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Raising the Bar:

Key considerations on new SEC data, reporting, and liquidity rules

The SEC's new regulations on fund data, reporting, and liquidity risk management will require many asset managers to develop significant new operational and risk-governance capabilities.

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In October, the Securities and Exchange Commission (SEC) took a major step toward advancing its regulatory agenda when it finalized two long-awaited rules on data, reporting and liquidity risk management for US registered mutual funds and exchange-traded funds (ETFs). The new rules, which were released in the final months of SEC chair Mary Jo White's leadership,¹ are a significant part of the Commission's efforts to overhaul the Investment Company Act of 1940 (1940 Act) and will affect more than \$18 trillion of assets held by at least 9,000 US registered investment companies.

In our view, the final rules have garnered a degree of consensus that will outlast future changes that might result from new leadership at the SEC (see sidebar, "Asset management and systemic risk"). Asset managers that want to remain competitive will have to act now and shift their strategic thinking to ensure compliance with these and other global requirements. Among the key issues at stake are fund performance, overall operational cost controls, and the viability of certain new fund launches. We believe that asset managers will need to focus on three primary areas: data and reporting infrastructures, risk analysis and oversight, and implications for strategy.

Strengthening data and reporting infrastructures, with an eye on costs

Most firms will need to bolster their overall data and reporting infrastructure to meet the detailed new monthly reporting requirement. Targeted technology investments and vendor management will play key roles to contain costs.

The SEC's rules introduce a comprehensive monthly reporting form for mutual funds and ETFs and the collection of more data on separate accounts and securities lending. More granular information on portfolio holdings and various exposures will give regulators unprecedented amounts of quantitative information to enhance supervision and enforcement capabilities. The public will also have access to the data on a lagging quarterly basis, enabling a new level of analytical scrutiny of public funds by third-party providers.

Risk and compliance leaders will need to understand their specific data infrastructure and reporting gaps now, so they can address how to meet the rule's 2018 go-live date. Most likely, a major part of the compliance solution will be improvements in technology, with some firms requiring a significant revamping of the technology backbone so they can handle volume increases. In addition, monthly fund reporting demands strong operational governance. Risk leaders will have to control costs by balancing the outsourcing of certain reporting functions against strengthening specific in-house risk capabilities.

1 Securities and Exchange Commission, "SEC chair Mary Jo White announces departure plans," news release, November 14, 2016, [sec.gov](https://www.sec.gov).

Overhaul of risk analytics and fund board oversight

The SEC's ambitious new liquidity risk management rules may prove difficult for some to implement unless they improve current risk analytics to support decision making and provide their boards with sufficient transparency to conduct oversight. Some asset managers may also need to rethink more broadly their current fund board governance structures in light of the SEC's higher expectation for proactive involvement and greater accountability.

The SEC rules require every fund to have a formalized liquidity risk management program in place by 2018. The rule mandates a liquidity classification applied to portfolio holdings, requires funds to maintain a liquidity minimum, and specifies certain new fund board oversight functions. The approach marks a fundamental regulatory shift, placing much sharper expectations on each open-ended fund's risk management capabilities to utilize risk analytics and stress testing to forecast and better manage redemption demand. The SEC also introduced an "offensive" option for open-ended mutual funds to address liquidity costs via swing pricing. While swing pricing is potentially an attractive solution to limit the impact of excessive trading costs on fund investors, current US market closing practices will also present substantial new operational challenges.

To prepare for these changes, asset managers need to begin thinking now about some key questions:

- **Do fund managers have the right risk analytics to manage new liquidity programs and conduct stress tests?** Building out advanced analytic tools for stress testing will be critical for asset managers to support decision making in a manner consistent with the rule's high bar. The new rules call for fund managers to develop tools to differentiate risks among fund categories and forecast behaviors

of their investor bases; supervisors will also have significantly more granular information to monitor funds and investigate violations should they occur. Robust risk analytics that apply to each specific fund case can also help properly calibrate a required liquidity minimum to ensure compliance but also avoid unnecessary drags on investment performance. New tools are critical for providing boards and regulators with a transparent fact set.

