	China	EU27	Hong Kong	Japan	Singapore	United Kingdom	All Countries
2005	0.1	16.5	-0.5	15.4	1.1	0.1	7.2	19.8	82.0
2006	1.0	11.8	0.5	20.3	-0.5	-0.7	-4.5	75.8	150.4
2007	4.8	8.1	4.0	17.0	35.4	-5.0	-2.5	69.5	195.6
2008	0.1	7.2	-0.7	-32.7	27.4	23.0	7.1	30.9	44.8
2009	3.0	-1.6	4.0	15.7	6.3	13.8	12.0	33.7	152.7
2010	2.0	6.5	2.8	14.4	9.8	4.6	-4.4	27.8	109.8
2011	0.3	14.1	0.4	-35.0	6.5	3.4	-6.7	3.0	24.7
2012	1.0	14.7	-1.5	22.1	0.1	-8.1	-0.9	34.2	107.8
2013	-0.6	-3.2	2.8	11.7	-4.0	-26.4	-3.8	-0.3	-43.0
2014	0.9	10.2	-1.7	28.6	-6.6	-9.2	-11.0	-19.7	-15.4
2015	0.1	-12.2	-4.5	-25.3	-16.2	9.5	-5.5	-15.5	-114.7
2016	0.4	2.3	-3.3	-20.6	-12.3	9.1	-0.6	13.5	-6.3
2017	6.8	53.0	2.1	-2.6	-4.6	3.0	-7.3	33.5	119.4
2018	2.9	0.8	2.0	-4.8	-28.9	5.9	-2.9	-106.4	-129.8
2019	4.3	17.7	-3.5	18.7	7.0	0.0	16.6	-17.2	-3.1
Average	1.8	9.7	0.2	2.9	1.4	1.5	-0.5	12.2	45.0
Y/Y % Change	48.1%	2146.3%	-277.2%	486.3%	124.2%	-99.9%	679.5%	83.8%	97.6%

Source: U.S. Treasury, Treasury International Capital (TIC) System

Note: Net purchases = purchases - sales; China includes Mainland only.

Major Global Stock Market Indexes

	Local Currency, End of Year					
	Canada S&P/TSX Comp.	France CAC 40	Germany DAX	Hong Kong Hang Seng	Japan Nikkei 225	U.K. FTSE 100
2005	11,272.26	4,715.23	5,408.26	14,876.43	16,111.43	5,618.80
2006	12,908.39	5,541.76	6,596.92	19,964.72	17,225.83	6,220.80
2007	13,833.06	5,614.08	8,067.32	27,812.65	15,307.78	6,456.90
2008	8,987.70	3,217.97	4,810.20	14,387.48	8,859.56	4,434.17
2009	11,746.11	3,936.33	5,957.43	21,872.50	10,546.44	5,412.88
2010	13,443.22	3,804.78	6,914.19	23,035.45	10,228.92	5,899.94
2011	11,955.09	3,159.81	5,898.35	18,434.39	8,455.35	5,572.28
2012	12,433.53	3,641.07	7,612.39	22,656.92	10,395.18	5,897.81
2013	13,621.55	4,295.95	9,552.16	23,306.39	16,291.31	6,749.09
2014	14,632.44	4,272.75	9,805.55	23,605.04	17,450.77	6,566.09
2015	13,009.95	4,637.06	10,743.01	21,914.40	19,033.71	6,242.32
2016	15,287.59	4,862.31	11,481.06	22,000.56	19,114.37	7,142.83
2017	16,209.13	5,312.56	12,917.64	29,919.15	22,764.94	7,687.77
2018	14,322.86	4,730.69	10,558.96	25,845.70	20,014.77	6,728.13
2019	17,063.43	5,978.06	13,249.01	28,189.75	23,656.62	7,542.44
Average	13,381.75	4,514.69	8,638.16	22,521.44	15,697.13	6,278.15
Y/Y % Change	19.1%	26.4%	25.5%	9.1%	18.2%	12.1%
5-Year CAGR	3.1%	6.9%	6.2%	3.6%	6.3%	2.8%
10-Year CAGR	3.8%	4.3%	8.3%	2.6%	8.4%	3.4%

Source: Bloomberg

Foreign Exchange Rates

Foreign Currency Units Per U.S. Dollar, Average

	Canadian Dollar	Euro	Japanese Yen	British Pound	Major Currencies Index
2005	1.212	0.803	110.107	0.549	83.876
2006	1.134	0.796	116.312	0.542	82.604
2007	1.073	0.729	117.762	0.500	77.956
2008	1.066	0.679	103.391	0.539	74.466
2009	1.141	0.718	93.683	0.639	77.663
2010	1.030	0.754	87.782	0.647	75.385
2011	0.989	0.718	79.697	0.623	70.868
2012	1.000	0.778	79.818	0.631	73.594
2013	1.030	0.753	97.597	0.639	75.921
2014	1.104	0.752	105.740	0.607	78.373
2015	1.279	0.901	121.049	0.654	90.980
2016	1.324	0.903	108.657	0.738	91.492
2017	1.298	0.885	112.099	0.776	91.079
2018	1.296	0.846	110.397	0.748	89.016
2019	1.327	0.893	109.019	0.783	92.027
Average	1.154	0.794	103.541	0.641	81.687
Y/Y % Change	2.4%	5.6%	-1.2%	4.7%	3.4%
5-Year CAGR	3.7%	3.5%	0.6%	5.2%	3.3%
10-Year CAGR	1.5%	2.2%	1.5%	2.1%	1.7%

Source: The Federal Reserve

Note: Major Currencies Index includes trade-weighted (goods only) value of the dollar.

American Depositary Receipts (ADRs)

	Total Sponsored ADR Programs	of which: U.S. listed	Total Unspansored ADR Programs	ADR Traded Share Volume (Billions)	ADR Traded Dollar Volume (\$ Billions)
2005	1,912	485	N/A	39	1,000
2006	1,984	478	N/A	53	1,500
2007	2,084	407	N/A	76	3,000
2008	2,157	391	N/A	118	3,700
2009	2,110	376	1,060	135	2,700
2010	2,217	397	1,116	147	3,500
2011	2,289	403	1,229	175	3,800
2012	2,287	396	1,391	157	2,790
2013	2,230	392	1,532	143	2,569
2014	2,152	385	1,600	159	3,300
2015	1,976	390	1,626	160	3,100
2016	1,876	362	1,516	152	2,900
2017	1,652	N/A	1,613	136	3,300
2018	1,579	N/A	1,461	162	4,280
2019					
Average	2,036.1	405.2	1,414.4	129.4	2,959.9
Y/Y % Change	-100.0%	#VALUE!	-100.0%	-100.0%	-100.0%
5-Year CAGR	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
10-Year CAGR	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%

Source: Bank of New York, Deutsche Bank

Note: 2017 and 2018 U.S. listed sponsored ADR data not available at time of publication; trading volume includes both sponsored and unsponsored ADRs global traded amounts; 2019 data not available at the time of publication.

US Investor Participation

US Holdings of Equities – Market Value

	S Billions				% of Total	
	Households	Institutions	Total		Households	Institutions
2005	8,088.1	13,444.8	21,532.9	2005	37.6%	62.4%
2006	9,875.6	14,959.0	24,834.6	2006	39.8%	60.2%
2007	9,759.4	16,441.7	26,201.1	2007	37.2%	62.8%
2008	5,736.7	10,528.8	16,265.5	2008	35.3%	64.7%
2009	7,211.3	13,439.4	20,650.7	2009	34.9%	65.1%
2010	8,565.3	15,513.8	24,079.1	2010	35.6%	64.4%
2011	8,126.0	15,209.9	23,335.9	2011	34.8%	65.2%
2012	9,389.4	17,425.0	26,814.4	2012	35.0%	65.0%
2013	12,164.1	22,261.1	34,425.2	2013	35.3%	64.7%
2014	13,813.0	24,154.6	37,967.6	2014	36.4%	63.6%
2015	13,688.0	23,444.3	37,132.3	2015	36.9%	63.1%
2016	15,239.6	24,963.9	40,203.5	2016	37.9%	62.1%
2017	18,111.1	29,944.7	48,055.8	2017	37.7%	62.3%
2018	16,650.4	27,265.1	43,915.5	2018	37.9%	62.1%
2019	20,607.7	34,016.0	54,623.7	2019	37.7%	62.3%
Average	11,801.7	20,200.8	32,002.5	Average	0.4	0.6
Y/Y % Change	23.8%	24.8%	24.4%	Y/Y Change	-0.2%	0.2%
5-Year CAGR	8.3%	7.1%	7.5%			
10-Year CAGR	11.1%	9.7%	10.2%			

Source: The Federal Reserve - Financial Accounts of the United States

Note: Household sector includes nonprofit organizations; includes only directly held equities.

