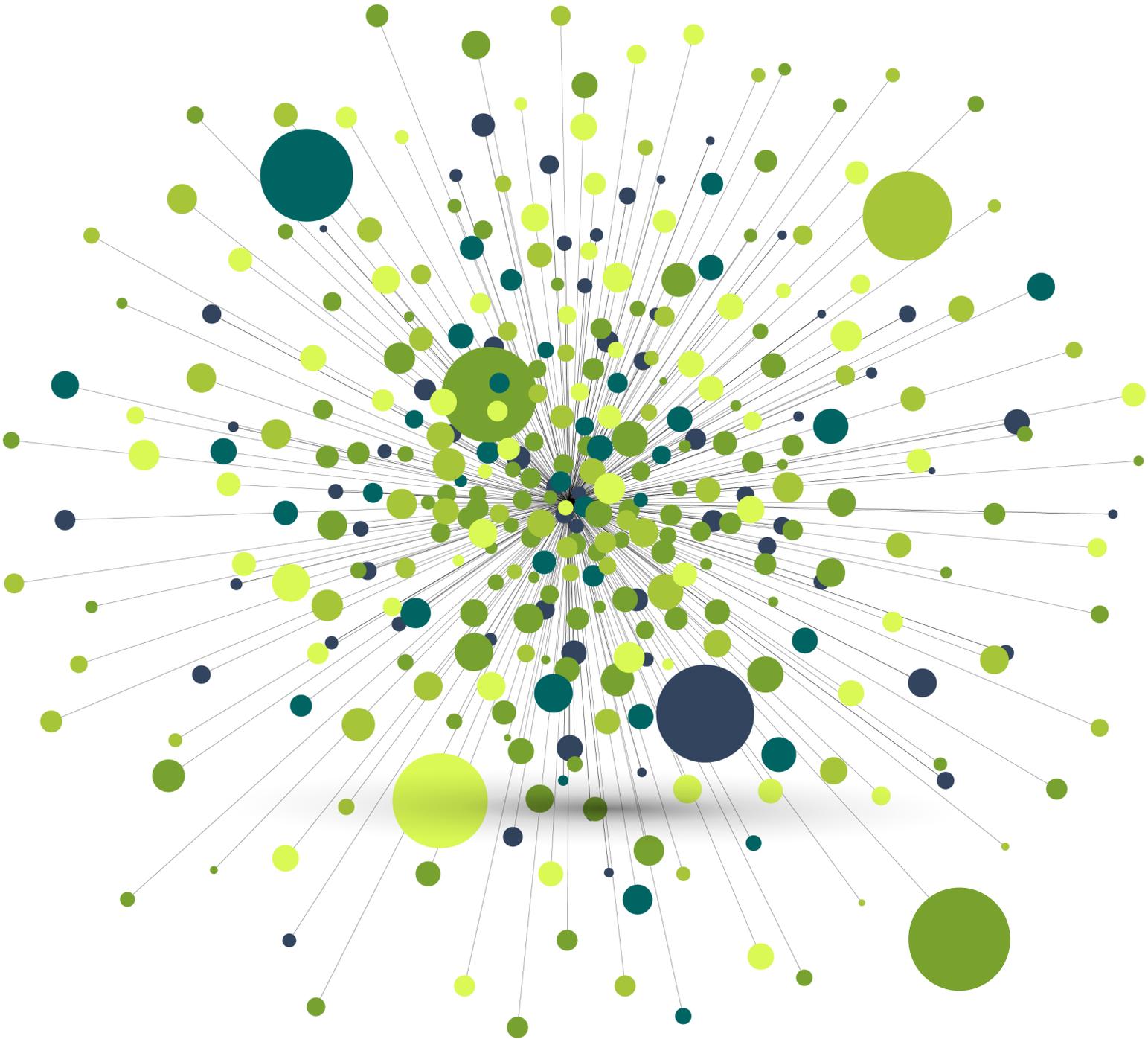




# 2019 OUTLOOK

Trends in  
the Capital  
Markets



**SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets.** On behalf of our industry's nearly 1 million employees, we advocate for legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development.

SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA).

# Why Markets Matter

**Why do capital markets matter?** In short, efficient markets are essential to facilitate investment and capital formation that grow and sustain a vibrant economy. Markets provide the means for the best ideas and enterprises to obtain capital and credit and propel them forward. Nowhere has this been more evident than the United States, where we have the deepest, most liquid markets in the world.

As the voice for the U.S. securities industry, SIFMA convenes hundreds of broker-dealers, investment banks and asset managers to advocate for legislation, regulation and business policy that enables our capital markets to drive American ingenuity, help investors achieve their goals, and fuel economic growth and job creation. SIFMA also serves as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. This report contains our insights into how markets performed, viewpoints on critical policy issues and several helpful resources.

America's capital markets are a key contributor to long-term global growth and a beacon of opportunity for investors, most importantly the individual investor. Our member companies comprise one million employees across the nation who serve clients both large and small and contribute to our communities. Together, we are Invested in America.

With best regards,



**LISA KIDD HUNT**  
Executive Vice President,  
Business Initiatives  
Charles Schwab & Co., Inc.  
2018 Chair  
SIFMA Board of Directors



**JAMES R. ALLEN**  
Chairman & CEO  
Hilliard Lyons  
2019 Chair  
SIFMA Board of Directors



**KENNETH E. BENTSEN, JR.**  
President and CEO  
SIFMA



Market  
Insights

## Market Insights

Capital markets recognize and drive capital to the best ideas and enterprises. Capitalism is a catalyst for innovation, opportunity and dynamism. Coupled with the free flow of capital, innovation is an integral component 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 grow.

Clients benefiting from healthy capital markets include not just investors but also corporations and governments. 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, businesses and individuals can invest in securities to generate wealth.

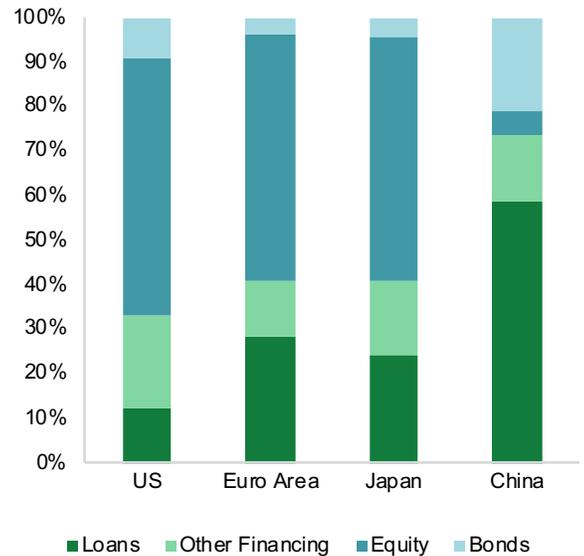
### Capital markets are crucial to fueling economies

In the U.S., capital markets provided 67% of funding for economic activity. Capital markets enable debt issuance, which is a more efficient and stable form of borrowing for corporations. The use of debt capital markets is more prevalent in the U.S., with around 80% of corporate funding coming through the debt capital markets versus 20% bank lending. This is reversed in other major developed regions.

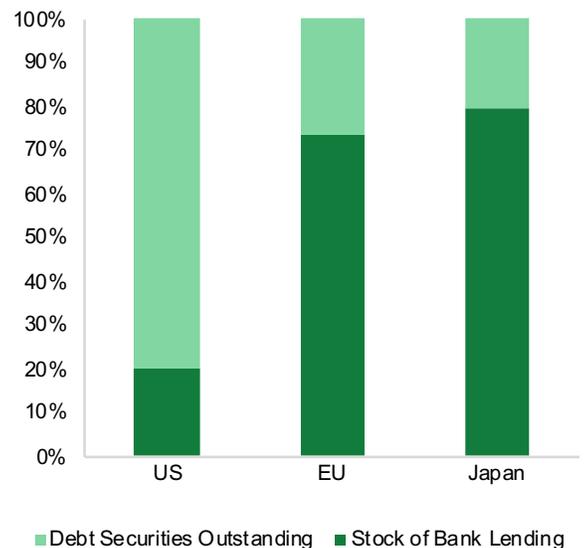
On the equities side, an SEC survey of companies after their IPO indicated: 89% of companies accessed equity capital markets in order to strengthen their balance sheet, while 83% went public to access capital to generate cash for growth and to build a competitive advantage over peers. From an economic perspective, capital formation benefits the economy and promotes job growth. According to the same SEC report, on average since the 1970s, 92% of a company's job growth occurs after the IPO<sup>1</sup>, with most of that occurring within the first five years.

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

### Financing of Non-Financial Corporations



### Debt Financing of Non-Financial Corporations

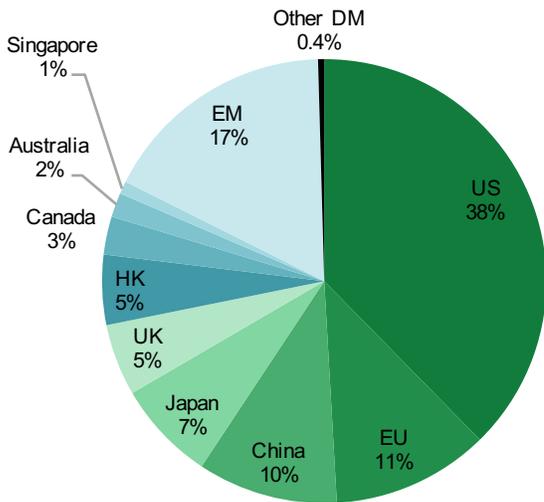


Source: Organization for Economic Co-operation and Development, European Central Bank, Bank of Japan, National Bureau of Statistics of China, Federal Reserve

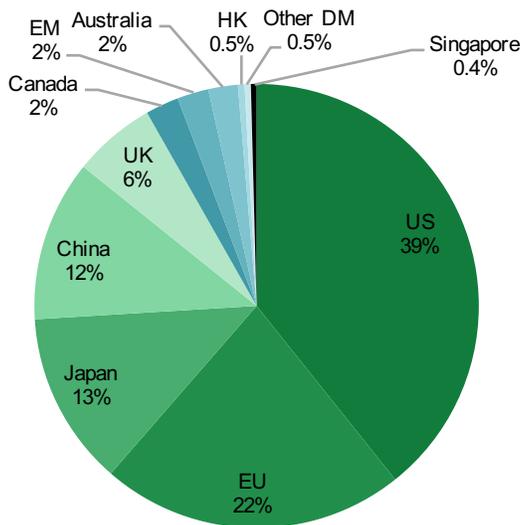
Note: As of FY17, China FY15. Euro Area = 19 EU-member states using the Euro; EU = 28 member states. Other financing = insurance reserves, trade credits and trade advances.

1. Post IPO employment growth dropped to 76% on average for the 2000s, corresponding to the decline in IPOs

## Global Equity Markets Capitalization



## Global Fixed Income Markets Outstanding



Source: World Federation of Exchanges, Bank for International Settlements, SIFMA estimates (as of FY17)

Note: EM = emerging markets; HK = Hong Kong; DM = developed markets; equity market cap = listed domestic companies

## Capital Markets Depth and Liquidity

### US versus the Rest of the World

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. capital markets are multiples of GDP – equity markets are 162% of GDP, while the fixed income markets are 207% of GDP. Debt capital markets provide an efficient and stable form of borrowing, funding 80% of financing in the U.S. compared to 20% in other regions where bank loans dominate.

**Equities:** U.S. equity markets represent 38% of the \$85 trillion in global equity market cap, or \$32 trillion; this is 3.5x the next largest market, the EU (excluding the U.K.). On average (through September 2018), around 6.9 billion shares are traded on U.S. equity markets every day. Investors continue to enjoy narrow spreads, low transaction costs and fast execution speeds. There is also plenty of opportunity for price improvement, especially for retail investors.

**Fixed Income:** U.S. fixed income markets comprise 39% of the \$100 trillion securities outstanding across the globe, or \$39 trillion; this is 1.8x the next largest market, the EU (excluding the U.K.). U.S. fixed income markets are broad and diverse – broken out into U.S. Treasuries, mortgage-backed securities, corporates, municipal bonds, agency, asset-backed securities, money markets and repurchase agreements. The diversity of products increases the amount of funds available to borrow, as well as allows financial institutions and nonfinancial companies to manage credit, interest and market risk more effectively. Debt capital markets provide a more efficient and stable form of borrowing for corporations and fund 80% of financing compared to 20% with bank loans in other regions (as shown on the previous page).

## Market Structure

### Efficiency & Resiliency Key to Capital Markets Strength

Efficient and resilient market structure<sup>2</sup> is key to sustaining investor confidence and participation underpinning the capital markets. The goal of regulators and market participants is to promote market resiliency and ensure the markets continue to benefit investors and play an essential role in capital formation. Market strength is crucial in both primary and secondary markets.

Primary and secondary markets are symbiotic in nature. Efficiently functioning primary markets maintain the depth and liquidity in the secondary markets. Healthy secondary markets give issuers confidence their needs will be met at a good price level in the primary markets, and the cost of capital will be lower at issuance when a liquid secondary market is available.

