

SIFMA Insights

Q: Who Owns Stocks in America? A: Individual Investors

A Chart Book on Stock Ownership

October 2019



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Executive Summary

U.S. capital markets are where investors, small and large, put capital to work to drive innovation, economic growth and job creation. Our markets have long enabled businesses to grow, governments to invest in infrastructure, and individuals to save for retirement and education. The U.S. capital markets are largest in the world and continue to be among the deepest, most liquid and most efficient. U.S. equity markets represent 41% of the \$75 trillion in global equity market cap, or \$30 trillion; this is 3.8x the next largest market, the EU (excluding the U.K.). The diversity, depth and breadth of U.S. equities markets (all of U.S. capital markets really) enable investor choice.

In this note, we provide a chart book of ownership on U.S. stocks (and other assets). Highlights include:

- Americans Responsible for 52% of Retirement Assets. In the U.S., people build their retirement
 accounts themselves. 52.1% of the \$34.6 trillion in retirement assets are individually funded through defined
 contribution pension plans, IRAs and annuities. This differs from many other countries/regions, where
 citizens are highly reliant on government funded retirement plans. This section breaks out retirement assets
 across account types and asset classes, as well as analyzes growth trends in different segments.
- Individuals Own Stocks. It is households that own equities, 37.6% of total equities in the U.S., and equities represent households' largest financial asset holdings at 38.2%. According to the Federal Reserve, 52% of HHs in the U.S. own stocks (65 million households), which shows the figure is greater than one percent of income earners (estimated at 1.6 million households). Our analysis inside this section shows that the low balance reported by the Federal Reserve median value of \$40 thousand for a household's stock holdings demonstrates a much wider universe of Americans own stocks.
- Strong Markets Enable Individual Investor Choice. The diversity across types of investment products and investment focus of these products (region, asset class, style, etc.) is part of what helps the U.S. capital markets maintain a dominant global position. It is also what provides individual investors choice to manage their retirement and other savings accounts in a manner that fits their investment objectives and needs.
- Market Depth and Breadth Enable Portfolio Diversification. Investors need choice in investment products, based on different return profiles and investment objectives. They need diversity within product sets and across investment focus of these products (region, asset class, style, etc.). U.S. equites markets provide this opportunity, as shown in the S&P 500 analysis in this section.

US Retirement Assets – Individuals Responsible for 52%

In the U.S., people mainly build their retirement accounts themselves. This differs from many other countries or regions, where citizens are highly reliant on government funded retirement plans. In the U.S., 52.1% of the \$34.6 trillion in retirement assets are individually funded by defined contribution pension plans, IRAs and annuities. The other 47.9% of retirement assets are funded by federal, state and local governments, as well as by defined benefit pension plans.

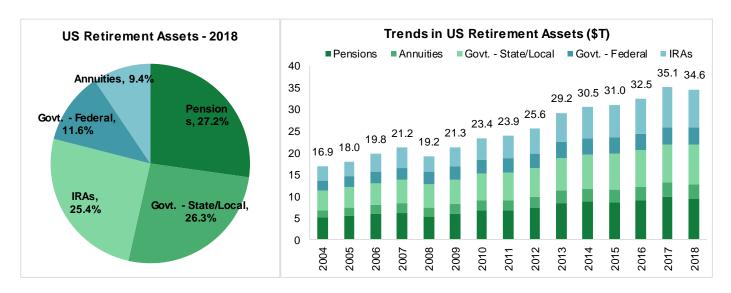
We therefore point out that more Americans own stocks than one would think – stocks are not just the privilege of the one percent.

In this section, we breakout the equity holdings across different types of retirement accounts. We also note that many retirement account assets are held in mutual funds, which are investment vehicles based on the performance of the underlying stocks (or other securities, such as bonds), and are, as such, included in the analysis.

US Retirement Assets

There are \$34.6 trillion in retirement assets in the U.S. (as of 2018). Assets have grown 104% since 2004, a 4.9% compound annual growth rate (CAGR). The breakout across investment categories is as follows:

- Private pensions, 27.2% (\$9.4T)
 - Defined contribution plans, 63.4% of total pensions or \$6.0T
 - Defined benefit plans, 36.6% of total pensions or \$3.4T
- State and local government pensions, 26.3% (\$9.1T)
- IRAs, 25.4% (\$8.8T)
- Federal government pensions, 11.6% (\$4.0T)
- Annuities, 9.4% (\$3.3T)



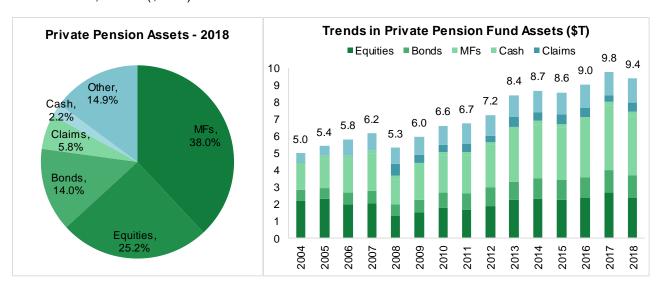
Source: Federal Reserve Flow of Funds Accounts L.227, SIFMA estimates

Note: Pensions includes defined benefit and defined contribution plans held by private individuals; 403 plans are included in private pensions

Private Pension Fund Assets

There are \$9.4 trillion in U.S. private pension fund assets in the U.S. (as of 2018). Assets have grown 88% since 2004, a 4.3% CAGR. The breakout across investment categories is as follows:

- Mutual Funds (MFs), 38.0% (\$3.6T)
 - o 52% of MFs are equity funds (23% bond, 17% money market, 8% hybrid)
- Equities, 25.2% (\$2.4T)
- Bonds, 14.0% (\$1.3T)
- Claims on pension fund sponsors, 5.8% (\$0.5T)
- Cash items, 2.2% (\$0.2T)
- Other, 14.9% (\$1.4T)



Source: Federal Reserve Flow of Funds Accounts L. 118, ICI, SIFMA estimates

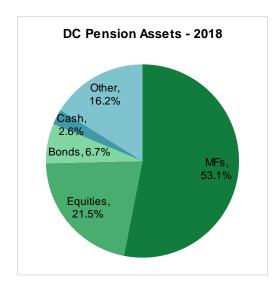
Note: Bonds = Treasuries, Agency, corporates & foreign bonds. Cash = checking, currency, time & savings deposits; money market mutual fund shares, repo, reverse repos; CP. Claims = unfunded defined benefit pension entitlements. The Fed only defined other as miscellaneous assets

Private Pensions: Defined Benefit versus Defined Contribution Plans

Employer-sponsored private pension (retirement) plans are offered in two categories: defined contribution and defined benefit plans. A defined contribution plan is funded predominantly by the employee through pre-tax contributions, with employer contributions often offered as part of one's employment benefits package. These plans allow employees and employers to contribute and invest funds over time to save for retirement. In a defined benefit plan, the employer guarantees a specific retirement benefit (a set payment amount) to employees. The main difference between plans is which party bears the investment risks, the employer or employee.

Defined Contribution: Defined contribution plan assets (63.4% of total private pensions assets, \$6.0T) have grown 113% since 2004, a 5.2% CAGR. The breakout across investment categories is as follows:

- Mutual Funds (MFs), 53.1% (\$3.2T)
- Equities, 21.5% (\$1.3T)
- Bonds, 6.7% (\$0.4T)
- Cash items, 2.6% (\$0.2T)
- Other, 16.2% (\$1.0T)

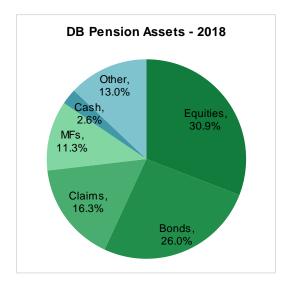


Source: Federal Reserve Flow of Funds Accounts L. 118, SIFMA estimates

Note: Bonds = Treasuries, Agency, corporates & foreign bonds. Cash = checking, currency, time & savings deposits; money market mutual fund shares, repo, reverse repos; CP. Claims = unfunded defined benefit pension entitlements. The Fed only defined other as miscellaneous assets

Defined Benefit: Defined benefit private pension plan assets (36.6% of total private pensions assets, \$3.4T) have grown 57% since 2004, a 3.1% CAGR. The breakout across investment categories is as follows:

- Equities, 30.9% (\$1.1T)
- Bonds, 26.0% (\$0.9T)
- Claims on pension fund sponsors, 16.3% (\$0.6T)
- Mutual Funds (MFs), 11.3% (\$0.4T)
- Cash items, 2.6% (\$0.1T)
- Other, 13.0% (\$0.4T)



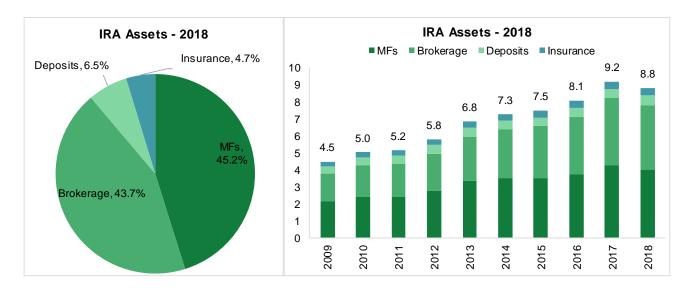
Source: Federal Reserve Flow of Funds Accounts L. 118, SIFMA estimates

Note: Bonds = Treasuries, Agency, corporates & foreign bonds. Cash = checking, currency, time & savings deposits; money market mutual fund shares, repo, reverse repos; CP. Claims = unfunded defined benefit pension entitlements. The Fed only defined other as miscellaneous assets

Individual Retirement Accounts (IRAs)

A traditional IRA allows individuals to direct pre-tax income toward investments which in turn grow tax-deferred, i.e. there are no capital gains or dividend income taxes assessed until the beneficiary makes a withdrawal. There are \$8.8 trillion in U.S. individual retirement account (IRA) assets in the U.S. (as of 2018), and 42.6 million households (33% of total households) owns IRAs. Assets have grown 96% since 2009, a 7.0% CAGR. The breakout across investment categories is as follows:

- Mutual Funds (MFs), 45.2% (\$4.0T)
- Brokerage accounts, 43.7% (\$3.8T)
- Deposits, 6.5% (\$0.6T)
- Insurance accounts, 4.7% (\$0.4T)

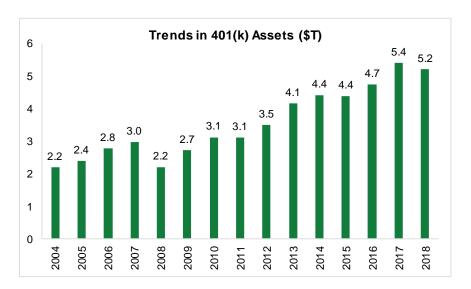


Source: ICI, SIFMA estimates Note: Deposits include Keogh deposits

401(k) Plan

401(k) plans are qualified employer-sponsored retirement plans enabling employees to make pre-tax contributions from their wages. Employers offering 401(k)s may make matching contributions to the plan on behalf of employees and may offer a profit-sharing feature to the plan. 401(k) earnings accrue on a tax-deferred basis.