US Family Holdings of Stock

	2001	2004	2007	2010	2013	2016	2019	Average
Families with stock holdings, direct or indirect (% of all families)	53.0%	50.3%	53.2%	49.8%	48.8%	51.9%	52.6%	51.4%
Median value of stock held among families (thousands of dollars)	50.5	44.6	42.0	34.2	39.3	42.5	40.0	41.9
Stock held by families (% of total family financial assets)	56.7%	51.3%	53.6%	46.8%	51.3%	53.2%	54.6%	52.5%

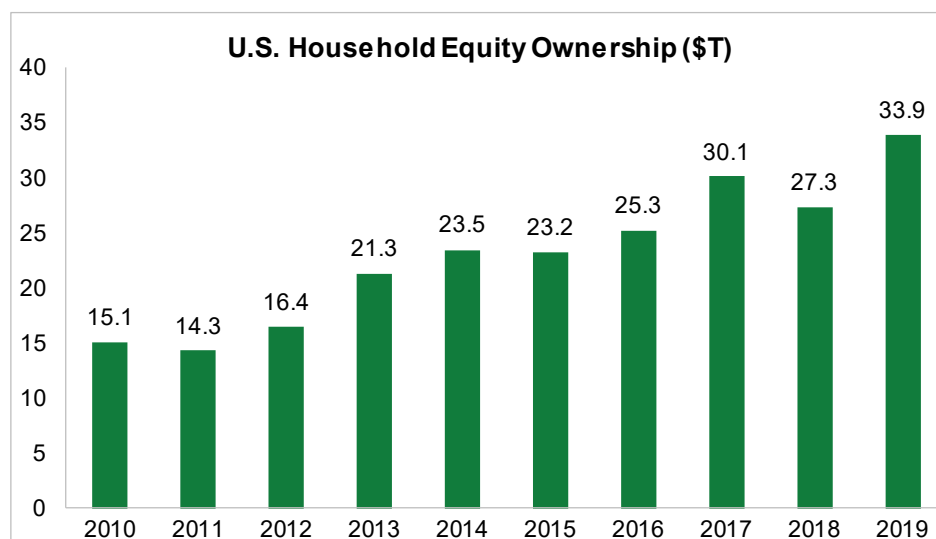
Source: The Federal Reserve, 2019 Survey of Consumer Finances

Note: Includes both directly and indirectly held publicly traded stock (i.e. through mutual funds or retirement accounts).

US Household Equity Ownership

	\$ Billions
2005	13,860.2
2006	16,455.4
2007	16,915.8
2008	9,895.1
2009	12,829.0
2010	15,093.0
2011	14,318.7
2012	16,443.5
2013	21,323.2
2014	23,508.1
2015	23,232.3
2016	25,272.3
2017	30,090.6
2018	27,332.9
2019	33,905.6

Average	20,031.7
Y/Y % Change	24.0%
5-Year CAGR	7.9%
10-Year CAGR	8.4%



Source: The Federal Reserve - Financial Accounts of the United States

Note: Household sector includes nonprofit organizations; includes both directly and indirectly held equities (i.e. through mutual funds).

US Household Liquid Financial Assets - Market Value

\$ Billions								
	Equities	Bank Deposits & CDs	Mutual Fund Shares	U.S. Treasury, Agency, and GSE Securities	Municipal Bonds	Money Market Funds	Corporate Bonds	Total Liquid Financial Assets
2005	8,088.1	5,238.5	3,409.0	630.3	1,701.0	1,261.8	828.3	21,157.1
2006	9,875.6	5,711.4	4,010.3	342.2	1,760.7	1,465.9	869.2	24,035.3
2007	9,759.4	6,127.1	4,535.9	690.5	1,640.1	1,967.8	1,175.6	25,896.3
2008	5,736.7	6,643.6	2,917.7	1,388.9	1,524.4	2,285.0	1,322.0	21,818.2
2009	7,211.3	6,783.1	4,021.7	936.4	1,858.0	1,962.3	1,885.1	24,657.9
2010	8,565.3	6,920.2	4,701.7	1,264.2	1,912.7	1,657.5	2,002.3	27,023.9
2011	8,126.0	7,586.6	4,684.4	1,336.0	2,062.8	1,584.8	2,169.6	27,550.1
2012	9,389.4	8,045.1	5,549.7	1,399.6	2,021.2	1,589.9	2,248.9	30,243.8
2013	12,164.1	8,429.6	6,598.8	1,047.1	1,843.1	1,591.9	1,636.7	33,311.3
2014	13,813.0	8,981.9	7,065.1	1,003.6	1,939.4	1,568.0	1,752.2	36,123.2
2015	13,688.0	9,609.9	6,960.6	1,500.7	1,902.8	1,551.1	1,211.0	36,424.1
2016	15,239.6	10,195.7	7,306.5	1,483.9	1,879.5	1,558.4	1,058.9	38,722.5
2017	18,111.1	10,528.8	8,654.8	1,580.9	1,890.2	1,617.9	1,006.6	43,390.4
2018	16,650.4	10,815.5	7,961.9	2,336.6	1,861.0	1,799.0	943.0	42,367.4
2019	20,607.7	11,361.8	9,798.7	2,650.8	1,893.5	2,207.4	1,003.4	49,523.3
Average	11,801.7	8,198.6	5,878.4	1,306.1	1,846.0	1,711.3	1,407.5	32,149.6
Y/Y % Change	23.8%	5.1%	23.1%	13.4%	1.7%	22.7%	6.4%	16.9%
5-Year CAGR	8.3%	4.8%	6.8%	21.4%	-0.5%	7.1%	-10.6%	6.5%
10-Year CAGR	11.1%	5.3%	9.3%	11.0%	0.2%	1.2%	-6.1%	7.2%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Households include nonprofit organizations. Liquid financial assets exclude pension fund reserves, equity in non-corporate business, etc.

US Household Liquid Financial Assets - Share of Total

	Percentage							
				U.S. Treasury, Agency, and GSE Securities	Municipal Bonds	Money Market Funds	Corporate Bonds	Liquid Financial Assets
	Equities	Bank Deposits & CDs	Mutual Fund Shares					
2004	38.2%	24.8%	16.1%	3.0%	8.0%	6.0%	3.9%	100%
2005	41.1%	23.8%	16.7%	1.4%	7.3%	6.1%	3.6%	100%
2006	37.7%	23.7%	17.5%	2.7%	6.3%	7.6%	4.5%	100%
2007	26.3%	30.4%	13.4%	6.4%	7.0%	10.5%	6.1%	100%
2008	29.2%	27.5%	16.3%	3.8%	7.5%	8.0%	7.6%	100%
2009	31.7%	25.6%	17.4%	4.7%	7.1%	6.1%	7.4%	100%
2010	29.5%	27.5%	17.0%	4.8%	7.5%	5.8%	7.9%	100%
2011	31.0%	26.6%	18.3%	4.6%	6.7%	5.3%	7.4%	100%
2012	36.5%	25.3%	19.8%	3.1%	5.5%	4.8%	4.9%	100%
2013	38.2%	24.9%	19.6%	2.8%	5.4%	4.3%	4.9%	100%
2014	37.6%	26.4%	19.1%	4.1%	5.2%	4.3%	3.3%	100%
2015	39.4%	26.3%	18.9%	3.8%	4.9%	4.0%	2.7%	100%
2016	41.7%	24.3%	19.9%	3.6%	4.4%	3.7%	2.3%	100%
2017	39.3%	25.5%	18.8%	5.5%	4.4%	4.2%	2.2%	100%
2018	41.6%	22.9%	19.8%	5.4%	3.8%	4.5%	2.0%	100%
Average	35.9%	25.7%	17.9%	4.0%	6.1%	5.7%	4.7%	
Y/Y Change	2.3%	-2.6%	1.0%	-0.2%	-0.6%	0.2%	-0.2%	

Source: The Federal Reserve - Financial Accounts of the United States

Note: Households include nonprofit organizations. Liquid financial assets exclude pension fund reserves, equity in non-corporate business, etc.