- **Are fund boards adequately trained and prepared for new oversight responsibilities?**

The liquidity rule calls for greater fund board engagement, including independent oversight of important new liquidity minimums and requirements to redress breaches. However, many current fund boards may be ill equipped to fulfill these new duties. Many fund boards are organized either as unitary boards for all the funds in a complex or as cluster boards for groups of funds, rather than as separate boards for each individual fund. Whether these arrangements will be adequate in light of new rules—and whether fund directors are willing to accept greater accountability on this particular issue—is a key governance question.

- **Are fund managers considering swing pricing as a competitive tool for some funds?** Swing pricing has been successfully implemented in Europe for a number of years. Research has demonstrated that over time, it can have a meaningful positive impact on the returns of non-trading-fund investors. Large global asset managers with existing fund platforms in Europe may have a leg up in terms of existing capacities, but other US fund complexes should weigh the advantages, costs, and risks of swing pricing with respect to their own business strategies. The SEC has provided a two-year window before this option would be available.

Winners and losers

Asset managers should expect the new liquidity rule to affect specific fund products and exposures more than others, and they should adjust strategies accordingly. We see headwinds for certain fixed-income and alternative-asset funds. These funds may need to hold higher cash buffers and could incur additional operational costs. This will likely limit some forms of product innovation in 1940 Act fund structures and keep alternative-asset and fixed-income strategies in private markets or in hedge-fund strategies, where managers have more options to address risks posed by the higher degree of liquidity and maturity transformation—an activity that is in the regulatory crosshairs.

To help managers begin thinking about where fund products and exposures might be affected, Exhibit 1 provides an illustrative heat map of the projected level of impact on broad categories of actively managed and passive registered investment companies. Alternative-asset and fixed-income funds are likely to be the most affected by the liquidity risk rules, which may require funds with these less liquid assets to hold a higher liquidity buffer to protect against potential spikes in investor redemption. To assess potential impacts on performance, asset managers will need to drill down into additional relevant factors, such as size, investor base, and degree of tracking error targeted.

Exhibit 1. SEC regulations will affect some funds more than others.

SEC Regulatory Initiative	Passive					
	Fixed-income	Equity	Alternative assets	Exchange – traded funds		
Data and reporting	High	Medium	High	Medium		
Liquidity risk management	High	Low	Very high	Low		
SEC Regulatory Initiative	Active					
	Fixed-income	Equity	Alternative assets	Exchange – traded funds	Separate accounts	
Data and reporting	High	Medium	Medium	Medium	Medium	
Liquidity risk management	Very high	High	Very high	High	Low	

Level of impact

High	Medium
Very high	Low

Operational considerations

Compliance deadlines will arrive sooner for large fund complexes—those with assets of more than \$1 billion. To comply with the new rules and data and reporting, large fund complexes will have until June 1, 2018, and other fund complexes will have until June 1, 2019. For new liquidity rules, large fund complexes will have until December 1, 2018, and the remaining fund complexes until June 1, 2019.

As risk and compliance leaders approach operational challenges during the transition period, they should consider tactical near-term questions:

- **Have we conducted a full gap analysis against the SEC's final rules?** Given the diversity of fund strategies, investor bases, inherent exposures, and current risk management capabilities, it will be critical for each fund complex to understand its own starting point relative to the SEC's higher bar. Identifying fund outliers (such as certain high-yield fixed-income funds) should be a priority. The independence of the risk function is a