There are \$5.2 trillion in U.S. 401(k) assets in the U.S. (as of 2018). Assets have grown 137% since 2009, a 5.9% CAGR.

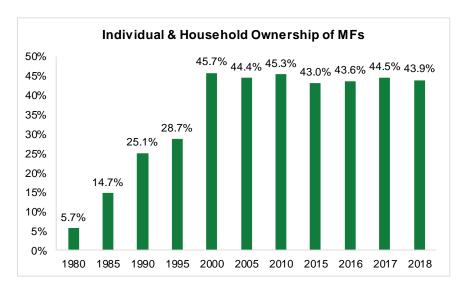


Source: ICI, SIFMA estimates

Ownership of Mutual Funds

As noted above, 52% of MFs are equity funds. Therefore, a main vehicle to owning stocks for the individual investor is through MFs. 99.5 million individual investors, or 56.0 million households (43.9% of total U.S. households), own MFs (as of 2018). It is the individual investor who owns the majority of MFs in the U.S. 89% of all MFs are owned by these 99.5 million individuals directly or through retirement accounts.

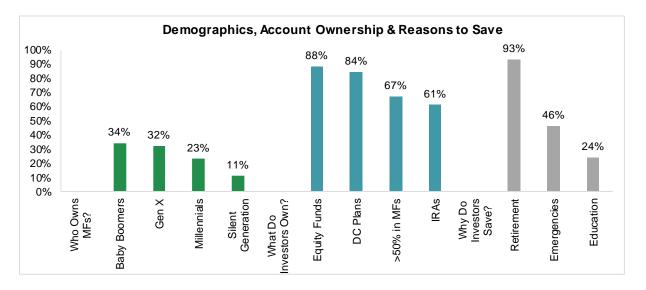
- Individual/household ownership of MFs was 43.9% in 2018
- Ownership remained steady around the 44% level throughout the 2000s



Source: ICI, SIFMA estimates

Looking to ICI surveys and <u>research</u> notes, we note the following characteristics of MF and stock ownership for individual investors:

- MF ownership is highest with Baby Boomers and Gen Xers, 34% and 32% respectively
- 88% of individuals surveyed own equity funds, while 84% participate in defined contribution retirement plans
- 93% indicate retirement planning as the reason for saving/investing



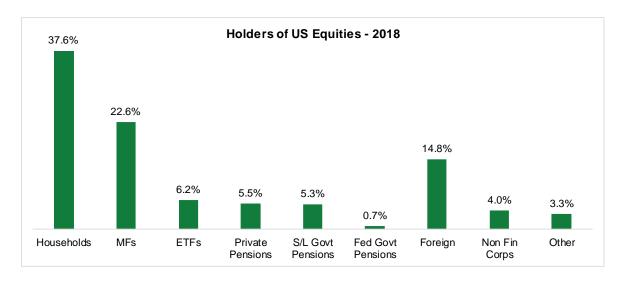
Source: ICI, SIFMA estimates

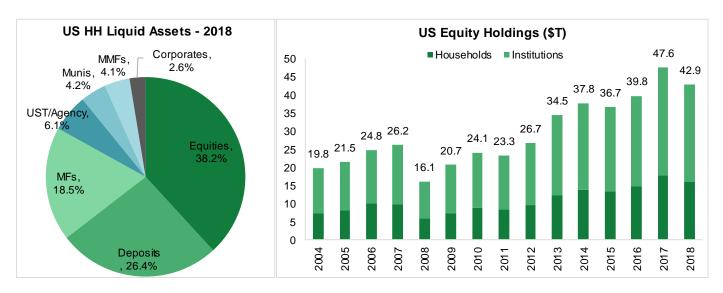
Note: As of 2018. Survey responses not meant to sum to 100%. Silent Generation born 1904 to 1945. Baby Boomers born 1946 to 1964; Gen X born 1965 to 1980; Millennials born 1981 to 2004, includes ages 14 to 37 but survey respondents must be 18+

Stock Ownership – Individuals Own Equities

Households Own 38% of Equities...

It is households (HH) that own equities, 37.6% of total equities owned in the U.S. The next largest holders are MFs, at 22.6%, and as explained above individuals own MFs as well. In other words, individuals own stocks directly and indirectly (ex: via MFs). HH holdings of equities, \$16.1 trillion in 2018, have grown 120% since 2004, or at a 5.4% CAGR. This slightly outpaces growth by institutional holders, +115% or a 5.2% CAGR. Equities represent HH's largest financial asset holdings at 38.2% (followed by deposits at 26.4% and MFs at 18.5%).





Source: Federal Reserve Flow of Funds Accounts, L.101 & 223; SIFMA estimates

Note: HH includes nonprofits. S/L = state/local govt. Non Fin Corp = ex financial inst. Liquid fin assets = ex pension fund reserves, equity in non-corp
bus. Includes direct & indirect equity holdings. Other = life + property & casualty ins, S/L/federal govt, broker-dealers, depository inst, closed end funds

... Meaning It Is Not Just the 1% Owning Stocks

According to the Federal Reserve, 52% of HHs in the U.S. own stocks (or 65 million HHs). This figure shows stock ownership is greater than 1% of income earners, which is estimated at 1.6 million HHs. Fed data also states the median value of a HH's stock holdings is \$40,000, representing 53% of total average HH financial assets. This figure also points to stock ownership expanding farther than the 1%, as this balance would be significantly more for high income earners (over \$400,000 or \$500,000, depending upon the source).