It is important to maintain the robustness and efficiency of secondary markets. In addition to promoting capital formation, investors utilize secondary markets (trading) to generate returns and manage risk. Market makers are essential to enabling the efficient flow of financial markets. Market makers stand ready to buy and sell securities at all times, including times of stress, thereby providing the necessary liquidity for markets to function efficiently. Public capital markets also need stable, long-term investors to keep markets functioning efficiently. In addition, a robust regulatory structure is crucial to complete the support framework for healthy, vibrant capital markets.

It is this structural support that is crucial to maintaining the longevity and stability of markets, ensuring they continue functioning even under times of economic or market stress. The stability of the capital markets provides continued fuel for economic growth and job creation.

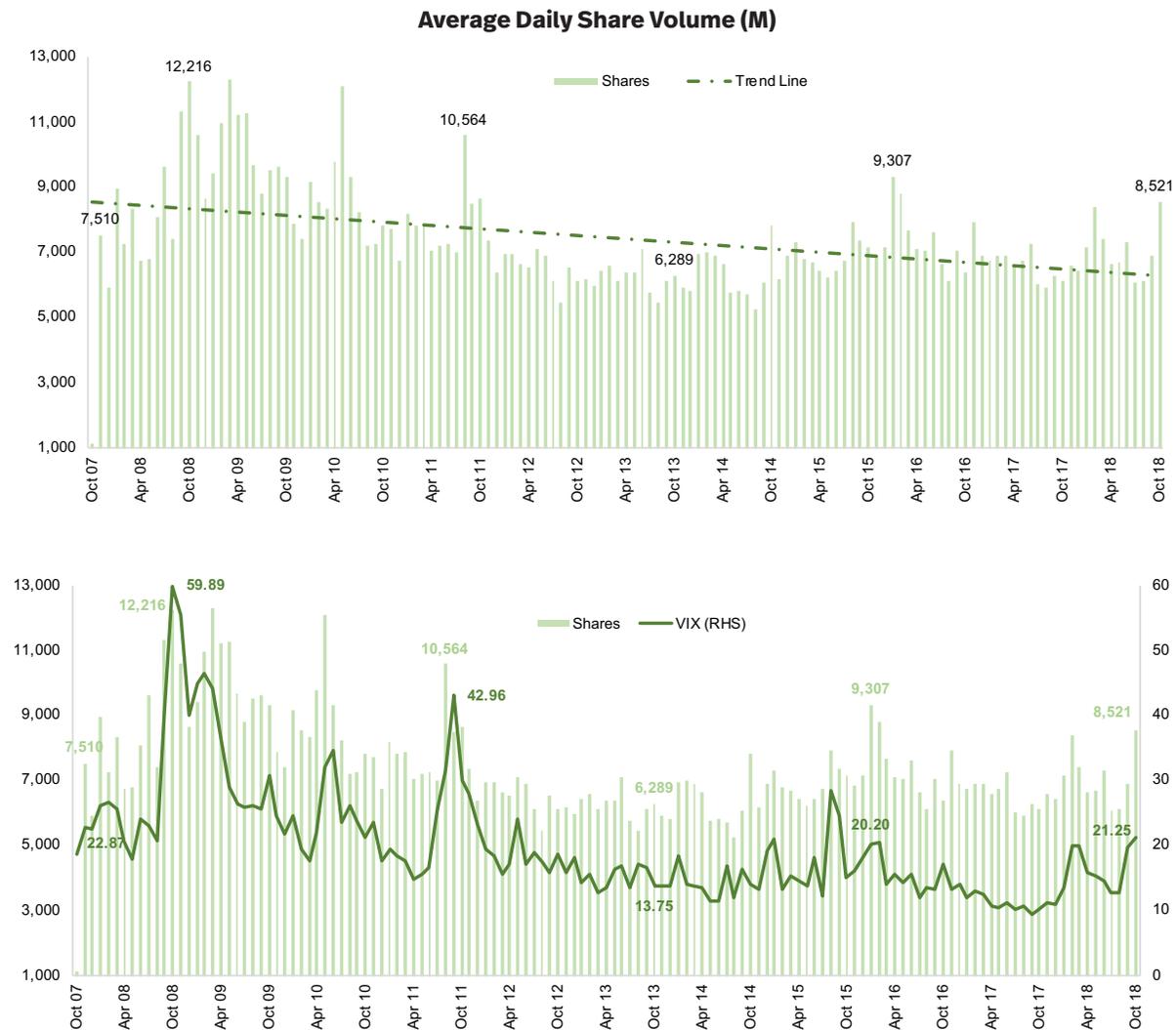
Market structure evolution and regulation have helped market efficiency and resiliency, but they also have unintended consequences. For instance, investors have benefited greatly from the SEC's adoption of the Regulation NMS in 2005 through increased speed of execution and lower transaction costs. At the same time, however, technological advancements have outpaced regulation, leading to increased fragmentation and complexity. Further, some of the rules put in place in response to the 2008 global financial crisis have created unintended constraints on liquidity, disadvantaging both investors and corporate issuers. Therefore, as changes in regulations and characteristics of the markets occur, we continue to watch the impact on market structure.

*2. Please see the Global Capital Markets & Financial Institutions Primer, by SIFMA Insights*

## Equities Markets

### Volatility Picked Up, Volumes Started to Follow

Volume is the number of shares traded indicating the overall activity of a security, or the market in aggregate, over a specified period of time. While some people consider aggregate volumes an indicator of liquidity, volumes may not always represent real liquidity. On average (YTD through October 2018), around 7.1 billion shares are traded on U.S. equity markets<sup>3</sup> every day, down slightly from 7.5 billion in November 2007. The low was 5.2 billion in August 2014, and the high was 12.3 billion in March 2009. ADV averaged 6.9 billion for the last 12 to 24 months, and the six month average was 6.9 billion as well. ADV did pick up in October. The VIX spiked in September to 19.64, and again in October to 21.25 on average for the month. As such, October ADV jumped to 8.5 billion.



Source: Cboe Global Markets, Bloomberg, SIFMA estimates (as of October 2018)

3. Please see the US Equity Market Structure Primer, US Multi-Listed Options Market Structure Primer and US ETF Market Structure Primer, by SIFMA Insights

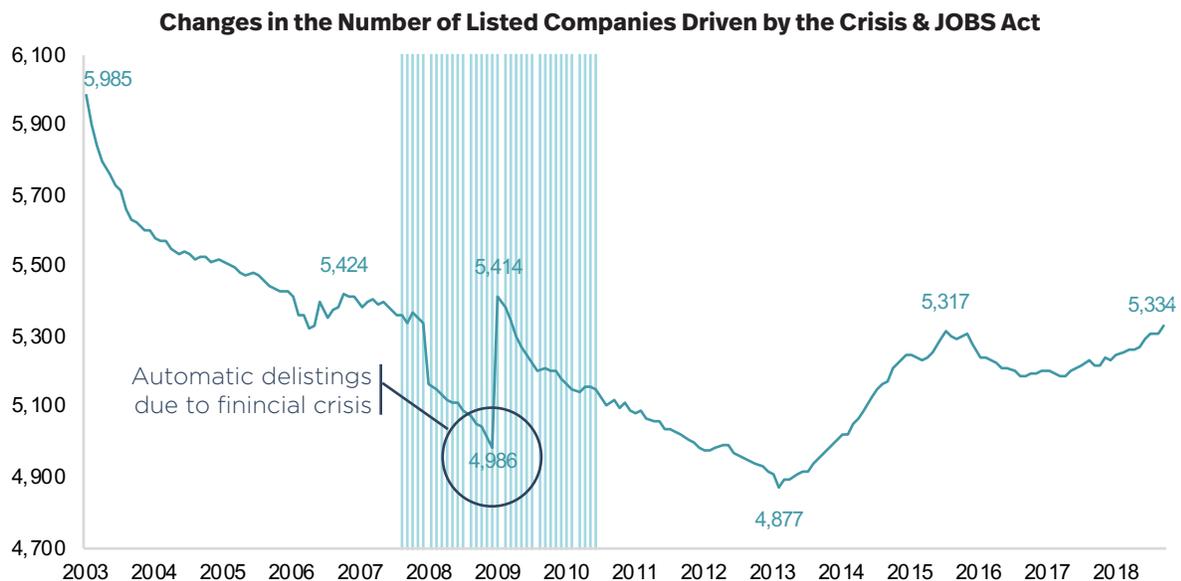
## Capital Formation

### Hurdles Continue, or Do They?

IPOs provide ways for innovative startups to become market leaders – think Amazon, Starbucks or Apple – that create jobs and grow quickly, increasing their contribution to the economy.<sup>4</sup>

A number of factors, including the regulatory environment and market conditions, has led to a decline in the number of listed U.S. companies, IPO deal value and the number of deals, as well as a decline in the number of small cap IPOs. The decline in the number of small cap IPOs implies fewer innovative American companies see the benefit of going public in today’s regulatory environment, which could have long-term negative effects on economic growth.

As of September 2018, the number of listed companies was 5,334, down 11% since 2003, and the average over this time period was 5,253. While the number of listed companies has increased since the JOBS Act, it has not returned to peak levels (5,985 in 2003 as shown below; 8,090 in 1980). The good news is the trend is turning upward in 2018. The number of companies increased all but one month so far this year (on a month-over-month basis), and the current total is up ~2% since the beginning of the year.



Source: World Federation of Exchanges, SIFMA estimates

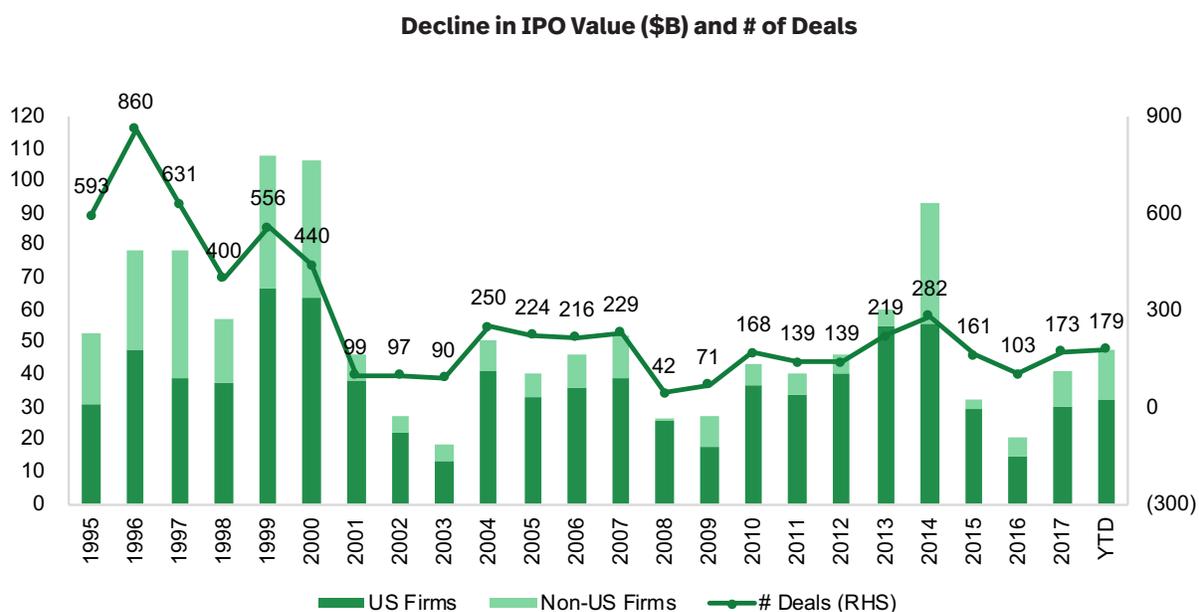
Note: As of September 2018. U.S. domiciled companies listed on U.S. exchanges

4. Please see the *Capital Formation & Listings Exchanges Primer*, by SIFMA Insights

As shown in the following charts, the number of IPOs peaked in 1996 at 860, and fell to 173 in 2017, or -80%. Post the JOBS Act, the number of IPOs did increase from 2012 to 2014, +103%. (According to the U.S. Treasury's report on capital markets, 87% of IPO filings since 2012 were filed under the JOBS Act as emerging growth companies.) However, IPO activity has been relatively muted since 2015, averaging 146 over this time period.

The number of small capitalization IPOs as a percent of the total has also declined post crisis. While in the low 90% range pre crisis, it remains in the low to mid 80% range over the past few years (81% as of October). Additionally, while the number of listed companies and IPOs declined, market cap for the U.S. equity markets continues to grow. The disconnect between market cap growth and IPO count continues.