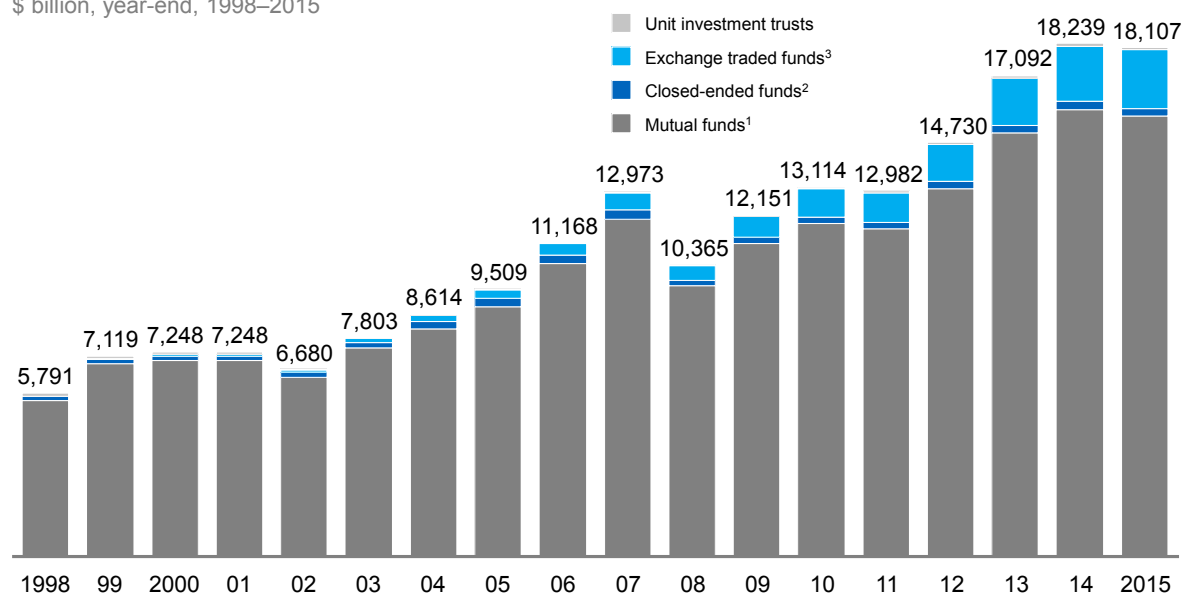
key new governance requirement. For some asset managers, this will necessitate a more comprehensive overhaul of current policies and the creation of new independent risk management positions (such as a fund Chief Risk Officer). Peer comparisons and readiness benchmarks are valuable tools for better understanding current industry approaches.

- **Do we have a comprehensive regulatory-change program in place?** The scope of these SEC changes is similar in comprehensiveness and complexity to many of the Dodd-Frank and Basel III rules mandated for banks in recent years (notably, the \$18 trillion held in 1940 Act funds is more than the entire U.S. banking system as shown in Exhibit 2).² In response, asset managers should adopt a “banklike” approach to regulatory change

2 As of the end of 2015, the US banking system had \$16 trillion in assets, according to the Federal Reserve.

Exhibit 2. The SEC rules impact more than \$18 trillion of assets in US registered investment companies

\$ billion, year-end, 1998–2015



management at a level of detail typically required in comprehensive bank-transformation efforts (for instance, as driven recently by the Federal Reserve's enhanced prudential standards). This approach is particularly relevant for larger, more complex asset managers with multiple fund exposures. For example, in response to new data requirements, firms should consider developing a data-governance framework analogous in rigor to guidelines developed in the Basel Committee on Banking Supervision Regulation 239, *Principles for effective risk data aggregation and risk reporting*.

- **How does our firm's data-governance framework currently ensure data validity and consistency for external regulatory reporting?**

The SEC's new requirement for monthly filing of Form N-Port represents a sea change in terms of requiring fund data for regulatory purposes (see Field Guide). Both the volume of fund reporting and the content—information on separate accounts, etc.—greatly exceed current requirements. The control environment related to regulatory fund reporting should be of a consistently high quality such that any issues reported to the SEC can be traced back to their source. In terms of implementing technology and data improvements, the transition time frame may be aggressive for some firms, given the scope of expected changes required. More extensive improvement of the data infrastructure will likely require a longer lead time.

- **Are economic relationships with third-party service providers in line with new requirements and with overall compliance cost targets?**

The role of third-party service providers is evolving in response to the SEC's new reporting requirements. Complying with the new SEC rules will likely increase compliance costs, but whether firms build on their in-house capabilities or rely on third parties will differ according to each firm's need, circumstances, and scale.



The SEC's long, complex, and interrelated new rules on data, reporting, and liquidity risk were issued as final rules as a result of a multiyear engagement with industry. We believe these announced final rules are here to stay and have garnered enough consensus to survive SEC chair White's departure in early 2017.³

Although additional expected regulatory changes are more uncertain, asset managers in any evolving policy scenario will be rewarded by tackling the final rules on data and liquidity today. These rules require fund managers to assess and enhance their risk management programs, making sure they have the right infrastructure, oversight, and analytics not only to comply but also to remain competitive in the marketplace.

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3 Securities and Exchange Commission, "SEC chair Mary Jo White announces departure plans," news release, November 14, 2016, sec.gov.

Field Guide to the Final Rules

The SEC's final rules include requirements for monthly reporting and for liquidity risk management. This field guide provides details of these rules in each area.