Household Statistics	2001	2004	2007	2010	2013	2016
% HHs Holding Stocks	52%	50%	53%	50%	49%	52%
Median Value Stock Holdings (\$K)	42.3	35.7	35.5	29.0	36.0	40.0
% Total Family Financial Assets	56%	51%	54%	47%	52%	53%

Source: Federal Reserve (triennial) Survey of Consumer Finances; SIFMA estimates

Note: Households includes nonprofit organizations. Includes direct and indirect (MFs, etc.) holdings

Let's look deeper at the \$40,000 median value of a HH's stock holdings reported by the Fed. As we have noted, we do not believe this figure matches up to HH income and net worth (NW) data of the 1%. Therefore, we take the \$40,000 portfolio average and try to match that up to data breaking out HH income and NW by different groups (as shown in the table on the next page). We are trying to get a sense of which income/NW groups fit in line with the \$40,000 median stock portfolio value.

The groups we analyze include:

- **Income levels**: Top 5% average income = \$385,300; middle groups average income = \$99,000 and \$61,600
- NW based on income levels: highest quintile average NW (excluding value of home) = \$267,700; middle groups average NW (excluding value of home) = \$70,100 and \$28,800
- **NW based on NW ranges**: NW >\$500,000 average NW (excluding value of home) = \$668,400; middle groups average NW (excluding value of home) = \$75,800 and \$209,900

\$40K \(\neq 1\%

The median value of a HH's stock holdings is \$40,000. Our analysis demonstrates this median applies to an income range of \$61,600-\$99,000 and therefore shows a wide universe of Americans own stocks – not just the 1%.

Now we divide the groupings – income and NW levels, as shown above – by the \$40,000 median value of a HH's stock holdings. The result is that the middle tier income and NW levels match up closest to this \$40,000 stock portfolio value. We note the following results for this ratio:

- HH Income / stock portfolio (green table on left) = 1.5x-2.5x, represented by the middle groups (labelled fourth and third 5th groups)
- HH NW (ex-home value) / stock portfolio (blue table on right) = 0.7x & 5.2x, represented by the middle groups (labelled third & fourth income quintiles in the top section and \$100-500K NW groups in the bottom section)

Comparatively, high NW individuals' ratios are as follows:

- HH Income / stock portfolio (green table on left) = 9.6x stocks (labelled Top 5%)
- HH NW (ex-home value) / stock portfolio (blue table on right) = 6.7x & 6.7x (labelled highest quintile and >\$500K NW)

It stands to reason that high NW individuals would be holding much higher stock portfolio balances (the right table shows a stock and MF balance >\$100K for NWs starting at \$500K).* However, the Fed reports a low median balance of stock holdings of \$40,000, demonstrating a much wider universe of Americans owns stocks than just the 1%.

				NW ex	NW /	Int	Stock,	IRA,	401K,	Educ	Ann,	Bus	Home
(\$ K)	Income	(\$ K)	NW	Home	Stocks	Earn A	MF	Keogh	Thrift	Accnt	Trusts	Equity	Equity
Income Data		HH Income											
Top 5%	385.3	Lowest quintile	4.0	1.5	0.04x	1.0	15.0	28.0	10.0	*	68.7	2.0	74.0
Highest 5th	221.8	Second quintile	30.9	9.0	0.2x	1.8	29.7	30.0	10.0	*	100.0	3.0	79.0
Fourth 5th	99.0	Third quintile	81.4	28.8	0.7x	3.0	30.0	37.0	25.0	4.6	95.7	2.0	80.0
Third 5th	61.6	Fourth quintile	147.4	70.1	1.8x	5.2	25.0	33.0	47.7	10.0	100.0	6.0	88.0
Second 5th	35.4	Highest quintile	432.2	267.7	6.7x	15.5	55.9	70.0	120.0	16.0	99.8	15.0	145.0
Lowest 5th	13.3	HH Net Worth											
Income / Stoc	ks	<=0	(8.0)	(7.0)	n/a	0.4	1.0	3.0	6.0	*	*	0.002	1.0
Top 5%	9.6x	1-5	1.5	1.4	0.04x	0.2	*	*	2.7	*	*	0.001	1.3
Highest 5th	5.5x	5-10	7.0	6.6	0.2x	1.0	*	*	5.0	*	*	0.5	5.0
Fourth 5th	2.5x	10-25	16.0	13.3	0.3x	1.4	1.5	5.0	10.0	*	*	1.0	11.0
Third 5th	1.5x	25-50	35.7	25.4	0.6x	2.0	1.4	7.0	18.0	*	*	2.5	26.0
Second 5th	0.9x	50-100	72.1	31.3	0.8x	3.0	7.0	13.0	25.0	*	*	3.0	50.0
Lowest 5th	0.3x	100-250	161.2	75.8	1.9x	5.1	10.0	23.0	52.0	5.0	32.0	4.0	97.5
		250-500	349.7	209.9	5.2x	12.3	21.0	45.0	108.7	13.0	54.0	10.0	150.0
		>500	948.4	668.4	16.7x	35.0	110.0	125.0	200.0	25.0	180.0	46.5	262.0

Source: U.S. Census Bureau; SIFMA estimates. HHs = Mar '16; income = median value, '17 \$. 5th quintile = 19% tot pop. NW = net worth, int earn A = interest earning assets, educ = education, ann = annuity, bus = business. * = Base <200K HHs, sample size <50. **As larger portfolio balances held by higher income/NW groups, Pareto Principle (80/20 rule) applies. Top groups hold > % of stocks on a value basis, but many other individuals of lower income/NW levels also own stocks.