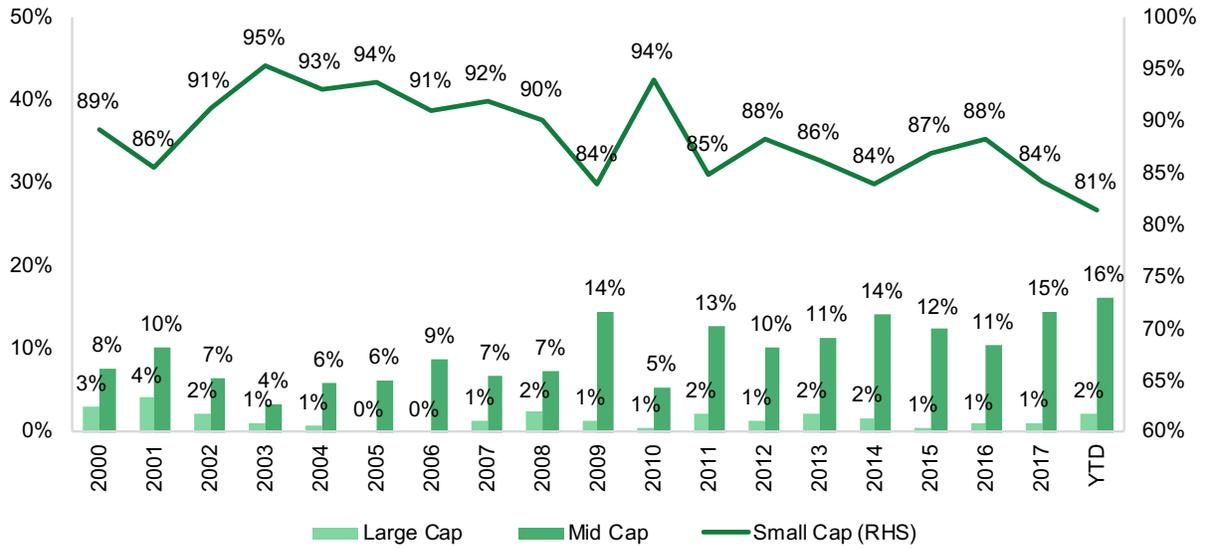
However, 2018 appears to be on pace to increase IPO deal count versus last year, with the total as of October already at 179 versus 173 for all of 2017. Could we be turning a corner?



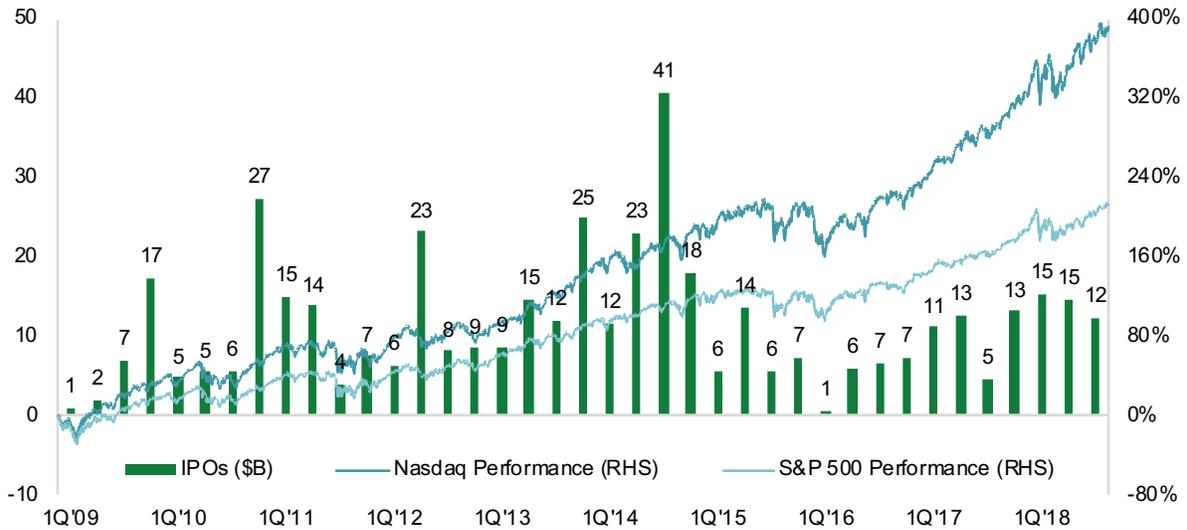
Source: Dealogic, SIFMA estimates

Note: As of October 2018. Excludes BDCs, SPACs, ETFs, CEFs, and rights offers

## Small Cap IPOs as % of Total



## IPOs vs Stock Performance



Source: Dealogic, Bloomberg, SIFMA estimates

Note: As of October 2018 (top), 3Q18 (bottom). Excludes BDCs, SPACs, ETFs, CEFs, and rights offers

## Fixed Income Markets

### The Transformation Continues

We have seen a transformation in fixed income markets<sup>5</sup> since the crisis, historically bilateral and performed by dealers. Post-crisis regulatory constraints on balance sheets, such as the Volcker Rule, have resulted in many bank-affiliated dealers dramatically reducing inventory and market making capabilities, to the detriment of some fixed income activities. This is coupled with volatility at sustained lows across multiple asset classes and a divergence in central bank policy, as rates begin to rise in the U.S. yet remain low in most other developed nations.

To continue servicing clients' needs, markets had to be innovative and leverage product innovation and technology. This led to growth in ETFs and other passive investments as a way for investors to achieve their financial goals. The market landscape has also enabled the development and adoption of electronic market makers, albeit gradual and varying by type of security. We highlight two additional transformational aspects of fixed income markets.

**TMPG Best Practices:** As markets evolve, it is important to promote liquidity and transparency. As such, market participants voluntarily established the Treasury Market Practices Group (TMPG), which is a group of market professionals committed to promote sound market practices to support the integrity and efficiency of the Treasury, agency debt and agency mortgage-backed securities (MBS) markets. The TMPG, sponsored by the Federal Reserve Bank of New York (New York Fed), is composed of senior business managers and legal and compliance professionals from a variety of institutions, including: securities dealers, banks, buy-side firms, market utilities, etc. The TMPG has undertaken many initiatives, including development of fails charges to address chronic settlement fails to mapping the operational/settlement environment for clearing and settlement in TMPG covered products.

One of the main missions of the TMPG is to create best practices for market participants trading in the covered markets, given the need for efficiency in these important markets. TMPG guidelines are recommendations and are not enforced by regulators.

**LIBOR → SOFR:** Another significant change impacting markets is the transition away from the London Interbank Offered Rate (LIBOR) as the standard reference rate. It is estimated \$200 trillion of financial contracts and securities (\$190 trillion in derivatives; \$10 trillion in corporate bonds, mortgages, securitized products, credit card receivables, etc.) are tied to LIBOR, being used by small businesses, corporations, banks, broker-dealers, consumers and investors as a benchmark for short-term interest rates. In response to concerns regarding the reliability and robustness of LIBOR and other reference rates across the globe, the Financial Stability Board (FSB), as established by the G20, and Financial Stability Oversight Council (FSOC) called for the development of alternative risk-free benchmark interest rates supported by liquid, observable markets.

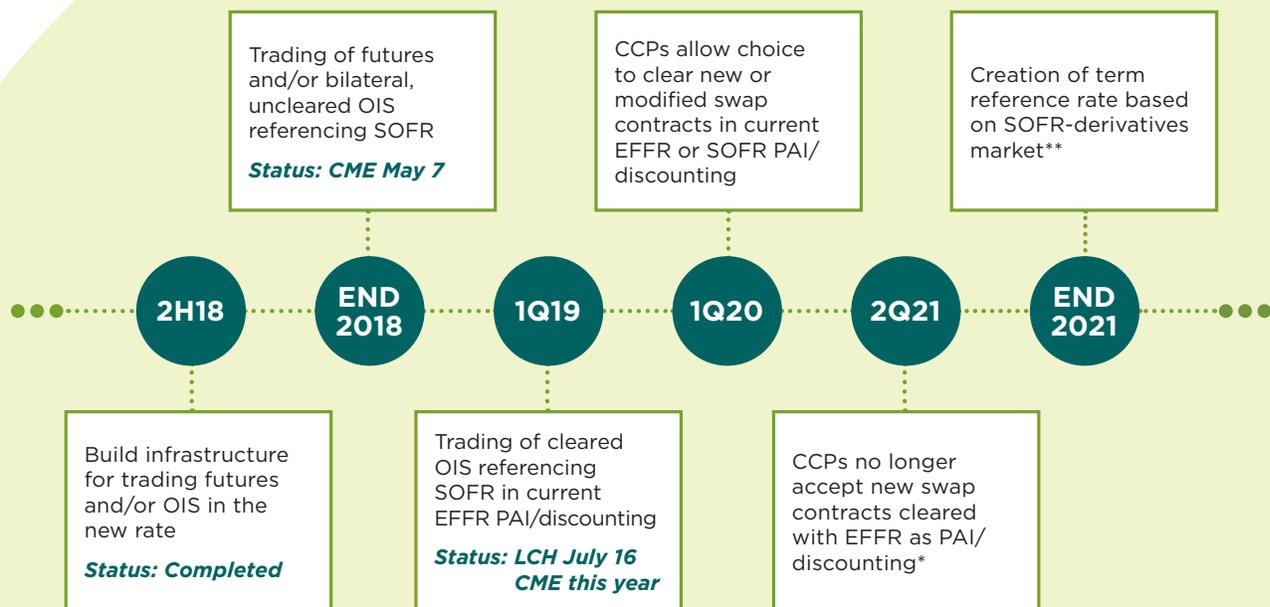
In the U.S. in 2014, the Board of Governors of the Federal Reserve System and the New York Fed established the Alternative Reference Rates Committee (ARRC), which eventually selected the Secured Overnight Financing Rate (SOFR) as the recommended alternative reference rate for the U.S. LIBOR is based on thinner markets and is not fully transaction based – the most active tenor (three months) posts less than \$1 billion transactions

*5. Please see the US Fixed Income Market Structure Primer, by SIFMA Insights*

per day – and submitted rates typically include expert judgement from market participants when determining the rate. SOFR, however, is based on the overnight repo markets, with over \$700 billion of transactions per day. It is fully transaction based and therefore regarded as more robust than LIBOR.

The ARRC will continue to lead the transition away from LIBOR. Its objectives include, among others: identifying best practices for alternative reference rates and contract robustness; making recommendations for developing an implementation plan for orderly transitions away from LIBOR on a voluntary basis; and working with market participants to encourage the development of sufficient liquidity in futures and swaps markets referencing the new rate. The ARRC’s plan for a smooth transition away from LIBOR is ahead of schedule.

## ARRC’s Paced Transition Plan Ahead of Schedule



Source: ARRC website

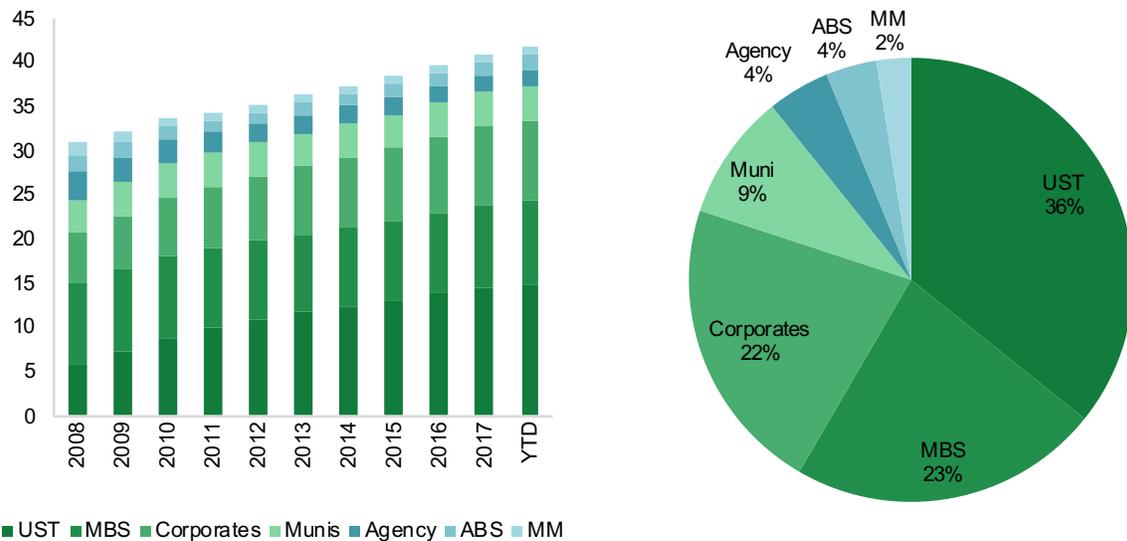
Note: OIS = overnight indexed swap. EFFF = effective Fed Funds rate. PAI = price alignment interest. \*Except to close out or reduce outstanding risk in legacy contracts. Existing contracts using EFFF as PAI and the discount rate continue to exist in the same pool but would roll off over time as they mature or are closed out. \*\*Dependent upon sufficient liquidity in the SOFR derivatives market, in order to determine a robust rate.