Investment company reporting modernization: Overview

New Form N-PORT reporting will give regulators unprecedented amounts of data at a granular level for supervisory and enforcement purposes.

The SEC's final rule on data and reporting introduces Form N-PORT, a monthly report with six sections and more than 300 reporting data elements that replaces quarterly Form N-Q. Form N-PORT will give the SEC access to more dynamic data to monitor individual funds, as well as the ability to aggregate financial-system trends, such as a broader calculations of outstanding systemwide leverage.

New collected information includes detailed characteristics and terms of each derivative contract, debt security, convertible security, and repurchase agreement. For derivatives, funds must disclose the category, type, counterparty, reference instrument or index, payoff profile, exercise price or rate, expiration date, unrealized appreciation or depreciation, and delta ratio of change in option value versus change in reference instrument value. Form N-PORT will also require disclosures about certain fund transactions and activities, including securities lending, repurchase agreements, and reverse repurchase agreements. The form also will include information regarding counterparties to which the fund is exposed in those transactions, as well as in over-the-counter derivatives transactions.

The new reporting rules also require that any fund investing 20 percent or more in debt instruments (or derivatives exposed to debt instruments or interest rates) provide an additional portfolio-level calculation of duration and spread duration across applicable maturities, measuring interest rate risk and credit spread risk.

Form N-PORT supervisory data will be made public on a lagging quarterly basis. Other, related revisions add reporting requirements for asset managers to use Form ADV to report annually on assets managed in separately managed accounts. These new disclosures are meant to plug a perceived data gap, so that regulators can gain a more complete picture of an asset manager's total advisory footprint.

Liquidity risk management: Overview

The requirement for a formalized liquidity risk management program is a fundamental shift that sharpens expectations around each fund's risk management capabilities.

The SEC's final rule on liquidity risk management requires that each open-ended fund implement a formal liquidity risk management program (the rule excludes closed-ended funds and most unit investment trusts). The rule does four things. First, it clarifies the 15 percent limit on illiquid investments and introduces a new definition of liquidity risk focused on meeting redemption requests. Next, it imposes a requirement for each fund to apply a liquidity classification to portfolio holdings. Third, it calls for maintaining a liquidity minimum. Lastly, it requires board oversight and also outlines an option for funds to use swing pricing as a tool to shield against excessive trading costs. The SEC clarified that ETFs that disclose daily portfolio information and already redeem "in kind" (meaning they provide securities rather than cash as redemptions) still must have a formal liquidity risk program. However, they are exempt from classifying the liquidity of investments and holding a liquidity minimum, since

ETF trading liquidity is supported by authorized participants through the unit-creation processes rather than by ETF unit holders.

1. New definition of liquidity risk and limits on illiquid investments. The new SEC rule is anchored on a regulatory definition of liquidity risk that involves the fund's ability to meet investor redemption requests.⁴ The rule defines liquidity risk as "the risk that a fund could not meet requests to redeem shares issued by the fund without significant dilution of remaining investors' interests in the fund."⁵ Funds will need to develop short-term and long-term cash-flow projections, considering not only asset liquidity but also factors affecting the fund's ability to meet its obligation to redeem investor withdrawals, including a fund's investor base and its susceptibility to runs. For example, liquidity risk programs will need to consider factors such as the size, frequency, and volatility of historical purchases and redemptions of fund shares during normal and stressed periods, the fund's shareholder ownership concentration, and the fund's distribution channels. Programs will also need to detail any reliance on additional liquidity management tools, such as available bank lines of credit or other borrowing arrangements.

The rule also requires that each fund consider both expected requests to redeem and requests that are unexpected but reasonably foreseeable under stressed conditions (for example, shareholder outflows related to market volatility shocks or outflows that may result from idiosyncratic events such as a portfolio manager's unexpected departure). This definition embeds an expectation that stress testing can play an important role to support liquidity risk programs for all funds. SEC Chair Mary Jo White has indicated the commission will outline more specific stress-testing requirements for funds with assets greater than \$10 billion in the near future, as required under the Dodd-Frank Act.⁶

The final rule also clarifies the 15 percent limitation on funds' illiquid investments by codifying how it

can be harmonized within the broader application of new liquidity risk guidelines. For example, a fund would not be permitted to purchase additional illiquid investments if more than 15 percent of its net assets are illiquid assets; breaches to the limit must be presented to the fund's board for remedy.