Strong Capital Markets Enable Individual Investor Choice

The diversity across types of investment products and investment focus of these products (region, asset class, style, etc.) is part of what helps the U.S. capital markets maintain a dominant global position. It is also what provides individual (and institutional) investors choice to manage their retirement and other savings accounts in a manner that fits their investment objectives and needs. Investors need choice based on different return profiles and financial characteristics. In other words, they need choice in order to develop their own portfolio to reach their individual investment objectives (retirement, children's education, etc.).

Inputs into An Investment Decision

There are many moving pieces that go into an investment decision. To begin with, an investor is not always thinking fundamentally – it is not just about price or expected returns. Investment decision making can be split into two factors:

- **Economic factors** The economic factors in an investment decision stem around the stock, or the company behind the stock, or fund (ETFs, mutual funds, etc.) itself. This includes analyzing the financial statements and expected earnings of a company, reviewing management strategy and risk tolerance, looking at stock price movements and assessing expected returns and capital distributions. It also includes assessing the costs of investing, i.e. costs to trade, fund fees, etc.
- Psychological factors However, investors are human and, therefore, must deal with emotional biases. (In
 fact, there is a whole field in financial studies on behavioral finance, looking at the impact of emotions on
 investments.) People know what they like or dislike and are prone to letting this outweigh fundamental
 economic factors. Psychological factors can include overconfidence, approval seeking, herd behavior, fear
 of loss or cognitive bias.

Focusing on fundamental factors, investors look not just at the stock or fund itself. Rather, investors think through their own objectives in totality. (While this will be a more formal process with a financial advisor, most investors perform an informal assessment themselves prior to putting money on the table.) Different investors will need unique investment products to meet their own individual needs.

Individual investors need choice in investment products, based on different return profiles and investment objectives. Investors will set their investment portfolio based on their own individual profile. For example, the SPY (the most common ETF investment, with \$254 billion AUM), returned (as of August 2009) 9.95% over five years and 13.20% over 10 years, with a 1.88% dividend yield (DY). This might be perfectly acceptable for someone in their 30s with a long investment horizon.

However, a 55-year-old investor who may have lost a good portion of their savings during the financial crisis might need to put their money into stocks or funds with a higher annual return to make up for lost income. For example, the EWZS returned 17.46% over the last three years. The QQQ posted high returns over five and 10 years, 14.52% and 17.7% respectively. Or, a senior investor living off their retirement savings alone may need a portfolio focused

on income stocks, such as high dividend stocks. For example, the DY for the EWU is 4.46% and the DEM is 5.91%. (Please see the Appendix for a sampling of ETF returns and DYs.)

RRTURTL - Risk, Return, Time, Unique, Regulatory, Taxes, Liquidity

Investors' strategy can be broken down into objectives and constraints:

Investor objectives

- Risk tolerance the degree of variability in returns an investor is willing to withstand, i.e. risk exposure
- Return requirement the minimum annual percentage earned by an investment to induce an individual to invest, based on income needs

Investor constraints

- Time horizon (duration) the total length of time an investor expects to hold an investment;
 incorporates years to retirement and years living in retirement
- Unique circumstances should be a dynamic process; for example, planning a gift to an alma mater, a substantial retirement trip, etc.
- Regulatory/legal considerations for example, qualified plans, accredited investor status, establishment of a trust, etc.
- Taxes¹ tax repercussions of different types of investments
- Liquidity needs income needed; includes ongoing expenses, significant future cash outlays, etc.

Additionally, investment decisions include an assessment of capital market expectations (this section is more likely to be performed if the investor is using a financial advisor). The differences in these factors across individual investors shows the need for investment choice. The diversity, depth and breadth of the U.S. stock market (all of U.S. capital markets really) enable this choice.

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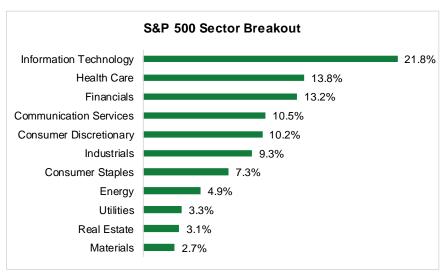
¹ This document is intended for general informational purposes only and is not intended to serve as tax (or investment) advice to any individual or entity

Stock Market Depth and Breadth Enable Portfolio Diversification

Investors need choice in investment products, based on different return profiles and investment objectives. They also need diversity within product sets across investment focus of these products (region, asset class, style, etc.). Finally, they need deep and liquid markets to provide this choice. U.S. equites markets provide this opportunity, as shown in the S&P 500 analysis below.