## Fixed Income Asset Class Breakout

### UST Drive 3.4% YOY Outstanding Growth

As a percent of total outstanding YTD, U.S. fixed income markets are dominated by U.S. Treasury securities (UST, 36%), then mortgage-backed securities (MBS, 23%) and corporate bonds (22%). (Remainder: municipal bonds (munis) 9%, agency 5%, asset-backed securities (ABS) 4% and money markets (MMs) 3%.) As a percent of issuance, UST leads at 35%, followed by MBS at 26% and corporates at 19%. Total fixed income outstanding was \$41.9 trillion as of June 2018. For FY17, total outstanding increased 3.4% YOY to \$40.8 trillion, or at a 2.8% CAGR from 2008 to 2017. UST grew 4.0% YOY to \$14.5 trillion, while MBS grew 3.1% to \$9.3 trillion, corporates grew 4.4% to \$8.8 trillion, and munis grew 0.3% to \$3.9 trillion (YOY change).

**US Fixed Income Outstanding, \$41.9T**



Source: SIFMA

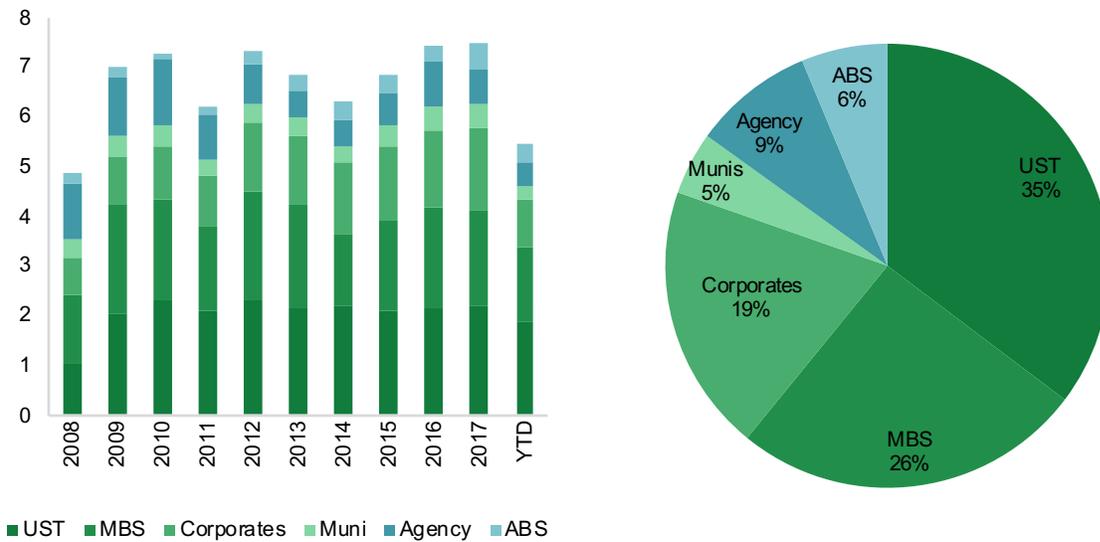
Note: As of June 2018

## Corporates Propel 0.7% YOY Issuance Increase

Total fixed income issuance was \$6.3 trillion as of October 2018. For FY17, total issuance increased 0.7% YOY to \$7.5 trillion, or at a 1.4% CAGR from 2007 to 2017 (we go back to 2007 because total issuance declined significantly in 2008, -24.1% YOY).

UST issuance grew 2.5% YOY to \$2.2 trillion, while MBS decreased 5.6% to \$1.9 trillion, corporates increased 7.8% to \$1.6 trillion, and munis grew 0.5% to \$448 billion (YOY change).

**US Fixed Income Issuance, \$6.3T**



Source: SIFMA

Note: As of October 2018. Issuance is long-term instruments only

## Private Wealth Management

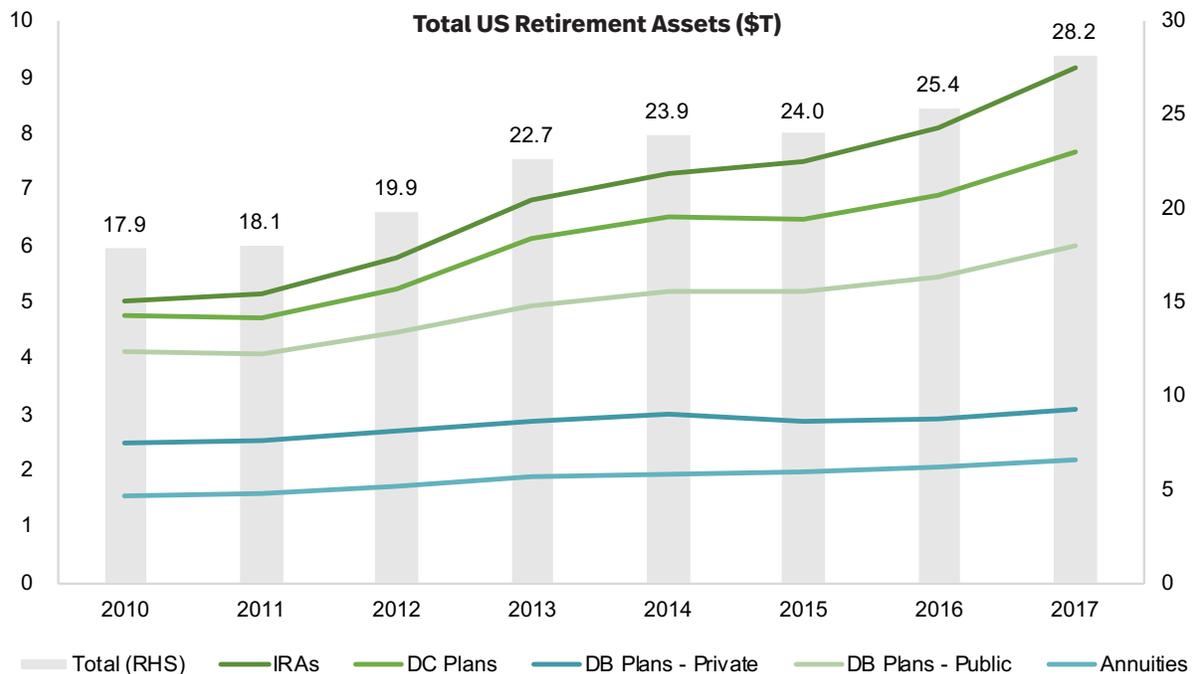
### Savings and Wealth Creation

Financial institutions pool their employee talent and product offerings to help individual investors, governments and corporations manage money. This includes:

- Managing individual investor retirement accounts;
- Providing investment advice; and
- Overseeing corporate and government retirement plans.

In the U.S., there are \$28.2 trillion of retirement market assets, broken out across the following categories:

- 33% individual retirement accounts (IRAs)
- 27% employer-sponsored defined contribution (DC) plans
- 21% employer-sponsored defined benefit (DB) plans, public (federal, state and local governments)
- 11% employer-sponsored defined benefit (DB) plans, private
- 8% other annuities
- Financial institutions further help investors to purchase individual stocks or other securities, as well as mutual funds (\$18.7 trillion market) and ETFs (\$3.4 trillion market).



Source: Investment Company Institute (as of FY17, US markets)

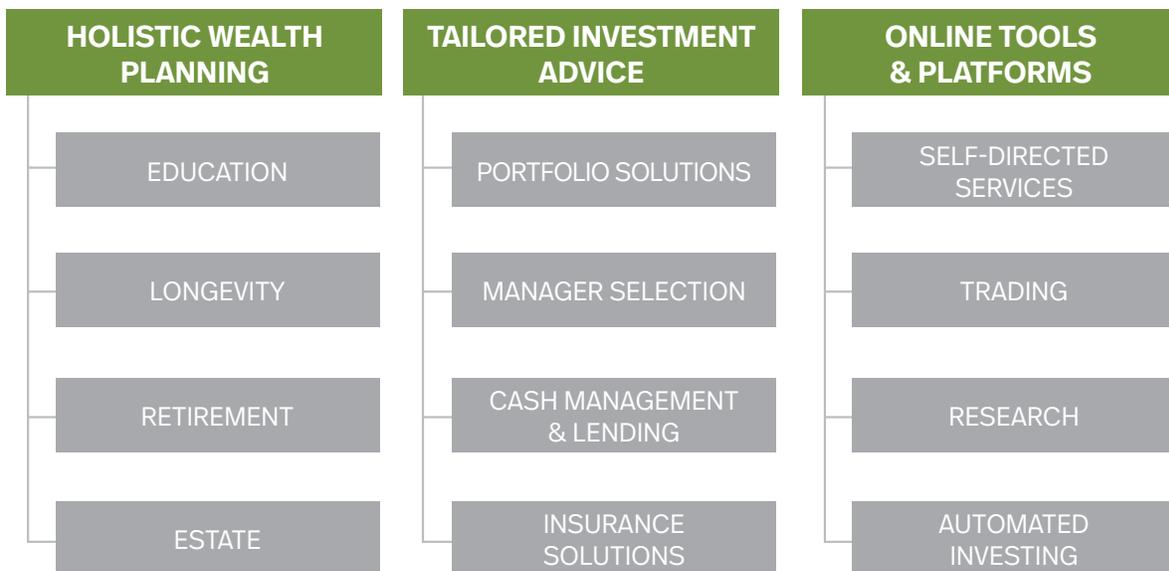
## The Role of the Financial Advisor

### Advising Individual Investors

Today's clients want customized solutions that meet their unique needs and goals, and people are turning to professionals to assist in meeting their objectives. Private wealth management is about delivering advice, managing complexities and meeting a client's needs. As the role of a financial advisor (FA) continues to evolve, FAs are delivering value to clients focusing on holistic wealth planning, building diverse multi-generational teams and leveraging technology.

The client experience in wealth management holds a higher weight for clients compared to other product and services they use, as this relationship has far-reaching implications on the client's financial and life goals. The objective of a financial advisor is to put a client's specific needs at the center of the relationship, as the client experience is a critical input for building trust and gaining confidence.

Disruption is on the rise in financial services. Demographics, client demand and preferences are shifting, as the baby-boomers move further into the post-retirement phase and as millennials become a more significant factor in the savings and investment process. Wealth managers are responding quickly by integrating their client's health needs, and well-being into longevity planning – enabling households to better protect assets, preserve lifestyles and maintain independence into older age. The next frontier in client engagement in financial services are millennial investors. For example, millennials are born digital. These clients have high expectations for access, service and convenience on their terms, thereby requiring a digital relationship. Technology is poised to change the nature and delivery of financial advice in some significant ways. We have seen a shift in robo-advice, which has gone from being an innovation led by small fintech start-ups, to being adopted by leading wealth managers to improve services and reach a wider audience. FAs can interweave robo-advice and data analytics to enhance the client experience by saving them time on manual tasks, focusing on personal interactions with the client, and help clients to better understand overall investment strategies for attaining both long range and short-term financial goals.



## Opportunities in Fintech and Operations

### Analyzing and Deploying New Technologies

Without past and ongoing advances in financial services operations – from clearing and settlement to electronic trading – it is unlikely the U.S. could have developed as deep, liquid and resilient capital markets, let alone maintained its lead in this area.

The industry continues to analyze how fintech solutions can increase efficiencies in the back office, serve clients, manage risk or meet regulatory reporting requirements. While much of a firm's technology spend is on ways to increase operational efficiencies – which could decrease costs to not just the firms but also their customers – many firms also sponsor investments for fintech innovations.

Firms are looking to fintech solutions in response to changing client demands. Firms constantly strive to improve the customer experience and many financial services firms continually review fintech opportunities to enhance customer product and services offerings. Firms must make it easier to do business by improving the efficiency of processes, including: decreasing the number of clicks, making systems more intuitive, improving service delivery, etc.

When analyzing and opting to deploy fintech opportunities, firms must bear in mind client expectations and preferences. There is, therefore, a wide spectrum of time estimates to deploying different technologies. A few of the key operational details firms must assess include:

- **Multiple Market Participant Usage** – Some technologies may involve participation by multiple market participants. For example, with DLT, the industry needs to collaborate to implement it on a wide scale – the DLT platform interacting with a bank's back office; banks speaking with each other; and market infrastructures working across platforms. The level of industry cooperation will dictate time to market, which will vary across different technologies.
- **Regulatory Context** – While financial institutions are testing fintech, regulators are working with the industry to understand these innovations themselves, particularly how technology developed in a fintech startup will interact with a highly regulated market. Firms are assessing new technologies in the context of changing processes via these new tools, while continuing to adhere to regulations.
- **Fintegration** – Fintegration is the ability to integrate innovative technologies with existing systems, allowing the two systems to “communicate” with each other and exchange relevant information. The ability and time to synch up systems will vary across different technologies.