US Holdings of Equities by Type of Holder - Market Value

	\$ Billions						Average	Y/Y % Change	5-Year CAGR
	2014	2015	2016	2017	2018	2019			
Total U.S. Holdings	37,967.6	37,132.3	40,203.5	48,055.8	43,915.5	54,623.7	43,649.7	24.4%	7.5%
Households	13,813.0	13,688.0	15,239.6	18,111.1	16,650.4	20,607.7	16,351.6	23.8%	8.3%
Institutions	24,154.6	23,444.2	24,963.9	29,944.7	27,265.1	34,016.0	27,298.1	24.8%	7.1%
Mutual Funds	8,799.2	8,625.3	9,069.9	10,819.6	9,657.5	11,934.5	9,817.7	23.6%	6.3%
Foreign	5,920.6	5,500.9	5,782.7	7,019.4	6,510.6	8,246.5	6,496.8	26.7%	6.9%
Exchange-Traded Funds	1,620.2	1,709.7	2,032.7	2,775.6	2,669.2	3,486.2	2,382.2	30.6%	16.6%
State & Local Gov't Retirement Funds	2,283.6	2,250.0	2,321.5	2,706.8	2,531.8	2,982.5	2,512.7	17.8%	5.5%
Private Pension Funds	2,284.3	2,220.4	2,329.9	2,713.0	2,364.2	2,939.0	2,475.2	24.3%	5.2%
Nonfinancial corporate business	1,552.3	1,498.3	1,711.5	1,948.3	1,791.2	2,290.8	1,798.7	27.9%	8.1%
Life Insurance Companies	538.9	545.9	554.8	622.8	537.8	644.2	574.1	19.8%	3.6%
Property Casualty Companies	341.9	334.0	354.3	410.6	392.1	493.9	387.8	26.0%	7.6%
Federal Gov't Retirement Funds	240.2	240.3	260.8	324.2	292.1	370.5	288.0	26.9%	9.1%
State & Local Governments	126.9	121.5	130.5	151.5	137.7	173.2	140.2	25.8%	6.4%
Broker/Dealers	187.8	166.8	176.1	182.7	147.7	166.7	171.3	12.9%	-2.4%
U. S. Chartered Depository Institutions	106.1	97.7	104.0	127.6	109.1	147.7	115.4	35.4%	6.8%
Closed-End Funds	119.4	99.8	101.8	109.3	91.2	107.2	104.8	17.5%	-2.1%
Federal Government	33.4	33.4	33.3	33.2	33.2	33.2	33.3	0.0%	N/A
Monetary Authority	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A

Source: The Federal Reserve - Financial Accounts of the United States

Note: Households include non-profit organizations. Other contains foreign banking offices in the U.S. and funding corporations.

US Holdings of Equities by Type of Holder - Share of Total

	Percentage						Average	Y/Y Change
	2014	2015	2016	2017	2018	2019		
Total U.S. Holdings	100%	100%	100%	100%	100%	100%		
Households	36.4%	36.9%	37.9%	37.7%	37.9%	37.7%	37.4%	-0.2%
Institutions	63.6%	63.1%	62.1%	62.3%	62.1%	62.3%	62.6%	0.2%
Mutual Funds	23.2%	23.2%	22.6%	22.5%	22.0%	21.8%	22.6%	-0.1%
Foreign	15.6%	14.8%	14.4%	14.6%	14.8%	15.1%	14.9%	0.3%
Exchange-Traded Funds	4.3%	4.6%	5.1%	5.8%	6.1%	6.4%	5.4%	0.3%
State & Local Gov't Retirement Funds	6.0%	6.1%	5.8%	5.6%	5.8%	5.5%	5.8%	-0.3%
Private Pension Funds	6.0%	6.0%	5.8%	5.6%	5.4%	5.4%	5.7%	0.0%
Nonfinancial corporate business	4.1%	4.0%	4.3%	4.1%	4.1%	4.2%	4.1%	0.1%
Life Insurance Companies	1.4%	1.5%	1.4%	1.3%	1.2%	1.2%	1.3%	0.0%
Property Casualty Companies	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.0%
Federal Gov't Retirement Funds	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.0%
State & Local Governments	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.0%
Broker/Dealers	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.4%	0.0%
U. S. Chartered Depository Institutions	0.3%	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	0.0%
Closed-End Funds	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.0%
Federal Government	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%
Monetary Authority	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Households include non-profit organizations. Other contains foreign banking offices in the U.S. and funding corporations.

US Net Acquisitions of Corporate Equities by Type of Holder

	\$ Billions						Y/Y %	
	2014	2015	2016	2017	2018	2019	Average	Change
Total Net Issuance	286.6	-124.7	-299.5	238.0	-137.1	-480.1	-86.2	250.1%
Households	144.4	-123.0	-7.3	133.3	-95.9	11.1	10.4	-111.6%
Institutions	104.9	40.5	-359.5	193.9	-3.0	-474.9	-83.0	15893.7%
Mutual Funds	94.7	58.1	-111.5	-133.4	-120.5	-221.0	-72.3	83.4%
Foreign	114.3	-191.4	-186.3	116.9	96.4	-190.0	-40.0	-297.1%
Exchange-Traded Funds	190.7	173.5	188.4	347.3	210.4	165.9	212.7	-21.2%
State & Local Gov't Retirement Funds	-86.5	22.6	-93.5	-61.9	-27.6	-112.4	-59.9	308.0%
Private Pension Funds	-183.9	-29.3	-113.5	-53.1	-98.4	-88.8	-94.5	-9.8%
Broker/Dealers	-1.4	-18.4	-5.4	-26.3	-19.9	-22.8	-15.7	14.4%
Nonfinancial corporate business	37.3	-42.2	67.2	-89.2	-38.3	-16.4	-13.6	-57.3%
Federal Gov't Retirement Funds	-1.2	0.0	-5.6	6.5	-21.6	-5.1	-4.5	-76.3%
State & Local Governments	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	0.0%
Closed-End Funds	4.3	1.3	0.1	-0.5	-0.4	2.6	1.2	-735.8%
Property Casualty Companies	3.1	-1.5	2.9	9.8	20.1	-1.8	5.4	-108.9%
Life Insurance Companies	-25.0	27.0	-24.5	-5.9	-44.5	1.1	-12.0	-102.5%
U. S. Chartered Depository Institutions	0.7	2.0	-6.9	-2.0	2.5	0.8	-0.5	-68.3%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Monetary Authority	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Federal government	-1.6	0.0	-0.1	-0.1	4.0	0.0	0.4	-100.0%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Households include non-profit organizations. Other contains foreign banking offices in the U.S. and funding corporations.

Savings & Investment

US Retirement Assets

	\$ Billions						
	Private	Life Insurance Companies	State & Local Government	Federal Government	Total Pension Assets	IRA Assets	Total Retirement Assets
2005	5,430.5	1,899.1	4,720.6	2,478.5	14,528.8	3,425.0	17,953.8
2006	5,839.1	2,078.9	5,060.8	2,594.2	15,572.9	4,207.0	19,779.9
2007	6,191.4	2,187.4	5,374.1	2,700.5	16,453.4	4,748.0	21,201.4
2008	5,331.6	1,947.0	5,507.4	2,741.0	15,527.0	3,681.0	19,208.0
2009	5,988.2	2,081.4	5,788.7	2,901.3	16,759.6	4,488.0	21,247.6
2010	6,640.7	2,290.9	6,275.3	3,132.8	18,339.6	5,029.0	23,368.6
2011	6,774.1	2,288.8	6,443.4	3,233.0	18,739.3	5,153.0	23,892.3
2012	7,295.8	2,479.0	6,647.1	3,356.7	19,778.6	5,785.0	25,563.6
2013	8,457.1	2,754.4	7,602.8	3,515.4	22,329.7	6,819.0	29,148.7
2014	8,756.4	2,869.9	7,930.2	3,605.5	23,162.0	7,292.0	30,454.0
2015	8,686.0	2,909.4	8,195.1	3,703.9	23,494.4	7,477.0	30,971.4
2016	9,110.1	3,003.6	8,468.4	3,791.9	24,373.9	8,015.0	32,388.9
2017	10,024.6	3,221.9	8,790.4	3,906.3	25,943.2	9,439.0	35,382.2
2018	9,759.3	3,178.5	9,058.3	3,979.1	25,975.2	9,250.0	35,225.2
2019	10,955.7	3,484.8	9,414.9	4,149.8	28,005.3	11,025.0	39,030.3
Average	7,682.7	2,578.3	7,018.5	3,319.3	20,598.9	6,388.9	26,987.7
Y/Y % Change	12.3%	9.6%	3.9%	4.3%	7.8%	19.2%	10.8%
5-Year CAGR	4.6%	4.0%	3.5%	2.9%	3.9%	8.6%	5.1%
10-Year CAGR	6.2%	5.3%	5.0%	3.6%	5.3%	9.4%	6.3%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Private include deferred benefit and deferred contribution plans; Includes claims of pension funds on sponsor (i.e., unfunded defined benefit pension entitlements); Life Insurance Companies are the annuity reserves held by life insurance companies.