Sector Breakout for the S&P 500

Around 50% of the S&P 500 is made up of information technology (22%), health care (14%) and financials (13%) stocks. (Please see the Appendix for subcategory breakouts by sector)



Source: S&P Dow Jones Indices, SIFMA estimates

Within the S&P 500 index, the top stocks represent (of total market cap):

- Top 10 stocks (in order, as of Aug. 2019): MSFT, AAPL, AMZN, FB, BRK, GOOG, GOOGL², JNJ, JPM, V
- Top 3 stocks = 11%
- Top 10 stocks = 22%

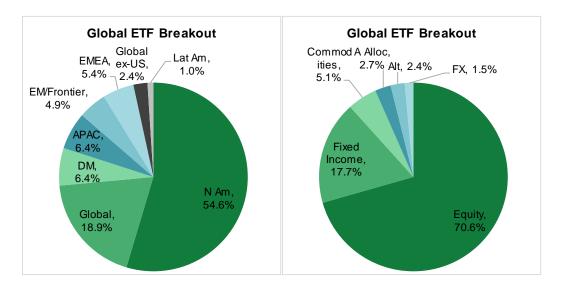
² Alphabet's (Google) two tickers represent different share classes: A (GOOGL) and C (GOOG); A shares receive one vote, C shares receive no votes

ETF Breakout by Region and Asset Class

Additionally, many investors continue to look to passive forms of investing to meet their investment needs without buying individual stocks or securities. As such investing in index-based products, for example investment vehicles based on the S&P 500, continues to grow. These products, such as MFs and ETFs, should have similar sector breakouts and portfolio composition weights as the benchmark indexes on which they are based, like the S&P 500.

\$5.6 trillion is invested in ETFs globally (\$5.7 trillion for all ETPs), with \$3.9 trillion of this in U.S. ETFs³. ETFs are a popular method for individual investors to gain diversity through a single or a few investment products. (Institutional investors invest in ETFs as well.) 7.9 million households (6% of total households) own ETFs.

There are around 2,285 ETFs globally, with the majority being North American by region and equity focused by asset class.



Source: etf.com (August 2019), SIFMA estimates

Note: N Am = North America, DM = developed markets, APAC = Asia Pacific, EM = emerging markets, EMEA = Europe, Middle East and Africa, Lat Am = Latin America. A alloc = asset allocation

³ Source: ETFGI, as of July 2019

The number one ETF invested in (by AUM) is the SPY, or the SPDR S&P 500 ETF, with \$255 billion AUM. This is followed by IVV, or iShares Core S&P 500 ETF, with \$177 billion and VOO, or Vanguard S&P 500 ETF, at \$119 billion. Therefore, investors are predominantly invested in broad based stock market returns. These popular ETFs will essentially follow the sector breakout in the S&P 500 index, as shown below.

	Т3	T10	IT	HC	ĦG	Т	CD	- 1	CS	Е	U	M
SPY	11.1%	21.8%	26.7%	13.9%	16.0%	2.0%	13.4%	10.1%	7.1%	5.0%	3.3%	2.4%
IVV	11.2%	21.7%	26.7%	14.0%	16.0%	2.0%	13.4%	10.1%	7.1%	5.0%	3.3%	2.4%
VOO	10.9%	21.4%	26.7%	13.9%	16.0%	2.0%	13.4%	10.2%	7.1%	5.0%	3.3%	2.4%

Source: etf.com (August 2019), SIFMA estimates

Note: IT = information technology; HC = health care; FIG = financials; T = communication services (telecommunications); CD = consumer discretionary; I = industrials; CS = consumer staples; E = energy; U = utilities; M = materials

However, not every investor invests in broad market indexes/ETFs. The QQQ, or Invesco QQQ, is another popular ETF (AUM \$71 billion) and invests in nonfinancial stocks listed on the NASDAQ. This ETF has a significant tech focus at 61.5% of the total market cap (followed by consumer cyclicals 21.6% and healthcare 7.9%). Its top three stocks are the same (in name, not necessarily % of total market cap) as the S&P 500: Microsoft 11.4%, Apple 10.3% and Amazon 9.7%. The top 10 stocks represent 54.6% of market cap, and the exposure to FAANG stocks (Facebook, Apple, Amazon, Netflix and Google) is 35.1%.

Again, diversity matters for investors and U.S. capital markets exhibit this diversity.

Appendix: S&P500 Sector Breakout Details

Information Technology

- Communications Equipment Industry
- Electronic Equipment, Instruments & Components Industry
- IT Services Industry
- Semiconductors & Semiconductor Equipment Industry
- Software Industry
- Technology Hardware, Storage & Peripherals Industry

Health Care

- Biotechnology Industry
- Health Care Equipment & Supplies Industry
- Health Care Providers & Services Industry
- Health Care Technology Industry
- Life Sciences Tools & Services Industry
- Pharmaceuticals Industry

Financials

- Banking Industry
- Capital Markets Industry
- Consumer Finance Industry
- Diversified Financial Services Industry
- Insurance Industry
- Mortgage Real Estate Investment Trusts (REITs) Industry
- Thrifts & Mortgage Finance Industry

Communication Services

- Diversified Telecommunication Services
- Wireless Telecommunication Services
- Entertainment
- Media
- Interactive Media & Services

Consumer Discretionary

- Automobile Components Industry
- Automobiles Industry
- Distributors Industry
- Diversified Consumer Services Industry
- Hotels, Restaurants & Leisure Industry
- Household Durables Industry
- Leisure Products Industry
- Multiline Retail Industry
- Specialty Retail Industry
- Textile, Apparel & Luxury Goods Industry
- Internet & Direct Marketing

Industrials

- Aerospace & Defense Industry
- Air Freight & Logistics Industry
- Airlines Industry
- Building Products Industry
- Commercial Services & Supplies Industry
- Construction & Engineering Industry
- Electrical Equipment Industry
- Industrial Conglomerates Industry
- Machinery Industry
- Marine Industry
- Professional Services Industry
- Road & Rail Industry
- Trading Companies & Distributors Industry
- Transportation Infrastructure Industry