Some of the common fintech opportunities financial institutions are analyzing, preparing to deploy or currently utilizing include:

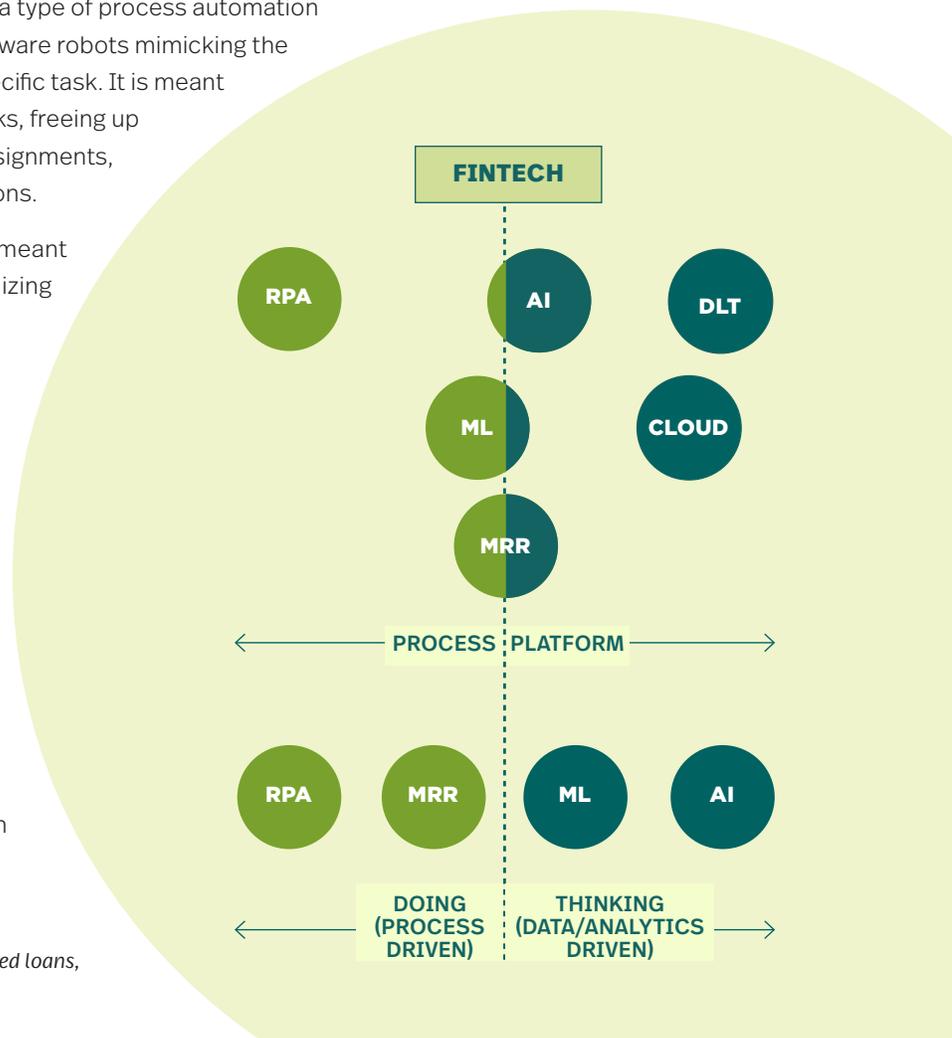
- **Artificial Intelligence** – AI can be used to increase efficiencies and lower costs in what would normally be human tasks (market surveillance, AML, KYC). While not new to financial services, firms are moving from use cases in data analytics to analyzing investment portfolios.
- **Cloud Computing** – Cloud involves moving from on site IT systems to software residing in a separate data center. Financial firms are assessing the use of public clouds, given regulatory and vendor risk management requirements, and exploring the use of private clouds.

- **Distributed Ledger Technology** – DLT, of which blockchain is one type, “holds a lot of promise” according to market participants. Firms are working to integrate existing systems with this new technology, albeit scale is not quite there with most current use cases in electronifying paper rather than transactional based.<sup>6</sup>
- **Machine Learning** – ML is a form of AI where computer algorithms can learn from data without specifically being programmed, i.e. autonomously learning or getting better over time at identifying issues or options.
- **Machine Readable Rulebooks** – MRRs put out rules which are written by humans in ways that can be fully and unambiguously interpreted by machines.
- **Regulatory Technology** – Regtech is the utilization of technology, such as advanced analytics or machine learning, to aid in compliance, reporting and other regulatory requirements (for example, the automation of due diligence such as know your customer/KYC).
- **Robotic Process Automation** – RPA is a type of process automation technology based on the notion of software robots mimicking the actions of humans in carrying out a specific task. It is meant to take the repetitive out of routine tasks, freeing up employees to focus on higher value assignments, such as those involving client interactions.

First, we look at whether the technology is meant to transform processes or platform – optimizing the user experience versus updating the user ecosystem. RPA is meant to take the repetitive out of routine tasks, i.e. process driven. Blockchain is currently being tested by the ASX Group in its clearing and settlement infrastructure, platform transformation.

Next, we look at the level of doing versus thinking. Both RPA and AI are two ends of the intelligent automation spectrum, with RPA being more process driven (doing) and AI more data/analytics driven (thinking or learning). RPA is suitable for automating the grunt work of updating spreadsheets. AI can read data and extract pertinent information with deductive analytics.

6. There are transactional use cases in repo, syndicated loans, custody and settlement, etc.





Policy  
Viewpoints

## Policy Viewpoints

The U.S. capital markets are deep and mature, and the financial industry that provides access to them is subject to robust regulatory oversight. The U.S. Department of the Treasury has undertaken a comprehensive review of this complex regulatory infrastructure to ensure policy and regulation promote growth, job creation, investment and financial stability.

The financial industry remains committed to establishing smart regulations, ensuring economic incentives and costs are calculatable and enabling capital markets to run efficiently. As the voice for the nation's securities industry, SIFMA has over a 100-year history of substantive contributions to the policymaking and rulemaking process. These Policy Viewpoints represent the views of hundreds of broker-dealers, investment banks and asset managers.

**“While what we do and the way we do it has dramatically changed, there is still that core of serving our clients and doing it at the absolute best level.”**

James R. Allen  
SIFMA Annual Meeting  
October 2, 2018

## Cybersecurity Remains Priority One

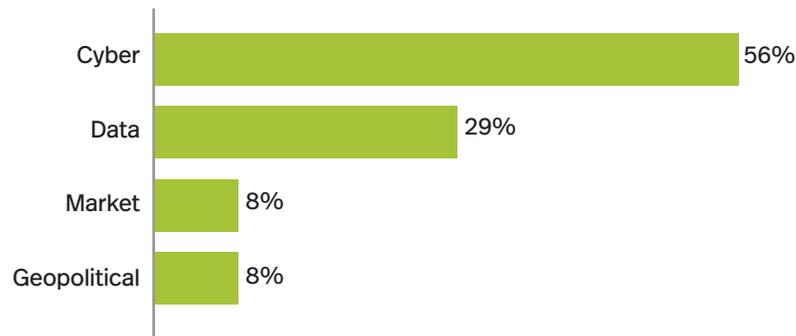
Cybersecurity is a top priority in the financial industry to ensure the security of customer assets and information and the efficient, reliable execution of transactions within markets. It is a shared objective that demands an integrated approach but is often complicated with an overlapping patchwork of regulation. In fact, no fewer than 11 federal agencies impose some form of cybersecurity requirements. This is in addition to individual state, SRO and jurisdictional requirements, as well as standards from the National Institute of Standards and Technology (NIST) and International Organization for Standardization (ISO).

**“Quantum Dawn IV participants, which included financial sector institutions and SIFMA, as well as law enforcement, government, and regulatory partners, use the exercises to strengthen the readiness of the financial services sector to respond to cyberattacks in a coordinated manner.”**

Quantum Dawn IV After-Action Report  
June 28, 2018

As a global industry, all market participants are interconnected and part of the same ecosystem and need to work together to protect the sector as a whole. An effective and efficient cybersecurity policy is achieved most easily through harmonized, risk-based global standards that leverage extensive investments already made. The financial industry is committed to furthering the development of industry-wide cybersecurity initiatives that protect our clients and critical business infrastructure, improve data sharing between public and private entities and safeguard customer information. SIFMA is actively engaged in coordinating the effort to support a safe, secure information infrastructure, with cybersecurity resources which provide security of customer information and efficient, reliable execution of transactions. We continually work with industry and government leaders to identify and communicate cybersecurity best practices for firms of all sizes and capabilities, and educate the industry on evolving threats and appropriate responses; see the Resources section of this book for our exercises, tests and other resources.

### What Risk Worries You Most?



Source: Audience polling, SIFMA Operations Conference & Exhibition, May 2018

Note: Figures may not add to 100% due to rounding. Data risk includes confidentiality, integrity and availability

## Safe Handling of Personally Identifiable Information

Clients have the ability to aggregate personal financial information on third-party platforms to assess their financial position. This data aggregation creates valuable opportunities for clients but also has the potential to put their data at risk if it is misused, mishandled or misappropriated. An individual's personal information is invaluable, and its protection is of paramount importance.

The financial industry is committed to ensuring the safety of the clients we serve at every turn. SIFMA is coordinating a broad-based industry effort to protect a customer's financial information, with a focus on investors' right to securely access their own data. We have created a set of industry-wide Principles for protecting, sharing and aggregating customer financial information. SIFMA has also introduced consumer resources for our members to help consumers better protect their data and discuss this important issue with their clients and is a founding member and serves on the Board of the Financial Data Exchange (FDX).

**“As the digital economy grows, personal data is the most important asset there is, and as an industry we have a responsibility to work together proactively to protect it and to take steps to help make sure others do, too.”**

Lisa Kidd Hunt  
Executive Vice President, Business Initiatives  
Charles Schwab & Co., Inc.  
Chair, 2018 SIFMA Board of Directors  
Wealthmanagement.com Oped

## Enhancing Investor Protection with Reg BI

SIFMA strongly supports enhancing investor protections by establishing a heightened and more stringent broker-dealer best interest standard. The SEC should establish such a best interest of the customer standard through its rulemaking authority under the Securities Exchange Act of 1934. Regulation Best Interest does just that.

Reg BI – a decade in the making – is a key development for retail brokerages and the clients they serve because it clearly and significantly raises the regulatory bar. Reg BI would require broker-dealers to act in the best interest of their retail customers when making a recommendation of any securities transaction or investment strategy involving securities to a retail customer. This new standard would apply across all brokerage accounts, would preserve a client’s right to choose, and would effectively bring regulation up-to-date to where the industry is already operating.

The SEC proposal also included two additional components, a proposed Form Customer Relationship Summary (Form CRS), and an interpretation regarding the standard of conduct for investment advisers. Notwithstanding SIFMA’s general support, SIFMA has recommended that various aspects of Reg BI, as well as the other two component proposals, should be modified and/or clarified in order to allow firms to implement the regulation in a manner that would most effectively benefit investors.

## Protecting Senior Investors

It is vital that we are able to protect our senior investors from financial exploitation and the dangers of cognitive decline. SIFMA has been working with industry members, academics, and state and federal lawmakers to advance policies, practices, rules, regulations and statutes which enhance senior investor protections. A growing number of states have enacted senior investor protection laws that extend to broker-dealers, and several others are currently working to develop a similar path. Additionally, FINRA Rule 2165, permitting pauses on certain suspicious activity, and FINRA Rule 4512, requiring firms to request trusted contact information from certain clients, went into effect in February 2018. SIFMA continues to push for updated laws and regulations to get ahead of this emerging threat and better equip advisors - through regional workshops, toolkits and more - to protect their aging client base. This is an issue of increasing importance, and SIFMA looks to continue to lead on this issue, as it has for the past several years.

**“The SEC proposal puts regulators, industry and, most importantly, investors, in a much better starting point than where we ended with the DOL rule.”**

Kenneth E. Bentsen, Jr.  
Investment News Oped  
August 7, 2018

**“Nationally, seniors lose an estimated \$2.9 billion every year in cases of financial exploitation reported by media outlets, while only an estimated 1 in 44 cases is even reported to authorities.”**

SIFMA White Paper,  
Ensuring Robust Senior Investor  
Protections: Permitting a Temporary Pause  
on Suspicious Transactions  
January 23, 2018

## Fixing the Broken Fee Structure for Market Data

Market data is the information on quotations and trades in each of the thousands of securities traded daily in U.S. financial markets. High-quality and reliable market data products are essential to enable all investors to make informed investment decisions.

The SEC's Regulation NMS requires exchanges to provide quote and trade information to Securities Information Processors (SIPs), which distribute the public feed of "top-of-book" market data. In addition, Regulation NMS allows exchanges to sell proprietary products, which provide "depth-of-book" market data. Each exchange is a monopoly source of its own depth-of-book data, and broker-dealers rely on that complete set of market data to achieve best execution for their customers.

SIFMA has long argued that the exchanges charge excessive fees for both top-of-book and depth-of-book market data. These excessive fees lead to unnecessary trading costs for all investors. In October 2018, the SEC agreed with SIFMA, unanimously ruling against two exchanges and finding that the exchanges had not adequately justified their price increases. SIFMA will continue to push for reform of this broken system, including changes to the market data monopoly advantage that exchanges enjoy under Regulation NMS.