US Private Pension Funds Assets

	\$ Billions		
	Defined Benefit	Defined Contribution	Total
2005	2,290.4	3,140.1	5,430.5
2006	2,402.0	3,437.1	5,839.1
2007	2,529.1	3,662.2	6,191.4
2008	2,608.2	2,723.3	5,331.6
2009	2,652.9	3,335.4	5,988.2
2010	2,872.2	3,768.4	6,640.7
2011	2,983.8	3,790.3	6,774.1
2012	3,055.4	4,240.4	7,295.8
2013	3,451.3	5,005.8	8,457.1
2014	3,463.6	5,292.9	8,756.4
2015	3,436.3	5,249.7	8,686.0
2016	3,469.5	5,640.6	9,110.1
2017	3,484.0	6,540.6	10,024.6
2018	3,490.9	6,268.4	9,759.3
2019	3,510.6	7,445.1	10,955.7
Average	3,046.7	4,636.0	7,682.7
Y/Y % Change	0.6%	18.8%	12.3%
5-Year CAGR	0.3%	7.1%	4.6%
10-Year CAGR	2.8%	8.4%	6.2%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Includes claims of pension funds on sponsor (i.e., unfunded defined benefit pension entitlements).

US Private Pension Fund Assets Investment Mix

\$ Billions							
	Equity	Bonds	Mutual Funds	Cash Items	Claims on Pension Fund Sponsor	Other Assets	Total Assets
2005	2,287.8	642.8	1,727.0	205.9	-30.1	558.0	5,391.3
2006	1,976.3	643.4	2,003.5	237.9	-16.2	956.6	5,801.4
2007	2,041.0	690.3	2,174.1	255.3	-28.3	1,024.6	6,157.1
2008	1,275.0	673.1	1,480.2	244.1	687.7	936.2	5,296.3
2009	1,504.4	722.8	1,955.3	236.8	466.2	1,066.3	5,951.8
2010	1,778.1	829.1	2,220.2	226.1	437.5	1,113.2	6,604.1
2011	1,680.4	915.0	2,200.0	252.6	497.9	1,191.5	6,737.5
2012	1,890.7	1,049.5	2,481.5	225.2	377.9	1,234.4	7,259.2
2013	2,243.8	1,045.5	3,006.9	248.0	592.0	1,284.5	8,420.6
2014	2,284.3	1,166.5	3,190.3	256.6	504.1	1,318.1	8,719.9
2015	2,220.4	1,136.2	3,127.9	248.0	609.0	1,307.8	8,649.4
2016	2,329.9	1,192.5	3,352.8	248.4	582.3	1,367.4	9,073.4
2017	2,713.0	1,348.3	3,886.7	261.5	294.6	1,483.9	9,988.0
2018	2,364.2	1,466.6	3,614.3	269.7	465.3	1,542.5	9,722.7
2019	2,939.0	1,700.1	4,306.0	276.6	48.7	1,648.7	10,919.2
Average	2,101.9	1,014.8	2,715.1	246.2	365.9	1,202.2	7,646.1
Y/Y % Change	24.3%	15.9%	19.1%	2.6%	-89.5%	6.9%	12.3%
5-Year CAGR	5.2%	7.8%	6.2%	1.5%	-37.3%	4.6%	4.6%
10-Year CAGR	6.9%	8.9%	8.2%	1.6%	-20.2%	4.5%	6.3%

Source: The Federal Reserve - Financial Accounts of the United

Note: Bonds includes Treasuries, Agency & GSE-backed securities, and corporate & foreign bonds; Cash Items include checkable deposits and currency, time and savings deposits, money market mutual fund shares, and repo and reverse repo agreements, and commercial paper; Total Assets include total liabilities of pension entitlements.

US Defined Benefit Plan Asset Investment Mix

\$ Billions							
	Equity	Bonds	Mutual Funds	Cash Items	Claims on Pension Fund Sponsor	Other Assets	Total Assets
2005	1,392.8	459.2	253.4	57.4	-30.1	118.5	2,251.2
2006	1,150.7	500.1	313.2	127.2	-16.2	289.3	2,364.3
2007	1,209.3	536.3	332.6	136.0	-28.3	309.0	2,494.9
2008	726.1	480.8	258.5	102.2	687.7	317.6	2,572.9
2009	863.8	517.9	321.9	106.7	466.2	339.9	2,616.4
2010	1,010.7	577.8	348.1	102.8	437.5	358.9	2,835.7
2011	929.5	665.9	356.3	106.5	497.9	391.1	2,947.2
2012	1,048.0	746.6	359.3	94.2	377.9	392.9	3,018.8
2013	1,165.0	750.5	407.9	109.6	592.0	389.9	3,414.8
2014	1,137.9	835.5	425.6	118.3	504.1	405.6	3,427.0
2015	1,086.9	804.6	382.9	105.9	609.0	410.5	3,399.7
2016	1,099.1	829.5	385.1	102.5	582.3	434.4	3,432.9
2017	1,210.9	946.7	411.5	115.3	294.6	468.4	3,447.4
2018	1,002.9	1,015.6	370.1	118.4	465.3	482.1	3,454.3
2019	1,215.0	1,162.2	423.9	121.0	48.7	503.2	3,474.1
Average	1,083.2	721.9	356.7	108.3	365.9	374.1	3,010.1
Y/Y % Change	21.2%	14.4%	14.5%	2.3%	-89.5%	4.4%	0.6%
5-Year CAGR	1.3%	6.8%	-0.1%	0.5%	-37.3%	4.4%	0.3%
10-Year CAGR	3.5%	8.4%	2.8%	1.3%	-20.2%	4.0%	2.9%

Source: The Federal Reserve - Financial Accounts of the United

Note: Bonds includes Treasuries, Agency & GSE-backed securities, and corporate & foreign bonds; Cash Items include checkable deposits and currency, time and savings deposits, money market mutual fund shares, and repo and reverse repo agreements, and commercial paper; Total Assets include total liabilities of pension entitlements.

US Defined Contribution Plan Asset Investment Mix

	\$ Billions					
	Equity	Bonds	Mutual Funds	Cash Items	Other Assets	Total Assets
2005	895.0	183.6	1,473.6	148.4	439.5	3,140.1
2006	825.6	143.3	1,690.3	110.6	667.2	3,437.1
2007	831.7	154.0	1,841.5	119.3	715.6	3,662.2
2008	548.9	192.3	1,221.7	141.9	618.6	2,723.3
2009	640.6	205.0	1,633.4	130.1	726.3	3,335.4
2010	767.4	251.4	1,872.0	123.3	754.3	3,768.4
2011	750.9	249.2	1,843.7	146.1	800.4	3,790.3
2012	842.7	302.9	2,122.2	131.0	841.5	4,240.4
2013	1,078.8	295.0	2,599.0	138.4	894.5	5,005.8
2014	1,146.4	331.0	2,764.6	138.3	912.5	5,292.9
2015	1,133.5	331.7	2,745.1	142.1	897.4	5,249.7
2016	1,230.8	363.0	2,967.7	145.9	933.0	5,640.6
2017	1,502.1	401.6	3,475.2	146.2	1,015.5	6,540.6
2018	1,361.3	451.1	3,244.2	151.4	1,060.4	6,268.4
2019	1,724	538	3,882	156	1,146	7,445
Average	1,018.7	292.9	2,358.4	137.9	828.2	4,636.0
Y/Y % Change	26.6%	19.3%	19.7%	2.8%	8.0%	18.8%
5-Year CAGR	8.5%	10.2%	7.0%	2.4%	4.7%	7.1%
10-Year CAGR	10.4%	10.1%	9.0%	1.8%	4.7%	8.4%

Source: The Federal Reserve - Financial Accounts of the United States

Note: Bonds include Treasuries, agency & GSE-backed securities, and corporate and foreign bonds; cash items include checkable deposits and currency, time and savings deposits, money market mutual fund shares, repo and reverse repo agreements, and commercial paper.

US Individual Retirement Account (IRA) Assets

	\$ Billions				
	Mutual Funds	Bank and Thrift Deposits	Life Insurance Companies	Other Assets	Total IRA Assets
2005	1,780	278	301	1,067	3,425
2006	2,142	313	299	1,454	4,207
2007	2,435	340	303	1,670	4,748
2008	1,692	391	294	1,304	3,681
2009	2,114	431	289	1,654	4,488
2010	2,418	461	311	1,840	5,029
2011	2,409	482	306	1,956	5,153
2012	2,752	508	321	2,204	5,785
2013	3,322	508	348	2,641	6,819
2014	3,524	506	365	2,897	7,292
2015	3,493	523	380	3,081	7,477
2016	3,707	561	393	3,354	8,015
2017	4,279	548	413	4,200	9,439
2018	3,994	568	426	4,262	9,250
2019	4,816	558	460	5,190	11,025
Average	2,992	465	347	2,585	6,389
Y/Y % Change	20.6%	-1.8%	8.0%	21.8%	19.2%
5-Year CAGR	6.4%	2.0%	4.7%	12.4%	8.6%
10-Year CAGR	8.6%	2.6%	4.8%	12.1%	9.4%