2. Liquidity classification. The new rule also requires each open-ended fund to review and classify the liquidity of portfolio positions into four categories. Fund managers must consider the number of days within which a position (or portions of a position) in a particular asset would be convertible to cash and settled at a price that does not materially affect the asset value immediately prior to sale. Funds must assess their own frequency of position liquidity determinations based on overall portfolio liquidity and portfolio turnover.

Although the final rule lowered the number of categories from six to four, implementing this classification still may not be straightforward—a concern voiced by many industry players during the rule's public-comment period. Determining factors include frequency of trades and average daily volume, price volatility, bid-ask spreads, standardization/simplicity of asset structures, position size relative to average daily trading volume and units outstanding, and the interrelationship of portfolio assets.

4 The SEC's previous concept of liquidity risk included language related to impacts on fund Net Asset Value (NAV), which was removed from the final version.

5 Securities and Exchange Commission (SEC), Investment Company Liquidity Risk Management Programs Final Rule, Release No. 33-10233, October 13, 2016, p. 56, sec.gov.

6 The Dodd-Frank Act requires annual company-run stress tests for any financial firm with assets greater than \$10 billion and whose primary regulator is a federal agency. The SEC has yet to promulgate formal guidance for registered investment companies. As of September 30, 2016, there were 318 ETF and mutual-fund portfolios with more than \$10 billion from 54 different fund families, and these funds held over half of all US-domiciled 1940 Act assets (\$10.4 trillion).

While these factors provide a structure to determine the classification, subjective risk judgment must be used for each specific fund. This could lead to wide variations in classification, even among funds that hold similar assets, due to factors such as the relative position size within a portfolio and the interrelationship of portfolio holdings.

These discretionary classification choices will matter, given that liquidity classification will provide regulators with basic references for any ex-post review of how a fund's risk management program performed during an actual liquidity stress event. While funds have discretion in classifying their positions, categorizations that are very different from peers' approaches will likely raise SEC questions. Managers will want to avoid categorizations that are noticeably different from yet-to-be developed industry norms.

3. Highly liquid investment minimum. Another controversial—and meaningful—provision requires that each fund establish and maintain a minimum absolute level of highly liquid assets (assets categorized in the first liquidity category). While the final rule gives each fund more discretion than the proposed concept of a “three-day liquidity minimum,” funds will need to consider multiple factors to avoid any unnecessary knock-on drag on fund performance due to overestimation of this minimum. As active managers already face challenges to outperform benchmarks, an overly conservative liquidity position could affect performance strategies. The highly liquid minimum must be reviewed at least annually according to a review of cash-flow projections, near-term foreseeable stress conditions, and historic redemption experiences.⁷

The market's ability to meet these new requirements is mixed, in line with the highly diverse nature of fund products and strategies, according to an SEC review. Only some fund families have established a dedicated risk management function with independent risk oversight. Many funds employ substantially less comprehensive liquidity risk

assessments without clear independence from portfolio management.

4. Fund board engagement. The liquidity rule introduces significant new expectations around fund board accountability and oversight. Boards must approve and oversee each fund's liquidity risk program (including officer appointments and written policies) independently from the portfolio-management function.

The SEC has previously highlighted the concern that portfolio managers may have competing interests that could potentially impede effective liquidity risk management. For example, the SEC has noted that “depending on the circumstances, a fund's portfolio manager could be reluctant to invest a portion of the fund's assets in highly liquid assets, which may be appropriate for liquidity risk management purposes, but that the manager believes could cause a fund's performance to lag compared to similar funds or the fund's benchmark.”⁸ The SEC also noted that SEC staff found that the comprehensiveness as well as the independence of funds' liquidity risk management varies significantly throughout the industry.

To meet this new challenge, fund boards will need to rely on robust data and improved risk analytics to ground their independent oversight. Some firms already have a governance foundation for a prudent market liquidity risk management framework. These funds communicate liquidity risks on a regular basis to the board of directors.

The SEC found that many funds will need to create a new governance model to assess the liquidity of portfolio assets in combination with other market,

7 The optimum mix of highly liquid securities, deposits, credit lines, derivative-based strategies, and other components of the buffer will depend on each fund's return objectives, tracking requirements, and cash-flow velocity, among other factors.