## Looking Across Geographical Borders

Financial services are crucial to U.S. economic prosperity, helping fuel economic activity across all industries, including manufacturing, agriculture and technology. SIFMA believes free- and fair-trade agreements promote U.S. economic growth and job creation by expanding opportunities for financial services firms to compete in overseas markets and better serve their clients.

The U.S. relationship with China, the U.K. and the EU are some of the most important in the world. SIFMA continues to advocate for a level playing field between domestic and foreign financial services firms in China and supports efforts to strengthen the U.S.-China economic relationship through the U.S.-China Comprehensive Economic Dialogue. In Europe, Brexit has potentially huge implications for the financial services industry, and will fundamentally transform the U.S. relationship with U.K. and EU. With just two years until the prospective transition period ends (conditional on the two sides agreeing on the terms of separation), we continue to coordinate closely with our colleagues at the Association for Financial Markets in Europe (AFME) and Global Financial Markets Association (GFMA) to help the U.K. and EU deliver Brexit in a way that protects global financial stability.

In the western hemisphere, SIFMA welcomed the news that the United States, Canada and Mexico reached agreement on a trilateral trade and investment deal to succeed NAFTA. For the first time ever in a trade and investment agreement, provisions prohibiting data localization and improving the free flow of data across borders, which are so important to many of our members' businesses, is protected. SIFMA is also engaged in the financial services aspects of prospective bilateral trade and investment agreements between the U.S. and the U.K., EU and Japan.

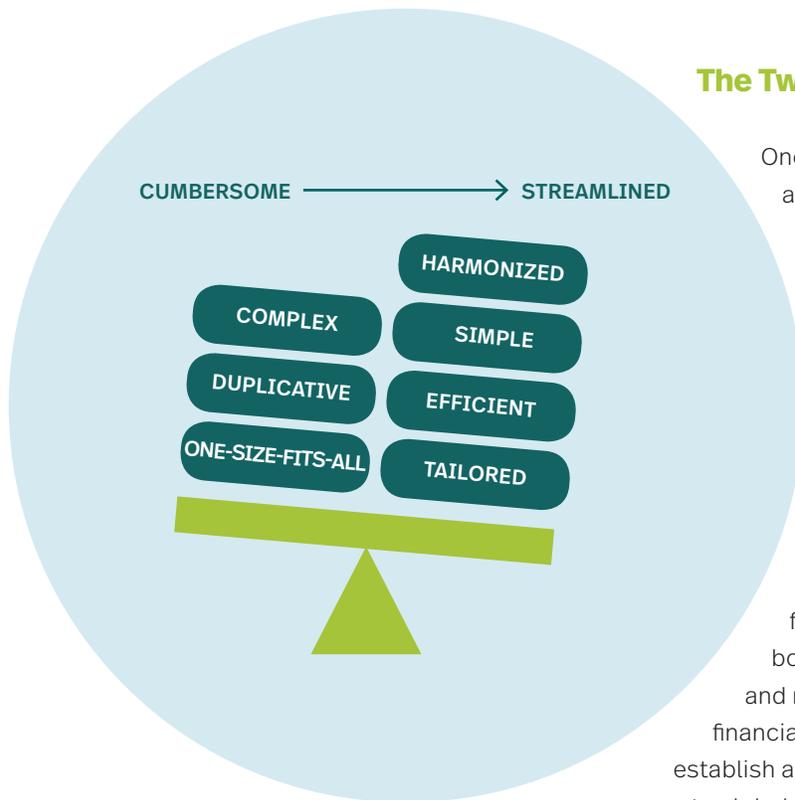
**“This pragmatic ruling by the SEC indicates increasing recognition by policymakers that the fee structure for proprietary market data products is broken.”**

Melissa MacGregor, Managing Director  
and Associate General Counsel, SIFMA  
Press Release: SEC Overturns Previous Ruling  
in Market Data Fees Case,  
Finds in Favor of Plaintiffs  
October 16, 2018

## Seeking Recalibration and Global Harmonization

The historic success of the U.S. capital markets has been bolstered by a regulatory framework focusing on investor protection, transparency, and safety and soundness. Much of the U.S. regulatory structure was put in place 85 years ago, and Congress and policymakers have continually reviewed and supplemented it to keep pace with market developments and a changing national and global economy.

The global financial system has adopted an unprecedented volume of new regulations since the financial crisis, affecting everything from market structure to capital standards. Various policymakers acknowledge some changes may have gone too far, adversely impacting market efficiency and liquidity at the expense of economic growth potential. Further, multiple regulators implementing regulations at different intervals since the financial crisis and adopting the same rule with different interpretations of how to implement it (for example, the gold-plating of international standards) has undercut the process of global harmonization. This left the scales unbalanced. As such, many regulators across the globe are assessing the current regulatory framework and potential recalibration of regulations to ensure capital markets run efficiently.



### The Two-Track Regime

Once the financial crisis hit, regulators and legislators across the globe began developing new regulations and laws to improve the safety and soundness of the global financial system and internally protect their own nations' systems and economies. We ended up with a two-track system:

- **Track #1:** The G20, a forum of the world's major economies seeking to address the world's financial challenges, agreed to adopt a set of policies, regulations and reforms to repair the global financial system and to maintain the global flow of capital. The FSB, an international body established by the G20 that monitors and makes recommendations about the global financial system, began making recommendations to establish a framework for identifying systemic risk and promote global financial stability. The Bank for International Settlements (BIS) - established in 1930 and owned by 60 central banks,

representing countries from around the world that together account for about 95% of world GDP - provided a framework for capital, liquidity, leverage and recovery and resolution standards. These international standard setters also encouraged coherent implementation of these policies across sectors and jurisdictions to create a level playing field across countries and regions.

- **Track #2:** On the other track, countries, or regions in the case of the EU, began turning the global recommendations into their own laws and regulations to protect their own markets. Some countries followed the recommended global standards, while others added their own layers of regulatory requirements on top of the minimums. Countries developed and implemented their new regulations at varying paces. In the U.S., both market and prudential regulators were tasked to implement the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA), America’s new financial reform legislation. Other countries moved along implementing their regulations as well.

With so many individual, jurisdictional efforts, it is not surprising this would result in certain inconsistencies across the globe –creating a spider web of regulations – and market participants need harmonization since financial markets are global. In addition to continuing to strive for global harmonization, the U.S. is also working on internal harmonization among prudential (Fed, FDIC, OCC, etc.) and markets (CFTC, SEC) regulators.

As regulators undertake efforts to harmonize regulatory frameworks, we recommend the following:

- **Analyze** regulations and the impact on market efficiency, i.e. unintended consequences;
- **Assess** the current market environment versus where markets were when rules were written and implemented several years ago;
- **Consider** the everyday impact on markets and the economy, not just prepare for stress environments; and
- **Potentially propose** changes to reverse the adverse effects of the original rules without releasing focus on ensuring financial stability.

**“We’re seeing prudential regulators and market regulators really taking a look at the rule set that they have today, much of it set by Dodd-Frank, saying what works? What doesn’t work? How do we make modifications to make sure banks, broker-dealers and asset managers can provide capital and credit to the economy?”**

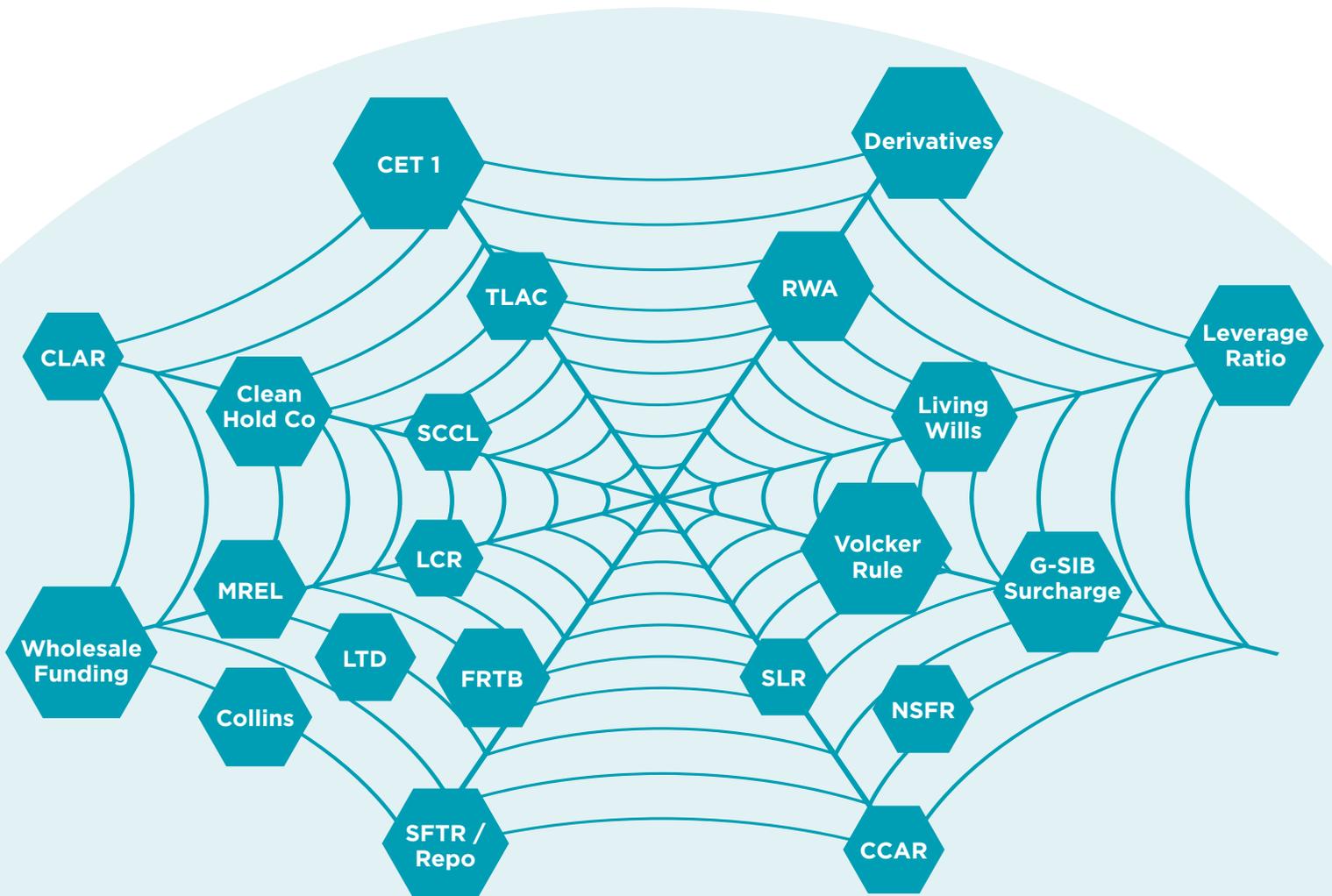
Kenneth E. Bentsen, Jr.  
Bloomberg Daybreak: Americas  
October 2, 2018

## Spider Web of Regulations

Market participants and their regulators and supervisors are forced to navigate a spider web of global regulations (and regulators), creating operational complexities. Further, it has forced firms to pull back from various businesses, drawing concerns about the efficient functioning of capital markets under times of stress (for example, with the decline in market makers in many market segments, there may not be market participants to take the other sides of trades). There may appear to be sufficient liquidity now, but could it be an illusion that quickly disappears once markets turn?

We believe the key to analyzing the efficiency of today's global regulatory regime is to take a step back and ask:

- What risk(s) are we trying to manage?
- What products are impacted?
- Which clients are affected?



*Note: See Resources, Terms to Know, at the end of this report*

## CAT Implementation Moves Ahead

The SEC and the SROs continue to develop a comprehensive Consolidated Audit Trail (CAT) that would enable regulators to efficiently and accurately track all activity throughout the U.S. for equities and options trades.

The CAT will allow regulators to link every order through its entire life cycle, including cancellations, modifications and executions, and the CAT database will link all orders with the account holder. As such, the CAT will enable regulators to conduct cross-market surveillance and market reconstruction by pulling together detailed trading data from all market centers. SROs began reporting data to the CAT in November 2018; they will develop analytic capabilities for CAT data in early 2019. Large broker-dealers are scheduled to begin reporting in November 2019 and remaining market participants in November 2020.

SIFMA has focused on concerns around risks related to the collection of Personally Identifiable Information (PII). SIFMA has engaged the SEC and the SRO's for adjustments to the CAT to ensure adequate data protection and response, as well as restricting access to any submitted data to a strictly controlled environment.

### Implementing the CAT





About  
SIFMA



## Our Mission

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. Our principal role is to advocate on behalf of our members' interests before policymakers, regulators, the media and the public. Our primary focus is on legislation, regulation and business policy affecting retail and institutional investors, equity and fixed income markets and related products and services. SIFMA also serves as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development.

SIFMA is a 501(c)(6) organization.