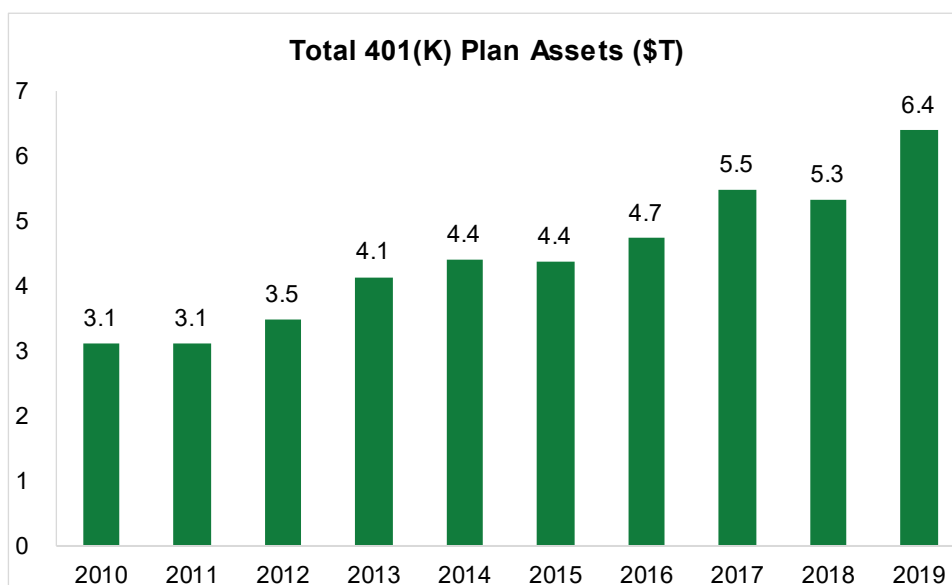
Source: Investment Company Institute

Note: Bank and thrift deposits include Keogh deposits.

US Individual Retirement Account (IRA) Assets

	\$ Billions
2005	2,393
2006	2,773
2007	2,975
2008	2,203
2009	2,718
2010	3,119
2011	3,112
2012	3,495
2013	4,148
2014	4,406
2015	4,377
2016	4,741
2017	5,486
2018	5,330
2019	6,395

Average	3,845
Y/Y % Change	20.0%
5-Year CAGR	7.7%
10-Year CAGR	8.9%



Source: Investment Company Institute

Household Saving Rates of Major Nations

	Percentage of Disposable Household Income					
	U.S.	Canada	France	Germany	Japan	U.K.
2004	5.3%	2.7%	9.6%	10.6%	3.8%	3.7%
2005	3.3%	1.6%	8.5%	10.6%	3.7%	3.5%
2006	4.0%	2.7%	9.0%	10.6%	2.7%	3.4%
2007	3.9%	2.3%	9.4%	10.7%	2.8%	5.0%
2008	5.2%	3.4%	9.3%	10.9%	2.7%	3.8%
2009	6.3%	4.7%	10.6%	10.4%	4.2%	6.8%
2010	6.8%	4.4%	10.5%	10.3%	3.9%	7.3%
2011	7.4%	4.4%	9.9%	10.0%	4.2%	4.9%
2012	9.1%	4.9%	10.0%	9.7%	2.9%	4.3%
2013	6.6%	4.9%	8.5%	9.3%	0.6%	3.5%
2014	7.6%	3.7%	8.9%	9.8%	0.1%	4.1%
2015	7.9%	4.2%	8.3%	10.1%	1.4%	4.7%
2016	7.0%	1.7%	8.2%	10.2%	3.3%	1.7%
2017	7.2%	2.0%	8.1%	10.4%	2.6%	-0.3%
2018	8.0%	1.5%	8.4%	11.0%	4.3%	0.4%
Average	6.4%	3.3%	9.2%	10.3%	2.9%	3.8%
Y/Y Change	0.8%	-0.5%	0.3%	0.5%	1.7%	0.7%

Source: OECD Economic Outlook

Note: Net savings rate, 2018 is the latest data available at the time of publication.

US Economic Indicators

	CPI (% Change)	Civilian Unemployment Rate (%)	Personal Savings Rate (% of Disposable Income)	Nominal GDP (\$ Billions)	Real GDP (2012 \$ Billions)	Real GDP (% Change)
2005	3.4%	5.1%	3.1%	13,036.6	14,912.5	3.5%
2006	2.5%	4.6%	3.8%	13,814.6	15,338.3	2.9%
2007	4.1%	4.6%	3.7%	14,451.9	15,626.0	1.9%
2008	0.1%	5.8%	5.0%	14,712.8	15,604.7	-0.1%
2009	2.7%	9.3%	6.1%	14,448.9	15,208.8	-2.5%
2010	1.5%	9.6%	6.5%	14,992.1	15,598.8	2.6%
2011	3.0%	8.9%	7.2%	15,542.6	15,840.7	1.6%
2012	1.7%	8.1%	8.9%	16,197.0	16,197.0	2.2%
2013	1.5%	7.4%	6.4%	16,784.9	16,495.4	1.8%
2014	0.8%	6.2%	7.4%	17,527.3	16,912.0	2.5%
2015	0.7%	5.3%	7.5%	18,224.8	17,403.8	2.9%
2016	2.1%	4.9%	6.9%	18,715.0	17,688.9	1.6%
2017	2.1%	4.3%	7.2%	19,519.4	18,108.1	2.4%
2018	1.9%	3.9%	7.8%	20,580.2	18,638.2	2.9%
2019	2.3%	3.7%	7.5%	21,427.7	19,073.1	2.3%
Average	2.0%	6.1%	6.3%	16,665.1	16,576.4	1.9%
Y/Y % Change	0.4%	-0.2%	-0.3%	4.1%	2.3%	-0.6%
5-Year CAGR				3.3%	1.8%	
10-Year CAGR				3.6%	2.0%	

Sources: U.S. Bureau of Economic Analysis; U.S. Department of Labor

Note: CPI and Unemployment Rate are not seasonally adjusted.

US Federal Receipts, Outlays, Deficit and Debt

	\$ Billions					
	GDP	Receipts	Outlays	Surplus/ (Deficit)	Total Debt	Debt Held by Public
FY2007	14,290.8	2,568.0	2,728.7	-160.7	8,950.7	5,035.1
FY2008	14,743.3	2,524.0	2,982.5	-458.6	9,986.1	5,803.1
FY2009	14,431.8	2,105.0	3,517.7	-1,412.7	11,875.9	7,544.7
FY2010	14,838.8	2,162.7	3,457.1	-1,294.4	13,528.8	9,018.9
FY2011	15,403.7	2,303.5	3,603.1	-1,299.6	14,764.2	10,128.2
FY2012	16,056.4	2,450.0	3,537.0	-1,087.0	16,050.9	11,281.1
FY2013	16,603.8	2,775.1	3,454.6	-679.5	16,719.4	11,982.7
FY2014	17,335.6	3,021.5	3,506.1	-484.6	17,794.5	12,779.9
FY2015	18,099.6	3,249.9	3,688.4	-438.5	18,120.1	13,116.7
FY2016	18,554.8	3,268.0	3,852.6	-584.7	19,539.5	14,167.6
FY2017	19,287.6	3,316.2	3,981.6	-665.4	20,205.7	14,665.4
FY2018	20,335.5	3,329.9	4,109.0	-779.1	21,462.3	15,749.6
FY2019	21,215.7	3,464.2	4,448.3	-984.2	22,669.5	16,800.7
FY2020E	22,210.9	3,706.3	4,789.7	-1,083.4	23,900.2	17,881.2
FY2021E	23,353.1	3,863.3	4,829.4	-966.1	25,077.4	18,912.1
Average	17,784.1	2,940.5	3,765.7	-825.2	17,376.3	12,324.5
Y/Y % Change	5.1%	4.2%	0.8%	-10.8%	4.9%	5.8%
5-Year CAGR	4.7%	3.4%	4.6%	10.6%	5.1%	5.9%
10-Year CAGR	4.2%	5.3%	3.0%	-2.9%	5.4%	6.4%