8 SEC, Proposal on Open-End Fund Liquidity Risk Management Programs, Release No. 33-9922, September 22, 2015, p. 104, sec.gov.

investor, and trading information. Prior approaches will need to be integrated into a single formal program with board oversight. Processes must be established to escalate any breach of certain limits (such as a breach of the 15 percent illiquidity limit) with clear assignment of accountability and communication lines.

5. The option for open-ended mutual funds to use swing pricing introduces a new strategic tool but also imposes operational challenges.

The final liquidity rule also introduces the option for open-ended funds to use swing pricing as a tool to better manage liquidity risk and protect non-trading shareholders in the fund from excessive trading costs. (Notably, the swing-pricing option excludes ETFs and money-market funds, given structural differences in these fund categories).

Swing pricing has been used effectively for many years in Europe as part of the daily net asset valuation (NAV) process to eliminate the dilutive effect of excessive redemptions and subscriptions on long-term investors in open-ended funds. The performance of Luxembourg- domiciled funds, for example, has shown that swing pricing can reasonably allocate the costs of fund redemptions and subscriptions to transacting investors (for instance, bid-offer spreads and other fees), if

administered using proper governance and disclosure policies.

Swing pricing is new to many US managers. In the illustrative example in Exhibit 3, once net daily investor trading activity surpasses a preset percentage of the fund's NAV (the swing threshold), then swing pricing shields the non-trading-fund investors from trading costs by passing on a discount to subscribers and a cost to redeeming investors.

While approving the option for swing pricing, the SEC acknowledged industry concerns regarding operational challenges in the US market related to the later 4:00 PM NAV order closing time (versus 2:00 PM in Europe). Operational teams that want to use swing pricing will need to modify their workflows to implement this practice in the context of US markets. This will likely require significant changes to a fund's current daily closing practices, even if custodians and other third-party service providers such as transfer agents shoulder some of this operational burden with enhanced support services. The SEC outlined a two-year extended effective date to allow for current systems and intermediaries to adopt any required changes. For example, transfer agents will need to provide requisite shareholder flow data or at least reliable estimates prior to striking of a fund's NAV.

Exhibit 3. Swing pricing can shield non-trading-fund investors from trading costs.

Fund net asset value (NAV), with or without swing pricing, \$

	Swing pricing, \$	Nonswing pricing, \$
Beginning NAV	100.00	100.00
Net flows	(15.00)	(15.00)
Subscriptions	5.00	5.00
Redemptions	(20.00)	(20.00)
Total costs of selling assets, 0.2%	0.03	0.03
Transaction costs, subscribing investors	(0.01)	0.00
Transaction costs, redeeming Investors	0.04	0.00
Transaction costs incurred by fund	00.0	0.03
Ending NAV	85.00	84.97

Asset management and systemic risk

Asset managers and the funds they manage have been under heightened regulatory scrutiny since the global financial crisis. Asset management represents a significant part of the global financial system, with more than \$37 trillion held worldwide by open-ended collective investment vehicles, according to year-end 2015 Investment Company Institute (ICI) estimates (Exhibit A).⁹ Growth in areas such as fixed-income funds and ETFs has been particularly strong (Exhibit B), sparking broader regulatory concerns that asset managers are performing many financial-intermediary functions—similar to banking—but with much less stringent supervision. Like US regulators, the Basel-based Financial Stability Board also has made the identification of emerging risks related to so-called “shadow banking” a key priority.

While the financial crisis exposed the global implications of insufficient capital and liquidity at banks, the role of asset management as a source or conduit of systemic risk is less clear.¹⁰ The Financial Stability Oversight Council—the US body charged with identifying new forms of systemic risk—has wrestled to define an appropriate framework for action. Rather than designating the largest, most interconnected management firms as “systemically important,” it has instead focused on specific “activities” that could contribute to broader financial-sector problems.¹¹ The SEC, which oversees registered investment companies, stepped into the regulatory void when chair Mary Jo White outlined a five-point plan to modernize the 1940 Act in December 2014 (Exhibit C).¹² The reform effort includes the rules governing enhanced data and reporting and liquidity risk management that were finalized in October, future changes to derivatives usage and leverage limits, and upcoming mandates for stress testing and transition management. Greater uncertainty surrounds additional expected SEC changes to derivative disclosures and leverage (proposed in December 2015), as well as more formal stress testing and transition management

(expected to be proposed in 2017). Future SEC priorities will be affected by a new chair and by those who fill the two other vacant SEC commissioner seats (only two of the total five seats will be filled after White’s departure). It may be some time before these seats are taken, in part because of the Senate’s ability to put a “hold” on presidential appointments; overcoming this generally requires the high hurdle of support from at least 60 senators, which would require some degree of bipartisan agreement.