Consumer Staples

- Beverages Industry
- Food & Staples Retailing Industry
- Food Products Industry
- Household Products Industry
- Personal Products Industry
- Tobacco Industry

Energy

- Energy Equipment & Services Industry
- Oil, Gas & Consumable Fuels Industry

Utilities

- Electric Utilities Industry
- Gas Utilities Industry
- Independent Power and Renewable Electricity Producers Industry
- Multi-Utilities Industry
- Water Utilities Industry

Real Estate

- Equity Real Estate Investment Trusts (REITs)
- Real Estate Management & Development

Materials

- Chemicals Industry
- Construction Materials Industry
- Containers & Packaging Industry
- Metals & Mining Industry
- Paper & Forest Products Industry

Appendix: ETF Returns & Dividend Yields

				Ret	urn		
		AUM			<u></u>		
Ticker	Fund Name	(\$B)	1Y	3Y	5Y	10Y	DY
T10 AUM	Equity ETFs - US						
SPY	SPDR S&P 500 ETF Trust	253.5	3.03%	11.26%	9.95%	13.20%	1.88%
IVV	iShares Core S&P 500 ETF	177.4	3.13%	11.34%	10.01%	13.26%	1.88%
VOO	Vanguard S&P 500 ETF	115.4	3.08%	11.33%	10.02%		1.88%
VTI	Vanguard Total Stock Market ETF	114.4	1.76%	10.99%	9.56%	13.25%	1.80%
QQQ	Invesco QQQ Trust	71.6	2.75%	16.80%	14.52%	17.70%	1.01%
IJH	iShares Core S&P Mid-Cap ETF	47.1	-6.06%	6.98%	7.25%	12.61%	1.62%
VTV	Vanguard Value ETF	46.8	0.70%	9.12%	8.35%	12.06%	2.64%
IWF	iShares Russell 1000 Growth ETF	43.8	5.09%	15.16%	12.80%	15.03%	1.15%
IJR	iShares Core S&P Small Cap ETF	42.0	-13.64%	7.67%	7.97%	13.05%	1.56%
VUG	Vanguard Growth ETF	40.5	5.39%	13.87%	11.62%	14.66%	1.05%
T10 AUM	Equity ETFs - AsiaPac						
EWJ	iShares MSCI Japan ETF	12.2	-5.18%	3.84%	3.55%	4.37%	2.51%
INDA	iShares MSCI India ETF	4.9	-6.62%	3.26%	1.93%		1.14%
FXI	iShares China Large-Cap ETF	4.6	-3.91%	2.85%	1.04%	1.65%	3.50%
BBJP	JPMorgan BetaBuilders Japan ETF	3.8	-4.99%				2.49%
EWY	iShares MSCI South Korea ETF	3.8	-17.61%	-2.04%	-3.21%	3.25%	2.30%
MCHI	iShares MSCI China ETF	3.6	-5.10%	6.31%	3.10%		2.16%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	3.6	-5.45%	3.85%	1.32%	4.44%	2.51%
VPL	Vanguard FTSE Pacific ETF	3.4	-5.94%	3.82%	2.47%	5.18%	2.80%
EWT	iShares MSCI Taiwan ETF	2.6	-3.84%	4.69%	3.36%	6.58%	4.00%
DXJ	WisdomTree Japan Hedged Equity Fund	2.5	-12.43%	5.56%	3.25%	4.76%	3.41%
T10 AUM	Equity ETFs - Europe						
VGK	Vanguard FTSE Europe ETF	12.6	-3.57%	4.54%	1.03%	5.11%	3.44%
EZU	iShares MSCI Eurozone ETF	5.1	-4.96%	4.70%	1.35%	3.56%	3.20%
BBEU	JPMorgan BetaBuilders Europe ETF	4.2	-2.84%				3.55%
HEDJ	WisdomTree Europe Hedged Equity Fund	3.2	-0.27%	7.21%	6.92%		3.09%
IEUR	iShares Core MSCI Europe ETF	3.0	-3.87%	4.75%	1.27%		3.43%
FEZ	SPDR Euro STOXX 50 ETF	2.1	-3.45%	4.49%	0.20%	2.56%	3.34%
EWU	iShares MSCI United Kingdom ETF	2.0	-6.56%	1.97%	-2.20%	3.96%	4.46%
EWG	iShares MSCI Germany ETF	1.9	-10.51%	0.66%	-0.15%	4.54%	3.15%
IEV	iShares Europe ETF	1.6	-3.06%	4.22%	0.48%	4.52%	3.56%
EWL	iShares MSCI Switzerland ETF	1.1	10.45%	8.31%	4.40%	7.82%	3.01%