Source: Economic Report of the President

Securities Industry

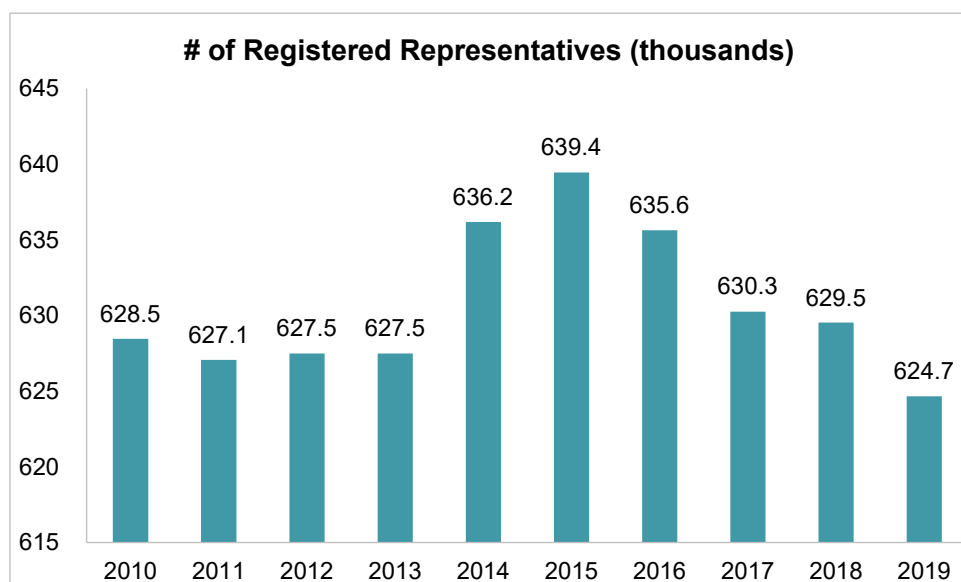
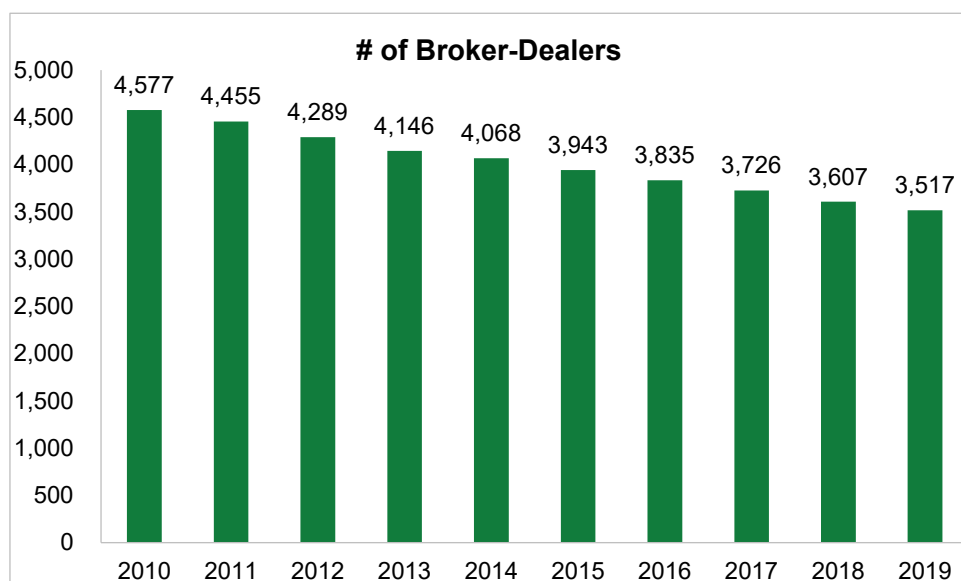
FINRA-Registered Broker-Dealers Financial Results

	\$ Billions		
	Revenues	Expenses	Pre-Tax Net Income
2005	321.8	304.2	17.6
2006	436.8	403.7	33.1
2007	474.2	473.4	0.8
2008	290.5	324.7	-34.1
2009	278.9	207.3	71.7
2010	254.8	220.0	34.8
2011	238.9	224.7	14.2
2012	256.9	224.9	32.1
2013	264.5	238.2	26.3
2014	275.0	247.9	27.0
2015	270.0	247.4	22.6
2016	271.5	246.2	25.3
2017	305.7	268.6	37.1
2018	361.1	318.3	42.8
2019	388.1	344.2	43.9
Average	312.6	286.2	26.3
Y/Y % Change	0.1	0.1	0.0
5-Year CAGR	7.1%	6.8%	10.2%
10-Year CAGR	3.4%	5.2%	-4.8%

Sources: FINRA, SIFMA DataBank

Note: Based on Financial and Operational Combined Uniform Single (FOCUS) Reports.

FINRA-Registered Firms and Registered Representative - Charts



Source: FINRA

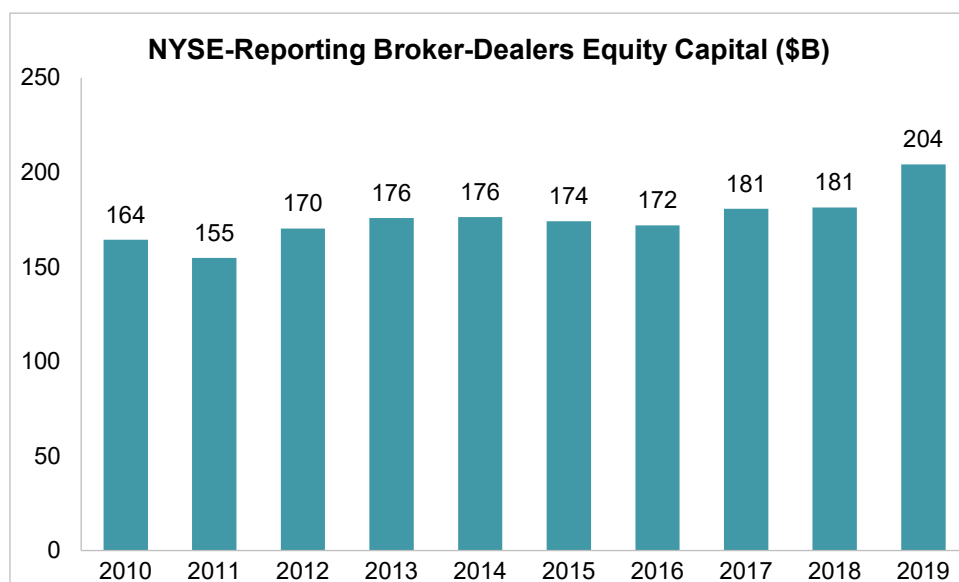
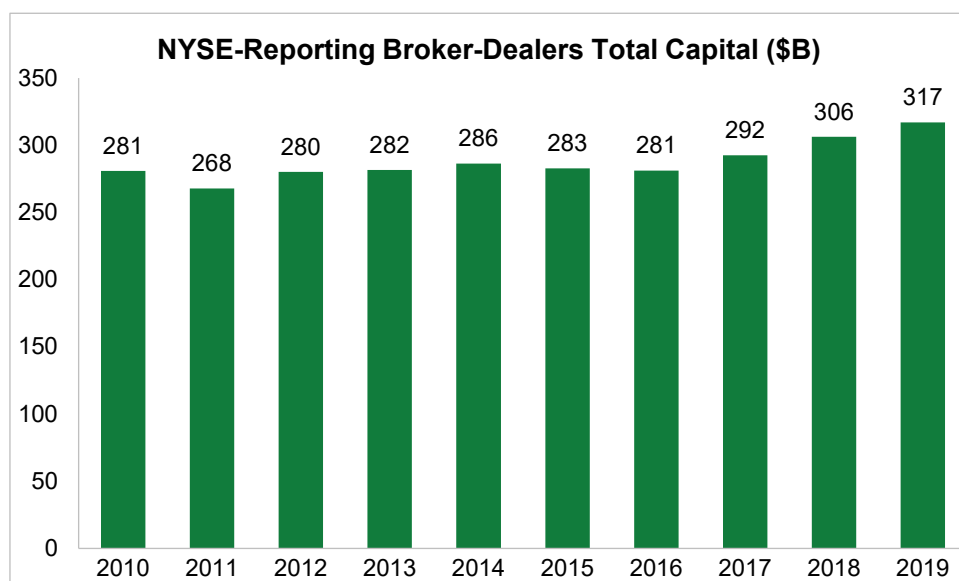
Note: Financial & Operational Combined Uniform Single (FOCUS) reports for all FINRA registered broker-dealers doing business in the US; BD = broker-dealer; RR = registered representative; branches = branch offices.