When it comes to the requirements for liquidity risk management, fixed-income funds were made an SEC examination priority in 2014 to 2016 in part because the outlook on liquidity in fixed-income markets was viewed as problematic. Fixed-income markets are largely quote-driven markets reliant on market making, compared with more standardized order-driven equity markets, for which buyers and sellers continuously display pricing on multiple venues. Bond markets have traditionally been reliant

9 Investment Company Institute, *Investment Company Fact Book*, 2016.

10 Asset management and financial stability, US Department of Treasury, Office of Financial Research, September 2013, financialresearch.gov.

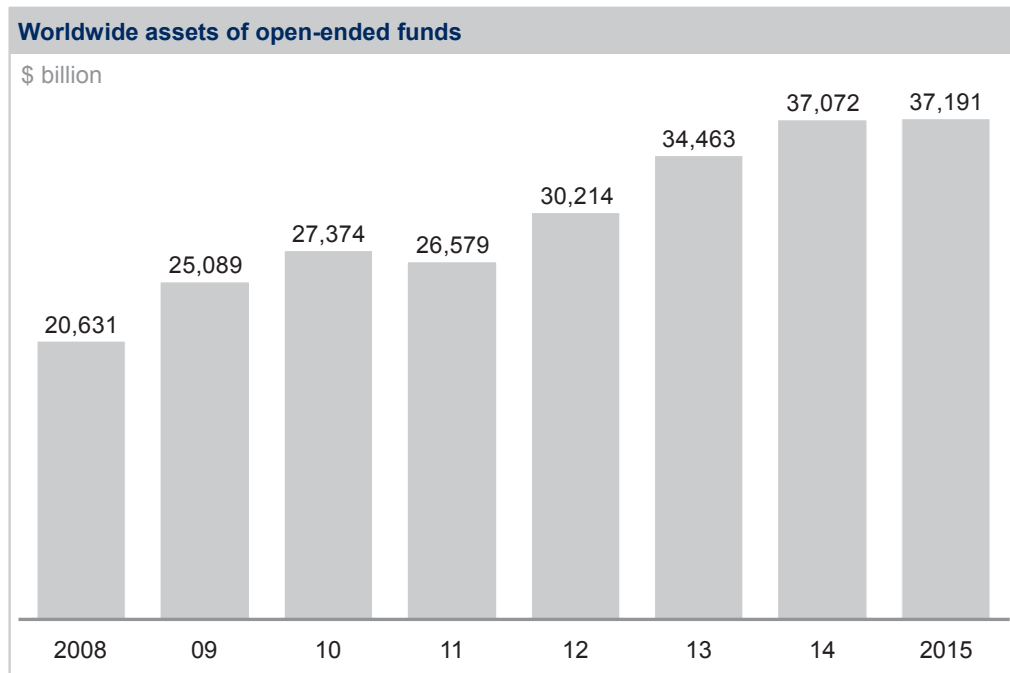
11 Regulatory concerns have focused on liquidity/maturity transformation risk in the fund context, specifically how funds meet seven-day redemption needs in stress events. While there is some evidence of fund-specific liquidity stress (for instance, a \$788 million credit fund managed by Third Avenue Management halted redemptions in December 2015, and some UK property funds utilized gating in the aftermath of the June 2016 Brexit vote), much of the concern is grounded in forward-looking trends versus historical data and direct evidence from the 2008–09 crisis.

12 Mary Jo White, *Enhancing risk monitoring and regulatory safeguards for the asset management industry*, New York Times DealBook Opportunities for Tomorrow Conference, New York, NY, December 11, 2014, sec.gov.

on regulated banks acting as market makers. But regulators have noted that dealer banks now hold smaller balances, in part because of the Volcker Rule and more stringent Basel III capital rules. These structural changes, combined with shorter settlement times and other technological developments, have raised concerns about risks posed by sharp liquidity drops in bond markets during times of stress. The SEC has emphasized the absolute growth of assets in these fund categories as evidence of potential risks. It noted that US registered fixed-income mutual funds and fixed-income ETFs grew from \$1.5 trillion at the end of 2008 to \$3.5 trillion at the end of 2014, with net inflows exceeding \$1.3 trillion during that period.