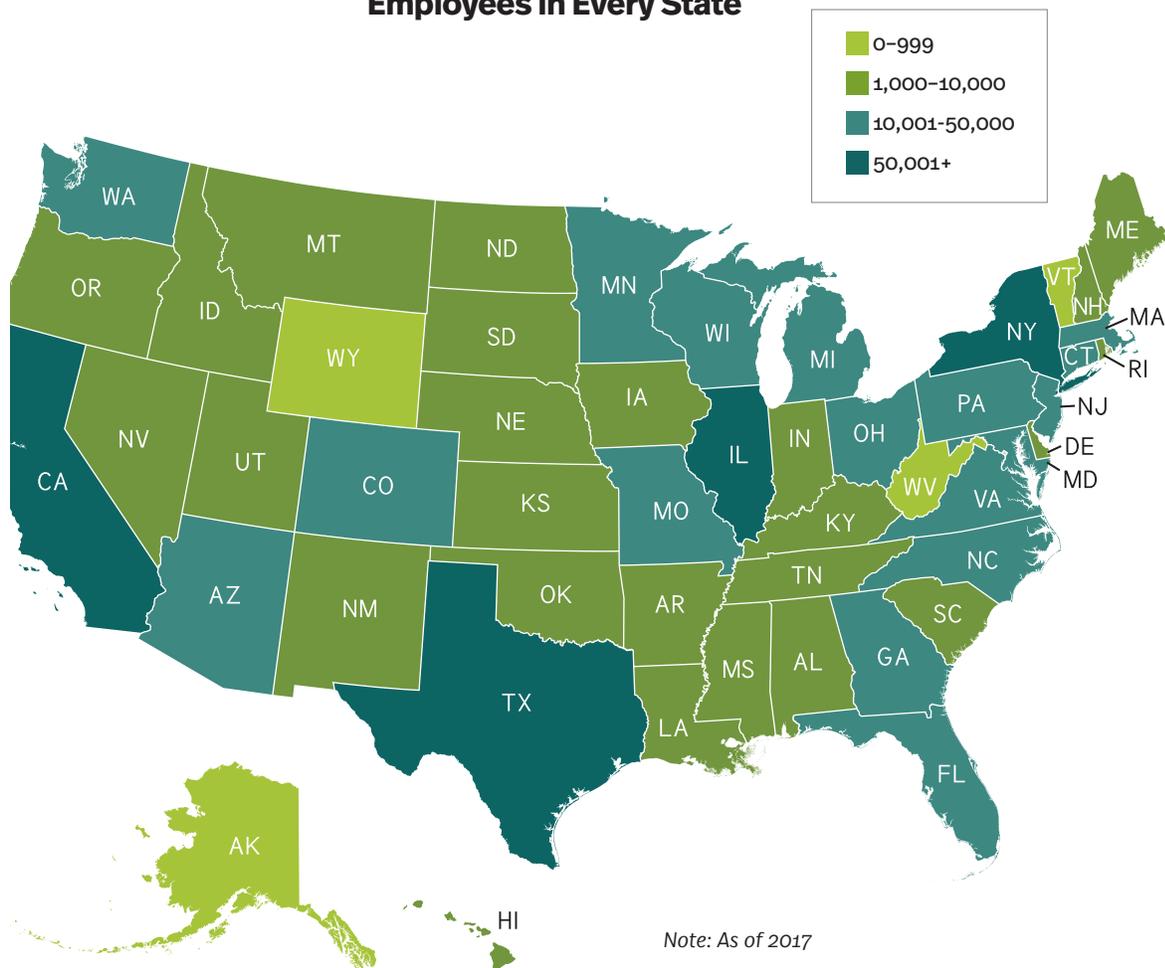
## Our Members

The combined businesses of SIFMA's members represent 75% of the U.S. broker-dealer sector by revenue and 50% of the asset management sector by assets under management. Together, we are invested in America.

## The GFMA Partnership

The Global Financial Markets Association (GFMA) is an extension of its regional association members: the Association for Financial Markets in Europe (AFME) in London and Brussels, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong and SIFMA in New York and Washington are, respectively, the European, Asian and North American members of GFMA. GFMA's mission is to provide a forum for global systemically important banks to develop policies and strategies on issues of global concern within the regulatory environment.

## The Securities Industry Employees in Every State



Note: As of 2017

Source: Bureau of Economic Analysis,  
Bureau of Labor Statistics

## Our History

**1912**

SIFMA's first predecessor trade group, the Investment Bankers Association of America (IBA), was founded to be the voice of the investment banking industry.

**1913**

The Association of American Stock Exchange Firms (ASEF) was formed to represent the interest of the financial markets. An eventual merger in 1971 between the ASEF and IBA was a natural fit.

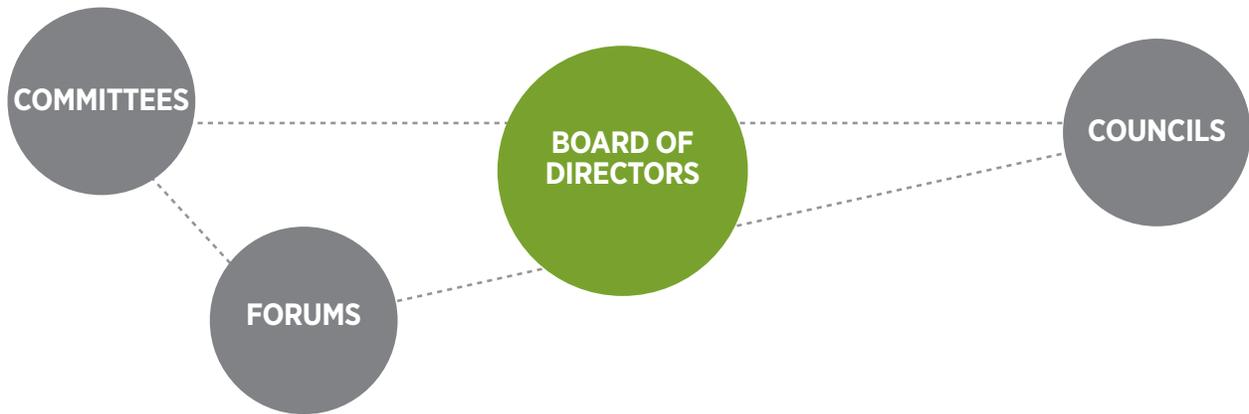
**1914**

The IBA creates our very first committee, the Education Committee. Our current organization is structured through approximately 100 such committees.

# About SIFMA

## Our Committees

SIFMA is a member-driven organization. On behalf of our industry's nearly one million employees, SIFMA's committees share their views on legislation, regulation and business policy affecting retail and institutional investors, equity and fixed income markets and related products and services. We engage with policymakers and regulators through comment letters, testimony, research and more. SIFMA's committee structure includes 35 standing committees, 24 forums and 8 advisory councils overseen by 6 Board subcommittees.



### 1971

IBA and ASEF merged to form the Securities Industry Association (SIA), as the industry recognized the need to formally combine efforts and establish one association representing all of Wall Street.

### 1976

IBA's Municipal Securities and Government Bonds Committees (established in 1918) incorporated as an independent organization, forming the Public Securities Association (PSA).

### 1997

PSA expanded over the years and changed its name to The Bond Market Association (TBMA) to reflect the organization's growing representation of the debt markets.

### 2007 – Present

Starting a new chapter but building on our shared history, the Securities Industry and Financial Markets Association (SIFMA) was created through the merger of SIA and TBMA.

## Committees

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### **Asset Management**

- SIFMA AMG Steering Committee
- SIFMA AMG Accounting Policy Committee
- SIFMA AMG Derivatives Committee
- SIFMA AMG Equity Market Structure Committee
- SIFMA AMG Fixed Income Market Structure Committee
- SIFMA AMG Operations Executive Committee
- SIFMA AMG Tax Committee

### **Capital Markets**

- Corporate Credit Committee
- Equity Markets and Trading Committee
- Listed Options Trading Committee
- Municipal Securities Committee
- Primary Markets Committee
- Prime Brokerage and Securities Lending Committee
- Rates and Funding Committee
- Securitization Committee
- Swap Dealer Committee

### **Government Relations & Communications**

- Federal Government Representatives Committee
- International Policy Committee

- State Regulation & Legislation Committee

### **Legal & Compliance**

- Amicus & Litigation Advisory Committee
- Anti-Money Laundering (AML) & Financial Crimes Committee
- Compliance & Regulatory Policy Committee
- Technology & Regulation Committee

### **Operations & Technology**

- Operations & Technology Committee
- Business Continuity Planning Committee
- Cybersecurity Committee

### **Private Client & Wealth Management**

- Arbitration Committee
- ERISA/Retirement & Savings Committee
- Private Client Services Committee
- Private Client Legal Committee

### **Prudential & Capital**

- Prudential Committee
- Dealer Accounting & Capital Committee
- Federal Tax Committee
- State Tax Committee
- Tax Compliance and Administration Committee

## Forums

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### **Asset Management Group**

- SIFMA AMG CCO and Enforcement Forum
- SIFMA AMG Collateral Operations Forum
- SIFMA AMG Counterparty Risk Forum
- SIFMA AMG Custodian Operations Forum
- SIFMA AMG Derivatives Europe Forum
- SIFMA AMG Derivatives Operations Forum
- SIFMA AMG Operational Risk Forum
- SIFMA AMG Retirement Investment Forum

### **Capital Markets**

- MBS Operations Forum
- Municipal & Corporate Operations Forum
- Municipal Legal Forum
- Retail Fixed Income Forum
- Swap Dealer Compliance Forum

### **Legal & Compliance**

- Electronic Communications & Records Forum
- Privacy & Data Protection Forum

### **Operations & Technology**

- Banking Services Management Forum
- Blockchain Forum
- Clearing Firms Forum
- Corporate Actions Forum
- Credit and Margin Forum
- Customer Account Transfer Forum
- Insider Threat Forum

### **Private Client & Wealth Management**

- Senior Investor Protection Forum

### **Prudential & Capital**

- Regulatory Capital and Margin Forum

## Councils

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- SIFMA Advisory Council
- Communications Council
- Diversity & Inclusion Advisory Council
- General Counsels Committee

- Muni Swap Index Advisory Council
- SIFMA AMG MAC Advisory Council
- Regional Firm CEOs Council
- TBA Guidelines Advisory Council



Community

## Community

**Our society has an extreme need for financial literacy**, an issue that has broad implications for our communities and the larger economy. At SIFMA, we are committed to tackle this issue from the ground up, empowering the next generation with an understanding of the market economy and teaching good financial habits that when taught young can last a lifetime.

**“It would be wonderful if every young American could invest in stocks and experience how our system works and how investing is participating in the growth engine of our economy.**

**The SIFMA Foundation’s Stock Market Game is a great way to bring that experience alive.”**

Charles Schwab, Founder and Chairman  
Charles Schwab & Co.

## The SIFMA Foundation

For 40 years, the SIFMA Foundation has strengthened economic opportunities for individuals of all backgrounds by increasing their understanding of the benefits of the global capital markets. Through a robust portfolio of dynamic, rigorous online educational programs that introduce young people to the financial industry and emphasize asset allocation, long-term planning, diversification and problem solving, the SIFMA Foundation<sup>7</sup> has advanced financial capability for 18 million young people across the country.

Year after year, SIFMA member firms' critical support enables the SIFMA Foundation to equip elementary through high school teachers to engage their students first-hand in personal finance and the capital markets, prepare them for college and the workplace, and motivate them to explore jobs and careers in the financial sector. The SIFMA Foundation promotes best practices and thought leadership through multi-sector partnerships, including engaging 6,000 industry professionals as volunteers and every single member of Congress in advancing financial capability for 600,000 students each year.



*Winners of the 15th Annual Capitol Hill Challenge meet their Member of Congress in Washington, DC. The national competition, supported by the Charles Schwab Foundation, uses the SIFMA Foundation's curriculum-based Stock Market Game to teach the importance of saving and investing while simultaneously fostering an understanding of government. This year, more than 13,000 students from 727 schools and, for the fifth consecutive year, 100% of Congress participated.*

<sup>5</sup>The SIFMA Foundation for Investor Education (FIE), Inc. is a separate 501(c)(3) not-for-profit educational organization

An independent study by Learning Point Associates found Stock Market Game students scored significantly higher on mathematics and financial literacy tests than their non-SMG peers. They also found that SMG teachers reported the program motivated them to better plan for their future and to engage in financial planning, research, and use of investment products and services.

The SIFMA Foundation offers a variety of volunteer and community engagement activities for financial professionals, in-person and online. From visiting classrooms to judging student essays, the SIFMA Foundation has a volunteer opportunity just right for you. Sign up today and discover specific ways you can bring your passion and expertise into classrooms and youth-serving nonprofits.