NYSE Member Firms Aggregate Financial Results

	\$ Millions		Percentage	
	Total Revenues	Pre-Tax Profits	Pre-Tax Profit Margin	Pre-Tax ROE
2005	229,819.1	9,446.3	4.1%	9.4%
2006	331,335.7	20,893.6	6.3%	19.0%
2007	352,048.4	-11,302.3	-3.2%	-10.4%
2008	178,068.0	-42,587.4	-23.9%	-37.9%
2009	185,267.3	58,575.8	31.6%	40.3%
2010	159,766.6	25,092.1	15.7%	15.3%
2011	147,282.7	7,746.7	5.3%	5.0%
2012	161,456.0	23,878.0	14.8%	14.0%
2013	162,359.0	16,719.0	10.3%	9.5%
2014	164,628.0	15,965.0	9.7%	9.1%
2015	161,886.0	14,288.0	8.8%	8.2%
2016	166,653.0	17,296.0	10.4%	10.1%
2017	189,702.0	24,526.0	12.9%	13.6%
2018	228,091.0	27,308.0	12.0%	15.1%
2019	250,379.0	28,086.0	11.2%	13.8%
Average	204,582.8	15,728.7	8.4%	8.9%
Y/Y % Change	9.8%	2.8%	-0.8%	-1.3%
5-Year CAGR	8.7%	12.0%		
10-Year CAGR	3.1%	-7.1%		

Sources: Intercontinental Exchange (ICE), SIFMA DataBank

NYSE Member Firms Aggregate Total Capital and Equity Capital - Charts



Sources: Intercontinental Exchange (ICE), SIFMA DataBank

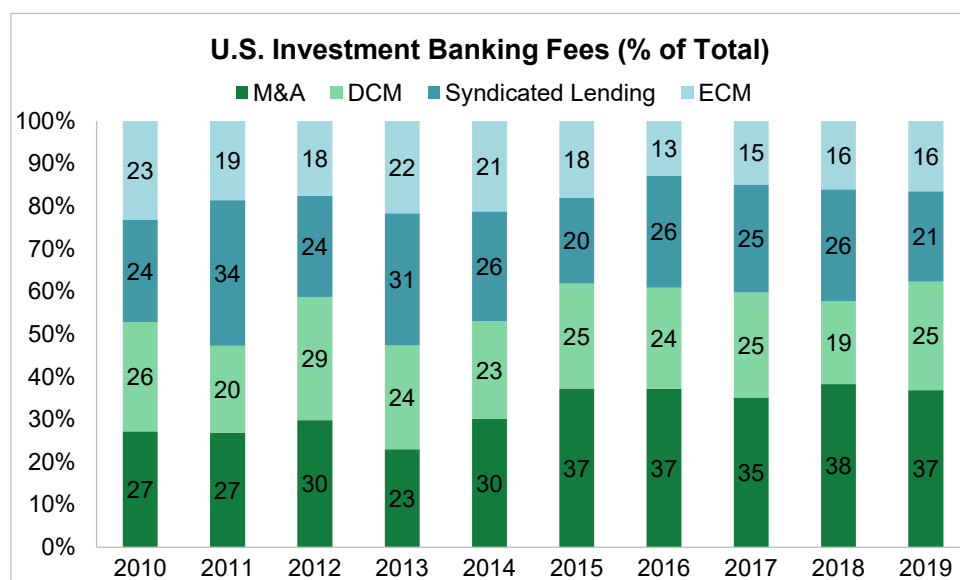
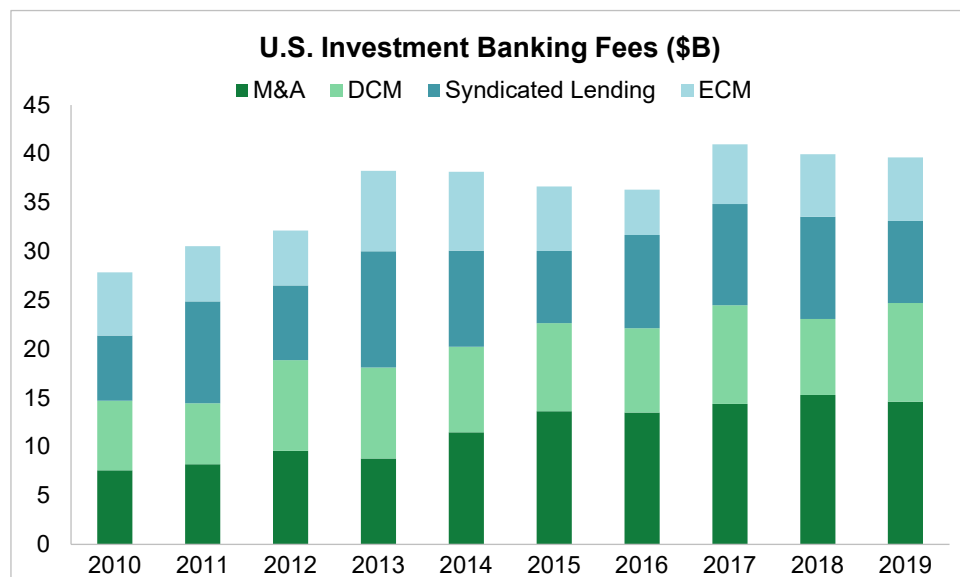
US Securities Industry Employment

	Thousands		
	United States	New York State	New York City
2005	846.8	197.7	176.7
2006	885.5	206.9	185.2
2007	909.4	214.6	191.8
2008	907.8	204.4	182.8
2009	854.2	187.0	165.3
2010	852.7	192.1	169.8
2011	862.7	192.8	171.5
2012	858.1	188.3	167.6
2013	872.6	188.7	167.7
2014	892.3	192.6	170.6
2015	923.6	197.4	175.6
2016	931.4	197	175.5
2017	944.9	200.1	177.7
2018	962.2	201.1	181.1
2019	971.0	202.3	182.1
Average	893.2	197.2	175.6
Y/Y % Change	0.9%	0.6%	0.6%
5-Year CAGR	1.7%	1.0%	1.3%
10-Year CAGR	1.3%	0.8%	1.0%

Sources: U.S. Department of Labor, Bureau of Labor Statistics

Note: Data as of year-end, not seasonally adjusted, based on North American Industry Classification System (NAICS) code 523; nationwide data is based on Securities, commodity contracts, investments, and funds and trusts industry while state and city data is based on Financial investments and related activities including financial vehicles industry.

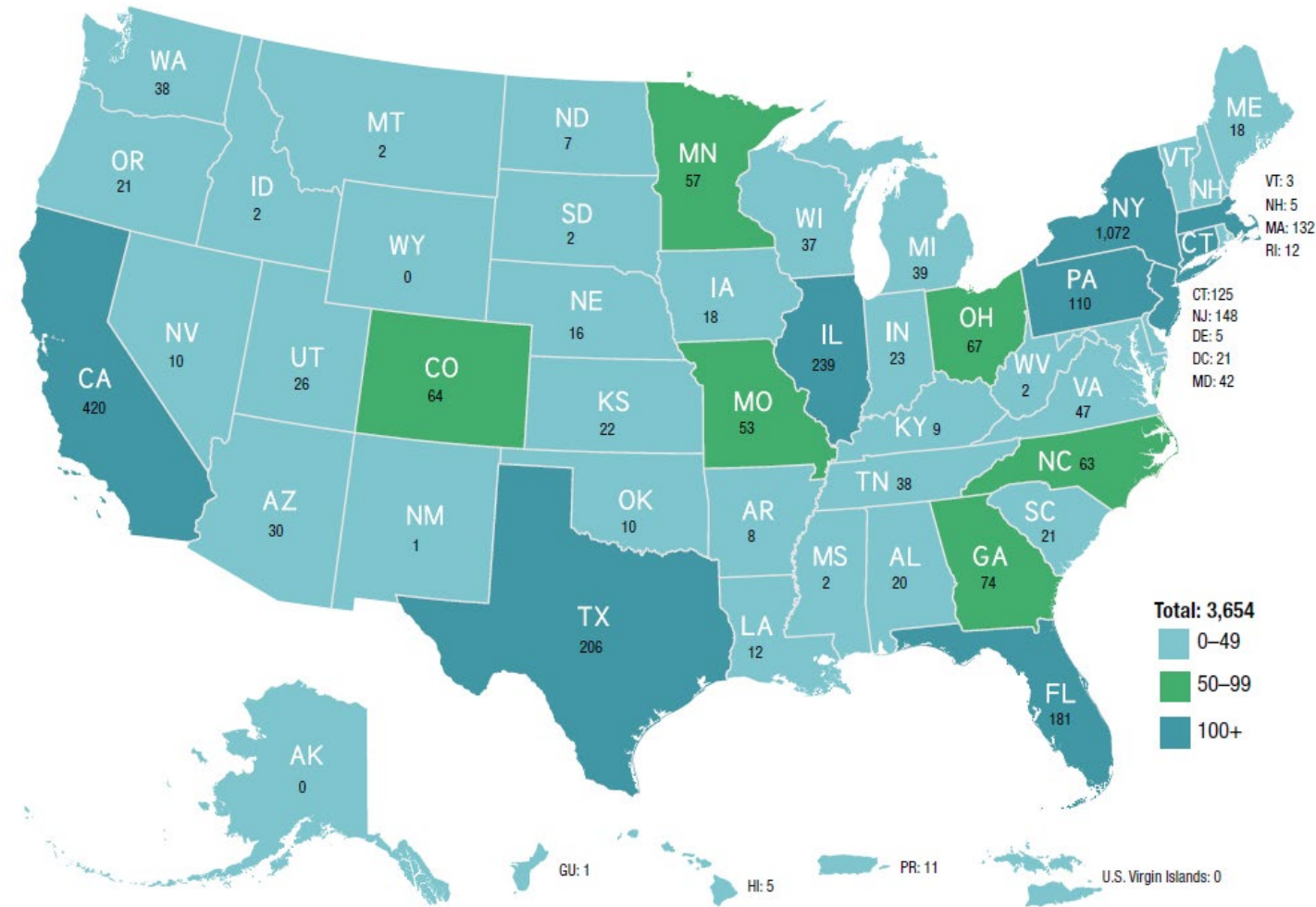
US Investment Banking Net Revenues by Product - Charts