Source: etf.com (August 2019), SIFMA estimates

	Retui						
		AUM					
	Fund Name	(\$B)	1Y	3Y	5Y	10Y	DY
	Equity ETFs - LatAM						
	iShares MSCI Brazil ETF	8.3	25.82%	8.58%	-1.07%		
	iShares Latin America 40 ETF	1.5	2.25%	3.55%	-3.03%	0.06%	3.35%
	iShares MSCI Mexico ETF	0.6	-19.57%		-9.47%	0.66%	3.22%
	Direxion Daily MSCI Brazil Bull 3X Shares	0.3		-11.28%			
	iShares MSCI Chile ETF	0.3	-15.26%	-0.69%	-2.00%	-1.38%	2.97%
EPU	iShares MSCI Peru ETF	0.2	-8.42%	0.32%	0.06%	3.73%	2.69%
FBZ	First Trust Brazil AlphaDEX Fund	0.1	40.01%	13.91%	1.95%		3.28%
EWZS	iShares MSCI Brazil Small-Cap ETF	0.1	38.79%	17.46%	1.24%		2.78%
BRF	VanEck Vectors Brazil Small-Cap ETF	0.1	29.82%	14.07%	-0.77%	0.28%	2.76%
ARGT	Global X MSCI Argentina ETF	0.1	-5.93%	3.57%	4.28%		1.68%
T10 AUM	Equity ETFs - EM & Frontier						
WO	Vanguard FTSE Emerging Markets ETF	59.4	-0.98%	3.14%	0.03%	3.52%	2.76%
IEMG	iShares Core MSCI Emerging Markets ETF	51.9	-4.05%	3.26%	-0.09%		2.68%
EEM	iShares MSCI Emerging Markets ETF	24.7	-3.92%	3.03%	-0.55%	2.87%	2.69%
SCHE	Schwab Emerging Markets Equity ETF	5.7	-0.11%	3.85%	0.46%		2.74%
EEMV	iShares Edge MSCI Min Vol Emerging Markets ETF	5.3	-0.27%	3.03%	0.21%		3.16%
SPEM	SPDR Portfolio Emerging Markets ETF	2.4	-1.83%	3.95%	0.57%	3.91%	2.78%
FNDE	Schwab Fundamental Emerging Markets Large Company Index ETF	2.3	-0.65%	5.43%	0.58%		4.16%
DEM	WisdomTree Emerging Markets High Dividend Fund	2.1	0.88%	5.31%	-0.80%	3.24%	5.91%
GEM	Goldman Sachs ActiveBeta Emerging Markets Equity ETF	1.7	-2.43%	3.37%			2.71%
DGS	WisdomTree Emerging Markets SmallCap Dividend Fund	1.5	0.07%	4.38%	1.17%	4.99%	4.52%
	Fixed Income ETFs						
AGG	iShares Core U.S. Aggregate Bond ETF	65.6	10.03%	3.00%	3.27%	3.82%	n/a
BND	Vanguard Total Bond Market ETF	44.4	10.32%	3.02%	3.30%	3.87%	n/a
LQD	iShares iBoxx USD Investment Grade Corporate Bond ETF	35.7	14.38%	4.62%	4.75%	6.13%	n/a
VCSH	Vanguard Short-Term Corporate Bond ETF	24.3	6.47%	2.66%	2.54%		n/a
SHV	iShares Short Treasury Bond ETF	24.2	2.47%	1.39%	0.89%	0.48%	n/a
VCIT	Vanguard Intermediate-Term Corporate Bond ETF	23.7	12.61%	4.17%	4.43%		n/a
BSV	Vanguard Short-Term Bond ETF	22.8	5.93%	1.97%	1.90%	2.07%	n/a
	iShares TIPS Bond ETF	20.2	7.34%	2.76%	1.95%	3.77%	n/a
BNDX	Vanguard Total International Bond ETF	20.1	11.46%	4.26%	4.77%		n/a
	iShares MBS ETF	18.8	6.92%	2.21%	2.53%	3.04%	n/a

Source: etf.com (August 2019), SIFMA estimates

Appendix: Terms to Know

ETF	Exchange-Traded Fund
ETP	Exchange-Traded Product
MF	Mutual Fund
OEF	Open-End Fund
CEF	Closed-End Fund
UIT	Unit Investment Trust
IRA	Individual Retirement Account
UST	U.S. Treasury Securities
Agency	Federal Agency Securities (FNMA, FHLMC, FAMC, FHLB, FCS, TVA)
Munis	Municipal Securities
MMF	Money Markets Funds
Corporates	Corporate Bonds
DM	Developed Markets
EM	Emerging Markets
FM	Frontier Markets
N Am	North America
APAC	Asia Pacific
EMEA	Europe, Middle East and Africa
Lat Am	Latin America

SP500	S&P 500 Index
IT	Information Technology
HC	Health Care
FIG	Financials
T	Communication Services (Telecommunications)
CD	Consumer Discretionary
IT	Industrials
CS	Consumer Staples
Е	Energy
U	Utilities
RE	Real Estate
M	Materials
FAANG	Facebook, Apple, Amazon, Netflix, (Alphabet's) Google
HH	Household
NW	Net Worth
T3	Top 10
T10	Top 3
DY	Dividend Yield
AUM	Assets Under Management
CAGR	Compound Annual Growth Rate

Investors	
Institutional	Asset managers, endowments, pension plans, foundations, mutual funds, hedge funds, family offices, insurance companies, banks, etc.;
	fewer protective regulations as assumed to be more knowledgeable and better able to protect themselves
	Individual; self-directed or advised investing; some considered accredited investors = income > \$200K (\$300K w/ spouse) in each of prior 2 years or NW >\$1M, excluding primary residence

Appendix: SIFMA Insights Research Reports

- SIFMA Insights: https://www.sifma.org/resources/archive/research/insights/
- SIFMA Insights Market Structure Primers: https://www.sifma.org/resources/news/primers-by-sifma-insights/
 - o Global Capital Markets & Financial Institutions
 - o Fixed Income
 - o Equity
 - o Multi-Listed Options
 - o ETF
 - o Capital Formation & Listings Exchanges
 - o SOFR: The Transition from LIBOR
 - o Electronic Trading

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