**“Students who participated in The Stock Market Game™ scored significantly higher on mathematics and financial literacy tests than their peers who did not participate.”**

Learning Point Associates



Resources

## 2018–2019 Board Officers



2018 Chair  
**Lisa Kidd Hunt**  
*Executive Vice  
President, Business  
Initiatives*  
Charles Schwab &  
Co., Inc.



2019 Chair  
**James R. Allen**  
*Chairman & CEO*  
Hilliard Lyons



Chair-Elect  
**William C.  
Caccamise**  
*General Counsel  
of Global Banking,  
Global Markets,  
and International  
Bank of America  
Merrill Lynch*



Treasurer  
**James Wallin**  
*Senior Vice President*  
AB



President and CEO  
**Kenneth E.  
Bentsen, Jr.**  
*President and CEO*  
SIFMA

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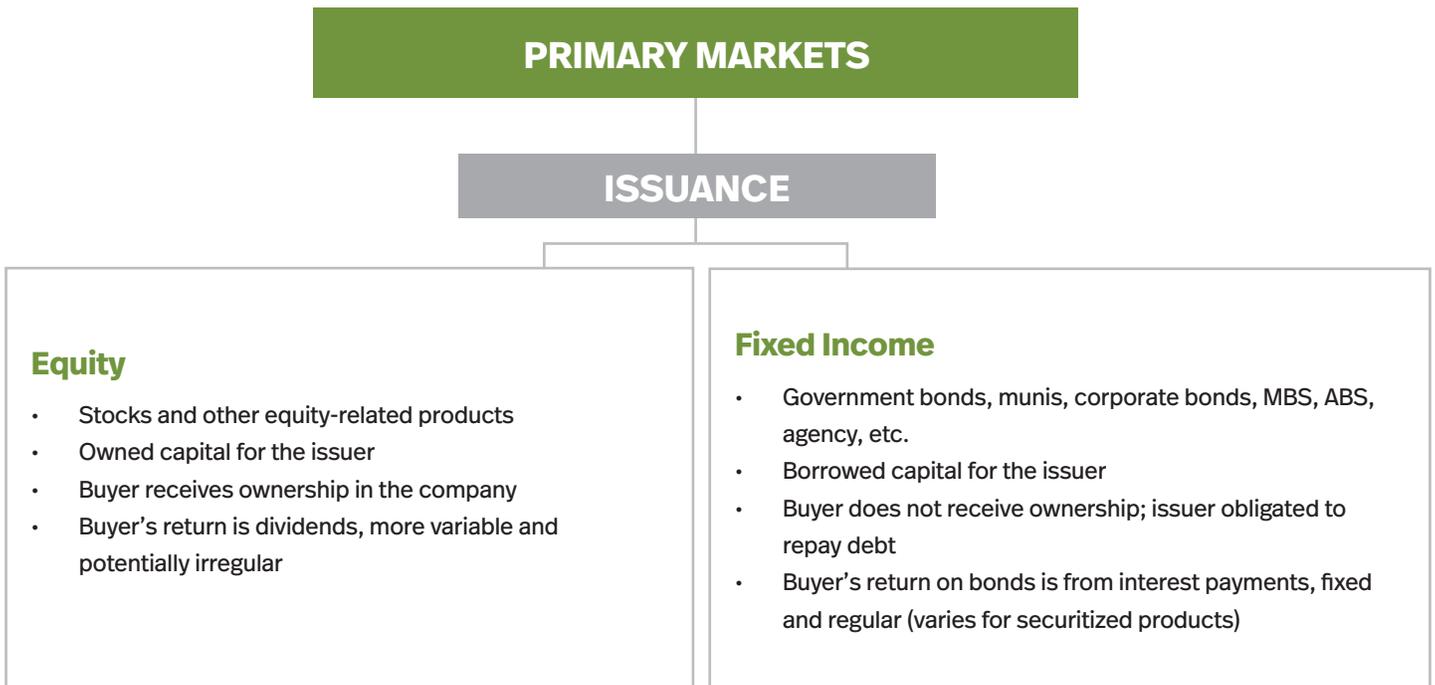
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## How Markets Work: The Capital Markets At-A-Glance



### Primers, by SIFMA Insights

The SIFMA Insights market structure primer series is a reference tool that goes beyond a typical 101 series. By illustrating important technical and regulatory nuances, SIFMA Insights primers provide a fundamental understanding of the marketplace and set the scene to address complex issues arising in today's markets. The series includes primers on: equity market structure, fixed income market structure, ETFs, listed options, equity capital formation and listings exchanges, and an overview of how capital markets function.

The SIFMA Insights primer series, and other Insights reports, can be found at:

[sifma.org/insights](https://www.sifma.org/insights)

Guides for retail investors can be found at:

[projectinvested.com/markets-explained](https://projectinvested.com/markets-explained)

## SECONDARY MARKETS

### TRADING

#### Exchange-Traded

- Traded on a registered securities exchange or alternative trading system
- More agency based
- Frequent, continuous trading
- Homogeneous products
- High number of market participants

#### Over-the-Counter (OTC)

- Off-exchange trading between counterparties
- More principal based
- Infrequent, less continuous trading
- Less homogenous products, more CUSIPs – ex: large financial institution may have 1,500 bond CUSIPs vs. 1 stock
- Dealer-to-Dealer (D2D) – dealers trade amongst each other
- Dealer-to-Client (D2C) – dealers trade with institutional clients

#### Electronification

- Increasing trend of trading on electronic trading platforms
- May match counterparties in the negotiation or execution stages
- Forms differ by trade protocols and types of end users

### MARKETS

#### Cash/Spot

- Market for the immediate settlement of transactions (settled on the spot)
- Exchange traded: equities
- OTC: currencies, bonds, etc.

#### Futures

- Auction market where standardized contracts are bought and sold for delivery on a specified future date
- Price is marked-to-market daily, value fluctuates until the contract ends
- Exchange traded: multiple asset classes

#### Forward

- Market setting the price of an asset for delivery on a set date in the future
- Price is fixed, contract settles on the date of the end of the contract
- OTC: currencies, etc.

### PRODUCTS

#### Financial Instruments

- Equities (exchange traded)
- Listed options (exchange traded)
- Bonds (OTC)

#### Derivatives

- Security whose price is directly dependent upon (derived) from the value of an underlying asset(s) or pricing index
- Predominantly used for hedging
- Exchange traded or OTC

#### Structured Products

- Replace payment features and returns of a traditional security with payments derived from the performance of an underlying security(ies)
- Facilitates customized risk-return objectives
- OTC traded

#### Securitization

- The process of designing a new financial instrument by packaging underlying assets with similar characteristics, supported by cashflows from those assets
- Transforms illiquid assets into tradable securities
- OTC traded

## 2019 Conferences & Events

[www.sifma.org/events](http://www.sifma.org/events)

### Anti-Money Laundering & Financial Crimes Conference (AML)

**February 4-5**

Grand Hyatt New York  
New York, NY

### Asset Management Derivatives Forum

**February 13-15**

Montage Laguna Beach  
Laguna Beach, CA

*Co-hosted by FIA and SIFMA AMG*

### Social Media & Digital Marketing Seminar

**February 21**

The Schwab Conference Center  
San Francisco, CA

### Insurance- & Risk-Linked Securities Conference (IRLS)

**February 27 - March 1**

Eden Roc  
Miami, FL

### Securities Industry Institute (SII)

**March 3-8**

Wharton School of the University of Pennsylvania  
Philadelphia, PA

### C&L Annual Seminar

**March 24-27**

JW Marriott Phoenix Desert Ridge  
Phoenix, AZ

### Equities and Options Conference

**April TBA**

New York, NY

### Private Client Conference

**April 10-12**

The Ritz-Carlton Golf Resort Naples  
Naples, FL

### Operations Conference & Exhibition

**May 6-9**

Boca Raton Resort & Club  
Boca Raton, FL

### Diversity & Inclusion Conference

**May 21-22**

SIFMA Conference Center  
New York, NY

### Prudential Regulation Conference

**June TBA**

Washington, DC

*Co-hosted by BPI and SIFMA*

### SIFMA Annual Meeting: The Capital Markets Conference

**November 19-20**

JW Marriott Washington, DC  
Washington, DC

## **Business Continuity Planning and Cybersecurity**

SIFMA leads a number of projects and services on behalf of the financial industry to help members secure, maintain and recover business operations against disruptions and threats, thereby promoting a safer and more resilient marketplace.

### **Quantum Dawn 5 Cybersecurity Exercise** **Thursday, November 7, 2019**

**Cybersecurity Resources**  
[www.sifma.org/cybersecurity](http://www.sifma.org/cybersecurity)

### **Industry-Wide Business Continuity Test** **Saturday, October 26, 2019**

**Business Continuity Planning (BCP) Resources**  
[www.sifma.org/bcp](http://www.sifma.org/bcp)

## **Emergency Crisis Management Command Center**

In the event of an industry-wide emergency, SIFMA convenes market participants; issues market close recommendations; and coordinates with market infrastructures, regulators and emergency personnel including the U.S. Treasury, New York City Office of Emergency Management and more.

[www.sifma.org/emergency](http://www.sifma.org/emergency)

## 2019 US Holiday Schedule

[www.sifma.org/holiday-schedule](http://www.sifma.org/holiday-schedule)

On Behalf of financial market participants, SIFMA recommends a holiday schedule in the U.S., U.K. and Japan. All SIFMA holiday recommendations apply to the trading of U.S. dollar-denominated government securities, mortgage- and asset-backed securities, over-the-counter investment-grade and high-yield corporate bonds, municipal bonds and secondary money market trading in bankers' acceptances, commercial paper and Yankee and Euro certificates of deposit. Previously scheduled SIFMA early close recommendations do not affect the closing time for settlements.

<b>Holiday</b>	<b>Recommended Early Close (2:00 p.m. Eastern Time)</b>	<b>Recommended Close</b>
<b>New Year's Day 2019</b>	Monday, December 31, 2018	Tuesday, January 1, 2019
<b>Martin Luther King Day</b>	None	Monday, January 21, 2019
<b>Presidents Day</b>	None	Monday, February 18, 2019
<b>Good Friday</b>	Thursday, April 18, 2019	Friday, April 19, 2019
<b>Memorial Day</b>	Friday, May 24, 2019	Monday, May 27, 2019
<b>U.S. Independence Day</b>	Wednesday, July 3, 2019	Thursday, July 4, 2019
<b>Labor Day</b>	None	Monday, September 2, 2019
<b>Columbus Day</b>	None	Monday, October 14, 2019
<b>Veterans Day</b>	None	Monday, November 11, 2019
<b>Thanksgiving Day</b>	Friday, November 29, 2019	Thursday, November 28, 2019
<b>Christmas Day</b>	Tuesday, December 24, 2019	Wednesday, December 25, 2019
<b>New Year's Day 2020</b>	Tuesday, December 31, 2019	Wednesday, January 1, 2020

## Terms to Know

<b>Fintech</b>	Financial Technology
<b>AI</b>	Artificial Intelligence
<b>DLT</b>	Distributed Ledger Technology
<b>PII</b>	Personally Identifiable Information
<b>Regtech</b>	Regulatory Technology
<b>RPA</b>	Robotic Process Automation
<b>CCAR</b>	Comprehensive Capital Analysis and Review
<b>CET1</b>	Common Equity Tier 1
<b>CLAR</b>	Comprehensive Liquidity Analysis and Review
<b>Collins</b>	Collins Amendment
<b>FRTB</b>	Fundamental Review of the Trading Book
<b>Hold Co</b>	Holding Company
<b>IM</b>	Initial Margin
<b>LCR</b>	Liquidity Coverage Ratio
<b>LTD</b>	Long-Term Debt
<b>MREL</b>	Minimum Requirement for Own Funds & Eligible Liabilities
<b>NSFR</b>	Net Stable Funding Ratio
<b>RWA</b>	Risk-Weighted Assets
<b>SCCL</b>	Single Counterparty Credit Limits
<b>SFTR</b>	Securities Financing Transactions Regulation
<b>SLR</b>	Supplemental Leverage Ratio
<b>TLAC</b>	Total Loss-Absorbing Capacity

<b>CFTC</b>	Commodity Futures Trading Commission
<b>Fed</b>	Federal Reserve System
<b>FINRA</b>	Financial Industry Regulatory Authority
<b>SEC</b>	Securities and Exchange Commission
<b>EMS</b>	Equity Market Structure
<b>ADV</b>	Average Daily Trading Volume
<b>AUM</b>	Assets Under Management
<b>CAT</b>	Consolidated Audit Trail
<b>ECM</b>	Equity Capital Markets
<b>ETF</b>	Exchange-Traded Fund
<b>IPO</b>	Initial Public Offering
<b>Reg NMS</b>	Regulation National Market System
<b>SRO</b>	Self Regulatory Organization
<b>FIMS</b>	Fixed Income Market Structure
<b>ARRC</b>	Alternative Reference Rates Committee
<b>DCM</b>	Debt Capital Markets
<b>FICC</b>	Fixed Income, Currencies and Commodities
<b>LIBOR</b>	London Interbank Offered Rate
<b>MBS</b>	Mortgage-Backed Security
<b>SOFR</b>	Secured Overnight Financing Rate
<b>TMPG</b>	Treasury Market Practices Group
<b>UST</b>	U.S. Treasury Securities



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