Source: Dealogic Investment Banking Revenue Analytics

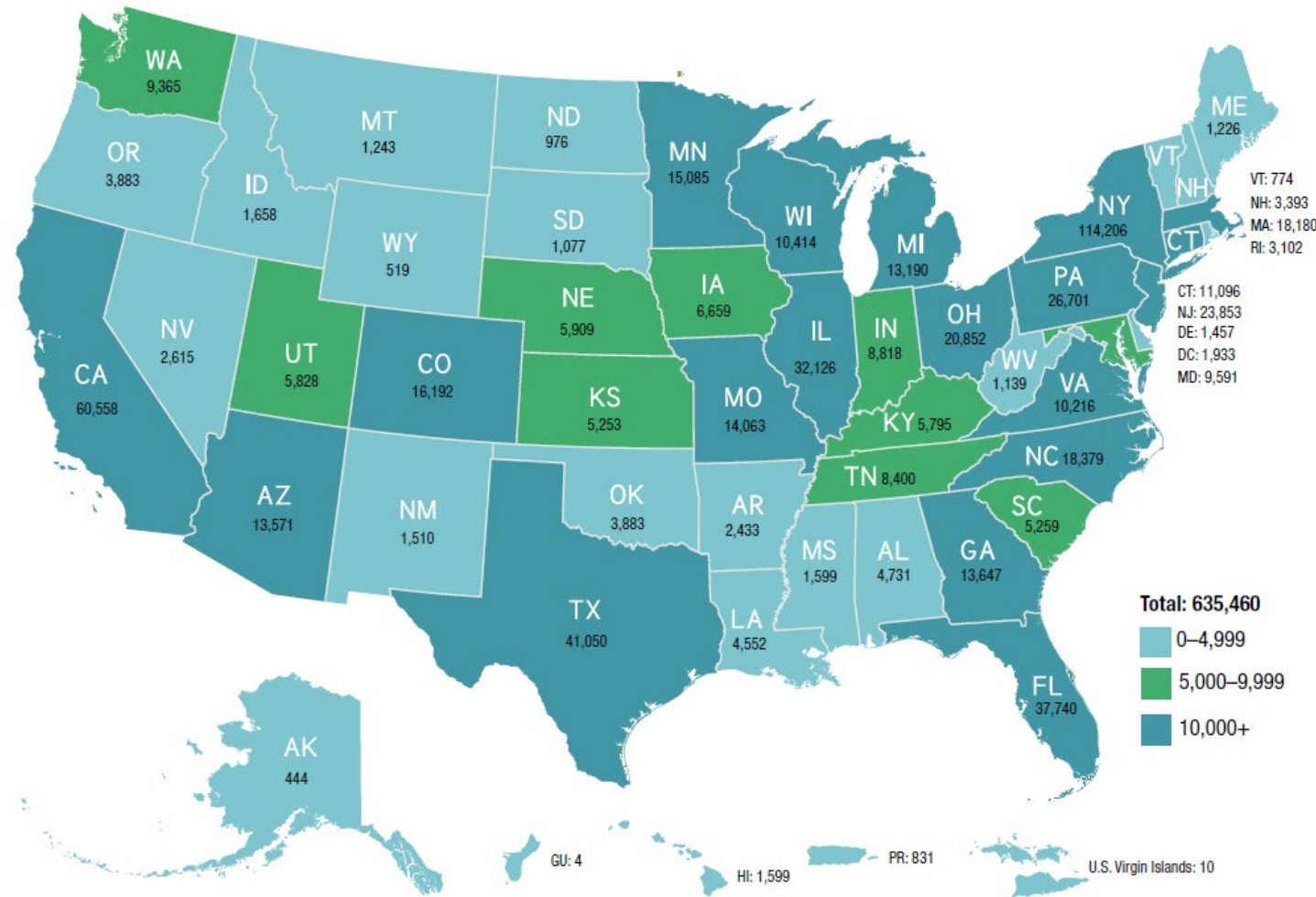
Note: Includes M&A, debt capital markets, equity capital markets, and syndicated lending net revenues.

FINRA-Registered Broker-Dealers by State - Map



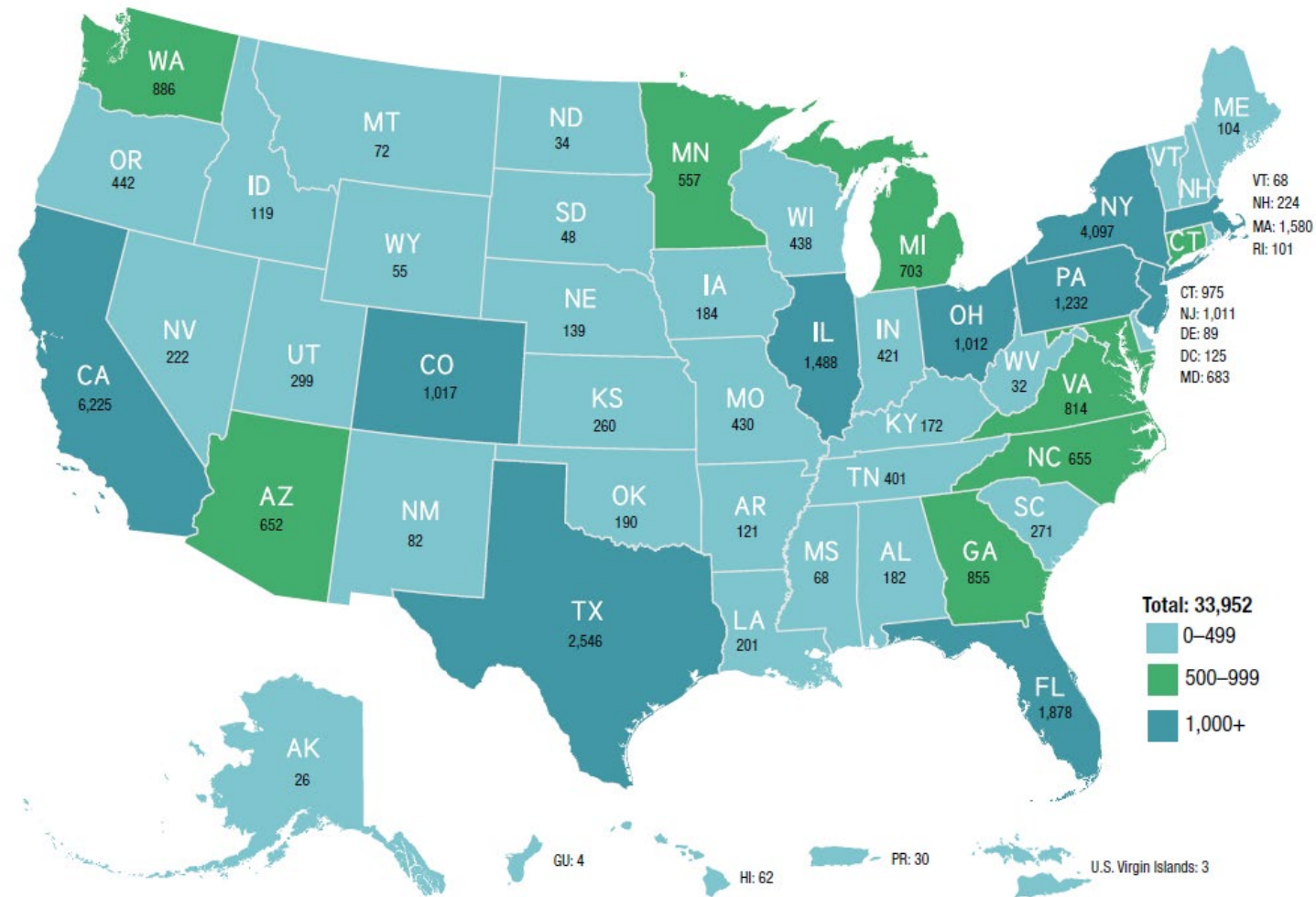
Source: Discovery Data
Note: Based on main office location. Totals differ from FINRA-reported data due to data source.

FINRA-Registered Representatives by State - Map



Source: Discovery Data
Note: Based on main office location. Totals differ from FINRA-reported data due to data source.

SEC- and State-Registered Investment Advisors by State - Map



Source: Discovery Data
Note: Based on main office location. Totals differ from FINRA-reported data due to data source.

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