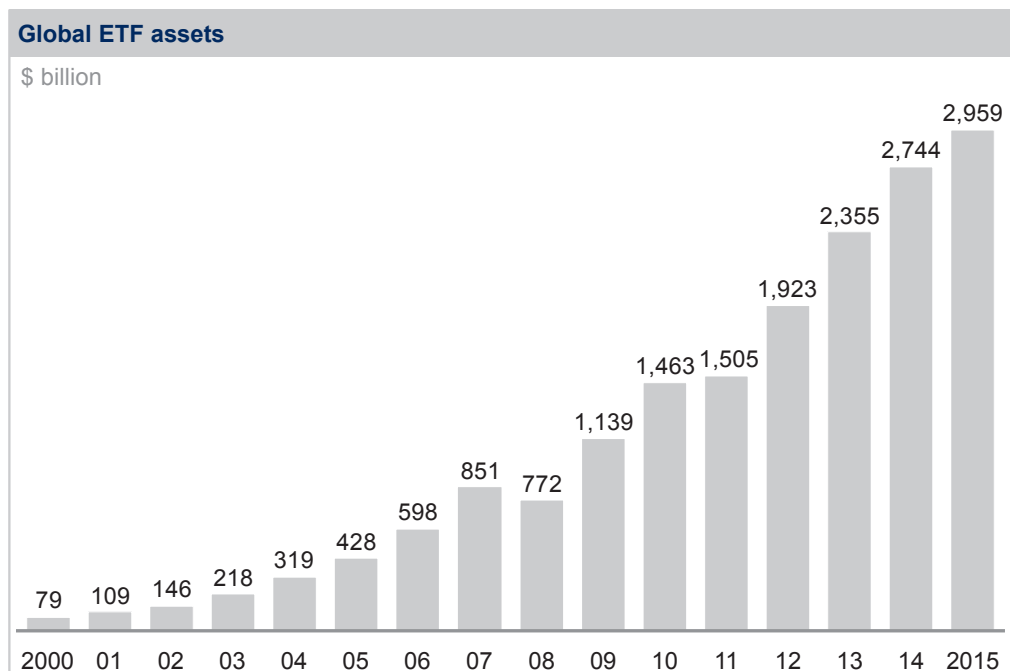
The SEC also said the recent growth in alternative mutual funds was an area of potential concern, noting that the assets of US registered open-ended funds with alternative strategies had grown from approximately \$365 million at the end of 2005 to approximately \$334 billion at the end of 2014. While alternative strategies accounted for approximately just 3 percent of US mutual funds, outsized asset growth of approximately 58 percent each year from the end of 2011 to the end of 2014 captured regulators' attention. Regulators have highlighted alternative funds that invest in relatively illiquid assets, such as bank loans or certain real asset markets, even as these funds retain the obligation to redeem investors on demand within seven days.

Exhibit A. Worldwide, open-ended funds have surpassed \$37 trillion in assets.



SOURCE: Investment Company Institute 2016 *Investment Company Fact Book* <http://www.icifactbook.org/>

Exhibit B. Growth in exchange-traded funds (ETFs) has been particularly strong.



SOURCE: BlackRock

Exhibit C. The SEC's five-point plan continues the commission's mandate to protect investors and also tackles concerns about systemic risks.

Problem	Solution
Improved investor protection around fund industry growth/portfolio complexity	Form N-PORT significantly expands publicly available information on funds and provides regulators with new tools
Fire-sale dynamics for funds as a source of systemic market risks	Liquidity risk management rules require boards to standardize practices and conduct certain types of stress tests.
Lack of transparency on certain funds and separate accounts	N-PORT requires monthly position-level reporting Revised Form ADV to include separate account disclosures
Investor first-mover advantage	Swing pricing is an optional management tool to pass on costs to those investors that are redeeming or investing.
Leverage risk Contagion risk of an institutional or fund failure	Proposed rules around synthetic leverage demand a much higher bar for derivative exposures Transition planning will focus on operational continuity

